# THE RELATIONSHIP BETWEEN A SITUATIONAL CONSTRUCT, ORGANIZATIONAL CULTURE, AND TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP 

## By

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Submitted to the Faculty of the
Graduate College of the
Oklahoma State University
in partial fulfillment of the requirements for the Degree of DOCTOR OF PHILOSOPHY

December, 2005

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## DEDICATION

Dedicated to Shelby Victoria Waldner Our perfect child; now cradled in God's perfect arms.

If giving up this degree, my career or every material possession I have ever had or ever will have would bring you back, I would do it in a second. I will forever miss you and the person you would have become.

I dedicate this effort to you.

## ACKNOWLEDGMENTS

One of my favorite quotes is from Helen Keller who wrote "I long to accomplish a great and noble task, but my chief duty is to accomplish small tasks as if they were great and noble." As I ponder who to acknowledge regarding the completion of this degree, I think of many, many people with whom I have crossed paths in my educational pursuits and life journeys. Those people who come to mind are individuals, mostly educators, who chose to make my educational pursuits appear if they were great and noble. Don't get me wrong, I believe there is no more important and worthy endeavor than education. Becoming educated or gaining understanding is not only important and worthy, but is a great and noble task. However, educators are not always seen as having chosen a great and noble profession. Too often, people promote the old adage: "if you can't do, you teach." However, most educators I have encountered consider their choice of educating others as a very important endeavor. In most cases, they not only teach subject matter related to their interests, but they teach life skills that will benefit students beyond their careers. These educators did make a difference in my life and gave me the courage to use my abilities to earn three degrees and contribute positively to the world.

I know most of these educators will not win great prizes or receive recognition for their efforts. Still, by choosing to make me and many like me one of their chief duties, I believe their accomplishments are great and noble. It is those educators that I acknowledge. Below are just a select few who have made an impact on me and for which I often have emulated in my career as an educator:

Miss Mary Callahan...a beloved neighbor, Christian, teacher, friend
Mrs. Anna Brown...a HS science teacher who cared enough to notice
Mr. David Stowe...an English teacher, entertainer, philosopher of life
Dr. Don Ely...college professor, advisor, the ultimate teacher and motivator
Dr. Fred Thrift...college professor, professional guide, mentor, friend

Dr. Melvin Hunt...college professor, friend and who I try to emulate
Dr. Don Kropf...college professor and outstanding researcher who believed in me
Dr. Bill Weeks...dissertation advisor, challenger, ultimate devil’s advocate, friend
On a less philosophical note, I also would like to thank my dissertation chair, Dr. Bill Weeks, and committee members: Dr. Jim Key, Dr. Penny Pennington and Dr. Ed Miller. I appreciate the input and advice the committee has given me throughout the process of proposing and completing this dissertation.

Special thanks to Dr. Bill Weeks who has had the patience to put up with me as a student and colleague for the last nine years. His guidance, advice, prodding, support and encouragement made the process of obtaining my degree the challenge I wanted it to be. I am particularly grateful that he always treated me as an adult student and allowed me to take the courses and research direction necessary to achieve my goals and meet my own expectations.

I also acknowledge my family and friends. I thank my parents for being the ultimate educators in my life. Although they may not understand all the details of pursuing this degree, I credit them for being the foundation that has allowed me to pursue any goal. I also am grateful to my Stillwater friends ranging from all of the past Ag Ambassador teams to my friends at First Christian Church. These friends helped Dan and I survive and continue during the worst time of our lives. In particular, John and Earlene Leonard are our Stillwater parents and best friends. I cannot begin to put in words how much we appreciate all John and Earlene have done for our family. The babysitting alone is one of the reasons I have completed this degree!

Finally, thanks to Dan, Shelby, Morgan and Mason for giving me the time away from you to complete this pursuit. I know it took a long time to complete, but I like to think it took so long because I refused to put you second. I love you.

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## CHAPTER I

## INTRODUCTION

## Background and Setting

"The biggest issue that human resource managers are concerned about is identifying and developing high potential leaders," says Peter Hall in a viewpoint article in The Journal of Management Development (Hall, 2001). Hall is not alone. Leadership or leadership potential often rises to the top of the list of requisite skills used in selecting entry-level personnel through senior executives (Flynn, McCombs, and Elloy, 1990; Kretovics, 1998; "NACE’s job outlook 2004", 2004; Pollock, 1996; Stern, 2004; Warn, 1985). However, developing the potential of the workforce is not without its challenges, particularly with the accelerated pace of change in the world.

Training workers, whether for specific job-related tasks or for leadership positions, is a challenge. According to Training magazine’s 2004 Industry Report, U.S. companies budgeted $\$ 51.3$ billion for training of executives, managers, non-managers and nonexempt employees (Dolezalek, 2004). The training industry is huge. Still, training budgets are limited and knowing how to develop leadership within the workforce is a daunting task. According to Fiedler (1996), most leader selection and leadership training approaches have not been adequately validated. However, managers or performance improvement professionals want to feel certain their selection methods and training will
provide some type of return-on-investment for the organization, department and unit (Chase, 1997).

There are many trends that must be considered when contemplating leadership selection and development; including a shift in the way organizations function. For instance, the information age has produced technological advances resulting in most every person within an organization having near instant access to multitudes of information. It is now possible for people at all levels of the organization to influence key decisions more directly. According to Tapscott (1996), today there are more people who have the information and resources to lead intelligently. By the nature of how information flows, organizational structures have become flatter with more people having the knowledge to impact key decisions related to their area. Furthermore, the trend towards learning or knowledge organizations reflect flatter organizations, more flexible jobs and greater levels of empowerment for employees with ever-increasing levels of skill and responsibility (Neef, 1999). By definition, this type of organization "...facilitates the learning of all its members and consciously transforms itself and it context" (Pedler, Burgoyne, and Boydell, 1997, p. 3).

In a review of data about the U.S. workforce, Lawler (1985) found that today's workforce is more educated than the workers of the past. They are more concerned about the development of their abilities and the opportunity to do interesting work. This point is an important consideration for human resource managers and those responsible for hiring, training and retaining the workforce. Leaders who simply reward or acknowledge mutually agreed upon performance objectives without intellectual stimulation or consideration of worker's individual needs, are not likely to attract, retain, or invigorate
employees.
In light of the trends toward change in the workforce and world, there is a need for leadership that is adaptive and flexible (Bass, Avolio, Jung \& Berson, 2003). "Adaptive leaders work more effectively in changing environments by helping make sense of challenges and then responding appropriately to the challenges" (Bass et al., 2003, p. 207). Bass (1985) listed this adaptive type of leadership as transformational.

In his book Leadership, Burns (1978) identified two types of political leadership: transactional and transformational. Bass (1990) applied the concepts to organizations and went on to define transactional leaders as those who create exchange relationships with employees while transformational leaders achieve results by getting workers to transcend their self-interests for the sake of the organization's interests. Transformational leaders are described as those who stimulate their followers to change their motives, beliefs, values and attitudes so that they are willing to perform beyond the minimum levels specified by the organization (Podsakoff, MacKenzie, Moorman \& Fetter, 1990). In contrast, transactional leaders focus on the motivation of followers through discipline and rewards, clarifying the types of rewards or punishments that should be expected for certain behaviors (Goodwin, Woodford \& Whittington, 2001).

As organizations move from being hierarchical entities well suited for transactional styles of leadership to more knowledge/information organizations with flatter structures and blurred lines of authority, the need for a broader perspective on leadership will be necessary (Avolio \& Bass, 2004). The trend towards transformation, coined the "new leadership" (Bryman, 1992, p. 91) paradigm, is a process that subsumes charismatic and visionary leadership and involves assessing followers' motives,
satisfying their needs and treating them as full human beings (Northouse, 1997). As changes in the workforce continue, the reliance on developing transactional leadership styles will fall short of the leadership challenge facing most organizations (Avolio, 1997).

Transformational leadership is postulated to be responsible for leadership beyond expectations in the military and in corporate settings. Hater and Bass (1988) and Yammarino and Bass (1990) found that it is more highly related to employees’ perceived satisfaction and effectiveness than transactional leadership. Other researchers have found transformational leadership behaviors to be positively related to a number of organizational outcomes such as performance (Bass et al., 2003), organization commitment (Bycio, Hackett \& Allen, 1995; Pillai \& Williams, 2004) and, indirectly, organizational citizenship behaviors (Podsakoff et al., 1990).

Although the value of using transformational leadership behaviors is well documented (Bass, 1985; Bennis \& Nanus,1985 ; Burns, 1978; Hater \& Bass, 1988; Tichy \& Devanna, 1990; Yammarino \& Bass, 1990), Bass (1985) viewed transactional and transformational leadership as separate dimensions implying a leader could be both transactional and transformational. Bass argues that the effects of transformational leadership behaviors augment or supplement the effects of transformational behaviors instead of replacing it. This is an important point because research has shown that contingent reward leadership (a transactional component) was positively related to follower performance and job satisfaction (Podsakoff, Todor \& Skov, 1982).

Is an individual's ability to excel in a leadership role based on disposition or is it dependent on the situation? Some theorists suggest that behaviors are consistent across situations (House, Shane \& Herold, 1996) while others argue that behaviors are largely a
result of the situation dictating the action taken (Davis-Blake \& Pfeffer, 1989). Still, some behavioral scientists contend that behavior is a function of the interaction of the person and situational characteristics (Lewin, 1951; Pervin, 1989; Schneider, 1987; Terborg, 1981).

According to House and Aditya (1997), the majority of research in leadership is concerned with leaders and followers, practically ignoring the situation (organization and culture) in which the leaders function. A number of researchers have argued that the situational setting and organization context are crucial determinants of behavior (Bem \& Allen, 1974; Davis-Blake \& Pfeffer, 1989; Mischel, 1968;), including leadership behavior ( Bass, 1990; Fiedler, 1993; Hersey \& Blanchard, 1988; Hill \& Hughes, 1974; House \& Mitchell, 1974; Singer \& Singer, 1990; Vroom \& Jago, 1978). Some of the research on organizational culture suggest that attempts by the organization to develop common frameworks of understanding about the mission and methods of the organization impact behaviors and attitudes (Schein, 1990; Wilkins \& Ouchi, 1983) However, few studies have concentrated on using the situational construct of organizational culture to explain how behavior is influenced by the situation (Yukl, 1989).

Schein's (1992) research on culture indicated that a new organization's culture is impacted by theleaders of the organization. On the other hand, leaders entering organizations in which the culture was already established did not typically impact the culture in the same way. In the latter cases, it appears that the established culture began to define the leadership (Schein).

Although the literature is replete with research about the concepts of transactional and transformational leadership and the importance of organizational culture, very few
studies have been designed to test the relationship between these two concepts. Bryman (1992) identified several problems with the research on transformational leadership including a relative absence of situational analysis. Specifically, he noted that although there was a high level of consistency in the various study results, there were differences from study to study implying that there could be situational contexts that would explain the effectiveness of the various types of leader behavior.

According to Trice \& Beyer (1991), a problem with organizational culture research is the small amount of research on the part that leadership plays in organizational culture is more often about how leaders establish or change cultures rather than leaders role in cultural continuity or maintenance.

Den Hartog, Van Muigen and Koopman (1996) conducted a study that showed transformational leadership as more strongly related to a supportive and innovative culture as opposed to a more procedural and goal oriented culture. According to their study, an unanswered question is whether transformational leadership results in or is a result of the organizational culture. In other words, does culture impact leadership style or does leadership style impact the culture? Pennington, Townsend and Cummins (2003) conducted a correlational study between organizational culture and leadership, operationalized with the Leadership Practices Inventory, and concluded that different leadership practices resulted in different cultures. Their recommendations included further investigation of the two constructs outside of the academic environment.

## Statement of the Problem

The concepts of transactional and transformational leadership as well as organizational culture have received much attention in the literature. Still many contend the linkage between the two constructs has not been systemically explored (Den Hartog et al., 1996; Trice \& Beyer, 1993) The small body of research linking the two constructs focused on how leaders establish or change cultures (Trice \& Beyer, 1991). In general, situational analysis of transformational and transactional leadership is lacking (Bryman, 1992).

The present study addressed the link between the constructs of leadership and organizational culture with a emphasis on Schein's(1992) observation that an established culture can begin to define leadership. Specifically, the purpose of the study was to learn about and describe the behaviors of leaders in an established organization and correlate their behaviors with the respective culture of their organization.

A correlational study cannot answer the question of whether the culture defines the leadership of the organization or whether the leadership established the culture. In other words, it cannot answer the question: "Is organizational culture a determinant of transformational and transactional leadership behaviors or vice versa?" However, the study does confirm or disconfirm other research regarding the relationship and provides additional insight into the relationships between the two constructs.

## Purpose Statement

The purpose of this study was to explore the relationship between leadership and a situational construct, organizational culture. Specifically, it was designed to examine and describe the relationship between the full-range leadership behaviors (transformational, transactional, passive/avoidant) and four organizational culture constructs within an agricultural business.

## Research Objectives and Questions

Objective 1: To describe the full range leadership behaviors (transformational, transactional, passive/avoidant leadership behaviors) within the selected agricultural business.

Objective 2: To describe the organizational cultures within the branch offices of a selected agricultural business.

Objective 3: To explore the relationship between organizational culture and transformational leadership and its factors (Idealized Influence-Attributable, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration).

Research Question 1: What is the relationship between clan culture and the factors of transformational leadership?

Research Question 2: What is the relationship between adhocracy culture and the components of transformational leadership?

Research Question 3: What is the relationship between hierarchal culture and the components of transformational leadership?

Research Question 4: What is the relationship between market culture and the components of transformational leadership?

Objective 4: To explore the relationship between organizational culture and transactional leadership (Contingent Reward and Active Management-by-Exception).

Research Question 5: What is the relationship between clan culture and the components of transactional leadership?

Research Question 6: What is the relationship between adhocracy culture and the components of transactional leadership?

Research Question 7: What is the relationship between hierarchal culture and the components of transactional leadership?

Research Question 8: What is the relationship between market culture and the components of transactional leadership?

Objective 5: To explore the relationship between organizational culture and passive/avoidant behaviors (Passive Management-by-Exception and Laissez-Faire).

Research Question 9: What is the relationship between clan culture and the components of passive/avoidant behaviors?

Research Question 10: What is the relationship between adhocracy culture and the components of passive/avoidant behaviors?

Research Question 11: What is the relationship between hierarchal culture and the components of passive/avoidant behaviors?

Research Question 12: What is the relationship between market culture and the components of passive/avoidant behaviors?

## Definitions of Terms/Operational Definitions

The following definitions describe the four organizational culture profiles as outlined in the Organizational Culture Assessment Inventory (Cameron \& Quinn, 1999): Clan: An organization that focuses on internal maintenance with flexibility, concern for people and sensitivity to customers.

Adhocracy: An organization that focuses on external positioning with a high degree of flexibility and individuality.

Hierarchy: An organization that focuses on internal maintenance with a need for stability and control.

Market: An organization that focuses on external positioning with a need for stability and control

The following are operational definitions associated with full range leadership model (transformational leadership behaviors, transactional leadership behaviors and passive/avoidant behaviors) as outlined by Avolio and Bass (2004):

Transformational leadership: Process of influencing in which leaders change their associates' awareness of what is important, and move them to see themselves and the opportunities and challenges of their environment.

Transactional Leadership: Based on the concept of exchange between leaders and followers where the leader provides followers with recognition and rewards in exchange for motivation, productivity and effective task accomplishment.

Passive/Avoidant Behaviors: Two behaviors (passive management-by-exception and laissez-faire) classified together due to their commonality of having negative impacts on followers. This type of behavior exhibited by a manager or person in the leadership
position is characterized by failure to engage in leadership activities either by systematically not responding to situations or problems until they are out of control or completely avoiding the situation or problems all together.

The following are definitions of the transformational leadership factors: Idealized Influence (attributes and behaviors): A component of transformational leadership where follower's identify with and want to emulate their leaders. Among the things the leader does to earn credit with followers is to consider followers' need over his/her own needs. The leader shares risks with followers and is consistent in conduct with underlying ethics principles and values.

Inspirational Motivation: A component of transformational leadership where leaders behave in ways that motivate those around them by providing meaning and challenge to their followers' work. The leader encourages followers to envision attractive future states, which they can ultimately envision for themselves.

Intellectual Stimulation: A component of transformational leadership where leaders stimulate their followers' effort to be innovative and creative by questioning assumptions, reframing problems, and approaching old situations in new ways. New ideas and creative solutions to problems are solicited from followers, who are included in the process of addressing problems and finding solutions.

Individual Consideration: A component of transformational leadership where individual differences in terms of needs and desires are recognized. Leaders pay attention to each individual's need for achievement and growth by acting as a coach or mentor. Followers are developed to successively higher levels of potential.

The following are definitions of the transactional leadership factors:

Contingent Reward: A component of transactional leadership where the leader clarifies expectations and offers recognition when goals are achieved with the end result being the expected level of performance.

Management-by-Exception-Active: A component of transactional leadership where the leaders monitor follower activities and correct mistakes as they happen. The leader's focus is on mistakes and deviations from standards.

The following are definitions of the passive/avoidant behaviors:
Management-by-Exception-Passive: A passive/avoidant behavior where the leader fails to interfere or become involved until problems become serious or chronic.

Laissez-Faire: A passive/avoidant behavior where the leader fails to get involved fails to make decisions and is simply not present when needed.

## Limitations of the Study

Because the population was isolated to a small agribusiness, the generalizablity of the study is limited. Nonetheless, the study does contribute to the general knowledge of how culture and leadership behaviors are related. Furthermore, eight individual branch offices and their leaders were studied. The low number of observations limits the ability to generalize to the greater population.

## Assumptions

It was assumed that all participants in this study answered the survey questions honestly and to the best of their ability.

## Significance of the Study

An increased emphasis on knowledge organizations and information technology are two changes impacting workforce development. It seems logical that with these changes, combined with an aging workforce, the strategies used to develop human resources must be evaluated. In particular, as organizations experience more dispersed leadership throughout the organization, a flatter organizational structure, and increased expectations of inexperienced workers, a greater understanding of the antecedents or determinants of leadership behavior could be useful.

In particular, organizational culture and its relationship to leadership have received limited attention in the literature. According to Schein (1992), a leader’s behavior is intricately intertwined with culture creation and management. Thus, the focus of this research is to explore and describe the relationship between organizational culture and transformational and transactional leadership.

From a practical standpoint, workforce performance professionals and others involved in leadership education, development and training can benefit in understanding the relationship between culture and leadership. Does culture influence, inhibit or enhance the type of leadership behaviors exhibited by employees? For instance, Den Hartog et al. (1996) hypothesized that a strong bureaucratically oriented culture could inhibit or diminish the effectiveness of transformational leadership while an innovative, supportive culture could enhance the effectiveness of transformational leadership. These hypotheses lend credibility to the proposed research that is designed to uncover greater understanding of the relationship between transformational and transactional leadership and specific cultures.

## CHAPTER II

## REVIEW OF LITERATURE

Introduction

Leadership is one of the most studied and analyzed aspects of working organizations (Bass, 1990, Trice \& Beyer, 1993). It is featured in almost every textbook on organizational behavior (McFillen, 1977). Still, despite the numerous studies regarding leadership within organizations, scattered attention has been given to the role of leaders in the cultures of organizations (Schein, 1992; Trice and Beyer, 1993; House and Aditya, 1997). According to House and Aditya, the majority of research in leadership is concerned with leaders and followers, practically ignoring the situation (organization and culture) in which the leaders function.

The prompting by researchers to focus on organizational variables in leadership research is not a new fad. In 1977, Melcher wrote "leadership studies are unlikely to be of any additive value until they take into account organization variables" (p. 99). He added that organizational researchers should spend more time studying leadership models and leadership researchers should spend more time evaluating organizational models. In 1993, Trice and Beyer essentially indicated the same thing writing that most organizational culture analyses pay only minor attention to leadership while the analyses of leadership has never focused squarely on organizational cultures. Still, even with the
prompting for research in this area, the hypotheses and propositions that describe the relationship between organizational culture and leadership are often not specific and the evidence to link the two is insufficient (Den Hartog et al., 1996).

## Trends in Leadership Theory and Research

The three main eras in the study of leadership prior to the 1980s were the trait era (up to the 1940s), style era (1940s-1960s) and the contingency era (late 1960s - early 1980s) (Bass, 1990; Bryman, 1992; Nahavandi, 2003; Northouse, 1997; Yukl, 2002). Since the 1980s, the focus of leadership research has been on transformational leadership that has been classified as part of the new leadership paradigm, a phrase coined by Bryman. Charismatic and inspirational leadership are also included in this new leadership categorization (Bryman).

Bryman (1992) actually classifies the research and theories of the leadership eras prior to the 1980 's as old leadership, but is careful to point out that as each new stage, theory or approach has developed, the previous stage or approach to understand leadership is not thrown out; rather, a new theory or set of theories is introduced due to the findings and criticisms of the previous theories and a change in the emphasis is indicated. For instance, the new leadership theories are reminiscent of the behavioral/style theories in that they identify behaviors that leaders possess (Bass, 1990; Bryman). However, the theoretical underpinnings of these theories are tied in with charismatic leadership theory (Bass, 1985) and therefore the behaviors go beyond initiating structure and consideration.

The focus of this literature review is not a comprehensive review of the leadership eras or theories. Instead, the focus is on the new leadership research and theories and how these theories are connected with organizational culture.

## Which Comes First, Culture or Leadership?

Does culture determine leadership behaviors or do leadership behaviors determine the culture? Leaders have been credited as the creators, transformers and managers of organizational cultures (Schein, 1992). However, over the years researchers have argued that the situational setting and organizational variables are crucial determinants of actual leader behavior (Fiedler, 1996; House \& Aditya, 1997; Melcher, 1977; Singer \& Singer, 1990). Bass \& Avolio (1993b) contend that an organization’s culture develops in large part from its leadership while the culture of an organization can also affect the development of its leadership.

Perhaps a simple way to gain understanding of the relationship between organizational culture and leadership is to ask two succinct questions: (1) Can situations dictate leadership behaviors? (2) Can leadership influence organizational culture? The search and identification of those traits, behaviors or situations that increase a leader's effectiveness has been a major concern for practitioners and researchers alike for the past several decades (House, 1971; see also Bass, 1990; Yukl, 2002). Schein’s (1992) research on culture indicated that a new organization's culture is impacted by the leader or leader' of the organization. On the other hand, leaders entering organizations in which the culture was already established did not typically impact the culture in the same way. In the latter cases, it appears that the established culture began to define the leadership (Schein).

## Person-Situation Debate

A beginning place to gain understanding of the determinants of leader behavior is the person-situation debate. Do individual dispositions significantly influence behavior? Or, are situational forces alone sufficient to predict and explain behavior? Some theorists suggest that behaviors are consistent across situations (House et al., 1996) while others argue that behaviors are largely a result of the situation dictating the action taken (DavisBlake \& Pfeffer, 1989). Still, some behavioral scientists contend that behavior is a function of the interaction of the person and situational characteristics (Lewin, 1951; Pervin, 1989; Schneider, 1987; Terborg, 1981).

Early organizational researchers (Stodgill, 1948; Fleishman, 1953; McClelland, 1985) focused much effort on whether individual characteristics could be reliably used to measure and select individuals for leadership and various other roles in the organization. Individual dispositions (e.g. personality, values, motives, abilities) have been measured and related to organizational effectiveness (Epstein \& O’Brien, 1985; Hackman \& Oldham, 1976; McClelland, 1985; O'Reilly \& Roberts, 1978; Staw \& Ross, 1985). Certainly, in the study of leadership, identifying traits associated with effective leadership is well documented in almost any text written about leadership (Bass, 1990; see also; Nahavandi, 2003; Northouse, 1997; Yukl, 1989).

The trait approach emphasized the personal qualities of leaders and implied that leaders are born rather than made. This belief dominated the early part of the twentieth century (Bass, 1990; see also; Bryman, 1992; Nahavandi, 2003; Northouse, 1997; Yukl, 2002). According to Bryman, the majority of the studies sought to identify a collection of traits or personal features that distinguished leaders from non-leaders or followers.

Bryman indicates that from an organizational research perspective, the most valuable aspect of the dispositional or trait research would have been identifying characteristics of effective versus non-effective leaders. However, he concludes that few studies addressed the issue and often failed to distinguish the difference.

Stodgill (1948) was one of the first researchers in the trait era who cast doubt on the validity of trait research (Bass, 1990). In his 1948 review of the literature he cast doubt on research findings that concluded personal factors to be the only determinant of leadership behaviors. His review suggested that personal factors associated with leadership are situation specific. Although Stodgill later revaluated his position on the significance of traits (in combination with the situation), his 1948 review is partially credited with the decline of trait-focused research and initiation of research on behavior and style (Bryman, 1992). Mischel's (1968) book on personality assessment also stimulated a change from an emphasis on dispositional research to a focus on situational factors. He advocated that dispositions were not as stable and independent across situations as implied by dispositionists. Instead, Michel suggested that changes in external stimulus modify how people behave. In other words, behavior is situation specific. Specifically, Mischel (1968) wrote the following:

Although it is evident that persons are the source from which human responses are evoked, it is situational stimuli that evoke them, and it is changes in conditions that alter them. Since the assumption of massive behavioral similarity across diverse situations no longer is tenable, it becomes essential to study the difference in the behaviors of a given person as a function of the conditions in which they occur (p. 295).

In contrast to traits theorists, situational theorists suggest that leadership is all a matter of situational demands. Situational theorists postulate that situational factors determine who will emerge as a leader. In the early 1900s, this theory was favored over trait theory in the United States (Bass, 1990). According to Bass, many theorists believed that the condition of the nation determined great military figures. He summarized the belief of situational theorists writing that in times of uncertainty or war, situationalists believed people emerged who possess the abilities and skills required to solve the prevailing problems. In other words, leadership did not reside in a person but was a function of the occasion. This situational view suggests that individuals such as Mahatma Ghandi, although very devoted to a cause, just happened to be at right place at the right time (Bass, 1990). In more recent years, there is a better understanding of how situations and behavior are related, with empirical evidence adding to the early theories and beliefs (Fiedler,1972, 1993; Hersey \& Blanchard, 1988; Hill \& Hughes, 1974; House \&. Mitchell, 1974; Vroom \& Jago, 1978).

Examples of more recent theories that incorporate situations into the framework are contingency theories. Contingency theories are based on the premise that the performance of an organization or group depends not only on the leader but the situation. The view suggests that there is no one best way to lead; but rather the type and style of leadership that are effective will depend on various situational contingencies (Nahavandi, 2003).

Fiedler's contingency model is the oldest, most widely recognized and most highly researched model (Nahavandi, 2003) and was the first to specify how situational variables interact with leader personality and behavior (House \& Aditya, 1997). In terms
of leader effectiveness, the model suggests if the leader's style matches the situation, the leader will be effective and if the leader's style does not match the situation, the leader will not be effective. More specifically, the model postulates leadership effectiveness is dependent upon two factors: (a) the degree to which the situation gives the leader control and influence over the group process and performance, and (b) an attribute of the person, namely whether their primary concern is with tasks or with relationships.

According to House \& Aditya (1997), Fiedler’s contingency model was criticized for conceptual reasons and due to inconsistent findings. Conceptually, the theory fails to explain why individuals with certain leadership styles (relationship versus task) are more effective in some situations than in others (Bryman, 1992). Fiedler (1993) calls this the "black box" in contingency theory because there is no empirical explanation as to why task-motivated leaders are good in extreme situations while relationship-motivated leaders are good in moderate situations. Fiedler's theory is task-oriented individuals feel more certain in situations where they have a lot of control. On the other hand, relationship-oriented people are not as effective in extremes because they overreact in situations of high control. Fielder theorizes that in situations where individuals have little control, the relationship-oriented leader focuses too much on the relationships and fails to help the group get the task completed. In moderate situations Fiedler theorizes that since the group is handling the task, the relationship-oriented leaders are effective because they can focus on relationship issues; whereas, task-oriented people are frustrated because they are uncertain of their role.

According to the path-goal model of leadership (House, 1971), the effective leader clarifies, through a series of transactions with followers, the path they need to
follow to achieve a particular goal. In contrast to Fiedler's contingency model that emphasizes the match between the leader's style and situational variables, the path-goal model emphasizes the relationship between the leader's style and the characteristics of the subordinates and the work setting. This theory uses expectancy theory and motivation of the follower to help the leader determine the specific behaviors he/she can use that are best suited to the followers' needs and the situation in which they are working (Northouse, 1997).

## Resurgence of the Person-Situation Debate

The trait era is typically dated from late 1800s to Mid-1940s (Nahavandi, 2003). However, in the early 1970s, interest in leadership traits reemerged with more theoretical justification for the study of individual dispositions as predictors for individual behavior. In particular this new focus helped to clarify when and how traits are likely to explain individual behavior (House \& Aditya, 1997). For instance, Mischel (1973) introduced the concept of "strong" and "weak" situations with strong situations characterized as those with strong behavioral norms and clear expectations of the type of behavior that is rewarded or punished. He observed that people's expression of dispositions are more likely suppressed in strong situations, but expressed in weak situations. The strength of the situation was not considered during early leader trait studies.

Bem and Allen (1974) suggested that certain people are more likely to express traits than others. In other words, predicting behaviors is dependent on the person. House \& Aditya (1997) added to that thought by hypothesizing that people high in selfmonitoring are less likely to express themselves or their dispositions in certain situations
because they are very aware of situational cues. However, if the person is low in selfmonitoring, they are more likely to display their disposition regardless of the situation or situational cues. This theory is confirmed by Atwater \& Yammarino (1992) who concluded that self-awareness should be considered in attempts to predict leader behavior and performance.

The 1970s resurgence of trait theory research again brought up the personsituation debate that was hotly contested in the early years of trait research (Davis-Blake \& Pfeffer, 1996; Shane, Herold, and House, 1996). However the debate has been considered useful in that it "has served as a corrective influence on two extreme views that were prominent during different time periods" and "has served to focus attention on the person as someone who actively selected and shapes situations" (Pervin, 1989, p. 352). As stated below, Schneider (1987) agrees with focusing on how people shape their situations and hypothesizes that the combination of the person and their behavior is what shapes the environment and offers this formula: $E=f(B, P)$.

You must view organizations as situations containing patterned behaviors, as environments that are characterized by the coordinated activities of interdependent parts, including independent people. My basic thesis is that it is the people behaving in them that make organizations what they are. (Schneider, 1987, p. 438).

Schneider's view is interactional in nature. The interactional perspective of psychology grew out of the person-situation debates in the late 1960's and early 1970's. However, the simultaneous consideration of both person and situation is not new. Lewin
(1951) hypothesized that behavior is a function of person and environment, that is, $\mathrm{B}=\mathrm{f}$ (P, E).

The interactionist perspective emphasizes that characteristics of people and of situations should be studied as joint determinants of individual attitudes and behaviors (Terborg, 1981). According to Terborg (1981), the basic propositions of interactional psychology are as follows:

1. Actual behavior is a function of a continuous process, being both changed by situation and changing situations.
2. The individual is an intentional, active agent in this interaction process, being both changed by situations and changing situations.
3. On the person side of the interaction, cognitive, affective and motivational factors and individual ability are essential determiners of behavior.
4. On the situation side, the psychological meaning of situations for the individual and the behavior potential of situations for the individual are essential determiners of behavior (p. 570).

Terberg points out that the most important point to be emphasized is that the propositions must be considered when conceptualizing and conducting research on individual behavior.

According to Pervin (1989), most personality psychologists today are interactionists in the sense they emphasize both person and situational variables when explaining behavior. However, most still disagree about what interaction process to
emphasize or whether the situation or disposition would provide the most return-oninvestment for research studies.

Although the long-standing dispositional-situational controversy has reemerged, most agree that, ultimately, behavior is determined by both dispositions and situations (Chatman, 1989; House et.al., 1996, Pervin, 1989; Terberg, 1981 ). In 1960, Bass tagged the debate between "the great man theory" and the environment as a pseudo-problem (as cited in Bass, 1990). Others have concluded the same thing (Endler, 1973, House et al.) indicating that some of the variance that happens is due to the situation, some is due to the individual and some is due to the combining effects of the two. Pervin sums it up with this: "What remains an issue [in the disposition-situation debate] is how much of each there is and the kinds of person, situation, and process units that should be considered" (p. 352).

## Theoretical Basis for Study

The above summary of the person-situation debate does not give a specific theory that conclusively explains the determinants of leadership behavior. However, it does provide the evidence and framework for looking at both the person and the situation when trying to understand behaviors. According to Avolio \& Bass (1995), the literature on previous models of leadership typically have focused on measuring the behavior of a leader and the impact of that leader's behavior on his/her group of direct reports, while often either discounting or oversimplifying the context in which the behavior was embedded. The current study, however, seeks to determine the relationship between the
situational construct, organizational culture, and transformational and transactional leadership behaviors.

Coined the new leadership approach by Bryman (1992), the concept of transformational, inspirational and charismatic leadership emphasizes values, vision, and management of meaning. The emphasis on values, vision and meaning links this approach to organizational culture (Den Hartog et al, 1996) which has been described as "a set of core values, behavioral norms, artifacts and behavioral patterns which governs the way people in an organization interact with each other and invest energy in their jobs at the organization at large" (Van Muijen, Koopman, Dondeyne, De Cock \& De Witte, 1992, p. 250).

Bryman (1992) indicates a problem with the "new leadership approach" is that too little attention has been given to situational analysis. Avolio and Bass (1995) concurred indicating that even though there is considerable evidence that leaders described by their followers as more transformational are likely to be more effective, "the situation and/or context in which the leader's behavior is embedded need to be included and systematically examined" (p. 201). According to Trice \& Beyer (1991), a problem with organizational culture research is that the small amount research on the part that leadership plays in organizational culture is more often about how leaders establish or change cultures versus its role in cultural continuity or maintenance. Den Hartog et al. (1996) indicate the relationship between organizational variables such as culture and transformational leadership has been scarce.

Considering these problems cited in the literature, this study explores the relationship between organizational culture (the situation) and the transformational-
transactional leadership behaviors of individuals within an established business. The next two sections of this review are related to the two variables used in this study: organizational culture and transformational leadership and the relationship between them.

## New Leadership Paradigm

Since the early 1980's, the focus of leadership research has been on charismatic, inspirational or transformational theories (Bryman, 1992) referred to by Yukl (2002) as "...the emotional and symbolic aspects of leadership" (p. 240). Coined the "the New Leadership" paradigm by Bryman, the studies related to these concepts help in the understanding of how leaders influence followers to make self-sacrifices and put the needs of the mission or organization above their own self-interests (Yukl).

## Distinguishing Transformational and Charismatic Leadership

J. M. Burns (1978), credited with introducing the concept of transforming leadership, expressed dislike of the term charisma stating that "the word has been so overburdened as to collapse under close analysis" (p. 244) implying that it had taken on too many overlapping meanings to be useful in analytical studies. Instead of charisma, he used the term "heroic leadership" with the following definition:
...belief in leaders because of their personage alone, aside from their tested capacities, experience, or stand on issues....heroic leadership is not simply a quality or entity possess by someone; it is a type of relationship between leader and led (p.244).

Burns argued that heroic leadership was a manifestation of transforming leadership.

Bass's (1985) transformational leadership theory has probably received the most research attention of any theory on transformational leadership (Yukl, 2002). However, in his conceptual framework, transformational leadership subsumes charismatic theory (Bass, 1997). Still, some researchers/theorists do not distinguish between the two concepts of charismatic and transformational leadership actually using the terms interchangeably (Bryman, 1992). House and Shamir (1993) see charismatic, visionary and transformational leaders as essentially the same in that they all stress leader behavior that is symbolic, appealing to followers' emotions with a focus on motivation. To add to the debate, some of the most widely known writings which directly or indirectly discuss transformational leadership (Bennis \& Nanus, 1985; Tichy \& Devanna, 1990) imply charisma through their discussion of central points such as vision, intense loyalty and trust (Bryman, 1992).

Although the transformational leadership concept was formed from the study of charismatic leadership, Sashkin (1988) argues that the two are distinctly different because charismatic leadership mainly refers to leadership based on personal identification of followers with the leader.

Whether charisma is component of transformational leadership or an interchangeable term is not resolved in the literature. House and Aditya (1997) call the debate as "quibbles" (p. 441) that reflect minor differences. They conclude there is agreement over the fundamental central concept of the "new leadership" paradigm which is that there are leader behaviors that account for outstanding leadership.

For the purpose of this study, which draws heavily from Bass's (1985) transformational leadership model, it seems necessary to draw a distinction between the
two concepts. Per Bass's theory (1985), in this study charisma will be considered a component of transformational leadership. In that vein, understanding the origins and a few of the major empirical research theories of charismatic leadership is important in the understanding of the theory of transforming or transformational leadership.

## Charismatic Leadership

The framework of transformational leadership was developed from the study of charismatic leadership (Bass, 1990). The foundation of the study of charisma dates back to sociologist Max Weber’s (1947) work. Weber first introduced the concept of charisma in the context of his work on authority and leadership, and in so doing broached the question of social and organizational change in it relationship to charismatic leadership (Bass, 1990). In general, charisma has been studied in numerous disciplines including sociology, psychology, and political science and, more recently, in relationship to leadership within the fields of organizational psychology and management (DeGroot, Kiker \& Cross, 2000).

For Weber (1947) there were three form of social authority: legal-rational, traditional and charismatic. Charismatic authority was described as a mode of leadership in which certain individuals assume a privileged social status on the basis of their divine or inspired gifts. Essentially, he used the term "charisma" to describe a form of influence based not on traditional or formal authority, but on follower perception that the leader has exceptional powers and qualities (Yukl, 2002). Weber wrote:

The term charisma will be applied to a certain quality of an individual personality by virtue of which he is set apart from ordinary men and treated as endowed with
supernatural, superhuman, or at least specifically exceptional powers or qualities. These are such as are not accessible to the ordinary person, but are regarded as of divine origin or as exemplary, and on the basis of them the individual concerned is treated as a leader (pp. 358-359).

Weber's conception of a charismatic leader is reminiscent of the early review of literature of dispositions and situations. Weber argued that the charismatic leader would become a special advocate, possessed by radical vision, during a time of perceived crisis (Bass, 1990). The leader attracts followers who believe in the vision and, when there are some successes, the followers perceive the leader as having special powers (Yukl, 2002). In general, Weber's work offered the first modern theory of leadership and set in motion widespread investigations into the essential attributes of leaders that would eventually form the basis of leadership theory in later years. (Bass, 1990; Conger \& Kanungo, 1987).

From the late 1970's to the present, social scientists have made strides to develop Weber's theories to describe charismatic leadership in organizations. House's (1977) charismatic leadership theory is probably the major application of charisma to the study of organizations (Bryman, 1992). His theory viewed charismatic leadership in terms of behavior which was a much different focus than Weber whose theory viewed leadership in terms of the attributes or traits of the leader.

House (1977) tested specific hypotheses about charismatic leadership including (a) how charismatic leaders behave, (b) how they differ from others, and (c) how their circumstances in which they are more likely to emerge. Findings by House showed that behaviors typical of charismatic leaders include role-modeling, creating the impression of
competence and accomplishment, clarifying ideological goals, expressing high expectations and showing confidence in followers' abilities, and arousing motives that are relevant to accomplishing the mission. Like other writers, House (1977) believed that charismatic leadership most often emerged in stressful situations. The stressful situation works with the charismatic leaders traits and behaviors to enhance the chance that he or she will be categorized as charismatic (Bryman, 1992).

House's theory was criticized because of its ambiguity of the influence process (Yukl, 2002). In short, it was not clear how much of the behaviors (identified by the theory) were attributable by followers or actually established by the leader (Bryman, 1992).

Building on House's behavioral perspective and considering the criticisms of the ambiguity of the influence process in his theory, Conger and Kanungo (1987) proposed a theory of charismatic leadership based on the assumption that charisma is an attributional phenomenon and emphasizes the behavioral precursors to the attribution of charisma. The basis of the research is explained with this question: "In what kinds of behavior do leaders engage that result in their being viewed as charismatic by others?" (Bryman, 1992, p. 102). Conger and Kanungo's (1987) view is that follower attribution of charismatic qualities to a leader is jointly determined by the leader's behavior, skill and aspects of the situation. Leader behaviors are not assumed to be present in every charismatic leader to the same extent and the amount of attribution is dependent to some extent on the leadership situation and the individuals who work with the leader.

The important aspect of the work by Conger and Kanungo is that they appear to imply that charisma is not a mystical quality that only very special people possess. While
the extent of charismatic behaviors expressed by leaders may vary, they seem to imply that charisma is made up of a pattern of behaviors that, when exhibited, increases the chances of the leader being deemed charismatic. If this is indeed true, charisma is potentially learnable by others (Bryman, 1992). Still, that point is often challenged. Trice and Beyer (1993) argue that charisma is a rare and complex phenomenon and people who advocate training of leaders to be charismatic underestimate the difficulty of achieving the right mix of conditions necessary for the attribution of charisma to occur.

## Transformational Leadership

Downton was the first to "coin" the term transformational leadership (as cited in Northouse, 1997). However, it was from Burn's (1978) study of political leaders that the concept of "transforming leadership" emerged as an important approach in the study of leadership (Northouse).

Drawing upon charismatic leadership theory, Burn's (1978) findings emphasized the need for leaders to both inspire and empathize with their followers. For Burns "transforming leadership" is quite different from other forms of leadership that emphasize hierarchy and power. His view was that leadership is inseparable from follower's needs (Northouse, 1997). Burns (1978) suggested that leaders who are most able to achieve organizational goals are those from whom leadership is viewed from a moral perspective in which leaders and followers engage in a mutual covenant. The leaders and followers motivate each other and help each other see the value of achieving a higher purpose. According to Burns, the transforming leader seeks to engage the follower as a whole person who has goals and aspirations beyond just meeting basic
needs (Bryman, 1992; Northouse, 1997). Referring to transforming leadership, Burns (1978) wrote that "such leadership occurs when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (p. 20). Pawar and Eastman (1997) summarized Burns' concept of transformational leadership with the following definition: "the process of pursuing collective goals through the mutual tapping of leaders' and followers' motive bases toward the achievement off the intended change" (p. 83). Bass's 1985 description of the transformational leader was "one who motivates us to do more than we originally expected to do" (p. 20).

Researchers such as Burns (1978) and Bass (1985) contrasted transformational leadership with the more traditional form of leadership dubbed by Burns as "transactional." The transactional approach entails an exchange, literally a transaction, between leader and follower in which the leader promises to give something to the follower (continued employment, wages, power, recognition) in exchange for compliance with the leader's wishes. Burns posited that the transactional form of leadership, while comprising the majority of forms of interaction between leaders and led, will not lead to advancement of larger organizational goals. In contrast, Burns transformational theory viewed leadership as a process for the entire organization that brought together all the resources of the organization in the service of the larger institutional objectives and values.

According to Goodwin et al. (2001) the definitions of transformational and transactional leadership have remained relatively consistent for the past 15 to 20 years. Transformational leadership is based on more than compliance of followers; it involves a
shift in belief, values and attitudes. Transformational leaders are described as those who stimulate their followers to change their motives, beliefs, values and attitudes so that they are willing to perform beyond the minimum levels specified by the organization (Podsakoff et al., 1990). In contrast, transactional leaders focus on the motivation of followers through discipline and rewards, clarifying the types of rewards or punishments that should be expected for certain behaviors (Goodwin).

Most of the research on transformational leadership has been on the identification of the key transformational behaviors, and the development of theories of their antecedents and consequences. Podsakoff and colleagues (1990) ascertained from the literature, six key behaviors associated with transformational leaders. Those six behaviors included (a) identify and articulate a vision, (b) provide an appropriate model, (c) foster the acceptance of group goals, (d) set high performance expectations, (e) provide individualized support and recognize accomplishments, and (f) provide intellectual stimulation. They established their list of six behaviors from the extent researchers including House (1977) whose research on charismatic leadership found four behaviors associated with leaders including (a) provide an appealing vision, (b) set an example for others to imitate, (c) communicate high expectations, and (d) behave to arouse individual motives. Bennis and Nanus (1985) found that management of attention through vision and working to development commitment and trust were the common behaviors of transformational leaders while Tichy and Devanna (1990) indicated that the leader had to have the ability to recognize a need for change and create a new vision as well as the ability to gain support for the vision. Through their extensive survey of people at all organizational levels in varying types of organizations, Kouzes and Posner (1995)
identified five leadership behaviors of exemplary leadership. In their research exemplary leaders (a) challenge the process, (b) inspire a shared vision, (c) model the way, (d) enable others to act, and (e) encourage the heart.

Although there are others like Conger and Kanungo (1987) who have conducted research to identify the behaviors associated with transformational leaders, the remainder of the review will be on transformational and transactional leadership behaviors as originally conceptualized by Bass (1985) and further developed by Avolio and Bass (2004) through the full-range leadership model. According to Yukl (2002), Bass’s (1985) transformational leadership theory has probably received the most research attention of any model on transformational leadership.

## Bass’ Full-Range Leadership Model

Bass (1985) extended Burn's qualitative theory of transforming leadership by describing the processes, behaviors, and strategies by which leaders developed the capabilities of their followers-those who would come to perform, as a result, beyond organization expectations (Howell \& Avolio, 1993). In particular, Bass (1985) proposed a more detailed analysis that began to identify specific components of both transformational and transactional leadership. The extension also differentiated Bass from Burns in their views of how the two leadership concepts were related. Whereas Burns (1978) conceived that the two types of leadership were at opposite ends of a continuum, Bass (1985) viewed them as separate dimensions implying a leader could be both transactional and transformational. Bass argued that the effects of transformational
leadership behaviors augment or supplement the effects of transformational behaviors, not replace it.

In an attempt to identify the behaviors underlying the transactional and transformational conceptualizations, Bass (1985) developed the Multifactor Leadership Questionnaire (MLQ). In his original formulation Bass saw transformational leadership comprised of four qualities: Charisma, Inspirational Motivation, Individualized Consideration and Intellectual Stimulation; while transactional leadership was made up of two qualities: Contingent Reward and Management-by-Exception. Between 1985 and the present, Bass and others (Hater \& Bass, 1988; Bass \& Avolio, 1993a; Avolio \& Bass, 2004) have expanded the original theory to the full-range leadership model comprised of five transformational leadership factors (Idealized Influence-Attributable, Idealized Influence-Behavior, Inspirational Motivation, Intellectual Stimulation and Individualized Consideration), two transactional factors (Contingent Reward and Active Management by Exception), and two passive /avoidant behaviors (Passive Management-by-Exception and Laissez-Faire).

## Organizational Culture

Since the 1980s organizational culture has become very visible in organizational research. The more recent focus on the subject came about in an effort to explain why U.S. firms were having difficulties in competing with organizations from countries with very different cultures, particularly Japan. (Schein, 1990; Trice \& Beyer, 1993). From this line of study it was determined that national culture cannot explain all the differences. Instead researchers determined the need were concepts to differentiate
between organizations within a society, especially in relation to organizational performance and effectiveness (Wilkins \& Ouchi, 1983). Organizational culture served this purpose.

The study of organizational culture is not a recent phenomenon (Trice \& Beyer, 1993). The beginning studies of culture in organizations can be traced back to the early 1930 Hawthorne studies (Warner \& Low, 1947) at the Western Electric Company in Chicago, Illinois. When Western began a series of experiments designed to explain the relationship between productivity and the physical work environment, they were perplexed when the control group's performance improved. Western Electric hired Harvard's Elton Mayo to explore some of the behavioral phenomenon of the workers (Hersey \& Blanchard, 1988). Mayo hired a young anthropology professor, W. Lloyd Warner to design and perform observational studies at Western Electric in an effort to uncover the social structure and belief system within the organization. According to Trice \& Beyer (1993) this was the first systematic attempt to understand culture within work organizations. The discovery of group norms in Western led to the rise of the human relations movement which began the focus on motivation and leadership (Grieves, 2000).

Schein (1990) differs in his version of the history of organizational culture indicating that although the concepts of group norms and climate date back to the 1930 Hawthorne studies, the concept of culture has been used only in the last several decades. According to Schein (1990), the 1950s were the era when organizational psychology split from industrial psychology. At this point organizational psychology began to emphasize working with whole groups versus just individuals. As cited in Schein, Likert developed his System 1 through 4 to describe organizational norms and attitudes. At the same time,

Katz and Kahn developed their entire analysis of organizations around systems theory which laid the theoretical foundation for later culture studies (as cited in Schein).

Many researchers have identified relationships between organizational culture, organizational performance and change (Deal \& Kennedy, 1982; Peters \& Waterman, 1982; Wilkins \& Ouchi, 1983). Researchers have argued that improving, maintaining or changing organization culture assists in making organizations more competitive and in helping revitalize declining organizations (Yeung, Brockbank \& Ulrich, 1991). Still, despite this potential importance, organizational culture is still a very controversial area of study among organizational researchers (Quinn \& Spreitzer, 1991).

Numerous attempts to define, characterize or describe organizational culture appear in the literature (Colville, Dalton \& Tomkins, 1993; Deal \& Kennedy, 1982; Grieves, 2000; Kotter \& Heskett, 1992; Schein, 1992; Trice \& Beyer, 1993; Van Muijen et al., 1992). Grieves (2000) defines organizational culture as "the sum total of the learned behavior traits, beliefs and characteristics of the members of a particular organization" (p. 367). He indicates the key in the definition is the word "learned" because that is what distinguishes culture from biological inherited behaviors. Schein (1992) defines culture as follows:

A pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration, that has 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 those problems. (p. 12)

A key for Schein's definition is having a clear understanding of what is meant by an organization. Culture, according to Schein (1990) is what a group learns over a period
of time. Thus, some groups will have no overarching culture because of high turnover or no common history. The commonality between the definitions of Schein (1992) and Grieves (2000) is that formation of a culture involves learning and that the learned behaviors eventually become taken-for-granted belief structures. With some similarities to Schein's definition, Colville et al. (1993) describe culture as a "stock of knowledge that has been codified into a pattern of recipes for handling situations," and goes on to say that "with time and routine they become tacit and taken for granted and form the schemas which drive action" (p. 559).

Consistent with other researchers Kotter and Heskett (1992), say culture refers to "values that are shared by the people in a group and that tend to persist over time even when group membership changes" (p. 4). They also say that culture is made up of group behavior norms that are common ways of acting in a group. Consistent with Schein (1993) and Grieves (2000), Kotter and Heskett suggest that the behavior persists because group members teach these behaviors to new members, rewarding those that behave appropriately and sanctioning those that don't behave in the accepted manner.

Although the definitions are still being debated, Trice and Beyer (1993) write that human culture "emerges from people’s struggles to manage uncertainties and create some degree of order in social life" (p. 1). People in organizations face many uncertainties or possible changes related to economic conditions, technology, new competitors, new clients, just to name a few. The change in organizations is pervasive due to the amount of change in the external environment (Cameron \& Quinn, 1999). Culture emerges as people within organizations learn how to deal with these changes or uncertainties. It gives them accepted ways of expressing and affirming their beliefs, values and norms (Trice \&

Beyer, 1993). This method of dealing with uncertainty or change is consistent with systems theory and Lewinian field theory which states that systems tend toward some kind of equilibrium, attempt to reduce dissonance and thus bring basic's assumptions into alignment with each other (Schein, 1990). In short, "cultures are a natural outgrowth of the social interactions that make up what we call organizations" (Trice \& Beyer, 1993, p.2).

## Leadership, Culture and Change

Change and leadership: Bass (1985) labeled transformational leadership as adaptive. Tichy and Devanna (1990) write that "transformational leadership is about change, innovation and entrepreneurship" (p. xii).

Change and culture: Many theorists have suggested that organization culture is important not only as a method for implementing change, but also for systematic change efforts. Cultures are altered to attempt to improve organization processes and organization processes are altered to change culture (Yeung et al., 1991). According to Yeung et al., "organizational culture serves as both the mean and ends of organizational change efforts" (p. 60).

One commonality between transformational leadership and organizational culture identified above is that both are connected to change or transformation of or within an organization (Bryman, 1992). In an effort to connect transformational leadership with contextual factors, Pawar and Eastman (1997) described transformational leaders as those that "create dynamic organizational vision that often necessitates a metamorphosis in cultural values to reflect greater innovation," (р. 83.) the term metamorphosis implying
change. However, Bryman (1992) points out that "the emphasis on change should not imply that transforming organizations is the essence of leadership" (p. 161). Because some writers (Tichy \& Devanna, 1990) talk about the dramatic change or transformation of organizations, "new leadership" is often associated with instilling a vision for organizational change. However, most definitions of transformational leadership are referring to the transformation of followers by the leader. As cited earlier, Burns (1978) initial definition for transforming leadership was "when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (p. 20).

Although transformational leadership has been shown to be effective in times of crisis or when a company's performance is poor (Bass, 1990), it also may be equally appropriate in times of relative stability (when changes are incremental) (Bryman, 1992). In short, there may be times when a company needs the development provided by transformational leadership but does not need system-wide organizational transformation. Trice \& Beyer (1991) describe that as the type of leadership that maintains culture.

According to Trice \& Beyer (1991) "leadership is crucial to both continuity and change" (p. 151). This theory is based on Weber's (1947) writings on charisma. Weber (1947) attributed social and cultural change to charismatic leadership, but also emphasized the need for routinization of charisma with routinization being described as the process of maintaining and furthering the vision of the charismatic leader. Incorporating Weber’s concepts, Trice and Beyer (1993) concluded that there are two cultural consequences of leadership: (a) Cultural innovation which is responsible for creating culture (attracting followers and uniting them) and changing culture (weakening
and replacing elements of the old culture), and (b) cultural maintenance which embodies culture (keeps existing culture vital) and integrates culture (reconciles diverse interests of subcultures). In summary, cultural maintenance leadership is aimed at reinforcing the existing values and tradition to help the organization reach its goals while cultural innovation is aimed at creating a new culture or radical changing the existing culture.

With some similarities to Trice and Beyer (1991) but from a purely organizational analysis standpoint, Weick and Quinn (1999) describe change as either episodic or continuous. Episodic change in organizations is described as infrequent, discontinuous and intentional. It occurs most often when the organization is moving away from equilibrium and is characterized as dramatic and externally driven. The role of the leader in this situation is to create change. On the other hand, the role of the leader in an organization that is in continuous change is to be a sense-maker who directs change. Continuous change reflects organizational changes that are ongoing, evolving and cumulative. The idea behind continuous change is that "...small, continuous adjustments, created simultaneously across units, can cumulate and create substantial change" (Weick \& Quinn, 1999, p. 375).

According to Weick \& Quinn (1999), organizations compatible with continuous change are those "built around the ideas of improvisation, translation and learning" (p. 375). Schein (1992) stated that "the most intriguing leadership role in culture management was one in which the leader attempted to develop a learning organization that would be able to make its own perpetual diagnosis and self-manage whatever transformations were needed as the environment changes" (p. 363).

Bass (1985) wrote the following in his original work on transformational leaders: "The transactional leader works within the organizational culture as it exists; the transformational leader changes the organizational culture" (p. 24). "Transformational leadership is more likely to reflect social values and to emerge in times of distress and rapid change; transactional leadership, in a well-ordered society (p. 154)." Trice \& Beyer (1993) indicate that most of the work that links leadership and culture has focused on how leaders establish or change cultures with much less written about how to maintain culture. In light of the information presented above, it would appear that the role of transformational leadership should also be considered as important for organizations that are in cultural maintenance or are characterized by continuous change as the role it would play in an organization in turmoil or crisis. As stated above, continuous change organizations emphasize the ideas of improvisation, translation and learning (Weick \& Quinn, 1999). Transformational leadership is characterized as adaptive, and with a key component of intellectual stimulation (Bass, 1985). These characteristics imply that transformational leadership could not only be effective in situations of crisis, but also has a role in cultural maintenance and in organizations managing continuous change.

## Summarizing the Connection

Does leadership determine culture or does culture determine leadership? Leaders are credited with building cultures, being founders of cultures and subcultures, promoting change in culture and maintaining culture (Bass, 1990; Schein, 1992; Trice \& Beyer, 2003). For example, Avolio and Bass (1995) studied the impact of Individualized Consideration (a transformational component) within the context in which the leader's
behavior was nested. Their hypothesis was that transformational leaders who continuously focus on developing followers (individualized consideration) will eventually create group norms that encourage colleagues to focus on developing and helping each other. In other words, culture is taught by the leadership and eventually adopted by the followers (Bass and Avolio, 1993b).

The problem with this hypothesis is that the culture might also influence the impact of the leader. For example, what constitutes individualized consideration to one person might appear to be interference or paternalism to another person. The perception is dependent on the work environments (the situation) or culture that he/she has experienced. For instance, if the person works in a very controlling environment, a simple friendly response by the leader might be construed as individual consideration. However, if a person moves to a command and control work environment after they have experience in an organization that focuses on developing individual, his/her threshold for individual consideration will be much higher (Avolio \& Bass, 1995). Thus, the culture beliefs, norms and values that he has experienced in former work life impacts how he/she feels about the leader's behavior. In other words, culture defines characteristics of followers that are attributable.

Does leadership determine culture or does culture determine leadership? Howell \& Avolio (1993) hypothesized that leaders in an organization that is high in support for innovation (characterized as open to creative suggestion, innovation and risk taking) would have higher levels of performance. Their findings suggested transformational leaders do perform better in environments described by followers as innovative; thus implying that culture can have an effect on transformational leader performance.

Furthermore, Bass \& Avolio(1993b) hypothesized that a strong organizational culture could inhibit or enhance leadership efforts: "a strong organization culture, with values and internal guides for more autonomy at lower levels, can prevent top administration from increasing its personal power at the expense of middle-level administrators" (p. 113).

In summary, the link between organizational culture and the new leadership has been made by multiple researchers (Avolio \& Bass, 1995; Bass \& Avolio, 1993b; Den Hartog et al., 1996; Pennington et al., 2003; Trice \& Beyer, 2003; Wilkins \& Ouchi, 1983). Transformational leaders are described as those who stimulate their followers to change their motives, beliefs, values and attitudes so that they are willing to perform beyond the minimum levels specified by the organization (Podsakoff et al., 1990). Culture has been defined as "a set of core values, behavioral norms, artifacts and behavioral patterns which governs the way people in an organization interact with each other and invest energy in their jobs at the organization at large" (Van Muijen et al., 1992, p. 250). The definitions alone begin to formulate an understanding of the connection.

The speculations about the relationship between leadership and organizational culture are many, but studies that confirm the propositions are often not specific enough (Den Hartog et. al., 1996). So, we end as we began: Does culture determine leadership behaviors or do leadership behaviors determine the culture?

## CHAPTER III

## METHODOLOGY

This research project was designed to study the leadership behaviors of selected leaders within an agricultural business. The purpose was to explore the relationship between leadership and a situational construct, organizational culture. Specifically, it was designed to examine the relationship between transformational and transactional leadership behaviors and four organizational culture constructs.

This chapter presents a description of the research design, hypotheses, and the data gathering instruments. Also described is the population as well as the survey procedures that were be used. The reliability and validity of the survey instruments also are examined.

## Institutional Review Board

Oklahoma State University policy and federal regulations require approval of all research studies that involve human subjects before investigators can begin their research.

The Oklahoma State University Office of University Research Services and the Institutional Review Board (IRB) conduct this review to protect the rights and welfare of human subjects involved in biomedical and behavioral research. In compliance with that policy, the study investigators were granted permission to proceed. A copy of the IRB (Application \# AG0554) is located is Appendix N of this proposal.

## Research Design

The primary objective of the investigation was to explore the relationship between organizational culture and transformational and transactional leadership. It was a descriptive research study using correlational analysis to determine the extent of the relationship between the variables of interest: leadership (transformational and transactional) and organizational culture. A descriptive study seeks to describe the current status of a phenomenon to explore what is going on or what exists in a situation (Isaac \& Michael, 1995). Correlational analysis is used to investigate the extent to which variations in one factor correspond with variations in one or more other factors based on correlation coefficients (Isaac \& Michael).

Pursuant to a correlational analysis, the first variable of interest in this study was the four components of the organizational culture construct: clan, hierarchy, market or adhocracy. The leadership style (transformational or transactional) demonstrated in this study represented the second variable of interest in this research model. The specific constructs of the leadership style variables that were included to give even more information about the relationship were: Idealized Influence (attributable), Idealized Influence (behavior), Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Active Management-by-Exception, Passive Management-by-Exception and Laissez-Faire.

## Subject Selection

This study surveyed employees from a regional agribusiness with multiple branch offices. The agribusiness characterized itself as an Association. An organizational chart of the Association is location in Appendix K. A census of the Association was conducted to gather both the culture data and leadership data. Specifically, branch managers served as the leaders about whom full-range leadership data were collected. They are referred to as focal leaders throughout this document. The employees under the branch managers as well as the branch managers' colleagues and supervisors also were surveyed to gather information about the leadership style of the focal leader. Furthermore, all employees in each branch office were surveyed to ascertain the organizational culture of their respective branch office.

Each of the eight branch offices in the organization were at separate locations several counties apart. The hierarchal structure of this regional agribusiness includes the President/CEO and senior administrators who are responsible for their Association/area of the state. The President/CEO of this Association answers to a Board of Directors and works cooperatively with a Central/District office. The leader of each branch is known as the branch manager and is responsible for the functions and personnel in his respective branch office. The personnel in each branch office vary from three to eight individuals including the branch manager. Each office consists of the branch manager and at least one professional and one clerical staff. Most offices have multiple professional staff members. The branch manager answers directly to the Association senior administrators.

## Instrumentation

Two survey instruments were used to gather information from the individuals in the association. Organizational cultures were measured using the Organizational Culture Assessment Inventory (OCAI) (Cameron \& Quinn, 1999). The second variable of leadership was operationalized using the Multifactor Leadership Questionnaire (MLQ) form 5X (Avolio \& Bass, 2004). The MLQ form 5X is a measure of transformational and transactional leadership behaviors as well as effectiveness behaviors shown in prior research to be strongly linked with both individual and organization success (Avolio \& Bass, 2004).

## Organizational Culture Assessment Inventory

In this study, organizational culture is classified into one of four types operationalized with the OCAI. The OCAI measures the survey participants' perceptions of the culture of the organization and classifies it as a clan, adhocracy, market or hierarchical type culture. According to Cameron and Quinn (1999), the instrument has been found to be appropriate for use with organizations as a whole as well as subculture and teams within the organization. For this study, the culture within specific offices was the focus of data collection.

The OCAI was presented in a web survey format that consisted of six content dimensions related to the organizational culture: (a) dominant characteristics, (b) organizational leadership, (c) management of employees, (d) organizational glue, (e) strategic emphasis, and (f) criteria for success (Appendix A). In combination, these
dimensions reflect the fundamental cultural values and implicit assumptions about the way the organization functions (Cameron \& Quinn, 1999).

Under each of the dimensions are statements or scenarios to help survey participants evaluate their respective organization's culture. Participants read the statements under each dimension and then assess their organization by assigning points to each scenario. The total point total for each of the four statements within a dimension equals 100 points. The distribution of points will indicate the extent to which the participant believes the statement best describes his/her current organization. As described by Cameron and Quinn (1999), the point distribution across all dimensions determined the strength of each of the four cultures within that organization, as evaluated by the survey participant.

Cameron and Quinn (1999) have documented reliability, or the extent to which the OCAI measures culture types consistently, of the OCAI in numerous studies. These studies have shown the OCAI to consistently measure culture types with reliability coefficients (cronbach alpha) of .71 for the market culture, .79 for the adhocracy culture, .73 for the hierarchy culture and .74 for the clan culture. Other studies (Yeung et al., 1991; Zammuto \& Krakower, 1991) also confirmed reliabilities in the range of .67 for the hierarchy culture up to .82 for the clan culture. Validity of OCAI has been established in several studies and is outlined in Appendix I of Cameron and Quinn (1999).

## Multifactor Leadership Questionnaire

The Multifactor Leadership Questionnaire (MLQ) (Appendix B) grew out of the work of Bass (1985). It was initially developed from an open-ended survey of 70 senior executives who were asked to describe a transformational leader with whom they had worked. Seventy-three items were then selected for inclusion into a questionnaire on the basis that they described transformational or transactional leadership. Hater and Bass (1988) extracted the same factors as reported by Bass (1985) except that they also found active and passive type of management-by-exception instead of the single factor Bass found. Each of the factors discovered described active leadership except management-byexception and laissez-fair leadership.

The MLQ form 5X has two forms: a leader form (Appendix C) and a rater form (Appendix D). The leader form was developed as a self-evaluation tool for the leader to measure his/her perceived leadership styles. The rater form is completed by individuals who work at a higher, same or lower organizational level as the person being rated (the leader). It has been found that multiple sources should be solicited when leadership ratings are to be used (Atwater \& Yammarino, 1992). Atwater and Yammarino concluded that individuals vary in their levels of self-awareness which impacts whether they over estimate, under estimate or are on target with their self-evaluation. In short, they conclude that self-reports often do not parallel others' reports concluding that multiple sources should be solicited. Other studies (Harris \& Schaubroeck, 1988) also have acknowledged the value of obtaining ratings from multiple sources concluding that multiple source ratings led to increased reliability, fairness and rater acceptance. In this study, both the
self-rater (leader) form and at least three other raters (higher, same or lower organizational level) will be used.

Both the leader and "other" rater form use a five-point frequency scale ranging from 0 (not at all) to 4 (frequently, if not always). The questionnaire is comprised of an item list and each rater is instructed to evaluate how frequently, or to what degree, they have observed the focal leader engage in 32 specific behaviors. Additional items in the instrument include rating of attributions (passive/avoidant leadership and "outcomes of leadership" measures) (Avolio \& Bass, 2004). In the same way, the focal leader completes the MLQ as a self rating evaluating how frequently, or to what degree, he/she believes he/she engages in the certain types of leadership behavior with those he/she is associated with at work (those above, below, at their same organizational level or other relationships such as a customer). For each scale, items are summed and divided by the appropriate number of items, yielding a scale score that ranges from zero to four.

The MLQ 5X was developed in response to substantive criticisms of the MLQ 5R survey due to high correlations among transformational scales, among other things. In 1985, Bass proposed a six-factor model that was used as the based for conducting Confirmatory Factor Analyses of the 36 -item MLQ Form 5X. The six-factor model combined attributed charisma, charismatic behavior and inspirational leadership into a single factor. Additionally, for transactional leadership, Passive Management-byException and Laissez-Faire were merged into a factor called passive/avoidant. The six factors included: Charisma/Inspirational, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Active Management-by-Exception and Passive Avoidant.

Confirmatory Factor Analysis moved the MLQ Form 5X to a "Full Range Model" of nine factors (Avolio \& Bass, 2004). The current nine-factor model was superior to all other models including the six-factor model. Alpha coefficients (reliabilities) are in parentheses behind each of the full-range leadership factors: Idealized Influence: Attributes (.75); Idealized Influence: Behaviors (.70); Inspirational Motivation (.83); Intellectual Stimulation (.75); Individualized Consideration (.77); Contingent Reward (.69); Management-by-Exception: Active (.75); Management-by-Exception: Passive (.70); Laissez-Faire (.71). Testing of the nine factor model included analysis across regions and by rater level. It showed strong and consistent support for the full range ninefactor model (Avolio \& Bass, 2004) as evidenced by the reliability coefficients presented above.

## Data Collection

A census of the association was conducted to gather both the organization culture data and the full-range leadership data. A web version of the Multifactor Leadership Questionnaire (MLQ) (leader and rater versions) and a web version of the Organizational Culture Assessment Inventory (OCAI) were created according to Dillman’s (2000) recommendations for web and internet surveys (p. 376). However, the content and flow of the respective instruments was not changed. When sent to the participants, the web versions of the two instruments were combined so that it appeared to the participants as one instrument with multiple sections. Three web versions of the combined instruments were created: (a) a focal leader version for the eight branch managers (consisted of a leader version of the MLQ + OCAI + demographic data), (b) a lower organization version for subordinates of the focal leader at each branch office (consisted of the rater
version of the MLQ + OCAI), (c) a higher and same organizational level rater version (consisted of the rater version of the MLQ).

For the MLQ, the focal leaders (leaders about whom the leadership data was gathered) were the branch managers of each branch office. The focal leader version of the web instrument was distributed to branch managers while the appropriate rater version (as described above) was distributed to: 1) the subordinate employees of the focal leader; 2) individuals at a higher organizational level than the focal leader; and 3) individuals at the same organizational level as the focal leader. As recommended by Avolio and Bass (2004), the study achieved a minimum of three raters at a higher, same and lower organizational level as the focal leader.

As described above, the web version of the OCAI was combined with the web version of the MLQ. Focal leaders and their employees accessed the web OCAI after completion of the web MLQ. The senior administrators who are at a higher organizational level than the managers were not asked to complete the OCAI because they are not located in the respective offices of the focal leader.

Prior to the instrument distribution, the president of the organization sent out a brief, introductory email indicating that the research had been approved and that the researcher had received permission to send out the survey to each employee's business email. This was considered to be the pre-notice letter suggested by Dillman (2000). As described by Dillman (2000, p. 368), a personalized email asking for each employee’s participation (manager, manager's employees, senior administrators) was sent by the researcher (Appendix F, H \& J). The email described the study and informed each person of his/her rights as a survey participant. If the employee agreed to participate, he/she
linked to the web instruments (appropriate version-leader or rater) through the abovementioned email. The link in the email provided the survey participant to an introductory Web page that again described the research and gave the appropriate contact information for questions and concerns.

As suggested by Dillman (2000) participants who did not respond after the initial round of emails were sent a follow-up email including another link to the web instrument approximately two weeks after the first email (Appendix G, I). A final follow-up email and link to the web instrument was sent to non-responders approximately two weeks after the first non-response email (Appendix G, I).

## Data Analysis

To derive a transformational and transactional leadership as well as an "outcomes of leadership" score for each focal leader, compilation of the focal leader and their respective rater scores was done using the Multifactor Leadership Questionnaire scoring key (Avolio \& Bass, 2004) (Appendix L). For each scale (Idealized Influenceattribution, Idealized Influence-behaviors, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Active Management-byException, Passive Management-by-Exception, Laissez-Faire, Extra Effort, Effectiveness, Satisfaction with the leader), items were summed and divided by the appropriate number of items, yielding a scale score that ranges from zero to four. Similarly, the organizational culture score for each member of the organization will be calculated as described by Cameron and Quinn (1999) (Appendix M).

Descriptive statistics (means, standard deviations, ranges) were used to describe the leadership behaviors of the focal leaders (Research Objective 1) and the culture of each branch office (Research Objective 2). Correlation analysis was performed to explore the relationships between organizational culture and leadership (transformational, transactional and passive/avoidant behavior) as outlined in Research Objectives 3-5.

Magnitude versus statistical significance is used to describe the reported correlation coefficient (r value) (Miller, 1998). Pedhauzer (1997) indicates the importance of using tests of significance in proper perspective of the overall research endeavor. "Of what use is a statistically significant finding if it is deemed to be substantively not meaningful?" (Pedhauzer, 1997, p.26). Figure 2 (Davis, 1971) will be the basis for the correlation descriptions and discussion. The coefficient of determination $\left(r^{2}\right)$ will be used to interpret the data in an effort to find the "substantive meaning" as described by Pedhauzer (1997) or "practical significance" as described by Miller (1998).

| $\mathbf{R}$ | Adjective |
| :---: | :---: |
| 1.0 | Perfect |
| $0.70-0.99$ | Very High |
| $0.50-0.69$ | Substantial |
| $0.30-0.49$ | Moderate |
| $0.10-0.29$ | Low |
| $0.01-0.09$ | Negligible |

Figure 1. Descriptive representation of the correlation coefficient. ${ }^{\text {a }}$

[^0]
## CHAPTER IV

## RESULTS

This study was designed to describe the full-range leadership behaviors (transformational, transactional, passive/avoidant leadership behaviors) and four organizational culture constructs within an agricultural business. Furthermore, the study sought to explain the relationship between the transformational and transactional leadership behaviors and the situational construct, organizational culture. As described in Chapter III, this study was accomplished through the use of two survey instruments, the Multifactor Leadership Questionnaire (MLQ) (Avolio and Bass, 2004) and the Organizational Culture Assessment Inventory (OCAI) (Cameron and Quinn, 1999).

## Overview of Respondents

In total, there were fifty-one responses used to calculate the MLQ scores for each of the eight focal leaders at the eight branch offices. The responses included eight selfratings, eight ratings by individuals at a higher organizational level, eight ratings by individuals at the same organizational level and twenty-seven ratings by individuals at a lower organizational level. Thirty-seven out of a possible forty-two employees in the population responded to the Multifactor Leadership Questionnaire (twenty-seven lower; two higher; eight self and same). The organization President/CEO and one Senior Vice President assessed four of the eight focal leaders. The focal leaders (branch managers)
each responded twice to the survey: (a) once to rate their own leadership and 2) secondly to rate a colleague who was at the same organizational level. The same level organizational raters (colleagues) were selected by the Organization President/CEO to ensure the "same level raters" had actively had the opportunity to work with and observe their colleague.

Figure 2 is an organizational chart of the business in the study.


Figure 2. Organizational chart of branch offices.

The total number of respondents to calculate the MLQ for each branch is presented in Table 1. According to Avolio and Bass (2004), the number of raters evaluating a single leader can vary in size from three to more although it is recommended that all persons working above, below and directly at the same organization level as the leader, rate the leader. Except for a minimum of three raters, no specific optimal size for the rater group is suggested in regards to evaluating a single leader. As recommended, the study achieved a minimum of three raters at a higher, same and lower organizational level as the focal leader. The response rates for those at an organizational level lower than the focal leader are described in Table 1.

Table 1
Number of Respondents and Response Rate at Each Branch Office for the MLQ

| Branch <br> Office | Self-Rating | Higher Org <br> Level | Same Org <br> Level | Lower Org <br> Level | Total \# MLQ <br> respondents |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | \# Respondents <br> (response rate) | \# Respondents <br> (response rate) | \# Respondents <br> (response rate) | \# Respondents <br> (response rate) |  |
| A | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $1(50 \%)$ | 4 |
| B | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $2(100 \%)$ | 5 |
| C | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $5(100 \%)$ | 8 |
| D | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $4(80 \%)$ | 7 |
| E | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $1(50 \%)$ | 4 |
| F | $(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $3(75 \%)$ | 6 |
| G | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $6(100 \%)$ | 9 |
| H | $1(100 \%)$ | $1(100 \%)$ | $1(100 \%)$ | $5(83 \%)$ | 8 |

Note. There were 51 total responses to the MLQ. There were 37 total employees who responded (27 lower; 2 higher; 8 self and same).

Response rate for the Organizational Culture Assessment Instrument (OCAI) is outlined in Table 2. Thirty-five out of forty individuals in the population responded to the questionnaire. The number of people responding from each branch is also listed in Table 2. Only individuals working in a branch office were asked to complete the OCAI. Upper administrators (Senior Vice Presidents/President \& CEO) were not asked to complete the OCAI, as they were not directly involved in the daily work at the branch office.

Table 2
Number of Respondents and Response Rate at Each Branch Office for the OCAI

| Branch | \# Respondents | Response Rate |
| :---: | :---: | :---: |
| A | 2 | $66.7 \%$ |
| B | 3 | $100 \%$ |
| C | 6 | $100 \%$ |
| D | 5 | $83.3 \%$ |
| E | 2 | $66.7 \%$ |
| F | 4 | $80 \%$ |
| G | 7 | $100 \%$ |
| H | 6 | $85.7 \%$ |

Note. There were 35 total respondents to the OCAI.

## Demographic Data

All eight focal leaders (branch managers) were male with a mean age of 49 ranging from 38-57. They averaged 26.6 (ranging from 15-34) years in the workforce with an average of 25 years of service with their current employer. Six of the eight focal leaders had spent their entire career employed with their current employer although they were not asked if that career had been spent in their current branch office. Average years served in a managerial role was 13.5 ranging from 1-28 years. Seven of the eight had earned a Bachelor's degree and one had earned the degree of Masters.

Raters at a lower organizational level included 15 men and 12 women with job responsibilities ranging from clerical and secretarial to professional and administrative duties.

## Findings Related to Objective 1

Objective 1 of this study was to describe the Full Range Leadership Behaviors (transformational, transactional, passive/avoidant leadership) within the selected agricultural business. The means, standard deviations and ranges for each factor of the Full Range Leadership Model are outlined in Table 3. The means were calculated from the thirty-seven MLQ scores obtained from the employees at the each of the branch offices ( $\mathrm{n}=8$ ). The five-point scale for rating the frequency of the observed leader behaviors is listed in Table 4.

As shown in Table 3, the focal leaders' mean overall transformational score was higher than the transactional score (2.19 and 1.87, respectively). In addition, the highest mean scores for the focal leaders in this study were the transformational factors: Idealized Influence (Attributable) ( $\mathrm{M}=2.33$ ) and Individualized Consideration ( $\mathrm{M}=2.31$ ) as well as the transactional factor Contingent Reward ( $\mathrm{M}=2.29$ ). The passive/avoidant behavior means were the lowest among the full range leadership scores.

Table 3
Full Range Leadership Scores as Measured by the MLQ ( $\mathrm{N}=8$ )

| Scale | M | SD | Range | Min | Max |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Transformational | 2.19 | .37 | 0.83 | 1.70 | 2.71 |
| Idealized Influence <br> (Attributable) | 2.33 | .48 | 1.03 | 1.69 | 2.72 |
| Idealized Influence <br> (Behavior) | 2.23 | .33 | 0.94 | 1.75 | 2.69 |
| Inspirational Motivation <br> Intellectual Stimulation | 2.10 | .44 | 1.56 | 1.38 | 2.94 |
| Individualized Consideration | 2.31 | .47 | 1.38 | 1.54 | 2.92 |
|  | 1.87 | .31 | 0.98 | 1.31 | 2.29 |
| Transactional | 2.29 | .38 | 1.30 | 1.46 | 2.76 |
| Contingent Reward | 1.44 | .29 | 0.87 | 2.03 | 2.16 |
| Management-by- Exception <br> (Active) | 1.33 | .66 | 1.75 | .69 | 2.44 |
| Passive/Avoidant Behavior | .74 | .50 | 1.50 | .25 | 1.75 |
| Management-by-Exception <br> (Passive) <br> Laissez-Faire |  |  |  |  |  |

Note. $0=$ not at all; $1=$ once in a while; $2=$ sometimes; $3=$ fairly often; $4=$ frequently, if not always.
Table 4
Rating Scale for Leadership Items in the MLQ
$0=$ Not at all
1=Once in a while
2=Sometimes
3=Fairly often
4=Frequently, if not always

Mean transformational and transactional scores for all the leaders in the population across each type of rater are presented in Table 5. As shown, mean self-rating of leadership of the population was higher than subordinates', peers' or superiors' ratings.

## Table 5

Mean and Standard Deviations of Transformational and Transactional Scores Across Each Rater Type ( $\mathrm{N}=8$ )

|  |  |  |  | Transactional |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Rater Type | Transformational |  | Mean | StdDev |  |
| Self | 2.72 | .426 | 2.19 | .481 |  |
| All other | 2.12 | .538 | 1.83 | .646 |  |
| Higher level | 2.22 | .728 | 1.91 | .486 |  |
| Same level | 2.35 | .405 | 1.92 | .943 |  |
| Lower level | 1.78 | .483 | 1.66 | .507 |  |

Note. $0=$ not at all; $1=$ once in a while; $2=$ sometimes; $3=$ fairly often; $4=$ frequently, if not always.
The mean score for each leader at each branch office across rater type is presented in Tables 6 and 7. When evaluating the mean scores of each branch office, others' ratings were higher than self-rating in branches C, D, F and G (Table 5) for transformational leadership and branches B, C, E, G and H (Table 6) for transactional leadership.

Table 6

| Rater Type | Branch Offices |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | G | H |
| Self | 3.45 | 3.20 | 2.75 | 2.60 | 2.75 | 2.25 | 2.25 | 2.50 |
| All other | 2.40 | 2.24 | 2.59 | 1.96 | 1.47 | 1.92 | 2.44 | 1.32 |
| Higher level | 3.30 | 2.35 | 2.90 | 1.35 | 1.10 | 2.27 | 2.10 | 2.42 |
| Same level | 2.00 | 2.38 | 2.70 | 3.05 | 2.13 | 1.89 | 2.60 | 2.05 |
| Lower level | 1.90 | 1.99 | 2.17 | 1.95 | 1.18 | 1.61 | 2.63 | 1.32 |

Note. $0=$ not at all; $1=$ once in a while; $2=$ sometimes; $3=$ fairly often; $4=$ frequently, if not always
Table 7
Mean Transactional Scores for Each Leader in Each Branch Office Across Each Rater Type

| Rater Type | Branch Offices |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | G | H |
| Self | 3.00 | 2.25 | 1.63 | 2.75 | 2.25 | 2.13 | 1.83 | 1.75 |
| All other | . 96 | 2.10 | 2.16 | 1.83 | 1.96 | 1.75 | 2.36 | 1.53 |
| Higher level | 2.00 | 2.50 | 2.38 | 2.38 | 1.13 | 1.50 | 1.75 | 1.67 |
| Same level | 0.00 | 1.67 | 2.17 | 1.63 | 3.00 | 2.00 | 3.00 | 1.88 |
| Lower level | 0.88 | 2.13 | 1.93 | 1.47 | 1.75 | 1.76 | 2.33 | 1.03 |

Note. $0=$ not at all; $1=$ once in a while; $2=$ sometimes; $3=$ fairly often; $4=$ frequently, if not always.
The correlations among the transformational leadership ratings provided by the four rater groups are presented in Table 8. The ratings by employees at a lower organizational level were positively correlated with the respondents who were at a higher
organization level ( $\mathrm{r}=.472$ ) and those respondents who were at the same organizational level ( $\mathrm{r}=.325$ ). The correlation of self-raters with lower level raters was negligible ( $\mathrm{r}=.0006$ ) while the correlations of self raters with higher raters was positive.

## Table 8

Matrix of Transformational Scores for the Four Rater Groups

| Rater Group | $r$ r values |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Self | Higher | Same | Lower |
|  | 1.00 | .429 | -.129 | .0006 |
| Self |  | 1.00 | -.296 | .472 |
| Higher |  |  | 1.00 | .325 |
| Same |  |  |  | 1.00 |
| Lower |  |  |  |  |

Findings related to Objective 2

The Organizational Culture Assessment Instrument (OCAI) was used to gather the data related to Objective two. The OCAI measured the culture of each branch office as assessed by the leader and employees in that office. Table 2 shows the number of respondents used to calculate the culture score for each branch office. Table 9 describes the mean culture scores as well as standard deviations for the eight branch offices within the population. Based on population means, hierarchy and clan were the two predominant organizational cultures in the population. When compared with the mean scores from each branch office (Table 10), four branch offices had hierarchy as their top culture while three others had clan at the top. The OCAI data collected showed Branch E as having a market culture (mean score of 33.75) and a secondary culture of hierarchy (mean= 30).

Table 9
Means and Standard Deviations for OCAI (N=8)

| Scale | M | SD | Range | Minimum | Maximum |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Clan | 30.12 | 7.54 | 25 | 18.33 | 43.33 |
| Adhocracy | 13.60 | 3.50 | 10.33 | 9.17 | 19.50 |
| Market | 24.17 | 4.53 | 15.58 | 18.17 | 33.75 |
| Hierarchy | 32.12 | 6.51 | 19.65 | 23.89 | 43.54 |

Note. A total of 34 employees responded to the OCAI.

Table 10
Mean Organizational Culture Score for Each Branch Office

| Culture |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  | A | B | C | D | E | F | G | H |
|  | Clan | 30.00 | 29.17 | 43.33 | 33.17 | 18.33 | 19.79 | 33.00 |  |  |  |  |  |  |  |  |  |
| 34.17 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Adhocracy | 9.17 | 10.83 | 13.33 | 19.50 | 17.92 | 9.58 | 14.53 | 13.89 |  |  |  |  |  |  |  |  |  |
| Market | 22.50 | 24.72 | 19.44 | 22.83 | 33.75 | 27.08 | 18.17 | 24.86 |  |  |  |  |  |  |  |  |  |
| Hierarchy | 38.33 | 35.28 | 23.89 | 24.50 | 30.00 | 43.54 | 34.31 | 27.08 |  |  |  |  |  |  |  |  |  |
|  | $\mathrm{~N}=2$ | $\mathrm{~N}=3$ | $\mathrm{~N}=6$ | $\mathrm{~N}=5$ | $\mathrm{~N}=2$ | $\mathrm{~N}=4$ | $\mathrm{~N}=7$ | $\mathrm{~N}=6$ |  |  |  |  |  |  |  |  |  |

Findings Related to Objective 3

The purpose of Objective 3 was to explore the relationship between organizational culture and transformational leadership. This was accomplished using the four research questions below:

Research Question 1: What is the relationship between clan culture and the components of transformational leadership?

Research Question 2: What is the relationship between adhocracy culture and the components of transformational leadership?

Research Question 3: What is the relationship between hierarchal culture and the components of transformational leadership?

Research Question 4: What is the relationship between market culture and the components of transformational leadership?

The factors of transformational leadership correlated with organizational culture are follows: Idealized Influence (Attributable), Idealized Influence (Behaviors), Inspirational Motivation, Individualized Consideration and Intellectual Stimulation.

The Pearson's product moment correlation coefficient and coefficient of determination are listed in Tables 11-14.

Research Question 1 explores the relationship between the clan culture and the five factors of transformational leadership. As presented in table 11, the magnitude of the relationship between clan culture and the factors of transformational leadership can be described as low to substantial. The clan culture is moderately related to the overall transformational score ( $\mathrm{r}=.439$ ) as well as the factors of Idealized Influence (Attributable) ( $\mathrm{r}=.487$ ) and Individualized Consideration (.357). A substantial relationship (r=.640) between culture and Idealized Influence (behavior) was also observed accounting for $41 \%$ of the variance in the relationship $\left(r^{2}=.410\right)$. The total amount of variability shared between transformational leadership and clan culture was approximately $19 \%$.

Table 11
Relationship of Clan Culture and Transformational Leadership Components ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients $(\mathrm{r})$ | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transformational | .439 | .193 |
| Idealized Influence-Attributable | .481 | .231 |
| Idealized Influence-Behavior | .640 | .410 |
| Inspirational Motivation | .249 | .062 |
| Intellectual Stimulation | .191 | .036 |
| Individualized Consideration | .357 | .127 |

Note. A total of 37 employees responded to the MLQ.

Research Question 2 explores the relationship between the adhocracy culture and the five factors of transformational leadership. There is a negative correlation between adhocracy and all five transformational leadership factors as outlined in Table 12. The relationship between adhocracy and the overall transformational score, Idealized Influence (attributable), Intellectual Stimulation and Individualized Consideration can be described as moderately negative. The shared variability between the adhocracy culture and transformational, Idealized Influence (Attributable), Inspirational Motivation and Individualized Consideration are 13.8\%, 24\%, 15\% and 20\%, respectively. The negative relationship between transformational leadership and the adhocracy culture is inconsistent with findings in other studies.

Table 12
Relationship of Adhocracy Culture and Transformational Leadership Components (N=8)

|  | Pearson Correlation <br> Coefficients (r) | Coefficient of <br> Determination $\left.\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transformational | -.371 | .138 |
| Idealized Influence-Attributable | -.487 | .237 |
| Idealized Influence-Behavior | -.074 | .006 |
| Inspirational Motivation | -.390 | .152 |
| Intellectual Stimulation | -.036 | .001 |
| Individualized Consideration | -.446 | .199 |

Note. A total of 37 employees responded to the MLQ.
Research Question 3 explores the relationship between the market culture and the five factors of transformational leadership. Table 13 shows a negative correlation between the market culture and the transformational leadership factors with magnitudes ranging from moderate for Intellectual Stimulation (r=-.377) to very high for Idealized Influence-behavior (r=-.815). In this study, 48\% of the variability is shared between the overall transformational score and the market culture.

Table 13
Relationship of Market Culture and Transformational Leadership Components ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients (r) | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transformational | -.693 | .480 |
| Idealized Influence-Attributable | -.714 | .510 |
| Idealized Influence-Behavior | -.815 | .664 |
| Inspirational Motivation | -.424 | .180 |
| Intellectual Stimulation | -.377 | .142 |
| Individualized Consideration | -.671 | .450 |

Note. A total of 37 employees responded to the MLQ.
The relationship between the hierarchal culture and the five factors of transformational leadership is explored in the fourth research question. The relationship between this culture and the transformational factors is varied, but mostly positive as shown in Table 14. There is a low correlation between the hierarchal culture and Idealized Influence (behavior) with an $\mathrm{r}=-.135$. The four other factors, including the overall transformational score, are positively correlated, but in the low magnitude range. From a practical standpoint, there is little shared variability in the relationships. The amount of variability that is shared between hierarchy culture and the transformational factors ranges from 0.4\% for Intellectual Stimulation to 8.5\% for Individualized Consideration.

Table 14
Relationship of Hierarchy Culture and Transformational Leadership Components ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients $(\mathrm{r})$ | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transformational | .173 | .030 |
| Idealized Influence-Attributable | .201 | .040 |
| Idealized Influence-Behavior | -.135 | .018 |
| Inspirational Motivation | .216 | .046 |
| Intellectual Stimulation | .061 | .004 |
| Individualized Consideration | .292 | .085 |

Note. A total of 37 employees responded to the MLQ.

The mean full range leadership score of the focal leaders in each branch office as assessed by all raters is located in Table 15. The mean organizational culture score for each branch office as assessed by individuals in that branch office is located in Table 16. The raw data in Tables 15 and 16 can be compared and contrasted to observe tendencies in each branch office.

Table 15

Full Range Leadership scores for each branch office

| Scale | Branch Offices |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | G | H |
| Transformational | 2.71 | 2.38 | 2.40 | 2.11 | 1.79 | 1.87 | 2.53 | 1.70 |
| Idealized Influence (Attributable) | 3.06 | 2.65 | 2.66 | 2.11 | 1.69 | 1.93 | 2.72 | 1.78 |
| Idealized Influence (Behavior) | 2.69 | 2.20 | 2.38 | 2.49 | 1.75 | 1.82 | 2.53 | 2.00 |
| Inspirational Motivation | 2.94 | 2.13 | 2.47 | 1.86 | 1.94 | 1.79 | 2.28 | 1.38 |
| Intellectual Stimulation | 1.94 | 2.10 | 2.16 | 1.68 | 2.04 | 1.72 | 2.49 | 1.59 |
| Individualized Consideration | 2.92 | 2.83 | 2.34 | 2.43 | 1.54 | 2.10 | 2.62 | 1.73 |
| Transactional | 1.64 | 2.13 | 1.97 | 1.80 | 2.03 | 1.75 | 2.29 | 1.31 |
| Contingent Reward | 1.94 | 2.60 | 2.76 | 2.36 | 2.38 | 2.31 | 2.55 | 1.46 |
| Management-by-Exception (Active) | 1.33 | 1.67 | 1.19 | 1.25 | 1.69 | 1.20 | 2.03 | 1.16 |
| Passive/Avoidant Behavior |  |  |  |  |  |  |  |  |
| Management-by-Exception (Passive) | 0.83 | 0.90 | 0.69 | 1.10 | 2.44 | 1.17 | 1.06 | 2.44 |
| Laissez-Faire | 0.25 | 0.45 | 0.28 | 0.46 | 1.75 | 0.75 | 0.67 | 1.34 |
| $\mathrm{N}=$ | 4 | 5 | 8 | 7 | 4 | 6 | 9 | 8 |

Note. $0=$ not at all; $1=$ once in a while; $2=$ sometimes; $3=$ fairly often; $4=$ frequently, if not always.

Table 16

Organizational Culture Scores for Each Branch Office

| Scale | Branch Offices |  |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | B | C | D | E | F | G | H |  |
|  | Clan | 30 | 29.17 | 43.33 | 33.17 | 18.33 | 19.79 | 33 |  |
| Adhocracy | 9.17 | 10.83 | 13.34 | 19.50 | 17.92 | 9.58 | 14.53 | 13.89 |  |
| Market | 22.50 | 24.72 | 19.44 | 22.83 | 33.75 | 27.08 | 18.16 | 24.86 |  |
| Hierarchy | 38.33 | 35.28 | 23.89 | 24.50 | 30 | 43.55 | 34.31 | 27.08 |  |
|  | $\mathrm{~N}=$ | 2 | 3 | 6 | 5 | 2 | 4 | 7 |  |

Note. The point distribution across all dimensions determines the strength of each of the four cultures within that organization; a total point possible in each column was 100.

## Findings Related to Objective 4

The purpose of Objective 4 was to explore the relationship between organizational culture and transactional leadership. This was accomplished using the four research questions below:

Research Question 5: What is the relationship between clan culture and the components of transactional leadership?

Research Question 6: What is the relationship between adhocracy culture and the components of transactional leadership?

Research Question 7: What is the relationship between hierarchal culture and the components of transactional leadership?

Research Question 8: What is the relationship between market culture and the components of transactional leadership?

The components of transactional leadership correlated with organizational culture were as follows: Contingent Reward and Active Management-by-Exception. The Pearson's product moment correlation coefficient and coefficient of determination are both listed on Tables 15-18 and will be used to shed light on each of the research questions.

Prior to running the Pearson Product-Moment Correlations, scatterplots of each of the transactional factors were plotted against each of the four culture constructs to discern whether the assumption of linearity was tenable. As shown in Figures 3-6, it appears the assumption was met. The scatter plots also give a visual interpretation of the data.


Figure 3. Scatter plot of relationship between transactional leadership factors and the clan culture.


Figure 4. Scatter plot of relationship between transactional leadership factors and the adhocracy culture.


Figure 5. Scatter plot of relationship between Transactional Leadership Factors and the Market Culture.


Figure 6. Scatter plot of relationship between transactional leadership factors and the hierarchy culture.

Research Question 5 explores the relationship between the clan culture and the two factors of transactional leadership. Table 17 presents the correlation coefficients. The data reveal a positive but low magnitude relationship between contingent reward and the clan culture. However, there is a low magnitude negative relationship between clan and the transactional factor active management-by-exception. The overall transformational leadership score relationship to the clan culture was negligible (r=-.047).

Table 17
Relationship of Clan Culture and Transactional Leadership Components ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients $(\mathrm{r})$ | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transactional | -.047 | .002 |
| Contingent Reward | .101 | .01 |
| Management-by-Exception <br> (Active) | -.224 | .05 |

Note. A total of 37 employees responded to the MLQ.
The relationship between adhocracy culture and the two factors of transactional leadership is explored in Research Question 6. The magnitudes of the correlation coefficients calculated for the culture by transactional leadership variables can be described as low. The coefficient of determination in Table 18 shows the variability accounted for by this relationship is a negligible amount of 2.5\%.

Table 18
Relationship of Adhocracy Culture and Transactional Leadership Components ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients (r) | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transactional | .158 | .025 |
| Contingent Reward | .117 | .014 |
| Management-by-Exception <br> (Active) | .155 | .024 |

Note. A total of 37 employees responded to the MLQ.
The relationship between the market culture and transactional leadership factors was the purpose of Research Question 7. As noted in Table 19, there is a negative correlation between the market culture and transactional leadership factors. The
magnitude of the relationship between market culture and the overall transactional score, Contingent Reward and Active Management-by-Exception were all low. Again, very little variability in this relationship is shared.

Table 19
Relationship of Market Culture and Transactional Leadership Components ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients (r) | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transactional | -.148 | .022 |
| Contingent Reward | -.199 | .040 |
| Management-by-Exception <br> (Active) | -.028 | .002 |

Note. A total of 37 employees responded to the MLQ.
Table 20 outlines the data gathered for Research Question 8, which explores the relationship between the hierarchal culture and the two factors of transactional leadership. The overall transactional score and the factor contingent reward have a negligible relationship with the hierarchal culture with $\mathrm{r}=.072$ and $\mathrm{r}=-.042$, respectively. The Active Management by Exception has a low positive correlation (r=.195). Similarly to all of the transactional by culture relationships described above, there is no real practical significance in these relationships with $\mathrm{r}^{2=} .005, .002$ and .038 for overall transactional leadership, Contingent Reward and Active Management-by-Exception, respectively. The variance accounted for in this relationship is negligible.

Table 20
Relationship of Hierarchy Culture and Transactional Leadership Components

|  | Pearson Correlation <br> Coefficients (r) | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Transactional | .072 | .005 |
| Contingent Reward | -.042 | .002 |
| Management-by-Exception <br> (Active) | .195 | .038 |

Note. A total of 37 employees responded to the MLQ.

## Findings Related to Objective 5

The purpose of Objective 5 was to explore the relationship between organizational culture and passive/avoidant leadership. This was accomplished using the four research questions below:

Research Question 9: What is the relationship between clan culture and the components of passive/avoidant leadership?

Research Question 10: What is the relationship between adhocracy culture and the components of passive/avoidant leadership?

Research Question 11: What is the relationship between hierarchal culture and the components of passive/avoidant leadership?

Research Question 12: What is the relationship between market culture and the components of passive/avoidant leadership?

Table 21 presents the relationship between clan culture and passive/avoidant behavior. There is a negative relationship between clan culture and both passive/avoidant behaviors with the Passive Management-by-Exception behavior having a moderate
magnitude (r=-.414) and Laissez-Faire behavior having a substantial magnitude (r=.542).

Table 21

Relationship of Clan Culture and Passive/Avoidant Behavior ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients $(\mathrm{r})$ | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Management-by-Exception <br> (Passive) <br> Laissez-Faire | -.414 | .171 |

Note. A total of 37 employees responded to the MLQ.
The relationship between the adhocracy culture and the passive/avoidant behaviors are moderate with approximately $17 \%$ of the variance accounted for in both the Passive Management-by-Exception and Laissez-Faire behaviors. The correlation coefficients are shown in Table 22.

Table 22

Relationship of Adhocracy Culture and Passive/Avoidant Behavior (N=8)

|  | Pearson Correlation <br> Coefficients $(r)$ | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Management-by-Exception <br> (Passive) | .418 | .174 |
| Laissez-Faire | .421 | .178 |

Note. A total of 37 employees responded to the MLQ.
The magnitude of the relationship between the market culture and passive/avoidant behaviors ranges from very substantial to very high for Passive Management-by-Exception (r=.693) and Laissez-Faire (r=.760), respectively (Table 23).

Table 23
Relationship of Market Culture and Passive/Avoidant Behavior ( $\mathrm{N}=8$ )

|  | Pearson Correlation <br> Coefficients (r) | Coefficient of <br> Determination $\left(r^{2}\right)$ |
| :--- | :---: | :---: |
| Management-by-Exception <br> (Passive) <br> Laissez-Faire | .693 | .480 |

Note. A total of 37 employees responded to the MLQ.
Table 24 presents the relationship between the hierarchal culture and Passive/Avoidant Behavior. There was a negative relationship between the behaviors and culture with negligible amounts of variance accounted for in both relationships.

Table 24
Relationship of Hierarchal Culture and Passive/Avoidant Behavior (N=8)

|  | Pearson Correlation <br> Coefficients $(\mathrm{r})$ | Coefficient of <br> Determination $\left(\mathrm{r}^{2}\right)$ |
| :--- | :---: | :---: |
| Management-by-Exception <br> (Passive) <br> Laissez-Faire | -.227 | .051 |

Note. A total of 37 employees responded to the MLQ.

## CHAPTER V

## DISCUSSION AND CONCLUSIONS

The concepts of transactional and transformational leadership as well as organizational culture have received much attention in the literature. Still many contend the linkage between the two constructs has not been systemically explored (Den Hartog et al., 1996; Trice \& Beyer, 1993). In general, situational analysis of transformational and transactional leadership is lacking (Bryman, 1992). The small body of research linking the two constructs has been focused on how leaders establish or change cultures (Trice \& Beyer, 1991). This study was designed to address the link between the constructs of leadership and organizational culture with an emphasis on Schein's (1992) observation that an established culture can begin to define leadership. Specifically, the purpose of the study was to learn about and describe the full-range leadership behaviors of selected leaders in an established organization and correlate their behaviors with the respective culture of their organization.

The method of analysis used in this descriptive research study was correlational analysis to determine the extent of the relationship of the variables of interest: leadership (transformational and transactional) and organizational culture.

## Summary of Findings Related to Objective 1

Objective 1 of this study was to describe the Full Range Leadership Behaviors (transformational, transactional, passive/avoidant leadership) within the selected agricultural business. Figure 7 displays the eight focal leaders’ mean overall transformational and transactional scores along with the scores of their corresponding factors. The passive/avoidant behaviors of Management-by-Exception (Passive) and Laissez-Faire also are shown. The full range of leadership, as measured by the Multifactor Leadership Questionnaire (MLQ), implies that every leader exhibits a variety of patterns of both the transactional and transformational factors, but each leader's profile involves more of one and less of the other (Bass, 1985).


Leadership Factors

Figure 7. Aggregated mean MLQ ratings for eight focal leaders.
The key for the leadership factors are: IIA=Idealized Influence (Attributable); IIB=Idealized Influence (Behavior); IM=Inspirational Motivation; IS=Intellectual Stimulation; IC=Individualized Consideration; TRNSFO=Overall Transformational; CR=Contingent Reward; MBEA=Management-by-Exception (Active); TRNSA=Overall Transactional; MBEP=Management-by-Exception (Passive); LF=Laissez Faire

Multiple raters at various levels of the organization were used to collect the MLQ data. The analysis of self-rating scores with the aggregated ratings by peers, colleagues and supervisors, showed that the mean self-rating scores were higher than subordinates', peers' or superiors' ratings. Although analyzing self-other ratings was not a primary intent of this study, there will be a discussion of the agreement between self and other raters related to this study.

## Discussion/Conclusions Related to Objective 1

The leaders studied in this project were mid-level managers. These leaders exhibited a range of full range leadership behaviors with various frequencies for the various behaviors. This research is consistent with other investigations (Avolio \& Bass, 1987; Bass, 1985; Bass, Avolio \& Goodheim, 1987; Waldman, Bass \& Einstein, 1987) that have found transformational leadership in multiple organizational settings and with top executives and top military leaders to low-level managers and students.

Overall, the leaders in this study exhibited a slightly higher overall transformational leadership score when compared with the overall transactional leadership score. However, it is important to note that among the individual factors, Contingent Reward (a transactional factor) is among the highest. Since transformational leadership has been shown to add to the effects of transactional leadership (not replace it) (Bass, 1985), training to increase the understanding of transformational leadership factors as well as Contingent Reward and Management-by-Exception, could prove useful in improving effectiveness, satisfaction and performance. In a study of top performers versus ordinary managers in a U.S. corporation specializing in express delivery, Hater and Bass (1988) found that the individuals independently identified as "top performers" were rated higher on transformational leadership (by subordinates) than were the randomly chosen group of ordinary managers. Furthermore, correlations between transformational leadership factors (according to subordinates) and ratings of overall individual performance of ordinary managers as well as work-group performance were moderately to highly correlated. Transactional leadership for the same variables was negatively correlated. Finally, transformational leadership added to the prediction of
subordinates' ratings of leader effectiveness and satisfaction beyond that of transactional leadership.

In a review of data about the U.S. workforce, Lawler (1985) found that today's workforce is more educated than workers of the past. Today's workers are concerned about the development of their abilities and the opportunity to do interesting work. Certainly, this point is an important consideration for human resource managers and those responsible for hiring, training and retaining the workforce. Leaders who simply reward or acknowledge agreed upon performance objectives without intellectual stimulation or consideration of worker's individual needs, are not likely to attract, invigorate or retain employees.

## Self Raters versus Multiple Raters

The advantages of using multiple raters to assess leadership are discussed in the literature. Self-ratings are often inflated (Podsakoff \& Organ, 1986) and have been shown to be less related to ratings by others (subordinates, peers or supervisors) (Harris \& Schaubroeck, 1988). The results of this study are consistent with reports in the literature that average self-ratings tend to be higher than others’ ratings (Harris \& Schaubroeck) and lend credibility to the need to use multiple raters to evaluate leadership behaviors.

According to Atwater \& Yammarino (1992), using raters from various levels of the organization may help to eliminate biases and give a more accurate rating of performance. These researchers conclude that among the reasons for self-reports not paralleling reports by others is not only the different perspectives but also the varying levels of self-awareness (defined as self-other agreement) of the leader being evaluated.

In evaluating the raw rater scores for each individual branch office in the present study, seven of the eight leaders assessed themselves higher than the combined scores of the other raters. Based on the Atwater \& Yammarino (1992) study, the leaders' levels of selfawareness should be considered as a moderator of the leader behavior relationships. Harris and Schaubroek (1988) also recognized the value of obtaining feedback from multiple raters including increased reliability, fairness and rater acceptance.

## Summary of Findings Related to Objective 2

Objective 2 of this study was to describe the four organization culture constructs within the agribusiness. The type and strength of culture that dominates each branch office can be viewed in Figure 8.


Figure 8. Organizational culture profile of each of the eight branch offices.

## Discussion/Conclusions Related to Objective 2

The predominant culture for each branch office is illustrated in the competing values framework (the theoretical model from which the organizational culture data was based) diagram shown in Figure 9. Hierarchy and clan were the two predominant organizational cultures in the population as determined by overall mean scores. As shown in Figure 9, seven of the branch offices studied are categorized as internally focused (Branches 1, 2, 3, 4, 6, 7 \& 8) while one is externally focused (Branch 5). Furthermore, five of the branch offices categorized their work environment as emphasizing stability and control (Branches 1, 2, 5, $6 \& 7$ ) over flexibility and discretion (Branches 3, $4 \& 8$ ).


Figure 9. Categorization of the branch cultures within the competing values framework.

The leaders in this study had an average tenure in the current organization of 26 years with a range of 10-34 years. Average years in management were 13.5 with a range
of 1-28. According to Quinn and Cameron (1999), the trend is for companies, over time, to gravitate toward the hierarchy and market cultures. Their studies have found that once an organization moves to the bottom half of the quadrant where the focus is stability and control, it is hard to move them to an adhocracy or clan culture (top quadrants emphasizing flexibility/discretion) without a great amount of effort and leadership. Although none of the branch offices in this study emphasized an adhocracy culture, the clan culture was the top culture identified by three of the organizations (Branches 3, 4, \& 8; see Figure 9). Schein (1985) suggested that often culture manages management more than management manages culture. The current study is unable to shed light on if culture influenced the leader or if the leader influenced the culture. However, in light of the previous discussion it is worth noting the leaders of the branches that identified the clan culture as their dominate culture (Branches 3, 4 \& 8) had 10, 22 and 28 years of management experience.

Quinn and Cameron's (1999) research would suggest that a more mature organization would gravitate to the lower quadrants. The results of this study show three branch offices (with managers with 10, 22 and 28 years of experience) to be in the top quadrant. A qualitative study is merited to discover if the leaders of these branch offices had spent their management years creating their clan culture or if they simply inherited and maintained that culture. As discussed by Trice and Beyer (1991), the social mechanisms through which a leadership operates to create cultural innovation or change are not the same as those use to maintain that culture.

## Summary of Findings Related to Objective 3

The purpose of Objective 3 was to explore the relationship between organizational culture and transformational leadership. Figure 10 depicts a summary of the relationships between the five transformational leader factors (Idealized Influenceattributable, Idealized Influence-behavior, Inspirational Motivation, Intellectual Stimulation, Individual Consideration and overall transformational leadership) and each of the organizational culture constructs (clan, adhocracy, market, hierarchy).


Transformational Factors

Figure 10. Relationship between four organizational cultures and transformational leadership.

## Discussion/Conclusions Related to Objective 3

## Relationship between Transformational Leadership and Clan Culture

There was a positive relationship between the clan culture and all of the transformational leadership factors including the overall transformational score. Den Hartog et al., (1996) also found a positive relationship between a supportive culture and transformational leadership in their study of 330 employees in five organizations.

Bass (1985) speculated that transformational leadership will most likely surface in organic organization versus mechanistic organizations. As described by Burns and Stalker (1961), mechanistic organizations have a formalized structure where members are expected to conform rather than innovate while organic structure members are expected to be innovative, creative and the climate is characterized as warm and trusting with a structure that is often unclear. A clan culture closely resembles an organic organization. It is often characterized as a friendly place to work where people share a lot of themselves. Leaders are often mentors, attention to human development is emphasized and success is often defined by the relationships developed internally and with customers (Cameron \& Quinn, 1999). As shown in Figure 9, an organization with this culture focuses on internal maintenance and flexibility.

The results of this study agree with suppositions made by Bass (1990) that the clan culture provides more potential for transformational leadership. Teasing out the individual transformational factors only furthers the understanding of the relationship. The specific transformational leadership factors of Inspirational Motivation and Intellectual Stimulation are related, but with a low magnitude accounting for only $6 \%$ and
$3.6 \%$, respectively, of the variation in the relationship whereas Idealized Influence (Attributable), Idealized Influence (Behavior) and Individualized Consideration accounted for $48 \%, 64 \%$ and $35.7 \%$ of the variation in the relationship, respectively. Given the characteristics of a clan culture, this differentiation between the factors Intellectual Stimulation versus Idealized Influence and Individualized Consideration is not surprising. Intellectual Stimulation represents the thoughtful aspects of the leader rather than the emphatic and developmental. Idealized Influence represents followers trust in the leader. Followers identify with the leader and the leader uses this to help develop the followers. Finally, leaders with higher Individual Consideration pay attention to the follower's needs and show empathy for their desires and development (Avolio \& Bass, 2004).

## Relationship between Transformational Leadership and Adhocracy Culture

The adhocracy culture in this study was negatively correlated with all the transformational factors. The correlation between the adhocracy culture and overall transformational score and the factors of Idealized Influence (Attributable), Inspirational Motivation and Individualized Consideration were all moderate in magnitude but in a negative direction.

Contrary to the findings in this study, other researchers have found a positive relationship between the adhocracy culture and transformational leadership factors. Den Hartog et al., (1996) found a positive correlation between transformational leadership and culture with an innovative orientation while Pennington et al., (2003) found a positive significant relationship between adhocracy and the two of the five leadership practices
defined by Kouzes and Posner (1997). One possible explanation for this result could be related to the cultural stage of the organization in this study. Trice and Beyer (1991, 1993) propose that organizations are either in cultural maintenance or cultural innovation. The organizations in this study could be characterized as very stable organizations that do not undergo very much change. This is evidenced by the low turnover in the leaders' studied. The fact that the adhocracy culture was the least dominate culture in all eight organizations, gives rise to the supposition that the organizations in this study fall into a more cultural maintenance stage versus a cultural innovation stage.

In regards to leadership, Trice and Beyer $(1991,1993)$ propose that different types of leadership are needed at different stages of the process of formation, change and maintenance of culture. The major difference between leadership that produces cultural innovations from that which maintains existing cultures appears to be the nature of the vision and mission that the leader communicates to potential followers (Trice \& Beyer, 1991). Even though the leaders in this study are more transformational than transactional, the transformational characteristics related to communicating a vision and mission (Intellectual Stimulation and Inspirational Motivation) are still relatively low (in the range of sometimes to fairly often). Thus, even though the leaders are practicing some transformational leadership behaviors, they are still in an organization where entrepreneurship and risk-taking are not valued (low adhocracy culture).

## Relationship between Transformational Leadership and Market Culture

There was a negative relationship between all five transformational leadership factors and the market culture. This is in agreement with Pennington et al., (2003) who found a negative relationship with all five of Kouzes and Posner's leadership practices. The magnitude of the relationships vary from moderate to very high with $48 \%$ of the variability shared between the overall transformational score and the market culture. The shared variability between the market culture and the individual factors is as follow: $51 \%$ for Idealized Influence (Attributable), 66\% for Idealized Influence (Behavior), 45\% for Individualized Consideration, 18\% for Inspiration Motivation and 14\% for Intellectual Stimulation.

The market culture focuses on external factors and the need for stability and control. Organizations with this culture are described as results-oriented with competitive and goal-oriented people who focus on winning and define success as the amount of market share achieved (Cameron \& Quinn,1999). In contrast, a transformational leader attempts to focus on development and not just performance including being attentive to individual and organizational needs (Bass and Avolio, 1993b).

## Relationship between Transformational Leadership and Hierarchy Culture

The relationships between the hierarchy culture and the components of transformational leadership have negligible to low correlations accounting for $1.8 \%$ to $8.5 \%$ of the variation in the relationship. The low to negligible correlations are consistent with the findings of Den Hartog et al., (1996) who found that a culture with a rules orientation correlated higher with transactional than transformational leadership. An
organization with a hierarchal culture is concerned about stability, formal rules and policies and predictability whereas transformational behaviors are characterized as more adaptative (Bass et al., 2003).

Summary of Findings Related to Objective 4

The purpose of Objective 4 was to explore the relationship between organizational culture and transactional leadership. Figure 11 depicts a summary of the relationships between the two transactional leader factors (Contingent Reward and Management-by-Exception-Active) and each of the organizational culture constructs (clan, adhocracy, market, hierarchy).


Figure 11. Relationship between four organizational cultures and transactional leadership factors.

## Discussion/Conclusions Related to Objective 4

## Relationship between Transactional Leadership and Clan Culture

The relationship between clan culture and transactional leadership was negligible. This result is consistent with Bass’s (1985) speculation that transactional leadership is more likely to appear in mechanistic organizations than in organic organizations. An organization with a clan culture more closely follows the characteristics of an organic organization where the goals and structure are flexible and members are highly educated and innovative (Singer \& Singer, 1990).

## Relationship between Transactional Leadership and Adhocracy Culture

There was a very low correlation between the adhocracy culture and transactional leadership. Only $2.5 \%$ of the variability is accounted for in the relationship. For all practical purposes, there is no relationship in which to discuss. However, since adhocracy is described by flexibility, discretion and external maintenance and transactional leadership is favored in stable and orderly environments, it is easy to see why the relationship is basically non-existent.

## Relationship between Transactional Leadership and Market Culture

There was a negative relationship between market culture and transactional leadership components. This result is contrary to the literature where Den Hartog et al., (1996) found that both transactional and transformational leadership were significantly related to a goal oriented culture with transactional leadership having a higher correlation
coefficient.

## Relationship between Transactional Leadership and Hierarchy Culture

Contrary to Den Hartog et al., (1996), the hierarchy culture did not correlate higher with transactional than with transformational leadership. In fact, transactional leadership accounted for $0.5 \%$ of the variability while transformational leadership accounted for $3 \%$. Although both relationships were low to negligible with no practical significance, it was surprising that the transactional leadership was not more correlated with the hierarchal culture.

## Summary of Findings Related to Objective 5

The purpose of Objective 5 was to explore the relationship between organizational culture and the passive/avoidant leadership factors. Figure 12 depicts a summary of the relationships between the two transactional leader factors (Contingent Reward and Management-by-Exception-Active) and each of the organizational culture constructs (clan, adhocracy, market, hierarchy).


Figure 12. Relationship between four organizational cultures and passive/avoidant behaviors.

## Discussion/Conclusions Related to Objective 5

As illustrated in Figure 12, there is a negative relationship between the passive/avoidant leadership factors and the clan culture as well as the hierarchal culture. The more significant observation, however, is the positive relationship between passive/ avoidant leadership and both the adhocracy and market cultures. The correlation between the adhocracy culture and Passive Management-by-Exception as well as Laissez-Faire is moderately positive. The magnitude of the correlation between the market culture and the same two factors is even higher. Using Davis' (1971) descriptors, the latter relationship can be described as very high.

In the literature, it is often asked whether the culture determines the leadership or the leadership determines the culture. It is difficult to fathom that passive/avoidant behavior could create a certain culture. On the other hand, it is equally hard to fathom that a market culture or adhocracy culture would create a passive/avoidant leader. Certainly, a cause and effect relationship can not be ascertained with a correlational study and with so few observations $(\mathrm{n}=8)$ it is not practical to make any generalizations. However, it is interesting to hypothesize about the possibilities.

A market culture is a results-oriented culture where the major concern is getting the job done. People are competitive and goal-oriented and the leaders are hard drivers, producers and competitors. An adhocracy culture is entrepreneurial and creative work environment where people have freedom and are willing to stick their necks out and take risks (Cameron \& Quinn, 1999). Both cultures are focused on external maintenance. In this study, the market culture is substantially to very highly correlated with passiveavoidant behavior while the adhocracy culture is moderately related. Thus, in this study, it seems plausible that the culture was present in these offices in spite of the leader. In other words, in the absence of leadership, a subculture (market and adhocracy in this study) might have been created by the other workers in the office. Since adhocracy and market are both externally focused, there may be workers that are creating subcultures that are more related to change (adhocracy) and getting results (market).

## Summary of Discussion/Conclusions

Figure 13 is a summary of the relationships between organization culture and fullrange leadership behaviors including whether the result was expected or not expected based on the findings in the literature.

## Flexibility/Discretion

| + Transformational <br> Negligible with Transactional <br> Expected Result |  | - Transformational <br> + Passive/Avoidant <br> Not Expected Result |  |
| :---: | :---: | :---: | :---: |
| Internal Focus Integration | CLAN | ADHOCRACY | External Focus Differentiation |
|  | HIERARCHY | MARKET |  |
| Low Transformational Expected Result Negligible Transactional Not Expected Result |  | -Transformational Expected Result -Transactional +Passive Avoidant Not Expected |  |
| Stability/Control |  |  |  |

Figure 13. Summary of the relationships between organization culture and full-range leadership behaviors using the competing values framework.

In agreement with other studies, there was a positive relationship between the clan culture and all of the transformational leadership factors including the overall transformational score. Contrary to other research studies, the adhocracy culture in this study was negatively correlated with all the transformational factors. There was a
negative relationship between all five transformational leadership factors and the market culture. The correlations between the hierarchy culture and the components of transformational leadership were negligible to low. Contrary to the literature, there was a negative relationship between market culture and transactional leadership components and a very low relationship between transactional leadership and the hierarchy culture. Finally, there was an unexpected positive relationship between passive/ avoidant leadership and both the adhocracy and market cultures in this study.

## Conclusions and Recommendations

The results of this study agree with suppositions made by Bass (1990) that the clan culture provides more potential for transformational leadership. Idealized Influence (Behavior), Idealized Influence (Attributable) and Individual Consideration are the specific components most highly correlated with the clan culture. It is recommended that practitioners focus attention on those specific components of a leader's behavior if they are interested in helping leaders create a clan culture.

This study found a negative relationship between adhocracy and transformational leadership. More research is needed to explore why the results of this study are contrary to other research findings that have found a positive relationship between the adhocracy culture and transformational leadership. A specific hypothesis by this researcher of why there might be conflicting results is related to the cultural stage of the current organization. Trice and Beyer $(1991,1993)$ propose that organizations are either in cultural maintenance or cultural innovation. The organization in this study is very stable with very little changes occurring and could be classified as an organization in cultural
maintenance. Perhaps the members of an organization in cultural maintenance do not value the risk taking and entrepreneurial behaviors associated with the adhocracy culture, and; therefore, do not equate behaviors needed to create an adhocracy culture as transformational. A recommendation for future research is to consider the cultural stage of an organization as a mediating factor.

The results of this study are consistent with reports in the literature that average self-ratings tend to be higher than others’ ratings (Harris \& Schaubroeck, 1988). These results lend credibility to a recommendation that researchers and practitioners need to use multiple raters to evaluate leadership behaviors.

The results of this study show three branch offices (with managers with 10, 22 and 28 years of experience) in the top quadrant of the competing values framework (specifically, clan culture). A recommendation for further research with the current organization is a qualitative study to discover if the leaders of these branch offices spent their management years creating a clan culture or if they simply inherited and maintained that culture. As discussed by Trice and Beyer (1991), the social mechanisms through which a leadership operates to create cultural innovation or change are not the same as those use to maintain that culture.

The research on the organization in this study showed a positive correlation between adhocracy and market cultures and passive/avoidant behaviors. To further understand this result, a recommendation will be further qualitative investigation. It is hypothesized that in the absence of leadership, another non-positional leader emerges and begins to create a culture based on his/her actions and behaviors. Of course, this is only supposition. However, this hypothesis could be tested with another quantitative study
collecting data on the leadership behaviors of all professional staff in each branch office or by conducting a qualitative study including interviews with members of the staff in each branch office.

In summary, Pervin (1989) writes that "one of the strongest challenges to organizational researchers is to develop substantive models and research designs that provide opportunities to investigate organizational behavior as a dynamic, interpretative process." (p. 357). He indicates that most of the interactional research has focused on the congruence between the person and the environment. The current study, a correlational study to determine the relationship between a situational construct, organizational culture, and leadership behavior, is an example of that type of research. However, as indicated by Pervin, researchers should initiate efforts "to investigate the hypothesized on-going transactions between persons and environments" (p. 357).

In order to understand the on-going interactions between leaders and culture, this author recommends a line of study that focuses on how individuals shape their environments. Understanding the type and degree of the relationship between certain leadership behaviors and organizational culture is a start. However, to understand whether transformational leader behavior creates a certain culture or whether the culture brings out leaders that are more transformational, a qualitative study, preferably longitudinal, is recommended. The specific conclusions, hypotheses and recommendations listed above will help guide future research.

## REFERENCES

Atwater, L. E., \& Yammarino, F. J. (1992). Does self-other agreement on leadership perceptions moderate the validity of leadership and performance predictions? Personnel Psychology, 45, 141-164.

Avolio, B. J. (1997). The great leadership migration to a full range leadership development system. Kellogg Leadership Studies Project Transformational Leadership Working Papers Retrieved May 7, 2005, from http://www.academy.umd.edu/publications/klspdocs/transformational_index.htm

Avolio, B.J., \& Bass, B.M. (1987). Charisma and beyond. In J.G. Hunt (ed.), Emerging leadership vistas (pp. 29-49). Boston: Lexington.

Avolio, B. J., \& Bass, B. M. (1995). Individual consideration viewed at multiple levels of analysis: A multi-level framework for examining the diffusion of transformational leaders. Leadership Quarterly, 6, 199-218.

Avolio, B. J., \& Bass, B. M. (2004). Multifactor leadership questionnaire manual and sampler set. Redwood City, CA: Mind Garden, Inc.

Bass, B. (1985). Leadership and performance beyond expectations. New York: The Free Press.

Bass, B. M. (1990). Bass \& Stogdill's handbook of leadership: Theory, research and managerial applications (3rd ed.). New York: The Free Press.

Bass, B. M. (1997). Does the transactional-transformational paradigm transcend organizational and national boundaries? American Psychologist, 22, 130-142.

Bass, B.M. \& Avolio, B. J. (1993a). Transformational leadership: A response to critiques. In M. M. Chemers \& R. Ayman (eds.), Leadership theory and research: Perspectives and directions. (pp. 49-80). New York: Academic Press.

Bass, B. M. \& Avolio, B. J. (1993b). Transformational leadership and organizational culture. Public Administration Quarterly, 17, 112-122.

Bass, B. M. , Avolio, B. J. , \& Goodheim, L. (1987). Quantitative description of worldclass industrial, political and military leaders. Journal of Management, 13, 7-19.

Bass, B. M., Avolio, B. J., Jung, D. I., \& Berson, Y. (2003). Predicting unit performance by assessing transformational and transactional leadership. Journal of Applied Psychology, 88, 207-218.

Bem, D. \& Allen, A. (1974). On predicting some of the people some of the times: The search for cross situational consistencies in behavior. Psychological Review, 81, 506-520.

Bennis, W. G. and Nanus, B. (1985). Leaders: The strategies for taking charge. New York: Harper \& Row.

Bryman, A. (1992). Charisma and leadership in organizations. London: Sage.
Burns, J. M. (1978). Leadership. New York: Harper \& Row.
Burns, T. \& Stalker, G. M. (1961). The management of innovation. Chicago: Quadrangle Books.

Bycio, P., Hackett, R. D. \& Allen, J. S. (1995). Further assessments of Bass's (1985) conceptualization of transactional and transformational leadership. Journal of Applied Psychology, 80, 468-478.

Cameron, K. S., \& Quinn, R. E. (1999). Diagnosing and changing organizational culture: Based on the competing values framework. New York: Addison Wesley.

Chase, N. (1997). Raise your training ROI. Quality, 36, 28.
Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. Academy of Management. The Academy of Management Review, 14, 333-349.

Chatman, J. A. (1989). Improving interactional organizational research: A model of person-organization fit. The Academy of Management Review, 14, 333-349.

Colville, I., Dalton, K. \& Tomkins, C. (1993). Developing and understanding cultural change in HM customs and excise: There is more to dancing than knowing the next steps. Public Administration, 71, 549-566.

Conger, J.A. \& Kanungo, R.N. (1987). Toward a behavioral theory of charismatic leadership in organizational settings. Academy of Management Review, 12, 637647.

Davis, J.A. (1971). Elementary survey analysis. Englewood: Prentice-Hall.

Davis-Blake, A., \& Pfeffer, J. (1989). Just a mirage: The search for dispositional effects in organizational research. Academy of Management. The Academy of Management Review, 14, 385-400.

Deal, T.E. \& Kennedy, A.A. (1982). Corporate cultures: The rights and rituals of corporate life. Reading, MA: Addison-Wesley.

DeGroot, T., Kiker, D. S., \& Cross, T. C. (2000). A meta-analysis to review organizational outcomes related to charismatic leadership. Canadian Journal of Administrative Sciences, 17(4), 356-371.

Den Hartog, D. N., Van Muigen, J. J., \& Koopman, P. L. (1996). Linking transformational leadership and organizational culture. The Journal of Leadership Studies, 3, 68-83.

Dillman, D. A. (2000). Mail and internet surveys: The tailored design method. New York: John Wiley \& Sons, Inc.

Dolezalek, H. (2004). Training magazine's annual comprehensive analysis of employersponsored training in the United States. Training, 31, 20-36.

Endler, N. (1973). The person versus the situation--A pseudo issue? Journal of Personality, 41,287-303.

Epstein, S. \& O'Brien, E. J. (1985). The person-situation debate in historical and current perspectives. Psychological Bulletin, 98, 513-537.

Fiedler, F. E. (1972). Personality, motivational system, and the behavior of high and low LPC persons. Human Relations, 25, 391-412.

Fiedler, F.E. (1993). The leadership situation and the black box in contingency theories. In M. M. Chemers \& R. Ayman (Eds.), Leadership theory and research (pp. 128). San Diego, CA: Academic Press, Inc.

Fiedler, F. E. (1996). Research on leadership selection and training: One view of the future. Administrative Science Quarterly, 41, 241-251.

Fleishman, E. A. (1953). The measurement of leadership attitudes in industry. Journal of Applied Psychology, 37, 153-158.

Flynn, R., McCombs, T., \& Elloy, D. (1990). Staffing the self-managing work team. Leadership \& Organization Development Journal, 11(1), 26-31.

Goodwin, V. L., Wofford, J. C. \& Whittington, J. L. (2001). A theoretical and empirical extension to the transformation leadership construct. Journal of Organizational Behavior, 22, 759-774.

Grieves, J. (2000). Introduction: the origins of organizational development. The Journal of Management Development, 19, 345-447.

Hackman, J. R. \& Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. Organizational Behavior and Human Performance, 16, 250-279.

Hall, P. (2001). Viewpoint: Identifying and developing high potential leaders. The Journal of Management Development, 20, 671-675.

Harris, M. M., \& Schaubroeck, J. (1988). A meta-analysis of self-supervisor, self-peer and peer-supervisory ratings. Personnel Psychology, 41, 43-62.

Hater, J. J., \& Bass, B. M. (1988). Superior's evaluations and subordinate's perceptions of transformational and transactional leadership. Journal of Applied Psychology, 73, 695-702.

Hersey, P. \& Blanchard, K.H. (1988). Management of organizational behavior: Utilizing human resources. (5 ${ }^{\text {th }}$ ed.). Englewood Cliffs, NJ: Prentice Hall.

Hill, W. A. \& Hughes, D. (1974). Variations in leader behaviors as a function of task type. Organizational Behavior and Human Performance, 11, 83-96.

House, R. J. (1971). A path-goal theory of leadership effectiveness. Administrative Science Quarterly, 16, 321-338.

House, R. J. (1977). A 1976 theory of charismatic leadership. In J.G. Hunt \& L.L. Larson (Eds.), Leadership: The cutting edge (pp. 189-207). Carbondale, IL: Southern Illinois University Press.

House, R. J. \& Aditya, R. N. (1997). The social scientific study of leadership: Quo vadis? Journal of Management, 23, 409-473.

House R. J. \& Mitchell, T. R. (1974). Path goal theory of leadership. Contemporary Business, 16, 323-338.

House, R. J. \& Shamir, B. (1993). Toward the integration of transformation, charismatic and visionary theories. In M. M. Chemers \& R. Ayman (Eds.), Leadership theory and research: Perspectives and directions. (pp. 81-107). San Diego, CA: Academic Press.

House, R. J., Shane, S. A., \& Herold, D. M. (1996). Rumors of the death of dispositional research are vastly exaggerated. Academy of Management. The Academy of Management Review, 21, 203-224.

Howell, J. M. \& Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. Journal of Applied Psychology, 78, 891902.

Isaac, S., \& Michael, W. B. (1995). Handbook in research and evaluation: A collection of principles, methods, and strategies useful in the planning, design, and evaluation of studies in education and the behavioral sciences. San Diego, CA: EdITS Publishers.

Kotter, J. P. \& Heskett, J. L. (1992). Corporate culture and performance. New York: The Free Press.

Kouzes, J. M. \& Posner, B. Z. (1995). The leadership challenge. San Francisco: JosseyBass

Kretovics, M. A. (1998). Determining what employers really want: Conducting regional stakeholder focus groups. Journal of Career Planning and Employment, 58, 2527.

Lawler, E. E. (1985). Education, management style, and organizational effectiveness. Personnel Psychology, 38, 1-26.

Lewin, D. (1951). Field theory in social science. New York: Harper \& Row.
McClelland, D. (1985). How motives, skills, and values determine what people do. American Psychologist, 40, 812-825.

McFillen, J. M. (1977). The organizing and managing of organizational behavior: A review of first edition organizational behavior texts. Academy of Management Review, 2, 355-359.

Melcher, A. J. (1977). Leadership models and research approaches. In J.G Hunt \& L.L. Larson (Eds.), Leadership: The cutting edge (pp. 94-108). Carbondale, IL: Southern Illinois University Press.

Miller, L. E. (1998). Appropriate analysis. Journal of Agricultural Education, 39(2), 110.

Mischel, W. (1968). Personality and assessment. New York: Wiley.
Mischel, W. (1973). Toward cognitive social learning reconceptualization of personality. Psychological Review, 80, 252-283.

NACE's job outlook 2004. (2004). Retrieved November 5, 2004, from www.naceweb.org/pubs/JobOutlook/joboutlook2004/JO4fallprev.pdf

Nahavandi, A. (2003). The art and science of leadership (3rd ed.). Upper Saddle River, NJ: Prentice Hall.

Neef, D. (1999). Making the case for knowledge management: The bigger picture. Management Decision, 37(1), 72.

Northouse, P. G. (1997). Leadership theory and practice. Thousand Oaks: Sage Publications.

O'Reilly, C. A., III \& Roberts, K. H. (1978). Individual differences in personality, position in the organization, and job satisfaction. Organizational Behavior and Human Performance, 14, 144-150.

Pawar, B. S. \& Eastman, K. K. (1997). The nature and implications of contextual influences on transformational leadership: A conceptual examination. Academy of Management Review, 22, 80-109.

Pedhazur, E. J. (1997). Multiple regression in behavioral research. (3 ${ }^{\text {rd }}$ ed.). Orlando, FL: Harcourt Brace College Publishers.

Pedler, M., Burgoyne, J., \& Boydell, T. (1997). The learning company: A strategy for sustainable development (2nd ed.). London, UK: McGraw-Hill.

Pennington, P., Townsend, C., \& Cummins, R. (2003). The relationship of leadership practices to culture. Journal of Leadership Education, 2(1), 1-18.

Pervin, L. A. (1989). Persons, situations, interactions: The history of a controversy and a discussion of theoretical models. Academy of Management. The Academy of Management Review, 14, 350-360.

Peters, T. J. \& Waterman, R. H., Jr. (1982). In search of excellence: Lessons from America's best-run companies. New York: Warner Books.

Pillai, R. \& Williams, E. A. (2004). Transformational leadership, self-efficacy, group cohesiveness, commitment, and performance. Journal of Organizational Change Management, 17, 144-159.

Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., \& Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors, Leadership Quarterly, 1, 107-142.

Podsakoff, P. M. \& Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. Journal of Management, 13, 419-441.

Podsakoff, P. M, Todor, W. D. \& Skov, R. (1982). Effects of leader contingent and noncontingent reward and punishment behaviors on subordinate performance and satisfaction. Academy of Management Journal, 25, 810-821.

Pollock, T. (1996). A personal file of stimulating ideas, little-known facts and daily problems solvers. SuperVision, 57, 24-26.

Quinn, R. E. \& Spreitzer. (1991). The psychometrics of the competing values culture instrument and an analysis of the impact of organizational culture on quality of life. In R. W. Woodman \& W. A. Pasmore (Eds.), Research in organizational change and development. (Vol. 5, pp. 115-142). Greenwich, CT: JAI Press Inc.

Sashkin, M. (1988). The visionary leader. In J. A. Conder \& R. N. Kanungo (Eds.), Charismatic leadership, (pp. 122-160). San Francisco: Jossey-Bass.

Schein, E. H. (1990). Organizational culture. American Psychologist, 45. 109-119.
Schein, E. H. (1992). Organizational culture and leadership. (2 ${ }^{\text {nd }}$ ed.). San Francisco: Josey-Bass Inc.

Schneider, B. (1987). The people make the place. Personnel Psychology, 40, 437-453.
Shane, S. A., Herold, D. M., \& House, R. J. (1996). Situational determinism--one step forward, two steps back? Academy of Management. The Academy of Management Review, 21, 343-345.

Singer, M. S., \& Singer, A. E. (1990). Situation constraints on transformational versus transactional leadership behavior, subordinates' leadership preference, and satisfaction. Journal of Social Psychology, 130, 385-396.

Staw, B. M. \& Ross, J. (1985). Stability in the midst of change: A dispositional approach to job attitudes. Journal of Applied Psychology, 70-469-480.

Stern, M. (2004). The right stuff. Canadian Business, 77, 95-99.
Stodgill R. M. (1948). Personal factors associated with leadership: A survey of the literature. Journal of Psychology. 25, 35-71.

Tapscott, D. (1996). The digital economy. Boston, MA: Harvard Press.
Terborg, J. R. (1981). Interactional psychology and research on human behavior in organizations. Academy of Management. The Academy of Management Review, 6, 569-576.

Tichy, N. M. \& Devanna, M. A. (1990). The transformational leader: The key to global competitiveness. New York: John Wiley \& Sons.

Trice, H. M., \& Beyer, J. M. (1991). Cultural leadership in organizations. Organization Science, 2, 149-169.

Trice, H. M., \& Beyer, J. M. (1993). The cultures of work organizations. Englewood Cliffs, NJ: Prentice-Hall, Inc.

Van Muijen, J. J., Koopman, P. L., Dondeyne, P., DeCock, G., DeWitte, K. (1992). Organizational culture, the development of an international instrument for comparing countries. Proceedings of the $2^{\text {nd }}$ European Congress of Psychology. 249-258.

Vroom, V. H. \& Jago, A. G. (1978) On the validity of the Vroom-Yetton model. Journal of Applied Psychology, 63, 151-162.

Waldman, D. A., Bass, B. M. \& Einstein, W. O. (1987). Effort, performance and transformational leadership in industrial and military settings. Journal of Occupational Psychology, 60, 177-186.

Warn, R. (1985). Selecting first time front line managers. Manage, 37, 2.
Warner, W. L. \& Low, O. J. (1947). The social system of the modern factory. New Haven, CT: Yale University Press.

Weber, M. (1947). The theory of social and economic organizations (T. Parsons, Trans.). New York: Free Press. (Original work published 1920).

Weick, K. E. \& Quinn, R. E. (1999). Organization change and development. Annual Review of Psychology, 50, 361-386.

Wilkins, A. L. \& Ouchi, W. G. (1983). Efficient cultures: Exploring the relationship between culture and organization performance. Administrative Science Quarterly, 28, 468-481.

Yammarino, F. J., \& Bass, B. M. (1990). Long term forecasting of transformational leadership and its effects among naval officers: Some preliminary findings. In K. E. Clark \& M. B. Clark (Eds.), Measures of leadership (pp. 151-171). West Orange, NJ: Leadership Library of America, Inc.

Yeung, A. K. O., Brockbank, J. W., \& Ulrich, D. O. (1991). Organizational culture and human resource practices: An empirical assessment. In R. W. Woodman \& W. A. Pasmore (Eds.), Research in organizational change and development (Vol. 5, pp. 59-81). Greenwich, CT: JAI Press.

Yukl, G. A. (1989). Leadership in organizations (3rd ed.). Englewood Cliffs, NJ: Prentice-Hall.

Yukl, G. A. (2002). Leadership in organizations (5th ed.). Singapore: Pearson Education.
Zammuto, R. F., \& Krakower, J. Y. (1991). Quantitative and qualitative studies of organizational culture. In R. W. Woodman \& W. A. Pasmore (Eds.), Research in organizational change and development (Vol. 5, pp. 83-114). Greenwich,CT: JAI Press.

APPENDICES

## APPENDIX A

## Organizational Culture Assessment Instrument (OCAI)

The purpose of the OCAI is to assess six key dimensions of the culture in your organization (your BRANCH). The results will provide a picture of how your organization (branch) operates and the values that characterize it. No right or wrong answers exist for these questions just as there is no right or wrong culture.

Directions:
The following six questions each have four alternatives. Divide $\mathbf{1 0 0}$ points among these four alternatives depending on the extent to which each alternative is similar to your own organization (branch). Give a higher number of points to the alternative that is most similar to your organization, the second highest points to the next alternative most similar to your organization, etc. The total of each the four alternatives (A-D) must equal 100 points.

Estimated time to complete: 7-10 minutes
EXAMPLE:

Question: My temperament can best be described as:
Possible alternatives for which to divide 100 points:
A. I care very deeply for others and am often describe as a "people person." (\# points: 10) This statement is the one that describes me the least. So, out of $\mathbf{1 0 0}$ points, I gave it the lowest number of points (10).
B. I am on an unending search for knowledge and understanding. I prefer a rational approach to life. (\# points: 45)
This statement is the one that best describes me so I gave it $\mathbf{4 5}$ out of $\mathbf{1 0 0}$ points.
C. I love living in the moment. I have high regard for freedom, am free-spirited and fun-loving (\# points: 30).
This statement is the second one that best describes me so I gave it $\mathbf{3 0}$ out of $\mathbf{1 0 0}$ points.
D. I am preserver of tradition and family. I provide security and stability for those in my life. (\# points: 15)
This statement is the third one that best describes me so I gave it $\mathbf{1 5}$ out of $\mathbf{1 0 0}$ points.

| 1. Dominant Characteristics | Points |  |
| :--- | :--- | :--- |
| A | The organization is a very personal place. It is like an extended family. <br> People seem to share a lot of themselves. |  |
| B | The organization is a very dynamic and entrepreneurial place. People are <br> willing to stick their necks out and take risks. |  |
| C | The organization is very results oriented. A major concern is with <br> getting the job done. People are very competitive and achievement <br> oriented. |  |
| D | The organization is a very controlled and structured place. Formal <br> procedures generally govern what people do. |  |
|  | Total | 100 |


| 2. Organizational Leadership | Points |  |
| :--- | :--- | :--- |
| A | The leadership in the organization is generally considered to exemplify <br> mentoring, facilitating or nurturing. |  |
| B | The leadership in the organization is generally considered to exemplify <br> entrepreneurship, innovating, or risk taking. |  |
| C | The leadership in the organization is generally considered to exemplify a <br> no-nonsense, aggressive, results-oriented focus. |  |
| D | The leadership in the organization is generally considered to exemplify <br> coordinating, organizing, or smooth-running efficiency. |  |
|  | Total |  | 100.


| Management of Employees |  | Points |
| :--- | :--- | :--- |
| A | The management style in the organization is characterized by teamwork, <br> consensus, and participation. |  |
| B | The management style in the organization is characterized by individual <br> risk-taking, innovation, freedom, and uniqueness. |  |
| C | The management style in the organization is characterized by hard- <br> driving competitiveness, high demands, and achievement. |  |
| D | The management style in the organization is characterized by security of <br> employment, conformity, predictability, and stability in relationships. |  |
|  | Total |  | 100.


| 4. Organization Glue | Points |  |
| :--- | :--- | :--- |
| A | The glue that holds the organization together is loyalty and mutual trust. <br> Commitment to this organization runs high. |  |
| B | The glue that holds the organization together is commitment to <br> innovation and development. There is an emphasis on being on the <br> cutting edge. | The glue that holds the organization together is the emphasis on <br> achievement and goal accomplishment. Aggressiveness and winning are <br> common themes. |
| D | The glue that holds the organization together is formal rules and policies. <br> Maintaining a smooth running organization is important. | Total |
|  | 100 |  |


| 5. Strategic Emphases | Points |  |
| :--- | :--- | :--- |
| A | The organization emphasizes human development. High trust, openness, <br> and participation persist. |  |
| B | The organization emphasizes acquiring new resources and creating new <br> challenges. Trying new things and prospecting for opportunities are <br> valued. |  |
| C | The organization emphasizes competitive actions and achievement. <br> Hitting stretch targets and winning in the marketplace are dominant. |  |
| D | The organization emphasizes permanence and stability. Efficiency, <br> control and smooth operations are important. |  |
|  | Total |  |


| 6. Criteria for Success | Points |  |
| :--- | :--- | :--- |
| A | The organization defines success on the basis of the development of <br> human resources, teamwork, employee commitment, and concern for <br> people. |  |
| B | The organization defines success on the basis of having the most unique <br> or newest products. It is a product leader and innovator. |  |
| C | The organization defines success on the basis of winning in the <br> marketplace and outpacing the competition. Competitive market <br> leadership is key. |  |
| D | The organization defines success on the basis of efficiency. Dependable <br> delivery, smooth scheduling, and low-cost production are critical. |  |
|  | Total |  |

## APPENDIX B



Dale: April 21,2005

To whom it may concern,
This letter is to grant permission for Christine Lovann Waldner to use the following purchased copyright material; Instrument: Multifactor Leadership Questionarie Author: Bernard M Bass) \& Bruce J Avolio for her/his thesis research.

In addition, 5 sample items from the instrument may be reproduced for inclusion in a proposal or thesis.

The entire measure may not at any time be included or reproduced in other published material.


Director of Operations

## APPENDIX C

## MULTIFACTOR LEADERSHIP QUESTIONNAIRE (MLQ)-Leader Version

The Multifactor Leadership Questionnaire (MLQ) Form 5X was developed, tested, and copyrighted by Bass \& Avolio (2004) and is published by Mind Garden, Inc. The following sample questions from the MLQ Leader Form 5X are reproduced with permission.

Use the following rating scale:
Not at all (0)
Once in a while (1)
Sometimes (2)
Fairly Often (3)
Frequently, if not always (4)
5 sample items for the MLQ Form 5X

Q1: I provide other with assistance in exchange for their efforts (Contingent Reward)

Q2: I re-examine critical assumptions to question whether they are appropriate (Intellectual Consideration)

Q3: I fail to interfere until problems become serious
(Management-by-exception-Passive)
Q9: I talk optimistically about the future (Inspiration Motivation)

Q15 I spend time teaching and coaching (Individual Consideration)

## APPENDIX D

MULTIFACTOR LEADERSHIP QUESTIONNAIRE (MLQ)-Rater Version
The Multifactor Leadership Questionnaire (MLQ) Form 5X was developed, tested, and copyrighted by Bass \& Avolio (2004) and is published by Mind Garden, Inc. The following sample questions from the MLQ Leader Form 5X are reproduced with permission.

Use the following rating scale:
Not at all (0)
Once in a while (1)
Sometimes (2)
Fairly Often (3)
Frequently, if not always (4)
5 sample items for the MLQ Form 5X
The person I am rating...
Q1: $\quad$ Provides me with assistance in exchange for my efforts (Contingent Reward)

Q2: $\quad$ Re-examines critical assumptions to question whether they are appropriate (Intellectual Consideration)

Q3: $\quad$ Fails to interfere until problems become serious
(Management-by-exception-Passive)
Q9: Talks optimistically about the future (Inspiration Motivation)

Q15 Spends time teaching and coaching (Individual Consideration)

## APPENDIX E




## APPENDIX F

Participation Request Email<br>(Focal Leaders)

Dear $\qquad$ :

I am writing to ask for your participation in a research study being conducted by researchers in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. The purpose of the study is to gain an increased understanding of the determinants of leadership behaviors, specifically the relationship between transformational leadership and organizational culture in a real-world agribusiness setting. The implication of the research is to add to the literature about leadership and culture in the workforce.

If you agree to participate in the study you will complete an online survey (link located below) to assess your leadership behaviors and to assess the culture of your work organization. You also will be asked to provide some demographic details. The online survey should take 10-15 minutes to complete. The benefits to you will be learning more about your own leadership behaviors as well as the culture of your organization. Individuals completing the survey will receive a Full-Range Leadership Report which will incorporate the self-rating of your leadership behaviors as well as ratings by your subordinates, one other branch manager and your immediate supervisor.

Please know your participation in this research study is completely voluntary. If you choose to participate by accessing the below on-line survey, you have the right to withdraw at any point, for any reason. You should also know that the information you provide is confidential. Data will be reported in aggregate by groups and participants' names will not be associated with any reported data other than that provided directly back to the participant. Only the researcher will have access to the data and the data will be stored on a secure server that requires a researcher password for access. The results of this project may be published in professional journals, but no individual or branch office will be able to be identified.

The link to access the on-line survey is:
[Link goes here]
Thank you for your support and please contact me if you have any questions.

## Louann Waldner

Ph.D. Student
College of Agricultural Sciences \& Natural Resources
155 Ag Hall
Stillwater, OK 74078
Phone: 405.744.6580
Email: louann.waldner@okstate.edu
For questions about use of human subjects contact: Dr. Sue C. Jacobs, IRB Chair at (405)
744.1676.

APPENDIX G

## $\mathbf{2}^{\text {nd }}$ Participation Request Email for Non-Responders (Focal Leaders)

OSU
Insitutional Review Board
Approved 6 las 105
Expires $4 \rho / 2.2 / 06$
Initials AK
4. 40554

Dear $\qquad$ :

Two weeks ago I sent an email asking for your participation in a research study being conducted by researchers in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. I am writing again to request your participation. The purpose of the study is to gain an increased understanding of the determinants of leadership behaviors, specifically the relationship between transformational leadership and organizational culture in a real-world agribusiness setting. The implication of the research is to add to the literature about leadership and culture in the workforce.

If you agree to participate in the study you will complete an online survey (link located below) to assess your leadership behaviors and to assess the culture of your work organization. You also will be asked to provide some demographic details. The online survey should take 10-15 minutes to complete. The benefits to you will be learning more about your own leadership behaviors as well as the culture of your organization. Individuals completing the survey will receive a Full-Range Leadership Report which will incorporate the self-rating of your leadership behaviors as well as ratings by your subordinates, one other branch manager and your immediate supervisor.

Please know your participation in this research study is completely voluntary. If you choose to participate by accessing the below on-line survey, you have the right to withdraw at any point, for any reason. You should also know that the information you provide is confidential. Data will be reported in aggregate by groups and participants' names will not be associated with any reported data other than that provided directly back to the participant. Only the researcher will have access to the data and the data will be stored on a secure server that requires a researcher password for access. The results of this project may be published in professional journals, but no individual or branch office will be able to be identified.

The link to access the on-line survey is:
[Link goes here]
Thank you for your support and please contact me if you have any questions.
Louann Waldner
Ph.D. Student
College of Agricultural Sciences \& Natural Resources
155 Ag Hall
Stillwater, OK 74078
Phone: 405.744.6580
Email: louann.waldner@okstate.edu
For questions about use of human subjects contact: Dr. Sue C. Jacobs, IRB Chair at (405) 744.1676.

Dear $\qquad$ :

I am writing to ask for your participation in a research study being conducted by researchers in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. The purpose of the study is to gain an increased understanding of the determinants of leadership behaviors, specifically the relationship between transformational leadership and organizational culture in a real-world agribusiness setting. The implication of the research is to add to the literature about leadership and culture in the workforce.

Specifically, I am asking for your participation in completing an on-line survey to help us assess "name of colleague" leadership behaviors as well as the culture of your organization (your branch). If you agree to participate, you will complete an online survey (link located below) to assess the leadership behavior of your colleague. You also will be asked to assess the culture of your organization (your branch). In total, the survey should take about $\mathbf{1 5}$ minutes to complete. "Name of colleague" will be provided with a Full-Range Leadership Report which compiles his/her self assessment as well as the assessment of several colleagues at the same, lower or higher organizational level. In no way will your answers to the questions be identified with you.

Please know your participation in this research study is completely voluntary. If you choose to participate by accessing the below on-line survey, you have the right to withdraw at any point, for any reason. You also should know that the information you provide is confidential. Data will be reported in aggregate by groups and participant's names will not be associated with any reported data other than that provided directly back to the participant. Only the researcher will have access to the data and the data will be stored on a secure server that requires a researcher password for access. The results of this project may be published in professional journals, but no individual or branch office will be able to be identified.

The link to access the on-line survey is:
[Link goes here]
Thank you for your support and please contact me if you have any questions.

## Louann Waldner

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For questions about use of human subjects contact: Dr. Sue C. Jacobs, IRB Chair at 405.744.1676

## APPENDIX I

## $\mathbf{2}^{\text {nd }}$ Participation Request Email for Non-Responders (Leader's Colleagues)

Dear $\qquad$ :

Two weeks ago I sent an email asking for your participation in a research study being conducted by researchers in the College of Agricultural Sciences and Natural Resources. I am writing again to request your participation. The purpose of the study is to gain an increased understanding of the determinants of leadership behaviors, specifically the relationship between transformational leadership and organizational culture in a real-world agribusiness setting. The implication of the research is to add to the literature about leadership and culture in the workforce.

Specifically, I am asking for your participation in completing an on-line survey to help us assess "name of colleague" leadership behaviors as well as the culture of your organization (your branch). If you agree to participate, you will complete an online survey (link located below) to assess the leadership behavior of your colleague. You also will be asked to assess the culture of your organization (your branch). In total, the survey should take about $\mathbf{1 5}$ minutes to complete. "Name of colleague" will be provided with a Full-Range Leadership Report which compiles his/her self assessment as well as the assessment of several colleagues at the same, lower or higher organizational level. In no way will your answers to the questions be identified with you.

Please know your participation in this research study is completely voluntary. If you choose to participate by accessing the below on-line survey, you have the right to withdraw at any point, for any reason. You also should know that the information you provide is confidential. Data will be reported in aggregate by groups and participant's names will not be associated with any reported data other than that provided directly back to the participant. Only the researcher will have access to the data and the data will be stored on a secure server that requires a researcher password for access. The results of this project may be published in professional journals, but no individual or branch office will be able to be identified.

The link to access the on-line survey is:
[Link goes here]
Thank you for your support and please contact me if you have any questions.

## Louann Waldner

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For questions about use of human subjects contact: Dr. Sue C. Jacobs, IRB Chair at 405.744.1676

## APPENDIX J

Participation Request Email for Rater at a Higher Organizational Level

140554 Dear $\qquad$ _:

I am writing to ask for your participation in a research study being conducted by researchers in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. The purpose of the study is to gain an increased understanding of the determinants of leadership behaviors, specifically the relationship between transformational leadership and organizational culture in a real-world agribusiness setting. The implication of the research is to add to the literature about leadership and culture in the workforce.

Specifically, I am asking for your participation in completing an on-line survey to help us assess "name of colleague" leadership behaviors. If you agree to participate, you will complete an online survey (link located below) to assess the leadership behavior of this branch manager who reports to you. In total, each survey on each branch manager should take about $\mathbf{1 0}$ minutes to complete. "Name of colleague" will be provided with a Full-Range Leadership Report which compiles his/her self assessment as well as the assessment of several colleagues at the same, lower or higher organizational level. In no way will your answers to the questions be identified with you.

Please know your participation in this research study is completely voluntary. If you choose to participate by accessing the below on-line survey, you have the right to withdraw at any point, for any reason. You also should know that the information you provide is confidential. Data will be reported in aggregate by groups and participants' names will not be associated with any reported data other than that provided directly back to the participant. Only the researcher will have access to the data and the data will be stored on a secure server that requires a researcher password for access. The results of this project may be published in professional journals, but no individual or branch office will be able to be identified.

The link to access the on-line survey is:
[Link goes here]
Thank you for your support and please contact me if you have any questions.

## Louann Waldner

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155 Ag Hall
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Email: louann.waldner@okstate.edu
For questions about use of human subjects contact: Dr. Sue C. Jacobs, IRB Chair at 405.744.1676

## APPENDIX K



APPENDIX L<br>Multifactor Leadership Questionnaire<br>Scoring

To get the score for each of the transformational/transactional characteristics, the following MLQ questions were summed for each respondent (at a higher, lower, same, self-rating level) and then a mean across all raters (for each leader) was calculated..

Questions 1-45

Idealized Influence (Attributed): Sum of Questions 10, 18, 21, 25/4
Idealized Influence (Behavior): Sum of Questions 6, 14, 23, 34/4
Inspirational Motivation: $\quad$ Sum of Questions 9, 13, 26, 36/4
Intellectual Stimulation:
Sum of Questions 2, 8, 30, 32/4
Individual Consideration:
Sum of Questions 15, 19, 29, 31/4
Contingent Reward:
Sum of Questions 1, 11, 16, 35/4
Management-by-Exception (Active):
Sum of Questions 4, 22, 24, 27/4

Management-by-Exception (Passive):
Sum of Questions 3, 12, 17, 20/4
Laissez-faire Leadership:
Sum of Question 5, 7, 28, 33/4
Extra Effort:
Sum of Question 39, 42, 44/4
Effectiveness:
Sum of Questions: 37, 40, 43/4
Satisfaction:
Sum of Questions 38, 41, 45/4

## APPENDIX M

## Organizational Culture Assessment Instrument

Scoring

In total, 35 people responded to the culture survey. See table 2 for the number of respondents for each branch office. A culture score was calculated for each respondent. To calculate the actual culture score for each branch office, the individual respondent scores for that office were added and divided by the number of respondents in that branch office. In other words, it is a mean score of all respondents in that office.

The OCAI gives each branch office four culture scores. The higher score is an indication of the predominant culture/cultures in that office.

## APPENDIX N

# Oklahoma State University Institutional Review Board 

| Date: | Tuesday, June 28, 2005 |
| :--- | :--- |
| IRB Application No | AG0554 |
| Proposal Title: | The Relationship Between a Situational Construct, Organizational Culture, <br> and Transformational and Transactional Leadership |
| Reviewed and Exempt <br> Processed as:  |  |
| Status Recommended by Reviewer(s): Approved Protocol Expires: 6/27/2006 |  |
| Principal <br> Investigator(s |  |
| C. Louann Waldner William G. Weeks <br> 155 Ag Hall 458 Ag Hall <br> Stillwater, OK 74078 Stillwater, OK 74078 |  |

The IRB application referenced above has been approved. It is the judgment of the reviewers that the rights and welfare of individuals who may be asked to participate in this study will be respected, and that the research will be conducted in a manner consistent with the IRB requirements as outlined in section 45 CFR 46.

The final versions of any printed recruitment, consent and assent documents bearing the IRB approval stamp are attached to this letter. These are the versions that must be used during the study.

As Principal Investigator, it is your responsibility to do the following:

1. Conduct this study exactly as it has been approved. Any modifications to the research protocol must be submitted with the appropriate signatures for IRB approval.
2. Submit a request for continuation if the study extends beyond the approval period of one calendar year. This continuation must receive IRB review and approval before the research can continue.
3. Report any adverse events to the IRB Chair promptly. Adverse events are those which are unanticipated and impact the subjects during the course of this research; and
4. Notify the IRB office in writing when your research project is complete.

Please note that approved protocols are subject to monitoring by the IRB and that the IRB office has the authority to inspect research records associated with this protocol at any time. If you have questions about the IRB procedures or need any assistance from the Board, please contact Beth McTernan in 415 Whitehurst (phone: 405-744-5700, beth.mcternan@okstate.edu).

VITA
Christine Louann Waldner

Candidate for the Degree of
Doctor of Philosophy

# Thesis: THE RELATIONSHIP BETWEEN A SITUATIONAL CONSTRUCT, ORGANIZATIONAL CULTURE, AND TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP. 

Major Field: Agricultural Education

Biographical:
Education: Graduated from Owen County High School in Owenton, Kentucky in May 1984; received Bachelor of Science degree in Agriculture with majors in Animal Science and Agricultural Communication from the University of Kentucky, Lexington, Kentucky in May, 1988; received Master of Science degree in Food Science from Kansas State University, Manhattan, Kansas in December 1990; Completed the requirements for the Doctor of Philosophy degree in Agricultural Education at Oklahoma State University in December, 2005.

Experience: Consumer Representative, Kentucky Beef Cattle Association, Lexington, Kentucky, 1986-1988; Research \& Teaching Assistant, Department of Animal Science, Kansas State University, Manhattan, Kansas, 1988-1990; Instructor, Animal Science Department, University of Kentucky, Lexington, Kentucky, 1991; Director of Student Relations, College of Agriculture, University of Kentucky, Lexington, Kentucky, 1991-1996; Director, Student \& Career Services, College of Agricultural Sciences and Natural Resources, Oklahoma State University, Stillwater, Oklahoma, 1997-2005.

Professional Memberships: Association of Leadership Educators, North American Colleges and Teachers of Agriculture, National Association of Colleges and Employers, National Agriculture Alumni and Development Association, Phi Kappa Phi

Institution: Oklahoma State University
Location: Stillwater, Oklahoma
Title of Study: THE RELATIONSHIP BETWEEN A SITUATIONAL CONSTRUCT, ORGANIZATIONAL CULTURE, AND TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP

Pages in Study: 130
Candidate for the Degree of Doctor of Philosophy
Major Field: Agricultural Education
Scope and Method of Study: This research project was a study of the leadership behaviors of selected leaders within an agricultural business and the organizational cultures of the branch offices they manage. The purpose was to explore the relationship between leadership and a situational construct, organizational culture. Specifically, it was designed to examine the relationship between transformational and transactional leadership behaviors and four organizational culture constructs. Descriptive statistics and correlation analysis were used to order the data and explore the relationships between four organizational culture constructs and factors of transformational leadership, transactional leadership and passive/avoidant behaviors. Leadership behaviors were assessed by self and other raters with fifty-one total responses used to determine the leadership behaviors of the eight focal leaders at the eight branch offices. Thirty-five out of forty individuals responded to the organizational culture assessment instrument.

Findings and Conclusions: The leaders in the study exhibited slightly higher transformational than transactional leadership scores. Hierarchy and clan were the two predominant organizational cultures. There was an expected positive relationship between the clan culture and transformational leadership. Contrary to other research, the adhocracy culture in this study was negatively correlated with transformational factors. In agreement with suppositions made by Bass (1990), the clan culture appears to provide more potential for transformational leadership. Idealized Influence and Individual Consideration are the specific components most highly correlated with the clan culture. Attention to those components of a leader's behavior could be helpful in training leaders to create a clan culture. The results also are consistent with reports that average selfratings tend to be higher than others’ ratings (Harris \& Schaubroeck, 1988) and lend credibility to the recommendation that researchers and practitioners need to use multiple raters to evaluate leadership behaviors. There was a negative relationship between market culture and transactional leadership components and a positive relationship between passive/ avoidant leadership and both the adhocracy and market cultures in this study. More research is needed to explore why the results of this study are contrary to other research findings. It is recommended that the cultural stage of an organization should be considered as a mediating factor.

ADVISOR'S APPROVAL:__William G. Weeks


[^0]:    ${ }^{\text {a }}$ Davis, J.A. (1971) Elementary Survey Analysis. Englewood, NJ: Prentice-Hall.

