

# COGNITIVE COMPLEXITY, TRANSFORMATIONAL LEADERSHIP, AND ORGANIZATIONAL OUTCOMES

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## ABSTRACT

Transformational Leadership, proposed by Burns and extended by Bass and associates, has been conceived as a more complete model of leadership than that advocated by the trait, style, contingency, or exchange theorists. Through the constructs of idealized influence, intellectual stimulation, inspiration, and individualized consideration, leaders can influence followers' behaviors in a manner that allows the followers to achieve a synthesis of their individual goals and the organizational goals. However, the theory as conceptualized does not account for how this influencing process occurs and does not clearly specify the contexts in which this style of leadership style will be either facilitated or impeded. This dissertation seeks to remedy at least a portion of this problem by linking interpersonal cognitive complexity with the construct of transformational leadership, suggesting how the influencing process may occur through leaders who employ more person-centered speech. This dissertation seeks to identify these interpersonally complex leaders who use rhetorical design logic to structure communication interactions which focus on mutual communication goals. Supervisory personnel at a large naval command were asked to complete the Role Category Questionnaire in order to ascertain their interpersonal cognitive complexity. Their direct reports completed the Multifactor Leadership Questionnaire indicating their perceptions of these supervisors' leadership behaviors. These were then analyzed in relationship to specific organizational outcomes identified with the assistance of organization personnel. A confirmatory factor analysis of the Multifactor Leadership Questionnaire revealed a

factor structure different from that reported by Bass and associates. Although the small number of returned and completed Role Category Questionnaires preclude any generalizations concerning this study, the role of interpersonal cognitive complexity and leadership should continue to be explored in order to further specify this broad and ambitious theory.

## CHAPTER 1 – INTRODUCTION AND REVIEW OF LITERATURE

### Introduction

Although ancient and modern societies have exhibited a fascination with the study and practice of leadership, there have been few times in history that have afforded such an opportunity to study this ubiquitous phenomena as the beginning of the twenty-first century. As we attempt to discern a future either amazingly bright with innovations designed to improve the quality of life for all our planet's inhabitants, or one that is dismal and dark or even nonexistent, we recognize that most of us are at the mercy of leaders who we hope will make decisions that lead away from Armageddon and towards a comfortable and prosperous future.

How can we distinguish the truly great from the truly dreadful when both have adherents dying for the visions they impart? What particular traits set apart the leaders who inspire and motivate their societies? Are there simply crisis situations from which men rise who would be comparatively mundane in calmer settings? Is there something that sets leaders apart or does each individual have a particular potential to be developed in this direction?

In our comparatively secular Western society, we look askance at the Delphi oracle and biographer Plutarch's (105/1579/1941) narratives recounting the lives of Greek and Roman political and military figures with the suggestion that leadership is divinely ordained even before birth. Although Plutarch (104/1579/1941) also delineated the specific characteristics and behaviors that exemplified a leader, he also appeared to believe that heavenly intervention was important. For example, Plutarch writes of Alexander the Great's conception that Alexander's father, King Phillip, "dreamed that he

did seal his wife's belly, and the seal wherewith he sealed left behind the print of a lion" (p. 1245).

The heavens appeared to display concern with a leader's death as well according to Plutarch (105/1579/1941), "certainly destiny may be easier foreseen than avoided, considering the strange and wonderful signs that were said to be seen before Ceasar's death. For touching the fires in the element, and spirits running up and down in the night, and also these solitary birds to be seen at noondays, sitting in the great market place – are not all signs worth noting?" (p. 1434). Later in the narrative he recounts additional signs from the heavens,

Again of signs in the element, the great comet which seven nights together was seen very bright after Caesar's death, the eighth night after was never seen more. Also the brightness of the sun was darkened, the which all that year through rose very pale and shined not out, whereby it gave but small heat; therefore the air, being very cloudy and dark by the weakness of the heat that could not come forth, did cause the earth to bring forth but rank and unripe fruit, which rotted before it could ripe. (p. 1442)

Max Weber (1968) also notes the historical underpinnings of imbuing leaders with otherworldliness. He observes that in ancient China a leader was considered a "Son of Heaven" (p.50) and that this manifested itself in a charismatic quality attributed to the leader, transmitted by heredity. However, misfortunes or unlucky events required the leaders to do public penance. In extreme cases a leader was forced to abdicate, calling into question the legitimacy of his association with the divine.

More modern theories of leadership have suggested that while not divinely ordained, perhaps leaders share common traits, or use a particular style or combination of styles, or determine what is needed in a particular situation by a subordinate and provide the appropriate response. Popular books have proliferated urging leaders to emulate



Attilla the Hun (Warner, 1989) or cautioning them that management consists of praises or reprimands done as quickly as possible (Blanchard and Johnson, 1981). Advice given to would-be leaders often appears to emulate that of Machiavelli (1513/1981), who advocated the use of torture (when used appropriately) in spirit if not in practice.

A more comprehensive model of leadership has been introduced as well, an ambitious attempt to incorporate vision and inspiration into a model that focuses on the relationships that develop between a leader and his or her group members. Directing attention to the relationship between the leader and followers, the Transformational Leadership constructs of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration complemented by the more transactional behavior contingent reward, are thought to elevate both parties to higher levels of accomplishments.

This relationship, which earlier theories had begun to recognize as important, can be studied through the interpersonal communication lens. That is, what is particular about the communication between a leader and follower that elevates it to transformational can perhaps be studied by cognitive communication approaches.

Most significant is the construct of interpersonal cognitive complexity. Born of the constructivism theory and symbolic interaction and extended through the principle of orthogenesis or developmental progression (Werner, 1957) and Kelly's (1955) personal construct theory, the idea of an individual's "person-centered" speech (Burleson and Waltman, 1988) perhaps can explain communication strategies used by a Transformational Leader.

In terms of group process, this integration of cognitive complexity and transformational leadership appears to be the next step in advancing cognitive approaches to leadership. However, cognitive approaches subsume a large area that is difficult to specify. Cognitive complexity from the perspective of speech communication offers a more focused approach to the study of leadership, especially a more comprehensive leadership model such as Transformational Leadership. One may note this interest in cognitive approaches to leadership in extensions of the Leader-Member-Exchange (LMX) theory (Engle & Lord, 1997) where investigators began researching “cognitive similarities” (p.988) between leaders and their followers as well as LMX studies (Heneman, Greenberger, & Anonyuo, 1989) which focus on how a supervisor’s “internal attributions” (p.466) affect the nature of the exchange. However, the speech communication theory of interpersonal cognitive complexity and the resulting rhetorical design logic (Delia, 1977) utilized by those who exhibit the most developed cognitive complexity in the interpersonal realm can provide a bridge to better understanding how Transformational Leaders negotiate their relationships with those with whom they share the work environment.

This study is designed to investigate this possible relationship between interpersonal cognitive complexity and the construct identified as Transformational Leadership. The influence of interpersonal cognitive complexity on Transformational Leadership and how this impacts organizational indicators will be explored.

First, this study addresses the history of theories of leadership and how modern leadership theory has evolved, noting in particular the progression from trait theories which suggest that leaders possess particular traits which facilitate their development and

also the beliefs of style theorists, most of whom advocate a more democratic approach to leadership rather than what they term an autocratic style. This chapter also provides a review of the contingency theorists who believe that the most effective leadership is determined in large part by the context, sometimes broadly defined as organizational culture or more narrowly defined as subordinate skill level or an emphasis on the interpersonal needs of subordinates. This study then references the Transformational Leadership construct as developed by Burns (1978) and extended by Bass (1985). The context in which this leadership paradigm has evolved is examined to determine relevant socio-cultural factors which may facilitate the development of this type of leadership. Transformational Leadership is contrasted with other theories of leadership and how these theories interrelate is discussed.

The next section addresses the construct of interpersonal cognitive complexity and the effect this schema in the interpersonal realm has on communication with particular emphasis on the work of Basil Bernstein (1971) who identified that individuals communicate in ways he suggested were qualitatively different. The results of his observations led him to conclude that this differentiation arose out of ordering relationships either “out of sensitivity to the content of objects or out of sensitivity to the structure of objects” (p.24).

However, because Bernstein’s work was based on comparisons between Great Britain’s middle class, who he believed communicated via sensitivity to the structure of objects, and the working-class, who he believed differentiated out of the sensitivity to the content of objects, the specific delineation of codes are difficult to generalize to more egalitarian societies. As noted by Burleson (1987), this research did begin to direct

attention to differences in qualitative communication competencies among individuals. How Bernstein has influenced the extension of the construct of interpersonal cognitive complexity will be addressed in relationship to Delia's (1977) work regarding rhetorical design logic and Burlison's (1987) research regarding the communicative impact of more cognitively complex interlocutors.

The next section explores the possible interrelationship between interpersonal cognitive complexity and Transformational Leadership, citing the research of Kuhnert and Lewis (1987). These researchers identify four stages of developmental progression in leadership ability linked to more developed interpersonal communication schemata. This section notes especially stages two through four as the beginning and ending stages of Transformational Leadership's association with interpersonal cognitive complexity.

Following the literature review in Chapter One, the hypotheses and research questions introduce the purpose and parameters of the study, noting particularly an exploration of the factor structure of the Multifactor Leadership Questionnaire. The subject population, the Naval Oceanographic Office at Stennis Space Center, is introduced in the following chapter and explored in relationship to its organizational culture and structure. The factors underlying the recent reorganization of NAVO are explored.

The next section discusses the issues of response rate, the characteristics of participants, the procedures for collecting data, and the instruments used. A complete analysis both instruments is included. The Role Category Questionnaire, which is thought to provide a measurement of interpersonal cognitive complexity, and the Multifactor Leadership Questionnaire (Form 5X-Short), purported to measure the factors associated

with Transformational Leadership are discussed in detail, citing studies where these instruments have been used and comparing these instruments to others believed to tap into similar constructs.

A discussion of the results of the analysis concludes this study. This section focuses on additional questions which could possibly be explored regarding the constructs of Transformational Leadership and interpersonal cognitive complexity.

### Review of Theories of Leadership

#### History of Leadership.

Amongst the Athenian commanders opinion was divided: some were against risking a battle, on the ground that the Athenian force was too small to stand a chance of success; others – and amongst them Miltiades – urged it. It seemed for a time as if the more fainthearted policy would be adopted – and so it would have been, but for the action of Miltiades.... “it is now in your hands, Callimachus” he said, “either to enslave Athens, or to make her free and to leave behind you for all future generations a memory more glorious than even Harmodius and Aristogeiton left.... if we fight and win, then this city of ours may well grow to pre-eminence amongst all the cities of Greece....” Miltiades’ words prevailed...In the battle of Marathon some 6400 Persians were killed; the losses of the Athenians were 192. (Herodotus, 363-365)

Thus, the Battle of Marathon as recorded by the ancient historian Herodotus (1954/400 B.C.E), fought in the fifth century BCE, provides an early record of leadership exemplified by the general Miltiades who displayed the qualities of charisma and inspirational motivation. These two constructs are among four that have been associated by Burns (1978) and Bass (1985) with the concept of Transformational Leadership, identified in Western scholarly literature over 2,000 years later. These constructs, in association with those of intellectual stimulation and individualized consideration (Bass, 1998), form the basis for a leadership style which, while apparently efficacious for the

ancient Greeks, has been proposed as the optimum style to effect the radical changes needed in 21<sup>st</sup> century organizations.

Fisher (1985) writes, “Leadership is probably the most written about social phenomenon of all time” (p.168), and laments that it is still not well understood due to its complexity, defined by the number of variables associated with the concept of leadership, variables that encompass the entire social process. He also clearly differentiates between the *leader* and *leadership*. The former is a position; the latter is a process. Cautioning against an oversimplification of leadership by strictly defining it as position-based, Fisher notes that the complex social process must be reified. He suggests it is only through social interaction that a leader’s position achieves credibility. He writes that individuals in a position who do not or cannot function in the role of the leader are often circumvented by their groups and subsequently required to relinquish their positions.

Bass (1990) reveals that the concept of leadership has always been as ubiquitous as it is today: ancient Egyptian hieroglyphics refer to leaders and followers. The Bible is rife with references to the leadership qualities of Moses, Abraham, David, Solomon, and Joseph. The concept of leadership appears to extend to non-Western cultures as well, with Asian classics reflecting an intense interest in leadership as it applied to military and political leaders (Sun-tzu, 1993/300 B.C.E.) In fact, even among animals, those vertebrates who live within groups afford a higher status to some members denoted by special duties and privileges (Bass, 1990).

Leadership may be essential to human existence, as Fiske (1991) suggested. He wrote that authority ranking is one of the four foundations of human relations, in addition

to communal sharing, equality matching, and market pricing. Together these four structures underlie all human relationships. Authority ranking denotes a hierarchical relationship where individuals acknowledge and accept the differences in rank. Higher-ranking individuals have more authority and control and are usually considered to possess more knowledge and expertise. He proposed that authority ranking could work in tandem with the other structures and evoked Weber's (1968) concept of traditional authority as an example of combining authority rank and communal sharing, but emphasized that each is independent of the other; they are "logically distinct" (p. 312).

Adler (1979) also believed in the universality of authority, but approached it from an individual rather than a sociological perspective. He wrote that every individual was possessed of an innate desire for superiority that he suggested was a manifestation of a striving for perfection. He conceived that each person was attempting to maintain a positive relationship with his environment, a "better adaptation" (p.33) by this striving. He even suggested that this was a force of evolution, a survival of the fittest (and most superior). Those who do not have a desire to better themselves contribute nothing and are quickly forgotten (made extinct) while those who strive for superiority consequently "create values for eternity, for the higher development of all mankind" (p.36).

The force guiding this striving of each individual was "social interest" (p. 134) vaguely defined as an individual's attempt to identify with the entire community of mankind unfettered by religious, temporal, or cultural constraints: a normative ideal considered as the complete and perfect form of society. Adler (1979) did, however, caution against a striving toward superiority for use against others citing that, "deviations and failures of the human character – neurosis, psychosis, crime, drug addictions, etc. –

are nothing but forms of expression and symptoms of the striving for superiority directed against fellowmanship” (p.39). This appears to tap into what House (1977) proposed as a caution concerning charismatic leaders in that they may manifest leadership in a need to dominate others.

Weber,(1968) a German social scientist who wrote exhaustively on the subject of leadership, was the first to attribute the quality of charisma to leaders, suggesting that this was the means by which at least one type of authority was legitimized. Like Plutarch (105/1579/1941), he appeared to believe that leadership associated with charisma was endemic to one’s being. He defined it as “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 qualities” (p. 48).

Weber had also begun to incorporate more interest in the followers, in the relationship between leaders and those who count themselves among their advocates when he argues “his charismatic claim breaks down if his mission is not recognized by those to whom he feels he has been sent” (p.20), and “his divine mission must prove itself in that those who faithfully surrender to him must fare well” (p.22-23). As a sociologist, however, Weber appeared more interested in followers as a group rather than in attempting to discern individual relationships between leaders and followers.

He noted a tension between this charismatic authority and the authority derived from rational sources legitimized by long-standing societal rules: the concept of legitimate order and the authority derived from tradition. He believed that a charismatic leader unconstrained by tradition or rules could appeal to more fundamental concerns, but by doing so could undermine existing social institutions, resulting in a release of creative



energy and power. Weber (1968) recognized, however, that the charismatic leader would eventually out of necessity establish some type of order and routine to allow a dissemination of the results of releasing the creativity; the vision should be spread throughout a community.

A concern Weber identified was that charisma could result from suffering or conflicts in times of societal distress. Scholars interpreting Weber have argued that rather than being a positive response to the suffering, charismatic leaders may evolve from “mainly the disturbed, the disoriented, the alienated...and they necessarily will become most prominent in extreme situations of social change and disturbances” (Eisenstadt, 1968, xxiii).

Barnes (1978) extended Weber’s argument concerning the relevant societal underpinnings that may facilitate the emergence of such a leader including living during a period of social change. In a study of fifteen religious leaders representing a diversity of faiths from Hasidism to Nichiren Buddhism, he discovered that in fourteen cases the leader had emerged during a period of social change. He also suggested that charismatic leaders will be “de-alienated” (p.3) defined as recognizing that sacred symbols are socially created and as such subject to change; that their teachings will be innovative, i.e., integrating doctrines in novel ways or extending or developing new doctrines; and that they can develop from within or without traditional hierarchies.

Ernst Lewy (1979), who proposed a psychoanalytic approach to the study of charismatic leaders, noted similarities between such diverse leaders as Gandhi, Zulu King Shaka, and Hitler, and the chronicles of mythic heroes. Specifically, he wrote that rejection by an over-demanding father and consequent expulsion from the home or the

society or both, overcoming a number of difficult ordeals, and, finally, a triumphant return marked by heroic deeds are underlying commonalities of both mythic heroes and charismatic leaders. He wrote that these life events symbolize death and rebirth, where both the hero and leader must die to his former and often ineffective failure-prone self and become reborn to an overarching mission. It is interesting to note that Lewy (1979) referred to this as a transformation, suggesting what occurs within both the leaders and the heroes. In the psychoanalytic tradition, Lewy (1979) purported that this reveals an underlying consciousness of what constitutes a leader and may be pervasive among human beings, as evidenced by the commonalities of myth and reality.

Freud (1951) suggested that it was a “man of action” (p. 40) who assumed a leadership role, dominated more by external events than the internal workings of his own mind and that this ability to display and use power was the manner in which he could come closer to the goal of obtaining happiness and pleasure. However, the ultimate power was the uniting of individuals together in a culture against the power of any single individual. He did not necessarily believe this to be a good thing; as he writes, “The impression forces itself upon one that men measure by false standards, that everyone seeks power, success, riches for himself and admires others who attain them, while undervaluing the truly precious things in life” (p. 7).

Schwartz (1990) extended and elaborated Freud’s (1951) writings concerning power and discussed how this can be misused in organizations. He suggested that an individual may over identify with an organization in a narcissistic attempt to replace the ego ideal of infancy with an organizational ideal. Those individuals in more powerful positions within an organization are therefore thought to be closer to a return to the

narcissism ego ideal since they are in positions to represent the organization and are closer to the organizational ideal: their decisions more closely represent what the organization actually does. However, this causes a great deal of anxiety and guilt for most employees since at some level they recognize the vast differences between their actual selves and their ego ideal selves as represented by the organizational selves.

Modern leadership theory as explicated by Bryman (1992) in his identification of four distinct stages appears to incorporate many of the ideas of these writers, at least in the first, which he terms the Trait Approach. He suggests the Trait Approach dominated the literature until the late 1940s. The core theme involved the idea that leadership ability was innate and research focused on physical factors (height), ability characteristics (intelligence), and personality factors. Carlyle (1841/1907) provided a precursor to this idea in his great man theory of leadership in which he identified unique characteristics of successful leaders, such as strength and intelligence. Mann (1959) proposed an extensive list of traits he believed were associated with leadership including intelligence, extroversion, and a conservative political bent. House (1997) notes that the Trait Approach was also inclusive of particular psychological factors such as the need for power, reflecting influences from the psychoanalytic theorists.

However, research attempting to develop relationships between such factors as physical characteristics, scholarship, or introversion-extroversion and leadership ability produced mixed results. Stoghill (1948), after reviewing 124 studies that attempted to link traits with leadership determined the approach was too simplistic, although he did find that some particular traits such as knowledge and dependability were identified with many leaders. He concluded that the relationship between individuals characterized

leadership, or that “patterns of leadership traits differ with the situation” (p. 60), and that the demands of the context in which an individual is expected to function as a leader determined to a large extent the “qualities, characteristics and skills required” (p. 63).

The Style Approach or behavior approach was advanced as an alternative. This approach, which pervaded leadership literature from the late 1940s to the late 1960s, suggested that effective leaders employ one particular style regardless of the situation. An early example of this approach is Lewin, Lippitt, and White, who in 1939 published an article that suggested what they termed a democratic leadership style was most efficacious in terms of group involvement and satisfaction. They compared the democratic style to two other styles, autocratic and laissez-faire, and discerned the democratic style produced better outcomes than either the autocratic or laissez-faire style. Unlike the Trait Approach which suggested that effective leaders were “born, not made,” the Style Approach allowed for training to be utilized as a technique to increase the effectiveness of leaders who could be taught a particular style. However, as Chemers and Rice (1983) note, there was some question as to whether the research had simply evolved from investigations of enduring traits to enduring styles.

Bryman (1992) noted that “the research associated with Ohio State University was one of the first manifestations of the style approach” (p. 4). Specifically, Stogdill and Coons (1957) who led the Ohio State University Leadership Studies used an expanded version of the Leader Behavior Questionnaire in order to differentiate leadership from what they termed “good leadership” (p.2). They sought to answer questions concerning what an individual does when he or she functions as a leader. For example, Bales (1952) posited that it was possible to arrange the behaviors of leaders on

two dimensions which he conceived of as somewhat dichotomous: leadership oriented toward task completion and that which was more social in orientation. An individual who received a high score on task-oriented items was assumed to be more active, quick to intervene and precise. A high score on the social-emotional area indicated a leader who was more directed towards the interpersonal aspects of his job, involving himself in attempts to establish and maintain positive relationships at work.

A subgroup of the style advocates speculated that an approach high on both task and socio-emotional behaviors would result in more satisfied direct reports (Stogdill, 1974). Larson, Hunt, and Osborn (1976) argued that researchers had not determined whether this “hi-hi paradigm” (p.628) was based on interaction effects or additive effects. They wrote, “For the interactive model, knowledge of the exact combination is critical, whereas, for the additive model, such knowledge is not necessary” (p. 629). They analyzed 14 samples from 2,474 participants. Their data did not support either the high task or socio-emotional behavior models in their interactive or additive forms. They discovered that in some cases the consideration variable was a stronger predictor of outcomes; in other situations, the structure (task) variable accounted for more variance. Haythorn, et al. (1956) provided an explanation for these findings when they demonstrated this theory was unable to capture the complexities of the leader-follower relationship. Results obtained from varying combinations of what they termed authoritarian and equalitarian leadership appeared to be strongly influenced by the follower’s expectations and attitudes in influencing outcomes. Bryman (1992) summed up the limitations of this approach when he wrote that the problems ranged from the researchers’ inability to consistently verify specific combinations of task and socio-

emotional behaviors, the lack of inclusion of situational variables which could act as moderators, and the lack of recognition of informal leadership, or what is sometimes termed emergent leadership.

From the late 1960s to the early 1980s, a Contingency Approach was advanced as the most effective leadership model. The Contingency Approach incorporated context and suggested that effective leadership is determined by the situation; an effective leader is one who could adapt to a variety of requirements: the interaction of a leader's attributes and/or behaviors with environmental parameters. As noted by Chemers and Rice (1973), the contingency model evolved from research conducted by Fred E. Fieldler in 1951. He identified three situational variables important to this approach: the first, the interpersonal relations between the leader and follower; the second, the ambiguity of the work group's tasks and goals; the third, the leader's ability to reward and punish. An example of this approach is Situational Leadership Theory. Hersey and Blanchard, (1988), borrowing the task and relationship orientation from Chemers and Rice (1974), suggested that the appropriate leadership style is determined by the follower's maturity as well as the difficulty or complexity of the task assigned. However, research provided mixed support for this theory (Vecchio, 1987; Morris & Vecchio, 1992), indicating that especially with followers demonstrating high levels of maturity, the theory appears unable to predict the best leadership style.

The concept of a leader behaving in a manner that would facilitate a path toward a subordinate's achieving a particular outcome exemplifies a contingency-based theory from a different perspective. House (1971), extending expectancy theory, suggested leaders must act in order to motivate employees to attain their work goals. That is, the

leader must determine the work goals, coordinate these with an employee's personal goals and clarify and facilitate the employee's path toward these goals.

This theory recognizes the contribution of situational constraints that may either facilitate or impede the progress toward goals. It suggests the values or needs of followers must be addressed as well as how efficacious they perceive their efforts to be. A leader, therefore, must adapt his behavior to address these subordinate characteristics as well as context factors which include the nature of the task itself, the manner in which authority is conveyed within an organization, and the nature of the work group. The leader uses a combination of structuring and consideration behaviors (similar to task and relationship behaviors) to positively influence the subordinate's journey on a path toward the goals. House (1971) optimistically noted that "the findings, when viewed collectively, generally support the theory" (p.337), in agreement with Chemers and Rice (1973) who suggested that "on the whole, the research tends to support the contingency model, but the support is not unequivocal" (p.100).

However, Nemeth and Staw (1989) noted problems with this approach, "Uniformity [the assumption that the individual's goals and organizational goals are the same] has both necessary and desirable elements – particularly with regard to attainment of goals and harmony. It also has detrimental elements. Uniformity may result in decreases in innovation, in the detection of error, or in the willingness or ability to adapt to changing circumstances" (p.175-176).

Chemers (1983) attempted to integrate the trait, style, and contingency approaches with a complex model that incorporated both cultural characteristics and situational characteristics (interpersonal, technological, and political) within the society,

organization, and work unit. He suggested that these had both direct and indirect effects on such variables as leader and follower behavior as well as the followers' expectations and leaders' intentions. Also included in this model were a leader's personal characteristics as well as the follower's characteristics. This complex and ambitious model, although comprehensive in design appeared to tap into a great number of general constructs without addressing any one specifically (for example, determining specific leader traits or cultural characteristics which might impact the performance of individuals or groups).

As evidenced by this review, leadership theories have evolved from exclusively focusing on the leader in terms of particular traits to theories that have attempted to capture more of the complexity of leadership, involving both context and followers. However, a discussion of leadership theories would not be complete without addressing Leader-Member Exchange (LMX) (Graen & Cashman, 1975), a theory that has generated research and extensions of the theory (Dienesch & Linden, 1986; Heneman, Greenberger, & Anonyuo, 1989; Dockery & Steiner, 1990; Graen & Uhl-Bien, 1995; Wayne, Shore, & Linden, 1997; Engle & Lord, 1997; Gerstner & Day, 1997) for over 20 years. According to Graen & Cashman (1975) Leader Member Exchange Theory suggests that leaders develop different leadership styles which they suggest are exchange-oriented in nature with each subordinate. These can range from low LMX relationships where interactions are based strictly on employment contracts to high LMX relationships that involve mutual trust and respect. That is, this focus on the dyad can be understood from a perspective that is qualitative in nature. The higher quality exchanges result in greater



freedom given to the subordinate to negotiate his role within the context of the work group.

This theory illustrates the fact that rarely if ever do all followers of a particular leader enjoy exchanges that are the same; however, these exchanges are considered more transactional in nature.

The latest theory concerning leadership, which has dominated the literature since the early 1980's, is termed the New Leadership approach by Bryman (1992). This leadership approach not only incorporates the adaptability of the Contingency Approach, but it adds the qualities of vision and charisma. Specifically, Bryman (1992) has suggested that this model emphasizes the idea of a leader as visionary, able to imagine future accomplishments.

Behling and McFillen (1996) have indicated this shift in theory was the result of foreign competition that began to manifest itself most strongly in the late 1970s. They indicate that this shift, from business practices dominated by relative security to insecurity as a result of intense competition from previously ignored sectors, necessitated radical changes in management philosophy. The researchers suggested that the ability to adapt and respond, qualities previously associated with effective management, was insufficient. Leaders needed a more proactive stance rather than the previously effective behaviors which had required simply reacting to changes in markets and competition. They conceived of this model as "syncretical" (p. 163), evolving from an incremental model that focused on small but steady improvements to one that encouraged support, participation, and innovation. Meindl (1990) has taken a more cynical view of this change stating that, "the failure and the promise of leadership has been recast...providing

a way to interpret the dismal past, while at the same time encouraging hope and the possibility of more positive changes for the future” (p.181). Schwartz (1990) wrote that the problems American corporations experienced resulted from their leaders tendencies to display extreme narcissistic behaviors, including a loss of reality which led to an overcentralization of operational decision-making and the subsequent poor quality of decisions.

“Immediately after the Second World War the United States enjoyed a crushing economic advantage because its productive machinery was more modern than anyone else’s (and had not been bombed). But by the early 1970s forces were being set in motion around the world,” writes Mitroff (1987, p. 11), who has offered a succinct yet thorough analysis of the changing environment faced by American corporations. He wrote that a myriad of mutable conditions required a complete rethinking of how American corporations were led. These forces included foreign competitors entering the market, often subsidized by their governments, work force issues including a shortage of skilled labor in this country, employees who brought to bear higher expectations from their organizations than in the past, and the changing demographics of the work force. Forces from within the economy and the financial environment included high costs of benefits and health care and the high cost of labor in the United States. Market forces included customers who required more individualization of products and a shorter product life of goods and services. He cited technological advances as both a blessing and a curse. For example, improved communications could facilitate the flow of information, but also assured immediate dissemination of negative events. He also noted that often capital investments were made to secure technology that was quickly obsolete.

Mitroff (1987) also noted that these trends were exacerbated by societal ones that included an aging population requiring different types of benefits and services and an increased emphasis on employee's rights. He suggested the propensity of workers to sue their employers also became a significant concern.. The uncertainty of whether energy would be available and affordable was also cited. Mitroff (1987) write that the United States was in a state of inertia the remedy for which was building the "organization of the future" (p.47) led by individuals who defined problems globally, ignored constraints, and were ready to make decisions counter to existing trends.

Mulder, Ritsena van Eck, and de Jong (1971) proffered that in crisis situations such as that which emerged in the 1970s, "some type of powerful leadership...will be more often considered necessary by group members" (p.21). They suggested, however, that crisis situations may be linked to the growth and at the extreme to the very survival of the organizational system. They describe the type of leader required for a crisis situation as one who readily assumes the leadership position, is willing to take charge and has a "prominent" (p. 22) personality. They suggested that an effective crisis leader was also "power-upward" (p. 38) evoking an ability to link a leader's subsystem with the total system. Interestingly, this is in stark contrast to an analysis by Chemers (1983), who writes, "In other words, when the situation becomes too stressful...the effective leader falls back on the tried and true lessons of experience" (p. 15).

Bryman (1992) suggested that the New Leadership approach positions leaders as visionary and inspirational (the type of leadership needed to lead organizations in times of insecurity as noted by Behling and McFillen [1996]). This vision is directed by charisma, a quality demonstrated in the leader and also duly noted by his followers. In

this discussion, Bryman (1992) appears to have captured a portion of what Burns (1978) and Bass (1985, 1998) believe is necessary for optimum leader effectiveness. However, while charisma may be a necessary component of vision, it is not sufficient. This is noted by Bass (1985) who incorporates a number of additional constructs into what comprises the Transformational Leadership model, specifically individualized consideration and intellectual stimulation.

### Transformational Leadership.

This section addresses the concept of Transformational Leadership as it was identified by Burns (1978) and extended by Bass (1985), reviews studies that have tested the constructs associated with Transformational Leadership and contrasts Transformational Leadership with other theories of leadership. In addition, the factors that possibly influence Transformational Leadership in organizations are investigated. Of special interest in this section will be the emphasis on the relational aspects of this construct which have powerful implications for communication scholars. Possible organizational outcomes will be reviewed. Finally, a critical analysis of the concept concludes this section.

Certainly, the differences among leaders had been duly noted throughout history, but it was Burns (1978) who first clearly distinguished between leaders who were oriented to exchange and those who were oriented to change, the latter identified as Transformational Leaders. Of note is that both Burns (1978) and Bass (1985) compared Transformational Leadership with what they called transactional leadership. Burns conceptualized the latter type of leadership as characterized by a focus on the relationship in a manner similar to Transformational Leadership. However, in transactional

leadership, the locus of the relationship is on an exchange. Each party to the exchange recognizes the value of the exchange as well as the value of the relationship, but these bargainers have no reason to remain together subsequent to the exchange. There is nothing enduring about their relationship; no actual engagement has occurred.

That is, transactional leaders expect certain work behaviors from their subordinates who are compensated for these behaviors by both monetary and non-monetary rewards. This is similar to the path-goal concept (House, 1971) where the leader clarifies what should be accomplished and provides appropriate direction and rewards upon accomplishment. Burns noted that these leaders appear to obtain an adequate level of performance from their followers, who work according to rather strictly defined tenets.

Bass (1998) has more fully developed the concept of transactional leadership, identifying three levels. The first depends on positive contingent reward, a “reasonably effective” (p. 6) leadership style where the leader and follower agree on specific behaviors which are duly rewarded after satisfactory performance. The two lower levels of transactional leadership, management by exception and laissez-faire leadership, Bass (1998) believes are the two most ineffective types. The management by exception strategy involves a leader monitoring behaviors for deviancies and errors that are subsequently corrected. That is, the management by exception leader or manager only intervenes after a task has been incorrectly performed to rectify the problem. Laissez-faire leadership implies that someone is in the position of a leader yet ignores his leadership responsibilities and in reality involves no transactions whatsoever. This leader does little or nothing to affect either the followers or the outcomes of their behaviors. A

portion of Douglas M. McGregor's final speech to the faculty of his college, quoted by Bennis, Parikh, and Lessem (1994), provides an interesting example of this approach and the fallacies associated with it:

I believed, for example, that a leader could operate successfully as a kind of advisor to his organization. I thought I could avoid being a boss. Unconsciously, I suspect, I hoped to duck the unpleasant necessity of making difficult decisions, of taking the responsibility for one course of action among many uncertain alternatives, of making mistakes and taking the consequences...I couldn't have been more wrong. (p.82)

In comparison, a leader oriented to change recognizes the necessity of completing particular tasks, but he is able to extend the task orientation to include recognition of individualized needs of followers. Rather than conceiving task and relationship orientations as opposing, as did Bales (1952), the Transformational Leader sees these as complementary, both necessary but not sufficient. While a Transformational Leader may recognize the necessity of behaviors that appear more transactional in nature, the ability to transcend the leader-follower relationship as beyond merely an exchange-orientation identifies a Transformational Leader.

Burns (1978) noted that this type of leader is dependent on the relationship rather than position or authority, and in his seminal work distinguishes Transformational Leadership from other theories concerning leadership and power. He emphasized that Transformational Leaders are not limited to the upper tiers of the organization but can be found throughout. Burns (1978) wrote,

Our main hope for disenthraling ourselves from our overemphasis on power lies more in a theoretical, or at least conceptual effort, than in an empirical one. It lies not only in recognizing that not all human influences are necessarily coercive and exploitative, that not all transactions among persons are mechanical, impersonal, ephemeral. It lies in seeing that the most powerful influences consist of deeply human relationships in which two or more persons engage with one another. It lies in a more realistic, a more sophisticated understanding of power, and of the

often far more consequential exercise of mutual persuasion, exchange, elevation, and transformation - in short, of leadership. (p.11)

Fisher (1986) also emphasized the mutuality of the leader exchanges in discussing the differences between management and leadership. While management is dependent on legitimization by an external authority, such as the organization in question, leadership is dependent upon the “interactional relationship between leader and follower” (p. 201). In fact this was identified by earlier researchers when Haythorn et al. (1956) revealed “the behavior of the leader is to a significant degree, a function of the attitudes or personality characteristics of the follower” (p. 218). That is, while a manager or supervisor occupies a position regardless of the presence of followers, implicit in the definition of a leader is the existence of followers; neither role can exist without the other.

Fisher (1986) emphasized that the communication interactions which occur between leader and follower(s) distinguish the relationship(s) as characterized by incredible complexity. These interactions involve a myriad of behaviors based on context, follower’s perceived needs, and other factors that the leader, because of his ability to differentiate appropriately and the subsequent variety of behaviors he has at his disposal, is able to respond in a manner perceived as leadership. Thus, the power relationship is only legitimized through the follower’s responses.

In his discussion of power Burns (1978) wrote that power is a relationship that involves purpose. He conceptualized leadership as the ability to draw from individuals their best efforts. That is, individuals use their power for the common purpose of higher level goal achievement for both the leader and the follower, making this encounter transformational rather than transactional. Therefore, leaders are able to understand the

other as well as themselves, identifying both common and individual goals, and working toward the achievement of both sets. This integration of goals is an important distinction to make since Nemeth and Staw (1989) caution “persons who hold positions of power or who are viewed as higher in status are powerful sources of influence, and agreement is often achieved by adopting the positions they propose” (p.180).

While Pawar and Eastman (1997) wrote that followers of Transformational Leaders are able to transcend their own self-interests, this appears to be a conceptualization that is incongruent with the idea that the Transformational Leader is able to effect a type of merger between the self-interests of the followers and the interests of the organization. Bennis, Parikh and Lessem (1994) suggested this might be accomplished through a meeting of all members of a group where individual vision statements are presented and commonalities as well as differences identified. A shared vision is then “crafted” (p.69), making it both specific and inclusive.

Thus the follower is not required to sacrifice his self-interest, but instead is encouraged to incorporate it into a larger goal. This is an important aspect of Transformational Leadership, as Schwartz (1990) noted that if followers are required to disregard their own goals, “the subordinate has to see the world in a way that enhances, not his or her own self-image, but the self-image of the leader” (p.25). Thus the subordinate must subscribe to the leader’s view of reality. This is not the case in the Transformational Leadership model. Meindl (1990) argued that this leader-follower relationship is best understood as a social contagion process, emphasizing the expressive actions of the followers in regard to their leader.



Bass (1985, 1990, 1998) has extended the concept of Transformational Leadership, identifying particular constructs associated with leadership that when utilized “inspire the follower with challenge and persuasion providing meaning and understanding, ... expanding the followers’ use of their abilities” (p. 5, 1998). These components of Transformational Leadership include idealized influence (Bass, 2000), inspiration, intellectual stimulation, and individualized consideration.

### Idealized Influence

The first, idealized influence, is identified in leaders who behave in a manner that causes followers to want to emulate them. Originally Bass (1985, 1998) had identified this construct as charisma, borrowing the term from Weber (1947) who had in turn borrowed it from theology, expanding its meaning from being endowed with a type of divine grace to more of a sociological term. Weber (1947) conceptualized charisma as including five components: the exhibition of extraordinary gifts, a dilemma, an innovative solution to the problem posed by the dilemma, followers attracted to this individual because of his perceived abilities, and validation of this individual’s abilities by repeated successes. Bass (1985) eliminated the transcendent quality and the trait-centered approach suggested by Weber (1947). Instead, he defines a charismatic leader (one who exhibits idealized influence) as behaving in a consistent manner guided by high moral principles. This leader is noted for his determination and persistence, and the subsequent behaviors of followers who desire to act in a manner similar to their leader.

Howell (1988) makes a distinction between charismatic leaders who are high or low in activity inhibition. Those who are in high in activity inhibition are termed “socialized leaders” (p. 218) who will display more egalitarian behaviors, while those

low in activity inhibition, “personalized leaders” (p. 219), behave in a more dominant and authoritarian manner. Socialized leaders are follower-driven, where personalized leaders are driven by their own goals. While Howell (1988) suggests both types of leaders may influence follower effort in profound ways, it appears that the socialized leader exhibits idealized influence.

Leaders who rate highly on the idealized influence scale tend to be more consistent than arbitrary. Thus this can be a quality attributed to any individual at any point in time; a crisis is not necessitated. In fact, Bass (1999) emphasized that Transformational Leaders are more able to *avoid* crises by proactive behaviors and emphasis on continuous improvement. He suggested they are more sensitive to the competitive environment. Therefore Bass’ (2000) recently adopted term “idealized influence” is easily semantically differentiated from “charisma” as defined by Weber (1947). Bass (1999) suggested that “we should define concepts to fit the way we intend to use them. To fit modern usage of the term *charisma*, we need to tame it or substitute another term for it such as *idealized influence* constructed from survey evidence of leaders at all levels or organization and types of organizations” (p. 547). Conger and Kanungo (1987) echoed both Burn’s (1978) and Fisher’s (1986) emphasis on mutuality when they addressed the construct of idealized influence in relationship to the “interplay between the leader’s attributes and the needs, beliefs, values, and perceptions of his/her followers” (p. 639). They have suggested that this relationship is dependent on four variables: (1) how discrepant the vision of the future is with the present; (2) the innovations and creativity displayed by the leader; (3) the ability of the leader to

realistically assess the present situation; and (4) the manner in which the leader demonstrates his charismatic behaviors by communicating his vision with the followers.

### Inspiration

While idealized influence is an important component of Transformational Leadership, it is not sufficient. The second construct Bass included in his definition is *inspiration*, usually combined with *idealized influence*. Although Bass has indicated these constructs differ conceptually, they have on occasion appeared to be related in praxis (Carliss, 1998). Leaders who demonstrate inspirational motivation do not simply encourage their subordinates to complete a task, but rather combine meaning with challenge to achieve increasingly higher levels of performance while providing a vision which they encourage their followers to share.

### Intellectual Stimulation

The third construct is *intellectual stimulation* and references the manner in which Transformational Leaders encourage problem solving. They encourage creativity and novel approaches that result in subordinates conceptualizing and understanding problems in a different manner, while careful not to deal harshly with the occasional failures that are likely to result from increased experimentation. Subordinates of these leaders are taught to invent neoteric solutions and also that no problem is intractable.

### Individualized Consideration

The final construct associated with Transformational Leadership is *individualized consideration*. While listed last, this construct may in fact be the one that most distinguishes a Transformational Leader. Inspiration, idealized influence and even intellectual stimulation can be utilized as manipulative tools of a leader to further his own

ends without regard to a follower's development. Charismatic and inspiring leaders, while charming, may lack the attention to individualized consideration that identifies a Transformational Leader and characterizes the mutuality of the relationship. Conversely, a leader who demonstrates individualized consideration recognizes and values diversity while providing each follower with specifically tailored opportunities for learning and development. *Individualized consideration* includes adapting and responding to individual needs in a supportive manner.

Bass (1997, 2000) has written that these behaviors of idealized influence, inspiration, intellectual stimulation, and individualized consideration transcend organizational boundaries and can be noted in organizations in different countries and within organizations in the same country. He has suggested that Transformational Leaders can be found in industrial, military and educational settings (Bass, 1998), and appear to be effective. He cites research (1997, 2000) from throughout the world suggesting the applicability of Transformational Leadership to nations with different cultural traditions. This research has demonstrated that cultures which tend to be more collectivistic in nature appear to especially relate to the mutuality of interests inherent in the construct. Perhaps Kuhnert and Lewis (1987) have an insight into the universal applicability of this model. They have written that Transformational Leaders appear to base their actions on deeply held value systems that may be more universal. These end values are not subject to negotiation. They include such concepts as justice and integrity and are expressed by the leaders in order to incite followers to higher levels of performance.

It is important at this point to note that while Burns (1978) believed that transformational and transactional leadership were more or less mutually exclusive styles, Bass and Avolio (1990) have noted that “often, and in different circumstances, both transactional and Transformational Leadership has been exhibited by the same leader” (p.234). These researchers have extended this argument by concluding that both the higher level transactional behaviors and Transformational Leadership behaviors can contribute to an organizational culture that encourages innovations. They have argued that truly effective leaders can combine these behaviors to maximize their effectiveness.

Bass and Avolio (2000) have noted that “Transformational Leadership augments rather than replaces transactional leadership in terms of impact on performance. The appeals of the Transformational Leader are interspersed with the balances of establishing expectations and satisfying agreed upon contracts” (p. 6). In fact, Harris and Lambert (1998) indicate that this combination may work optimally in group leadership. That is, when attempting to accomplish tasks within a group, both transactional and transformational interactions may be efficacious at different times and for different requirements. For example, Pawar and Eastman (1997) have written that in situations where efficiency is emphasized and outcomes are strictly specified, transactional leadership may be the preferred style. Bass (1998) does make the point that while the best leaders can combine these styles, leaders who demonstrate a predominately transformational behaviors appear to be more effective than those who predominantly interact in a transactional manner.

Bass (1998) also differentiates Transformational Leadership from what he terms “pseudotransformational Leadership” (p. 24). He has also referred to this as “the dark

side of charisma” (1999, p. 543). He emphasizes that in both types of leadership, followers support their leader. However, he makes a distinction in the manner in which that support is offered and why it is offered. Bass (1998) suggests Transformational Leaders appeal to a vision that includes the followers’ goals and that commitment is freely given to this leader. He contrasts this with Pseudotransformational leaders who engage followers by fear of punishment or loss of the leader’s affection. In the latter instance, the followers become dependent upon the leader for approval, approval that may be given or withheld at the leader’s whim. Bass believes this type of leadership is characterized by manipulative behaviors, with scant attention provided to either addressing followers’ goals or providing them the intellectual stimulation needed to develop into self-actualizing individuals.

Bass describes pseudotransformational leaders in the following manner: “personalized tyrants [who] emphasize compliance and identification. They demand unquestioning obedience...[they] bring about change by articulating goals that are ethnocentric and/or xenophobic deriving from the leaders’ personality needs and motives” (p. 24). Thus all the behaviors identified by Bass (1985, 1998) are essential to Transformational Leadership. Leaders must acknowledge and affirm followers (individualized consideration) as well as inspire, intellectually stimulate, and influence in ways congruent with both the follower’s individual goals and the organization’s goals.

A leader exhibiting these qualities appears to be best positioned to become the new paradigm manager identified by Bennis, Parikh, and Lessem (1994). This leader who they believe exemplifies the best qualities of both eastern and western management demonstrates individual self-mastery (or self-management, always attempting to increase

his own competence). He will encourage “social synergy” (p. 7, or the flow of information in an organization, will engender organizational learning, and approach organizational development from a sustainability perspective, using all resources wisely. This “master manager” (p. 41) is able to integrate his responsibilities as a member of a particular culture with the responsibilities inherent in the job.

The total leadership approach advocated by Bass (1995, 1998), which includes the factors of idealized influence, inspiration, intellectual stimulation, and individualized consideration, appears to provide the foundation for the types of behaviors underlying the synergistic master manager competencies. In fact Bennis, Parikh, and Lessem (1994) discussed how managers or leaders must heighten their levels of awareness to enhance their potential and assist followers in doing so as well. They have called this an individual transformation they believe must precede an organizational one.

### Factors Influencing Transformational Leadership

The following section will examine the construct of Transformational Leadership in relationship to factors which have been identified as influencing its expression in an organization. Particular organizational indices which may facilitate or inhibit the development of Transformational Leadership will be explored.

Whether transformation leadership is related to gender has been the subject of debate. However, differences between men and women (Carliss, 1998; Bass, Avolio & Atwater, 1996) have produced either insignificant results or results that, while statistically significant, account for little actual variance. For example, in her study involving over 300 bank branch managers, 588 subordinates, and 32 branch manager

superiors, Carliss (1998) discovered a slight, albeit statistically significant, difference between the manner in which the managers and their superiors rated Transformational Leadership qualities according to gender. Females were rated higher by both groups, although there were no significant differences between the sexes discerned in the ratings of actual subordinates. In three separate samples of leaders in the banking industry, Bass, Avolio & Atwater (1996) discovered small statistically significant differences between Transformational Leadership exhibited in men and women in the first two groups and no differences in Transformational Leader behaviors in the third group, although these groups were similar in composition.

In regard to gender differences or behaviors attributed as either masculine or feminine, Hackman, Hills, Furniss, and Patterson (1992) after administering the Multifactor Leadership Questionnaire (Bass, 1985) and gender items revealed that a combination of masculine and feminine gender-role characteristics best predicts the Transformational Leadership style. The Transformational Leadership constructs of charisma, individual consideration, intellectual consideration, and inspirational leadership all had significant correlations with masculine and feminine gender items. They concluded that individuals displaying Transformational Leadership skills appear to effect a type of gender balance which they contrast with what they consider a more traditional leadership type involving masculine stereotypes.

In a later study regarding gender characteristics and leadership (1993), these same researchers found that both male and females leaders were perceived as satisfying to work with whether they displayed masculine or feminine characteristics. However, while male leaders were considered effective whether they displayed either masculine or



feminine characteristics, female leaders were not perceived equally as effective when displaying feminine characteristics as when displaying masculine gender traits. Although Metcalfe and Alban-Metcalfe (2001) were not able to conduct statistical analyses in their study of Transformational Leadership due to the small number of identified female managers, these researchers did note they did not detect any significant differences between managers of different sexes on the Transformational Leadership factors.

Transformational Leadership may be the most effective style for women, as advocated by Jordan (1992). She focuses on the follower-oriented aspects of Transformational Leadership, emphasizing that in this model rather than power being vested solely in the leader, it is disseminated to the group, and writes that this is “generally recognized as a more feminist orientation” (p. 62). Jordan has suggested that Transformational Leadership helps in minimizing social constraints associated with gender by emphasizing the sharing of power.

Fuller, Morrison, Jones, Bridger, and Brown (1999) found an employee’s sense of psychological empowerment, which they defined as intrinsically emanating cognitions that reflect his active orientation to the role assigned in the organization, moderated the effects of Transformational Leadership in relation to job satisfaction. They discovered slight, but significant, increases in job satisfaction among those employees demonstrating greater levels of self-determination in relation to job classification. However, it is difficult to discern whether employees who had jobs with higher classifications may have been more satisfied simply because of the opportunity to work in more prestigious positions.

Brynam (1992) has concurred that organizational environment can either facilitate or impede the expression of Transformational Leadership. He has suggested that in situations of uncertainty or crisis the qualities associated with this type of leadership are almost requisite to responding appropriately. Leaders exhibiting the New Leadership probably find it easier to get their message across when situations are stressful or when there is considerable uncertainty.

Whether the idea of Transformational Leadership is so intimidating to most individuals that they subsequently believe they themselves are incapable of displaying these qualities is a question posed by Brynam (1992). He has written that the idea of Transformational Leadership may be so intimidating that it may encourage employees to subscribe to the belief that leadership is only in the province of someone special, therefore eschewing any attempts at leadership themselves. While interesting to contemplate, this suggestion is in opposition to the original conceptualization of Transformational Leadership (Burns, 1978) as affecting followers in such a manner that their behavior becomes elevated as well. Rather than intimidate, Transformational Leaders inspire. Brynam (1992) appears to take the approach to the charismatic aspects of leadership of Weber (1947) rather than Burns (1978) and Bass (1985, 1990, 1998), the latter two authors having written that Transformational Leadership may be the province of any individual within the organization.

However, research indicates that followers may facilitate the emergence of Transformational Leadership, or may be more susceptible to its influence. Wofford, Whittington, and Goodwin (2001) discovered that followers who displayed higher autonomy needs rated their transformational leaders as more effective than followers with

low autonomy needs. In addition, regarding organizational outcomes, followers with higher needs for autonomy who rate their leaders as more transformational are perceived by their leaders as being more effective. These findings lend credence to the idea that Transformational Leadership depends on the follower as well as the leader and reflects Fisher's (1986) emphasis on the mutuality and interdependence of the relationship.

Pawar and Eastman (1997) have delineated the specific aspects of organizational context, specifically the inner context (structure, strategy, and culture) that may influence Transformational Leadership, extending and specifying the argument made by Brynam (1992) concerning the organizational environment. They have suggested that while research has concentrated on either the intrapersonal or interpersonal aspects of this type of leadership, scant attention has been paid to organizational factors. According to these authors, four contextual factors impinge upon Transformational Leadership behaviors: (1) whether the organization is focused on efficiency or adaptation; (2) whether the technical core or boundary-spanning units have dominance; (3) how the organization is structured; and (4) the "mode of governance" (p. 82).

#### Efficiency versus Adaptation

The first contextual factor of efficiency or adaptation refers to whether the organization's focus is on stability or change. During periods of stability, efficiency is emphasized and the role of the leader is simply to facilitate the adoption of goals that have already been established and monitor performance to achieve the maximum output according to these clearly defined standards. In contrast cycles defined by an adaptation orientation are those in which the organization must adapt to a changed environment while overcoming

internal resistance to this change. Innovative thinking and synthesis are required during periods of adaptation, requiring a visionary and inspirational type of leadership. Because of resistance to change, the leaders must also exhibit the behaviors necessary to reassure followers and secure their cooperation. This requires individualized consideration, recognizing concerns while providing the leadership required to assure and to motivate followers. Thus, the authors have suggested organizations that are experiencing periods of adaptation orientation will be more receptive to Transformational Leadership than those whose immediate goals involve efficiency orientation.

#### Technical Core versus Boundary-spanning Units

Whether the organizational task systems are dominated by technical cores or boundary-spanning units is the next influence the authors believe is related to whether Transformational Leadership is well-received in an organization. Specifically, they have proposed that organizations encompass two main cores of operation, the technical core and the boundary-spanning unit(s). The technical core is relatively isolated from extraneous influences in order to perform technical tasks with peak efficiency. The boundary-spanning units are interfaced with the environment and are relatively more fluid and flexible due to the necessity of constantly adapting to changes. Decision-making moves from a routine operationalized perspective within the technical core to highly individualized and discreet decisions made in the boundary-spanning units. Both units are encompassed by all organizations, with either the technical core or boundary-spanning units achieving dominance. The authors have suggested that organizations focusing more on boundary-spanning will provide contexts where Transformational Leadership is more valued than in organizations where the technical core is dominant.

## Organizational Structure

Recognizing that structure has a significant and pervasive influence on organizational processes, Pawar and Eastman (1997) have evoked Mintzberg's (1979) typology of five distinct structural forms: (a) machine bureaucracy, (b) professional bureaucracy, (c) divisional structure, (d) simple structure, and (e) adhocracy. In the machine bureaucracy structure, standardization and repetition are the norms. Processes, forms and tasks are highly structured and control rests with the hierarchy that as a consequence tends to be overburdened with all decisions that must be made. Middle and lower managers are focused on understanding the numerous directives that come from above.

This compares with the next typology, a professional bureaucracy. Although the employees in a professional bureaucracy are more committed than those in the machine bureaucracy, they are committed to their individual needs rather than mutual needs and goals. Thus the professional bureaucracy is characterized by self-directed and highly trained professionals who are motivated by individualized goals exclusively, with standards which "originate largely outside its own structure, in the self-governing associations its operators join with their colleagues from other professional bureaucracies" (Mintzberg, 1979, p. 351). Management serves a supporting role only.

The last of this set is the divisional structure. In the divisional structure, a headquarters specifies goals and monitors performance of a division, both areas being concerned with the attainment of operational goals. Financial resources are allocated by the headquarters, which is also where decisions are made concerning whether to replace,

merge, or allow particular divisions to continue to function. The divisions run their own businesses within this framework.

Pawar and Eastman (1997) have suggested that none of these three structural forms is receptive to Transformational Leadership. Rather they cite the remaining two, simple structure and adhocracy, as forms which facilitate the development of Transformational Leadership behaviors. The simple structure is characterized by a lack of hierarchy and by a single leader who can articulate the vision and demonstrate the behaviors of a Transformational Leader. There is no complex structure nor are there self-obsessed professionals impeding this process.

Mintzberg (1979) has written that in this type of organizational structure there is little formalized behavior and planning and training are also minimally utilized. In the adhocracy structure, which involves a flat hierarchy with groups of self-managed teams, the individuals themselves can develop the commitment and vision to work collectively toward mutual goals. According to Mintzberg (1979) little distinction is made between line and staff employees, rather they are both employed in relationships that change as the demands of projects warrant. Thus in these latter two structural forms Transformational Leadership is facilitated: in the leader in a simple structure; in the group itself in the adhocracy structure.

The authors suggest that Transformational Leadership behaviors will not be well-received in organizations with machine bureaucracy, professional bureaucracy, or divisional structures. Rather structures that are more loosely defined with less

established hierarchies, according to Pawar and Eastman (1997), are those in which the expression of Transformational Leadership is facilitated.

### Mode of Governance

Regarding mode of governance, the authors have suggested that organizations demonstrate three basic types: the bureaucratic mode, the market mode and the clan mode. The bureaucratic mode is characterized as more transactional or exchange in nature; employees accept organizational control in exchange for compensation. While the exchange also characterizes the market mode, the nature of the exchange is different. These exchanges are determined in part by market or price conditions. In the first mode therefore, employees are socialized through rigid formalized routines, where in the second, socialization occurs through an employee's apprehension that the market will provide a worker to replace him.

In contrast to both of these, the clan mode of governance does not require an employee abandon his own self interest, but rather emphasizes the attainment of individual goals through collective efforts. Pawar and Eastman (1997) have proffered that organizations demonstrating the clan form of governance will be more receptive to Transformational Leadership. The authors believe that these five contextual factors taken together can help determine in which organizations Transformational Leadership will flourish. Although Pawar and Eastman (1997) have revealed that they recognize in practice most organizations can be represented along a continuum (in fact Nemeth and Staw [1989] represent organizational context along a dichotomous continuum with military and religious organizations with established hierarchies and common goals at

one end and universities or educational institutions which they conceive as exhibiting departments that have less formal relationships at the other), those displaying the contexts most associated with adaptability and flexibility will more likely embrace Transformational Leadership over those that are more rigid and less responsive to the environment. However, it is important to note here that Behling and McFillen (1996) have indicated that only organizations that are less rigid and more responsive to the environment will survive in a system that is distinguished by constant change and consequent uncertainty, the system which predominates the modern business environment.

Finally, Bass (1990) has submitted that “neutralizers” (p. 159) may interfere with Transformational Leadership behaviors. He has indicated that these may be characteristics endemic to the organization, the followers, or the tasks. These include physical distance that may preclude personal interaction, systems that provide rewards on the basis of seniority only, or organizations that exhibit a dense hierarchy. In the first instance, physical distance may be somewhat ameliorated through the use of technology. This technology, either through video conferencing, voice mail, or other means can serve to keep leaders and their reports in frequent contact. Organizational concerns where the system itself precludes managers from sharing their vision or where innovation is discouraged reflects back to Pawar and Eastman’s (1997) machine organizational structure.

Thus, although gender does not appear to influence the adoption of Transformational Leadership behaviors, organizational context and culture may affect whether these are eagerly embraced or discouraged. Specifically, organizations which



tend to be more flexible and responsive to the environment where leaders have frequent physical contact with their subordinates appear to provide contexts that facilitate Transformational Leadership. However, as will be noted later in this study, this research just begins to examine the context, intrapersonal, and interpersonal factors influencing the expression of Transformational Leadership in an organization.

### Integrating with Other Theories

Wallis (1993) has suggested the theory of Transformation Leadership can provide a bridge by which economists and social economists can revise their theories of the corporate citizen to include a more follower-oriented approach in a leader who inspires those around him, incorporating individual goals into organizational ones. He has written that the concept of a Transformational Leader provides a richer perspective of the individual worker as well. This leader shares a vision with his follower, allowing the follower to transcend the mundane. According to Wallis (1993), this reaffirms a sense of shared identity and community. The follower is seen as making a sacrifice since he is willingly able to choose or not to choose to incorporate this vision, which will, of necessity, preclude other possibilities. The leader is able to articulate this vision of the future, based on the present, incorporating the individual followers in the quest to obtain whatever is necessary to achieve this future. This sharing of a vision addresses the concern of the social economists who advocate the development of a sense of community within an organization where each individual is valued.

Scanduar and Schrieshein (1994) have offered that augmenting Leader/Member Exchange Theory with constructs from Transformational Leadership may provide a more

accurate representation of outcomes associated with each. Liden and Maslyn (1998) have noted that LMX is heavily reliant upon role theory which “has provided the theoretical foundation for LMX research” (p.44). Scanduar and Schrieshein (1994) investigated the possible augmenting effects in terms of performance when Transformational Leadership behaviors operationalized as mentoring were added to the behaviors identified as leader-member exchanges that they conceived of as more transactional in nature. They speculated that the addition of Transformational Leadership to the leader-member exchange processes may allow for the possibility of an employee making a longer-term commitment. In addition, they have expressed the belief that Transformational Leadership may encourage recognition of the importance of developing a subordinate through coaching. They discovered that indeed the addition of mentoring behaviors explained more of the variance in rated salary progress and promotion rate than was explained by leader-member exchange only. These findings have particular relevance for subordinates or followers in these dyads in that they indicate more positive outcomes for followers whose managers augment leader-member exchange behaviors with those of a Transformational Leader. Bass (1999) has expressed concurrence with this idea when he writes that Transformational Leadership may represent the highest quality leader-member exchange.

Podsakoff, MacKenzie, and Bommer (1996) investigated Transformational Leadership in relationship to the Substitutes for Leadership Theory. The Substitutes for Leadership Theory is oriented to specific contexts and requires that the leader identify the salient situational variables that affect performance and adapt his or her behavior accordingly. That is, the context may afford particular “substitutes” (p. 263) for

leadership that provide the motivating influences and task orientations independent of the leader. A number of variables have been identified as possible substitutes for leadership at the individual, task, and organizational levels. Individual level variables include the subordinate characteristics of ability, amount of experience, prior training and knowledge, demonstrated need for independence, professional orientation, and whether the individual is extrinsically motivated by organizational rewards. Task characteristics include the amount and type of feedback inherent in the task and whether the task is routine or intrinsically satisfying. The six organizational characteristics that can function as substitutes for leadership are the degree to which the organization is formalized or flexible, how groups function, the amount of support provided employees from throughout the organization, the rewards which are a function of the organization rather than the leader, and finally, the spatial distance between managers and their direct reports. These substitutes for leadership supposedly moderate the effects of any type of leader behavior. That is, Transformational Leadership behaviors would be moderated in their effects on outcomes by context as specifically defined in the individual, task, and organizational areas.

These researchers discovered little support for their contention that the substitutes for leadership moderated the effect of Transformational Leadership behaviors. Although the substitutes for leadership behaviors did account for additional variance in the outcomes measured, the difference was not significant. They did discern that the substitutes for leadership behaviors and Transformational Leader behaviors were highly correlated and provide three possible explanations. They suggested that the relationship might be spurious, caused by other factors not included in the model, that the substitutes

influence the leader's behavior, or that leaders influence substitutes' variables. Podsakoff et al. (1996) did not consider a fourth possible explanation that could be explained by an correct interpretation of the tenants of Transformational Leadership. This rationale could incorporate their second and third explanations as well as provide a basis for their results. As defined by Bass (1998), Transformational Leadership includes the construct of individualized consideration (rather than individualized support as defined by these researchers). Bass (1998) notes, "Interactions with followers are personalized....management by walking around is practiced" (p. 4). Inherent in this explanation is that transformational managers adapt to the needs of their followers that must be determined in part by context.

The approach to Transformational Leadership taken by these researchers as exclusively predetermined leader behaviors appears to ignore the adaptability necessary for leaders who provide individualized consideration to followers. This individualized consideration is based on perceived needs and certainly determined in part by the context. In fact, a leader who practices management by walking around would certainly note the contextual cues at the individual, task, and organizational levels that would allow him/her to modify his/her behavior accordingly to provide individualized consideration. That is, a possible explanation for the high correlation between the Transformational Leadership Behaviors and the Substitute Behaviors could be that rather than two separate entities, Transformational Leadership subsumes the Substitute Behaviors into those that comprise Transformational Leadership. That is, a Transformational Leader provides individualized consideration to his followers that reflects adaptability to contextual cues.

Cannella and Monroe (1997) have echoed the belief of Wallis (1993) and Scanduar and Schrieshein (1994) in that Transformational Leadership can augment other modern theories of management to provide a broader perspective of requisite behavior for executive managers. They cite as an example the agency theory where top managers are perceived to be agents of shareholders but with interests and agendas that may be dissimilar from these shareholders, a rather narrow view which positions executive managers as manipulative, with a focus exclusively on the separation of ownership and control. Bass (2000) emphasizes that rather than focusing on separate goals “the true Transformational Leader thinks of all the constituents of the organization – shareholders, management, employees, consumers, and community – and tries to optimize the collective well-being of all the diverse interests of the system” (p. 7).

A second theory that the authors have argued dominates research on top managers is strategic leadership theory. This theory suggests that the preferences and knowledge of managers affect determinations of appropriate strategy. The authors have written that a focus on such characteristics as charisma and individualized consideration is viewed as interfering with an executive’s information processing by narrowing the choices available. They offer, however, that a focus on these behaviors that emphasize an orientation on relationships could better explain the implementation of strategies selected by an executive. Pawar and Eastman (1997) agreed when they suggested that strategic management theory does not address the elevating of followers to higher levels of performance based on mutual needs. That is, while strategic leadership theory may be useful to conceptualize how choices are made, Transformational Leadership theory may be useful in understanding how these choices are implemented in the organization.

Kegan (1982) has spoken to this in his discussion regarding the heads of corporations who he suggests may be “overembedded” (p. 248) in organizations that have placed a dichotomy between public and private life: “If the notion that most workplaces are not well suited to the development of genuine intimacy is unperturbing to those who shape them, perhaps the notion that the workplace works against a person’s growth in general might be more so” (p. 248). That is, Transformational Leadership in combination with other theories of leadership offers a more complete picture of the requisite behaviors for executive leadership as well as addressing the development of both the leader and followers.

Finally, Tracey and Hinkin (1998) have written that Transformational Leadership was simply what they termed effective managerial practices, arguing that the combination of behaviors identified by Burns (1978) and Bass (1985) have “striking similarities” (p. 220) to generally accepted modes of effective management practices. Their research was based on the suggestion that the Managerial Practices Survey (MPS) developed by Yukl (1990) assessed similar managerial practices to those identified in the Multifactor Leadership Questionnaire (Bass, 1984, 1990). Specially, they argued that the behaviors identified as charisma (later idealized influence), inspiration, intellectual stimulation, and individualized consideration were behaviors previously identified in the literature as those contributing to organizational effectiveness, although they may have been referred to differently. An investigation into the constructs associated with each instrument yielded results that did not support this contention. A confirmatory factor analysis supported the distinctiveness of the underlying constructs of the MLQ and the MPS and the MLQ accounted for significant variance beyond that which was accounted for by the

MPS. The authors suggest that Transformational Leadership as measured by the Multifactor Leadership Questionnaire is able to capture behaviors beyond that which are considered fundamental managerial practices associated with leader effectiveness. As such, it appears to effectively distinguish these behaviors from management practices that may be considered more transactional in nature. Similar results were discerned by Seltzer and Bass (1990), who discovered that the addition of Transformational Leader behaviors explained more of the variance in subordinates' ratings of satisfaction than initiation and consideration only. The latter two constructs are oriented to task accomplishment and relationship maintenance. Initiation addresses how tasks are explained and structured and how information concerning the tasks is provided. Consideration addresses relationship issues such as a leader being sociable, egalitarian, and concerned with the welfare of his/her followers.

#### Outcomes of Transformational Leadership

Transformational Leadership, because of the components of idealized influence, inspiration, intellectual stimulation and individualized consideration, has been suggested as the optimum style for managing change (Tichy & Devanna, 1986). In addition Transformational Leadership has been demonstrated to produce increased levels of employee satisfaction (Medley & Faye, 1995; Deluga, 1988; Koh, Steers and Terborg, 1995; Hater and Bass, 1998), higher quality results in research and development efforts (Keller, 1992), and extra effort expended by followers (Yammarino and Bass, 1990). Bass, Waldman, Avolio, and Bebb (1987) discovered that leaders scoring higher on Transformational Leadership factors have followers who display greater levels of transformational behaviors. Transformational Leadership has been linked to simulated

positive organizational economic indicators (Avolio, Waldman, & Einstein, 1988), actual organizational indicators (Howell and Avolio, 1993), reducing turnover (Bryant, 1990) and facilitating the process of urban renewal (Rada, 1999). The constructs of idealized influence, inspiration, intellectual stimulation, and individualized consideration have been linked to a number of different outcomes, including attitudes toward union involvement and, indirectly, loyalty toward one's union (Fullagar, McCoy, and Shull, 1992). Bass (1990) has discovered that "the leader is often responsible for the ease with which members of a group can communicate with each other" (p. 674). Brynam (1992) has suggested that charismatic leadership works especially well under conditions when high productivity is required.

Regarding a Transformational Leader's ability to manage change, Tichy and Devanna (1986) have suggested it is important to recognize change involves an ending that encompasses four basic processes. These include disengagement, or the event that "triggers the transition" (p.64); disidentification, or the process by which an individual begins the process of altering his/her identity in accordance with the change; disenchantment, or the recognition that the past cannot be recaptured or relived; and finally disorientation, or that which occurs after the past has been left behind, but the future is not yet embraced. It is at this last juncture that the effectiveness of Transformational Leaders is realized as they create a common vision of the future. Followers are in need of this new vision because of their uncertainty. Their prior vision has been altered by the change. The authors have recounted narratives of Transformational Leaders who have successfully managed change in their organizations that led to a shared bond among the employees. The leaders were able to engender new



teamwork and cooperation by creating new myths, stories, and rituals. Pawar and Eastman (1997) concur with the efficacy of Transformational Leadership in effecting change when they write:

First, we believe that organizational change is possible. Second, we believe that change can result from various mechanisms and that Transformational Leadership is one of the important mechanisms that effects organizational change. Third, we believe that Transformational Leadership effects organizational change through the articulation of leaders' vision, the acceptance of the vision by followers, and the creation of a congruence between follower's self-interests and the vision. (p. 84)

Apparently those employees associated with Transformational Leaders can better adapt to change, and also appear to enjoy greater job satisfaction and remain associated with the organization for longer periods. Medley and Faye (1995) surveyed staff nurses in acute care community hospitals by administering both the Multifactor Leadership Questionnaire and the Index of Work Satisfaction. The researchers discerned that the supervisory nurses (head nurses) who scored high on measures of Transformational Leadership were more likely to have direct reports (staff nurses) who reported higher levels of job satisfaction and longer associations with their head nurses. The authors write that these findings indicate that the Transformational Leaders, as opposed to the transactional leaders (those who exhibited only transactional behaviors), had less turnover and greater longevity with the staff, resulting in "important economic implications for hospitals" (p. 70JJ). The research of Koh, Steers, and Terborg (1995) also demonstrated higher levels of satisfaction in teachers whose principals were transformational leaders. These educators also reported greater levels of organizational commitment and increased organizational citizenship behavior. Subordinates of leaders

who demonstrated higher levels of Transformational Leadership behaviors in a study conducted by Hater and Bass (1988) also reported increased levels of satisfaction.

Deluga (1988) discovered that this satisfaction expressed by employees extends to satisfaction with leadership and higher perceptions of leader effectiveness. He also discerned that subordinates of Transformational Leaders tend not to engage in influencing behaviors such as coalition building, seeking a higher authority, and bargaining, and suggests that this relegation of “harmful organizational game playing” (p. 465) to a nonexistent role allows for more focus on mutual goals. Yammarino and Bass (1990) in an analysis of 793 subordinates of naval officers, found that satisfaction and perceptions of effectiveness with their superiors translated into the willingness to expend extra effort to accomplish tasks toward achieving goals.

Keller (1992) investigated Transformational Leadership in research and development organizations, speculating that the professional employees whose jobs require innovative thinking and creativity would be more effectively led by a Transformational Leader. Aggregated scores from project groups demonstrated Transformational Leadership was predictive of the production of higher quality projects. In addition, groups led by Transformational Leaders demonstrated better performance regarding budget and schedule limitations. The author has suggested that in the research and development environment, Transformational Leaders provide the vision to allow group members to incorporate their self-interests into a focus on the group and its project. He concluded that this environment usually populated with highly motivated, well-educated professionals, would find the behaviors exhibited by a Transformational Leader, such as intellectual stimulation and individual consideration, especially motivating.

A cascading leadership effect was discerned by Bass, Waldman, Avolio and Bebb (1987). Leaders who exhibited Transformational Leadership behaviors appeared to produce similar behaviors in subordinates. The subordinates of first level supervisors provided assessments of the Transformational Leadership behaviors of their superiors strikingly similar to those provided by the first level supervisors concerning their managers. This harkens to Burn's (1978) original conceptualization of this type of leadership as "a relationship in which two or more persons tap motivational bases in one another and bring varying resources to bear in the process" (p. 15). It also emphasizes the point made by Fisher (1986) regarding the mutuality of the relationship between leader and follower.

While outcomes such as increased employee satisfaction and commitment are relatively easy to operationalize, there are both methodological and theoretical considerations which make linking Transformational Leadership behaviors at the level of the dyad and "bottom line" organizational level outcomes, such as market share and stock price, difficult. In organizations, a myriad of factors may impinge upon organizational outcomes, many of which are only distantly related to Transformational Leadership Theory. For example, new competitors with more innovative products may decrease an organization's market share regardless of whether employees are managed by a Transformational Leader. While the qualities associated with this type of individual may inspire employees to greater levels of performance demonstrating subsequent rapid reactions to forces outside of their control, leaders, even Transformational Leaders, may have little or no authority over forces that may significantly impact organizational outcomes. A creative approach to this dilemma was demonstrated by Avolio, Waldman,

and Einstein (1988) in a study involving 190 second-year MBA students who participated in a business simulation as a part of course requirements for completion of their Master's in Business Administration degree. The students were involved in a game that was highly complex and presented both opportunities and challenges inherent in the operation of a medium-sized publicly held company.

The game involved such challenges as averting company takeovers and planning strategies to secure funding. The ability to motivate and inspire team members was rated very highly as necessary behaviors for successful outcomes as determined by prior participants. The Transformational Leadership qualities of charisma (later idealized influence), individualized consideration, and intellectual stimulation were all highly and significantly correlated with the financial indicators of market share, return on assets, stock price, and earnings per share. While the statistical analysis precluded a determination of the degree to which Transformational Leadership contributed to these successes, it was apparent that this construct had a significant impact on the bottom-line indicators in the game.

In spite of methodological difficulties, Bryant (1990) was also able to demonstrate a link between organizational outcomes and Transformational Leadership. Staff nurses randomly selected from an urban acute care institution whose supervisors scored higher in Transformational Leadership items perceived their leaders were more effective and reported greater job satisfaction. Additionally those units headed by transformational leaders had significantly less turnover. Specifically she discovered that "intellectual stimulation is the best indicator for nurse managers' perceived effectiveness. Second, the best indicator of job satisfaction among staff nurses is nurse managers' perceived

individualized consideration. Third, charisma [later idealized influence] is the most significant leadership characteristic associated with staff nurse turnover” (p. 64). Howell and Avolio (1993) discerned that transformational leadership behaviors were associated with more positive business unit outcomes; specifically Transformational Leaders were more likely to meet or exceed their unit goals.

Union apprentices assigned to journeymen who displayed transformational leadership behaviors demonstrated more positive attitudes and greater loyalty to the union. While the researchers’ model did not indicate these were direct effects of Transformational Leadership, it did indicate that they were indirect effects of these leaders being more adept at the union socialization process, operationalized by such behaviors as clarifying the goals of the union and communicating the behaviors and information necessary to assuming union membership. This study is especially interesting in that the rigid union rules and strict hierarchy might be presumed to impede the development and use of Transformational Leadership behaviors or, at the very least, not provide an environment where Transformational Leadership might flourish.

In one of the few longitudinal studies investigating Transformational Leadership, Yammarino, Spangler, and Bass (1993) looked at personal outcomes for naval officers. These researchers attempted to provide a different type of study than those represented by cross-sectional data to discern causality for outcomes. They suggested that the link between Transformational Leadership and subsequent performance was more closely related and stronger than that between a transactional leader and ratings of leadership by his/her direct reports. They obtained measurements from a variety of sources at different points in time, initially completing instruments on United States Naval Academy

midshipmen (those presently receiving training) to determine if these individuals displayed subsequent leadership behaviors when later promoted to officer ranks. Early identification of leadership behaviors as transformational, transactional, management by exception, and laissez-faire predicted later evaluations of performance by both superiors and subordinates (fleet performance). Specifically, the midshipmen identified as exhibiting Transformational Leadership behaviors were recommended earlier for promotions and received higher ratings for effectiveness by both their own supervisors and their direct reports up to six years subsequent to the initial measurement.

Another organizational outcome, changing organizational culture, is attributed to Transformational Leadership by Bass and Avolio (1993). They suggest

There is a constant interplay between culture and leadership. Leaders create mechanisms for cultural development and the reinforcement of norms and behaviors expressed within the boundaries of the culture. Cultural norms arise and change because of what leaders focus their attention on, how they react to crises, the behaviors they role model, and whom they attract to their organizations. The characteristics and qualities of an organization's culture are taught by its leadership and eventually adopted by its followers. (p.115)

These authors write that this interplay between leadership and culture results in leaders effecting changes in cultures. Transformational Leaders change organizational culture by attending to the beliefs and assumptions as well as the rites and rituals of the organization and making revisions as needed to reflect the value placed on change, the orientation to relationships between members of the organizations, and the mutual nature of the Transformational Leadership behaviors. Transformational Leaders view culture as an evolutionary process, recognizing that culture is never "done," but rather is in a constant state of flux as the organization itself changes to meet new challenges. This flexible and adaptable culture is especially essential to an organization where innovation

is paramount. Rather than simply comprise one aspect of context as suggested by Applegate (1980), these writers suggest culture as the medium through which identities are co-created through communicative interactions. The Transformational Leader is well-positioned to influence this culture since he brings to bear the behaviors which enhance the self-identities of followers as their individual goals are affirmed.

Perhaps this change in culture can extend to communities as well. Rada (1999) has eloquently detailed the processes associated with Transformational Leadership in an ethnographic study of the urban process in three southern California communities. She has addressed the idea of community design (redesign) based on an integration of housing, workplace, shopping, and recreational activities into mixed-use neighborhoods. This model, based on town designs prior to WWII, seeks to eliminate suburban sprawl and the associated decline of inner cities. She reports that the entrepreneurial approach based in neighborhoods and driven by residents which is grounded in Transformational Leadership beliefs and behaviors was associated with more positive outcomes. Rada (1999) enumerates the Transformational Leadership elements of this approach by stating that in the “collaboration [which] necessitates the formation of relationships [which are] dynamic and mutual [and] by considering a wider set of values and visions, participants in the process broaden their focus” (p. 35).

### Comments and Critique

Transformational Leadership focuses on the relationship and how it is communicated between either the confirmed leader (such as the executive manager, manager or supervisor) or the emergent leader in an organization and the individuals with whom

he/she works. It appears more comprehensive than other theories that began to focus on the relationship, but provided an incomplete model, emphasizing the idealized influence or inspirational qualities of leaders without regard to their specific interactions with their followers. By incorporating intellectual stimulation and individualized consideration, the Transformational Leadership model recognizes and responds to the difficulties inherent in a conceptualization of leadership which only focuses on the leader without any regard to how the followers' needs are addressed and how their contributions are acknowledged. However, as with any leadership model that focuses on the dyad (or multiple dyads), rather than on organizational performance, it is difficult to discern actual outcome measurements regarding organizational performance from what occurs in the relationship between a direct report and his/her superior. Arguably, in the context of business organizations, those which reflect the Pawar and Eastman (1997) constructs of efficiency over adaptation; technical core dominance over boundary spanning units; machine and professional bureaucracy over simple structure and adhocracy; and bureaucratic and market modes of governance over the clan mode may not be positioned to respond to an uncertain business environment, the type of environment that appears to characterize modern life.

What specific effects Transformational Leaders have on the other, less flexible end of the continuum is questionable. Leadership is one variable, albeit an important one, in what is a complex environment influenced by a myriad of factors regarding organizational outcomes. It is not difficult to discern processes that are antithetical to the Transformational Leadership theory (eg. "Reengineering," Hammer and Stanton, 1995) may produce immediate bottom line results indicated by higher stock prices, greater



returns on investments for shareholders, and costs savings. While satisfied employees may produce greater and more innovative solutions, employees who are concerned about losing their jobs may also exhibit similar work behaviors.

Collins, Ross, and Ross (1989) lament the fact that although most executive managers indicate they are interested in implementing more participatory management systems, few have actually done so. Perhaps this is because of the nature of the business environment where rapidity is a mantra. The development of relationships takes time and while Transformational Leaders may produce better results in the long term, a focus on short term gains may preclude the types of behaviors Transformational Leadership advocates.

Another criticism of the theory is the lack of clarity between what constitutes effective transformational and transactional leadership behaviors and under which conditions each is appropriate. While indicating that these behaviors may be complementary, Bass (1998) has also indicated that the more effective leaders use more Transformational Leadership behaviors than transactional leadership behaviors. If Transformational Leadership is indeed the result of greater cognitive differentiation as Kunhnert & Lewis (1987) write and adaptability as Fisher (1986) indicates, then it would appear that a Transformational Leader would have at his/her disposal a wide range of behaviors, some transactional in nature, and perhaps even displaying laissez-faire behaviors if the situation warranted no intervention. Conversely, transactional leaders would not yet have the adaptability or cognitive development to display fully developed Transformational Leadership behaviors, although theoretically, the behaviors conceived as less complex would be accessible to this individual. This has not been as fully

developed as necessary, although it does appear that subordinates tend to differentiate between transformational/transactional behaviors and laissez-faire behaviors. Because the Multifactor Leadership Questionnaire was developed in tandem with the theory of Transformational Leadership and because direct reports of leaders appear to clearly distinguish between those laissez-faire behaviors and the more transformational behaviors, Bass (1985, 1998) did not consider the idea of adaptability extending effective leadership to instances when the best course of action is to take no action. Apparently, followers appear to identify their leaders' styles based on the most frequently occurring behaviors rather than on the entire range of behaviors their leaders may display. Mendil (1990) cautions against this oversimplification in an organization, stating, "Organizations are highly complex systems. As a result, their representations in thought are likely to reflect a process of simplification" (p.163).

This tendency toward identifying the Transformational Leader as one who for the most part engages in transformational behaviors does not account for behaviors that may be the most efficacious in a variety of situations. Applegate (1980) noted that in a daycare center the most cognitively complex teachers, while able to engage in interactions that displayed highly person-centered communicative communication skills, also displayed the ability to vary their communication as dictated by situational constraints. Applegate elaborates, "At times, a teacher would construct a specific situational identity for a child which would result in the use of communicative appeals less adaptive than those normally employed...the use of commands and nonverbal means of control lacked the adaptive quality typical of her regulative communication" (p. 90). Perhaps what distinguishes Transformational Leaders is not simply their use of the

Transformational Leadership behaviors of idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation, but in addition, the cognitive complexity that provides them the flexibility to distinguish the most appropriate type of communication based on their analysis of the situation.

In addition, the theory of Transformational Leadership should be tested in different populations to determine if these behaviors have similar effects on workers of different ages and at different stages in their careers. For example, Poteet and Allen (1988) bring to the scholarly literature the practical concern of a workforce that has been downsized and reengineered, eliminating many middle management jobs to which the aging baby boomers had aspired. These researchers have identified a number of workers that are considered careered plateaued, that is, workers who have reached the end of their career path: further promotions are unlikely and/or jobs have become routine. The average age of their study participants was 46.82 years. Can a leader exhibiting the behaviors of inspiration, motivation, intellectual stimulation, and individualized consideration address the needs of workers who have an expected minimum of 20 years left of employment in the workforce with little or no chance of advancement or additional opportunity?

This theory, while comprehensive in specifying behaviors associated the Transformational Leadership, still has many gaps. For example, it does not address the process by which a leader determines his responses to followers to determine how to provide individualized consideration or intellectual stimulation. In contrast, a theory such as LMX has spawned research which attempts to address gaps in the theory process: Heneman, Greenberger, and Anonyuo (1989) suggested that supervisors' internal

attributions regarding particular contextual cues “significantly relate to critical performance incidents and to the leader-member exchange” (p. 466); Sparrows and Linden (1997) address the factors that determine how leaders perceive the quality of their exchanges and the subsequent delineation of a follower as an ingroup/outgroup member. We do not know the process by which a Transformational Leader determines how to interact with individual followers. These types of concerns were expressed even by the contingency model theorists, especially Korman (1973) who reflected, “We lose the ability to utilize the results of a given contingency model...unless we know the mechanisms by which the contingency variable operates” (p. 190).

In spite of the theoretical gaps, a final consideration of this theory is an optimistic one: the hope that it holds for the possibility of leaders developing in the area of leadership. Bass (1990) has developed an extensive training program for the development of Transformational Leaders individually and in groups. Statistically, he has reported significant and meaningful increases in Transformational Leadership behaviors and concurrent decreases in management by exception and laissez-faire behaviors of attendees. In addition, reports of graduates of the program contain such comments as, “I am a stronger, but softer leader” (p. 113).

In an empirically based study Barling, Weber, and Kelloway (1996) provided Transformational Leadership training to a randomly selected group of branch managers and discovered both individual-level and branch-level improvements enjoyed by managers who participated in the training when compared with the control group who received no leadership training. Using a pretest-posttest control group design, the researchers discerned that direct reports of managers who participated in

Transformational Leadership training sessions rated their managers significantly higher on intellectual stimulation, charisma, and individualized consideration. In addition credit card sales and personal loan sales were stronger for the group receiving the intervention.

In fact, suggesting that this theory is related to cognitive development can address a portion of one of the concerns expressed and dovetail with the concept of training to improve the skills of leaders. While addressing at least some gaps in Transformational Leadership Theory (what actually occurs during the communication interactions), the melding of these theories holds the promise of an interrelationship whereby cognitive complexity in the interpersonal domain predicts Transformational Leadership while the experiences gained by the Transformational Leaders lead to greater development and differentiation of the interpersonal cognitive domain in both the leaders themselves and their followers. This interrelationship is suggested by an application of general systems theory (von Bertalanffy, 1998) to understanding the relationship between cognitive complexity and Transformational Leadership behaviors in complex organizations comprised of interconnected systems. That is, while cognitive complexity and greater development may lead to a leadership style that is more adaptable and follower-oriented, the experiences gained as a Transformational Leader may produce a restructuring of schemata toward increased complexity. The relationship is not uni-directional.

The qualitative studies of Transformational Leadership hold great promise in actually defining outcomes achieved through the combination of transformation leadership and contextual factors that facilitate its development and utilization. For example, Glad and Blanton (1997) investigate the relationship between two South African Presidents, Nelson Mandela and Frederik de Klerk, two leaders the authors

identify as transformational. Specifically, the authors relate how these men worked together to end the apartheid laws and bring a peaceful transformation to the South African government. The elections of 1990 reversed the roles of de Klerk and Mandela, the former becoming the deputy president and leader of the main opposition party, and Mandela the president and leader of the party in power. de Klerk had positioned the country for this event by enacting a number of reforms which lifted bans on opposition groups and eliminated segregation laws. After his release from prison, Mandela emphasized a common vision where all South Africans could share in the process of government. Working together, these two visionary leaders enacted the peaceful transfer of power from a white minority government to a black majority government. However, the context to facilitate such leadership was optimum. World opinion was strongly united against apartheid and certainly both leaders recognized that a peaceful transition was infinitely preferable to one that involved war and bloodshed, outcomes that have predominated in conflicts on the African continent. Thus even during periods when such practices that give little thought to empowering employees as reengineering (Hammer and Champy, 1995) are eagerly embraced as the panacea to revive ailing organizations, a concept such as Transformational Leadership suggests that there is indeed a pervasive dichotomy underlying the tensions inherent in organizations.

The choice between restructuring from the top down or affording employees the opportunities to influence restructurings themselves is clearly defined. Giddens (as cited in Jablin & Puttnam, 2000) has so aptly stated in Structuration Theory that structure and action are intertwined, changes in one are inextricably related to changes in the other.

The actions, whether transformational, transactional, or driven by reengineering concepts, have immutable consequences for organizations.

### Transformational Leadership, Constructivism and Cognitive Complexity

This section will address the history of constructivism and the manner in which this concept relates to interpersonal communication. How constructivism and Transformational Leadership are related through interpersonal constructs and person-centered communication will conclude this section.

Jean Piaget, who chaired departments of psychology, sociology, history of science, and history of scientific theory at the University of Geneva, posited a well-developed theory of constructivism as he attempted to determine how knowledge grows in children as they develop. He recognized the inherent difficulties with what he termed the “common view” (Piaget, 1970, p. 705); that is, that the objective knowledge of the external world is simply the result of a set of perceptions. He believed that in order to understand objects, one must act upon them and transform them and that interactions between the subject and objects are essential. He wrote, “No behavior, even if it is new to the individual, constitutes an absolute beginning. It is always grafted onto previous schemes and therefore amounts to assimilating new elements to already constructed structures” (Piaget, 1970, p. 710).

He emphasized that assimilation alone would not allow for children to develop new structures. Rather, Piaget (1970) believed that accommodation also needs to occur. He actually suggested that the maintenance of a delicate balance between assimilation, the integration of elements into a cognitive structure and accommodation, an actual modification to the cognitive structure because of the incoming elements, was necessary

for normal development in human beings. Although he viewed language as important, Piaget (1970) was most concerned with interactions of children in their environments with objects.

While Piaget (1970) was investigating child development, the researchers of the Chicago School had begun to elaborate a perspective that was also different from the “common view.” They began to discount psychological theory based on instinct, imitation, and suggestibility and began to also view individuals as interactants with and on their environments. Delia (1987) writes, “Social psychology was to be a discipline founded on concepts of social influence, individual difference and group process” (p. 33). Social psychologists were beginning to conceptualize communication as a process mediated by a number of factors, including context. Emerging thought in both the areas of child development and social psychology was the idea of an individual interacting within his/her environment to some effect. The Chicago School scholars were interested in how individuals adapted to their worlds. They viewed organisms within their environments as active participants, as did Piaget (1970).

These ideas became more fully synthesized with Kelly (1955) who developed the idea of personal constructs and Werner (1957), who offered a structural development theory. Kelly (1955) developed the concept of personal constructs, from a psychological perspective as a foundation to develop techniques used in psychotherapy. In response to what he suggested was the “push” or “pull” approaches, both of which were currently in vogue with psychologists, he suggested, “It is possible to combine certain features of the neophenomenological approaches with more conventional methodology... We start by



making inferences based primarily upon what we see an individual doing, rather than upon what we have seen other people doing” (p. 42).

He suggested that one never actually knows the objects with which he/she interacts, but rather these objects are understood from a system of “personal constructs” (p. 50), which are types of templates into which are fitted one’s own experiences. Kelly (1955) suggested that an individual construes or places an interpretation on an event and then constructs a mental structure into which it is placed. He emphasized the diverse nature of these constructs. That is, each different construct reflects knowledge in a different area. He posited that these constructs were hierarchical in nature. That is, general constructs subsume more specific ones. For example, interpersonal constructs would include those involving interactions with other individuals, including information about the characteristics, behaviors, and qualities of others.

Werner’s (1957) contribution to this theory was the Orthogenetic Principle or the idea of developmental progression. He suggested that the manner of development proceeded from the less differentiated and more global to greater differentiation and integration. Langer (1970) writes that Werner believed that the more differentiated and integrated systems subordinate the less developed systems.

Crockett (1965) further developed these ideas, suggesting that individuals may possess differences in their construct systems dependent upon the construct and the antecedent experiences. That is, any particular individual may display a high level of differentiation in one construct while having a low level of differentiation in another.

Later, Delia (1977), noting that theory should be generated through observations, recognized that constructivism incorporated the interactive aspects of communication as

well as the idea of a shared meaning created by the interactants. He believed this theory could account for how one individual's expressed meaning could be translated into his/her conversational partner's understanding. According to Delia (1977), the constructivist epistemology is rooted in the belief that knowledge is socially constructed; therefore knowledge is limited to what one can construct through his/her experiences. His synthesis and application of this theory to speech communication will be discussed in a later portion of this section.

### Neural Constructivism

Medical researchers have begun investigations into the neural mechanisms that drive the construct development process. That is, what makes constructivism happen; i.e., what effects does the developing neural mechanism have on constructs and what effects do the development of constructs have on the neural mechanism? They suggest that neural activity derived from interactions with the environment is domain specific, that the neural pathways adjust accordingly as experiences are gained which further refine the domains. The representations within the domains become increasingly complex from increased neural activity resulting from experiences. Quartz and Sejnowski (1997) have offered as evidence a drastic reduction of synaptic density levels in the developing neural systems of infants. Although contrary to the "more is better" approach, they have suggested that the selective elimination of certain synaptic structures results in neural pathways that are better differentiated. They have also noted that neural cell axons expand and dendrites become increasingly arborized (grow more "branches") in response to activity. Johnson, Bates, Elman, Karmiloff-Smith, and Plunkell (1997) in their investigation of the neural regions of adults, have concurred with the constructivist view

as their findings have indicated that among most adults similar representations are found in similar regions of the cortex. They have suggested that adults have neurologically “constructed” representations based on experiences in similar areas of their brains.

Additional research by Hurford, Joseph, Kirby, and Reid (1997) has suggested that constructivism might be used to explain the decline in synaptic numbers they also have noted. However, their research has not convinced them of a simple cause-effect relationship. They have interpreted their findings in light of their belief that the interaction between the cognitive process and the neural mechanisms is more complex than can be explained by a single concept like constructivism even though it appears to account for a number of questions regarding their research.

Researchers Markowitch and Tulving (1995) have reported they may have discovered the actual areas of the brain where this cognitive differentiation occurs. In a meta-analysis of 30 positron emission tomography studies, the researchers discovered peaks of changes in neuronal activity in responses to tasks requiring a high level of cognitive processing. This neural activity was in the fundi (a specific area, located farthest from the region where the cortex connects with other portions of the brain) of the cortex, where sulci (deep narrow furrows) are located. They discovered that as subjects performed tasks requiring increasing levels of cognitive complexity, fundally related activity peaks also increased. They have suggested that specific regions in the cortex relate to tasks that require increasing levels of cognitive complexity.

Perhaps the advent of more sophisticated neural imaging devices will provide more discriminating and accurate testing of the neural mechanisms. Including both developing infants as well as adults who are believed to display more or less

differentiated constructs in future research will assist in determining the veracity of this theory. While a great deal of controversy exists, the advancement of techniques for studying the neural mechanism may provide further credence for the idea of neural constructivism.

### Constructivism and Interpersonal Communication

In regard to language and the developing cognitive structures, Sinclair (1989) has written that cognitive structures frame one's thinking and that they derive from early "organic coordinations" (p. 8). She has emphasized that both the structural and functional aspects of language must be considered when examining language development and that both must be accounted for in an explanation of emerging cognitive sophistication. Both the structure and function are essential, and their development is interrelated but somewhat independent. For example, when a child develops two-word utterances, he/she is revealing knowledge concerning the structure, that language is linear; and the function, the fact that the each word has a different meaning and referent, is a different symbol, i.e., that words are "semantically contrastive" (p. 11). Sinclair has suggested that increasing cognitive development and the development of more differentiated schemas result in increased sophistication in both structure and function. She echoes Piaget's (1970) belief that while the results of the process may be relatively conscious, i.e., an individual knows what he thinks about something; the underlying process is unconscious.

As mentioned previously, Delia (1977) recognized the value of constructivism to communication theory in that it incorporated both individual and social structures into the communication process. The theory has provided a means by which expressed meaning becomes understood. It also has served to articulate the reasons for misunderstandings,

since “the other’s” perceptions and explanations are never understood directly, but are filtered through the constructs the perceiver brings to bear on the interaction. Delia (1977) has proposed that the development of constructs is in the direction of greater complexity (reflecting the principle of Orthogenesis) as the individual who is viewed as an active agent experiences a greater variety and depth of communicative interactions. He has written that expressive meanings are translated into subjective understandings as the individual interprets his interactions with another in relationship to previously formulated schemes. Delia (1977) has noted, however, that these schemes constantly are being reshaped by new experiences.

Bernstein (1971) suggested that this differentiation arose out of ordering relationships either “out of sensitivity to the content of objects or out of sensitivity to the structure of objects” (p.24). An individual who communicates via sensitivity to the structure of objects is able to respond in terms of a matrix of complex relationships and interrelationships where sensitivity to content implies responses to the boundaries of only the object itself. He speculated this distinction was qualitative and the result of experiences. He suggested that the more qualitatively complex individual who exhibits sensitivity to the structure of objects is able to respond differentially to language, reflecting either a content or structure orientation where one oriented to content “will not differentiate effectively between the two” (p.27).

Bernstein believed that the learning process by which the differentiation was or was not transmitted occurred through communication interactions as a child is socialized, particularly by the mother. Bernstein suggested this was a function of class membership in Great Britain: specifically middle class where a predisposition toward ordering

symbolic relationships was encouraged, resulting in the structure orientation. He compared this to the working-class where communication consisting of simple statements, concrete language, and emotive rather than logical factors was emphasized. As a sociologist Bernstein was concerned that the use of the less differentiated restrictive code, which he believed to be too tied to context, constrained the user's potential linguistic ability and that the class system limited access to the structure oriented "elaborated code" (p.176).

The individual communicating via an elaborated code (the middle-class individual) would be able to ascertain the more subtle aspects of communication since this person would view communication as a complex process of negotiating meanings. He would communicate with the knowledge that social relationships are based on understandings which evolve through interactions, as with the recognition of the necessity of coordinating these meanings with an other who possesses his own set of covert meanings, intentions, and perspectives.

In comparison a user of the restricted code assumes that norms are culturally shared within specific rules. The code is restricted to rather narrowly defined understandings rather than expanded or elaborated through concern of the potential to achieve novel meanings leading to enhanced mutual understandings.

While noting that this analysis of linguistic codes provides a starting point for investigations of qualitative differentiation, Burleson (1987) has also noted that a dichotomous explanation does not capture the variety of more heterogeneous utterances interlocutors utilize to communicate. He has written that rather than specify exhaustive categories, restrictive and elaborated codes should be considered as ideal types at the

opposite ends of a continuum. However, Bernstein (1971) is to be noted for his advancement of the concept of differentiation and the importance of experience in enhancing the differentiation process.

The idea of differentiation, that is individual constructs that become increasingly well defined and specific, has been a heuristic impetus advancing the study of communication interactions. Berger (1987) suggested that schemas of self have a significant impact on the communication process, regardless of the other schemas activated in particular interactions. He writes that these self-schemas are linked with others in one system stored in memory. He suggests that this concept of self is similar to other cognitive schemas in that it can also be more or less differentiated. He suggests that those who are schematic (have a more differentiated sense of self as opposed to aschematics or those with a more poorly differentiated sense of self) process information consistent with their schemas of self more rapidly than inconsistent information. They process inconsistent information more slowly and do not remember it as well.

While self-schemas certainly influence communicative interactions, Applegate (1980) has further delineated the interpersonal aspect of communication itself as either person-centered or position-centered. Someone who exhibits person-centered communication will utilize a more elaborated code that recognizes the inherent uniqueness of how individuals differ in their motivations and intentions. A person-centered individual will also recognize that differences in context affect the communicative process. A position-centered individual who communicates via a “restricted code” (p. 61) does not recognize the uniqueness of personality or context, but rather looks to assigned roles as providing identity and focuses on the overt behavior of

self and others. In a study of kindergarten teachers' interactions with their students cited earlier in this chapter, he discovered a tendency for them to employ either person-centered or position-centered speech with their students and has argued that this person-centered vs. position-centered distinction may be valid. Also, while person-centered teachers utilized position-centered speech when they deemed it necessary, position-centered teachers displayed less variation.

Other researchers have suggested that person-centeredness is a result of highly differentiated individuals' abilities to perceive communication situations along more than one dimension (Shepherd & Trank, 1992). Thus construct differentiation provides an interlocutor the ability to discriminate another's communicative behaviors based on more goal-based dimensions. Not only is how another's communicative behaviors cognitively represented by the available schemas, but these also determine the available set of responses. A study by Shepherd and Trank (1997) that employed "differentiation" as the construct development indicator revealed that students who were more differentiated in construct development provided more discriminating assessments of the classroom environment. These students could also better discriminate instrumental from relational concerns; that is, they could better distinguish tasks concerns from communicative ones in evaluating their instructors.

While differentiation appears to be a distinguishing factor concerning cognitive complexity, Burleson (1987) has indicated that cognitive complexity should also be distinguished by increased abstractness and organization of cognitive structures. He has proffered that individuals who exhibit person-centered communication (the manifestation of cognitive complexity in the interpersonal realm of cognitive schemes) will recognize



and adapt to all aspects of the communicative interaction including subjective, affective, and relational aspects. Thus the individual who manifests a higher degree of cognitive complexity in this interpersonal realm will display a greater degree of person-centered communication.

O’Keefe (1988) has suggested that levels of cognitive complexity affect how individuals perceive the communication process or their message design logic. Less cognitively complex individuals view communication as a vehicle for expressing thoughts and effecting changes in behavior, the “expressive design logic” (p.84); more cognitively complex communicants see communication as a process by which to manage relationships and create identities, the “rhetorical design logic” (p.85). She discovered that individuals identified as more cognitively complex also tended to produce messages that reflected a view of communication as the manner in which each interlocutor creates and negotiates his/her sense of self and other. On the other hand, those who exhibited expressive design logic in relation to formation of goals in communication express themselves in a direct, clear manner, with little or no regard given to the possible responses of their communication partners. These individuals also do not appear to respond to contextual cues.

Stewart (1997) has further elaborated O’Keefe’s (1988) message logic design approach by suggesting that this may serve as an explanation of how some communicators are able to adapt their messages to the context as well as modify the context by their communicative interactions. The individual who employs rhetorical design logic uses communication in a manner that assures the most effective transmission

of his message by either modifying the message or changing how the conversational partner represents the situation.

#### Cognitive complexity, communication, and relationships

Cognitive complexity has significant and profound effects on communication in relationships. Communication and cognitive complexity have been identified as important in affecting the quality of marital interactions (Denton, Burleson & Sprenkle, 1995; Martin, 1992, Denton & Burleson, 1997) and friendships (Burleson & Samter, 1990; Waldron & Applegate, 1998). Denton, Burleson, and Sprenkle (1995), in a study of 60 couples, discovered that more cognitively complex partners were better able to predict the intended effect of a message and that communication and cognitive complexity were more closely related in marriages identified as distressed. Specifically, they discovered that there was higher agreement between what one member of the dyad reported as his/her intent and the intent perceived by his/her partner and these partners were better able to predict the actual results of what was said on each other in marriages considered distressed. From these findings, the researchers suggest that distressed marriages by their very nature may require that partners communicate at their highest levels of ability.

Martin (1992) speculated that individuals who display lower levels of cognitive complexity may be relatively limited in both their own patterns of communication behaviors and their responses to the communication of their partners. His results in part have supported the findings of Denton, Burleson, and Sprenkle (1995) in that he discovered that in interactions involving issues of importance to the relationship more cognitively complex male partners tended to use a particular style of communication which he describes as “transitional redundancy” (p. 160). That is, some partners display

more consistent patterns of interactions than others, perhaps lending a family system its distinctive style. These patterns can be symmetrical, where partners mirror each other's behavior, or complementary, where one member of the couple exhibits a behavior that is relationally oriented and the other member exhibits a behavior accepting that move. In similar issues of importance to their relationships, less cognitively complex male partners demonstrated no differences in communication style regardless of the importance of the topic. That is, the less cognitively complex partners did not demonstrate the ability to modify their style of communication to adapt to different issues. In a later study, Denton and Burleson (1997) investigated marital couples, cognitive complexity, and marital distress, and discovered that while individuals in distressed marriages may in fact be able to discern their spouses' negative intentions, they actually like them better when they are less able to detect these intentions.

One's relational cognitive complexity and the resulting communication behaviors manifested as a result appear not only to impact marital relationships but also friendships. Burleson and Samter (1990) have suggested that as cognitive complexity increases developmentally in growing children their conceptions of friendship become more complex. That is, a friend to a young child is simply someone who is available to play with while an older adolescent defines a friend as someone with whom to share intimate thoughts and dreams. Their research has suggested that while development is likely an important contributor to how a friend is conceptualized, differences in cognitive complexity appear to affect friendships in subjects of similar ages. They discovered that ego support was rated as important by all respondents, but those students displaying low cognitive complexity rated a friend's referential ability (accessed by items such as

“explains things very well” [p. 171]) as more important than his/her “ego supporting skill” (accessed by items such as “makes me believe in myself” [p. 170]). Conversely, the cognitively complex subjects rated ego support as much more important than referential skill. Overall, cognitively complex subjects rated affective skills higher than nonaffective skills and less cognitively complex subjects rated nonaffective skills higher than affective skills. This supports O’Keefe’s (1988) contention concerning the differences in purposes of communication between individuals with high and low levels of cognitive complexity. That is, individuals who display what O’Keefe (1988) terms rhetorical design logic, i.e. who are more cognitively complex, rate affective skills higher, thus attributing more importance to skills necessary for the construction of shared meaning.

In a later study, these same researchers (Burlison & Samter, 1996) found support for the contention that college students with similar levels of interpersonal cognitive complexity are attracted to each other. Although this refutes the notion that displaying high levels of cognitive complexity and subsequently more developed communication skills would facilitate the development of friendships, they discovered that participants were attracted to those who display similar levels of cognitive complexity whether relatively high or low. In addition, the participants tended to be attracted to and to form friendships with others who displayed similar levels of communication skills. The researchers have suggested it is not simply the ability to discuss certain aspects of a relationship that determines how one selects friends, but rather “it is the capacity to talk about these matters in a similar way and on a similar level that promotes interpersonal attraction and friendship formation” (p. 136).

## Constructivism and Transformational Leadership

Kuhnert and Lewis (1987) have written that the argument made in constructivism theory, that individuals progress from simple to more complex and differentiating understanding, lends itself to the conceptualization of Transformational Leadership. These authors have suggested that individuals progress through stages as they begin differentiating between themselves and others and each of these stages provides a distinctive leadership orientation. They have conceived of stage one as a beginning stage where leaders display little interpersonal cognitive complexity. They have drawn attention to stage two, where an individual still exhibits little interpersonal complexity, but does begin to distinguish his/her personal goals. At this stage, a leader bases his behavior on personal goals or agendas. The researchers have asserted that at this stage everything is initially experienced and subsequently evaluated by the leader as it relates to those personal goals. Individuals whose progression is limited to stage two relate to others in a transactional manner, behaviors which are incorporated into their leadership styles as well. They do not have the developed organizing processes to create shared realities and are solely interested in personal goals and agendas. Kuhnert and Lewis (1987) have suggested, “Stage two leaders lack an ability to reflect on their goals; they do not have agendas – they are defined by them” (p. 652).

In the next level, stage three leaders are able to transcend this exclusive focus on self, having developed interpersonal connections that allow for recognition of mutual obligations. Kuhnert and Lewis (1987) have written that leaders who advance to this level are able to sacrifice their personal goals as needed in order to maintain their connections with employees. Thus, in this stage of cognitive development, the authors

have proposed, the relationship becomes most salient. Mutual support, obligations, and expectations are paramount resulting in what the researchers have termed a higher-order transactional relationship where the leader recognizes that followers' needs may include that of mutual regard. Bass (1990) has suggested that this relation orientation is associated with greater trust of employees and consequent less controlling supervision. However, Kunhnert and Lewis (1987) have cautioned against making assumptions concerning the effectiveness of these leaders in the face of adversity or competing loyalties. Because they are interested in preserving the relationship, "the loyalties comprise the organizing process" (Kunhnert & Lewis, 1987 p. 653). That is, stage three leaders are ineffective in resolving conflicts between the organization and the employee. While stage three leaders display some behaviors of Transformational Leadership (i.e., the beginnings of individual consideration), Kunhnert and Lewis (1987) have proffered that it is not until the fourth stage of cognitive interpersonal understanding that a leader demonstrates the development which results in the behaviors associated with Transformational Leadership. Rather than organizing their frames of reference as defining themselves in relationship to others, stage four leaders instead display a highly developed system of standards that allows them to transcend specific agendas and make decisions based not on specific loyalties, but on these internal standards. The researchers have suggested these actions provide stage four leaders with a self-determined sense of identity. A stage four leader has used his/her experiences to hone his/her self-identity. The result is in an individual who can look beyond what is immediately efficacious. Kegan (1982) has written that the stage four individual is "embedded in a culture of identity" (p.191). As a consequence, an individual who has reached this level of

interpersonal cognitive development is able to discern the difference between a job and a career as he/she promotes independent definitions of himself/herself and others. It is important to note that Kunhnert and Lewis (1987) have emphasized that stage four leaders are able to utilize the entire repertoire of leadership behaviors. These researches have echoed Bass's (1998, 1999) belief that Transformational Leaders can also display behaviors that are more transactional in nature. The stage four leaders determine what is needed in any particular situation and respond appropriately.

While Fisher (1986) does not identify particular stages of cognitive development, he has addressed the ability effective leaders have to differentiate between individuals and situations and respond appropriately, "In short, leaders may be different not because they perform different functions but because they are more differentiated" (p. 205). He has envisioned this ability to adapt as the consequence of effective leadership and has suggested that effective leaders demonstrate greater complexity in their responses as topics and partners change. He has emphasized there are not specific behaviors that leaders display, rather, the ability to pair appropriate behaviors to particular contexts, is the distinguishing characteristic. This is possibly the result of cognitive complexity in the interpersonal domain. This analysis appears to correspond to what O'Keefe (1997) has referred to as integration, or the ability to find a communication solution that addresses multiple aims simultaneously, often involving rhetorical manipulation of the context in order to reduce or eliminate conflict among goals. This technique is used most often by individuals who demonstrate complexity in the constructing of their messages, referred to as rhetorical design logic, where communication is created and co-created by interactants in a process of constant negotiation and renegotiation.

Zorn (1991) has extended the arguments of Kunhnert and Lewis (1987) and Fisher (1986) to suggest that this increased complexity of the interpersonal domain influences message production, in a manner similar to that posited by O’Keefe (1997). He investigated interpersonal cognitive complexity and the use of person-centered messages in the workplace, specifically regarding leaders’ messages to their employees. He contrasts Transformational Leadership, or the style utilized by leaders who inspire their employees to achieve, with what he terms transactional leadership, characterized by managers who emphasize the exchange of rewards for effort. He has further distinguished the Transformational Leader as one who emphasizes the importance of a vision that is shared with employees to build commitment. He has suggested that social cognitive abilities and the resultant communicative proficiencies are important to both transformational and transactional leadership styles. He discovered that the more cognitively complex leaders (managers, owners) in his study were more likely to be perceived by their employees as inspirational leaders (Transformational Leadership), and that the use of person-centered messages was perceived by the employees as having greater effectiveness and impact. Sypher and Zorn (1986) have discovered that scores on the Role Category Questionnaire were correlated with upward mobility in employees in an insurance company and in fact that cognitive complexity was a strong predictor of upward mobility, that more cognitively complex employees were found at higher levels within the organization.

Supporting Zorn (1991) are Posner and Kouzes (1987) and Klauss and Bass (1982), who independently discovered significant and strong linkages between Transformational Leadership style and what they termed “communication style.” In



particular, in both these studies, subordinates of transformation leaders tended to rate their superiors highly on such attributes of message production as informativeness, trustworthiness, and dynamism. In addition the employees in both studies indicated their leaders were careful both in their transmission of messages and in the receipt of messages (careful listeners).

According to Zorn (1991), these types of results would be expected concerning communication and Transformational Leaders. He suggests that the insight into followers' needs and values displayed by a Transformational Leader indicates well developed social cognitive abilities, thus resulting in a communication style that reflects this development. One could expect, therefore, that the Kuhnert and Lewis (1987) stage four leader who is transformational may also display a highly developed communication style.

It is important to note at this juncture, however, that although interpersonal cognitive complexity is important for a leader, the role of leader requires activation of other domains. In an extensive review of literature concerning cognitive processes and leadership, Peterson and Sorenson (1990) reveal that a number of cognitive structures must be utilized by leaders in organizations to design appropriate strategies for the many different situations to which they must respond.

## CHAPTER 2 – HYPOTHESES AND RESEARCH QUESTIONS

The following hypotheses and research questions first address issues concerning both the construct of cognitive complexity and its effects on individuals in the workplace. Also investigated is the instrument used to measure Transformational Leadership. The instrument used to test this construct, the Multifactor Leadership Questionnaire (5X-Short), will be analyzed to determine an appropriate factor structure for further analysis. This factor structure, whether supporting the six-factor structure proposed by Bass and Avolio (2000) or supporting a separate factor structure, will guide the remaining analyses of the Transformational Leadership construct. The first hypothesis concerns upward mobility and cognitive complexity as identified by Sypher and Zorn (1986). These researchers discovered that scores on the Role Category Questionnaire were correlated with upward mobility in employees in an insurance company and that cognitive complexity in the speech communication realm was a strong predictor of upward mobility: that more interpersonally cognitively complex employees were found at higher levels within the organization. Peterson and Sorenson (1990) speak to this need of higher level employees for greater interpersonal cognitive complexity when they write, “Top leaders must be sensitive to the cognitions of lower-level leaders...[they] must be able to promote common understandings” (p.526).

H1: Participants who score higher on the Role Category Questionnaire will be in higher level positions as determined by their GS rating, controlling for educational level, years of management experience, and years of general employment experience.

The first research question addresses the structure of the Multifactor Leadership Questionnaire (5x-Short) and provides the structure for all further analysis. The initial

conceptualization of the leadership model proposed by Bass (1985) suggested that transformational leadership and transactional leadership were represented by six leadership factors (Charisma, Inspiration, Intellectual Stimulation, Individualized Consideration, Contingent Reward, Management-by-Exception, and Laissez-Faire). Bycio, Hackett and Allen (1995) suggested a five-factor structure combining Inspiration and Charisma. Also in some instances the transformational factors have been found to be highly correlated (Bycio, Allen, & Hackett, 1995; Keller, 1992), suggesting that while Transformational Leadership is distinguished from ineffective management, some individuals completing the questionnaire may not distinguish among the specific factors. Fairhurst (2000) has criticized the Multifactor Leadership Questionnaire for inadequate discriminant validity among the factors and Curphy (1992) discovered that charisma, individualized consideration, and intellectual stimulation clustered into one factor. Although the Multifactor Leadership Questionnaire (5x-Short) was developed to address these issues, the recent development (Bass & Avolio, 2000) of this instrument has not provided an opportunity for researchers to test the factor structure over time. Therefore, whether a respondent is able to distinguish among the factors suggested in this instrument remains in question. Given the shortage of factor analytic studies, the following research question is posed:

RQ1: Does the analysis support a six lower-order factor model of idealized influence, intellectual stimulation, individualized consideration, contingent reward, active management-by exception, and passive-avoidant? It will be noted that the factor structure discerned by this factor analysis will be used to test the remaining hypotheses and research questions.

The second hypothesis concerns the findings of Zorn (1991). He discovered using the RCQ and the MLQ that the more cognitively complex leaders (managers, owners) were more likely to be perceived by their employees as inspirational leaders (Transformational Leadership). He also discovered that the use of person-centered messages was perceived by the employees as having greater effectiveness and impact. Recall that these individuals who exhibit greater complexity are approaching or demonstrating the fourth state of cognitive interpersonal understanding detailed by Kunhnert & Lewis (1987). It is at this stage of cognitive interpersonal understanding that a leader demonstrates the development that results in the behaviors associated with Transformational Leadership.

Rather than organizing their frames of reference as defining themselves in relationship to others, stage four leaders instead display a highly developed system of standards which allows them to transcend specific agendas and make decisions based not on specific loyalties, but on these internal standards, thus providing them a self-determined sense of identity. A stage four leader has used his/her experiences to hone his/her self-identity, resulting in an individual who can look beyond what is immediately efficacious. As a consequence, an individual who has reached this level of interpersonal cognitive development is able to discern the difference between a job and a career as he/she promotes independent definitions of himself/herself and others.

H2: Role Category Questionnaire scores of supervisors/managers will predict Transformational Leadership as measured by the Multifactor Leadership Questionnaire Form 5X-Short. That is, participants who demonstrate greater interpersonal cognitive complexity as measured by the Role Category Questionnaire will also be rated higher on

Transformational Leadership behavior on the Multifactor Leadership Questionnaire by their direct reports than those who score lower on the Role Category Questionnaire, controlling for years experience, educational level, and years of management experience.

The third hypothesis investigates the relationship between Transformational Leadership, Cognitive Complexity, and outcomes. Research indicates that Transformational Leadership is associated with high levels of organizational outcomes. Transformational Leadership has been suggested as the optimum style for managing change (Tichy & Devanna, 1986), producing increased levels of employee satisfaction (Medley & Larochelle, 1995; Deluga, 1988), higher quality results in research and development efforts (Keller, 1992), extra effort expended by followers (Yammarino and Bass, 1990), followers displaying transformational behaviors (Bass, Waldman, Avolio, and Bebb, 1987) and even simulated positive organizational economic indicators (Avolio, Waldman, & Einstein, 1988). Bass (1990) has discovered “the leader is often responsible for the ease with which members of a group can communicate with each other” (p. 674) Brynam (1992) suggests charismatic leadership works especially well under conditions when high productivity is required.

After an extensive investigation of organizational outcomes that could possibly be identified, measured, and would have some relationship to the leadership practices demonstrated in a particular area of the organization, the following was included in this investigation: “on the spot monetary awards.” These awards are administered at the discretion of the leader to his/her group for exemplary service determined by the leader. He may use any criteria deemed pertinent in the administration of this award. Since many of the outcomes in the organization under investigation are at this point difficult to

quantify, this was the only organizational outcome for which information could be obtained at the level of specification needed. Additionally, since increased levels of employee satisfaction (Medley & Larochelle, 1995; Deluga, 1988) have been associated with Transformational Leadership, and employee satisfaction has been demonstrated to be associated with turnover intentions (Trent & Meyer, 1993), this study will also study the relationship between cognitive complexity, Transformational Leadership, and employee satisfaction.

H3: Transformational Leadership as measured by the Multifactor Leadership Questionnaire mediates the relationship between Cognitive Complexity as measured by the Role Category Questionnaire and organizational outcomes.

The research concerning sex and Transformational Leadership is equivocal (Carliss, 1998; Bass, Avolio & Atwater, 1996). Carliss (1998) discovered a slight, albeit statistically significant, difference between the manner in which the managers and their superiors rated Transformational Leadership qualities according to gender. Females were rated higher by both groups, although there were no significant differences between the sexes discerned in the ratings of actual subordinates. In three separate samples of leaders in the banking industry, Bass Avolio, and Atwater (1996) discovered small statistically significant differences between Transformational Leadership exhibited in men and women in the first two groups and no differences in Transformational Leader behaviors in the third group. In regard to gender differences or behaviors attributed as either masculine or feminine, Hackman, Hills, Furniss, and Patterson (1992), after administering the Multifactor Leadership Questionnaire (Bass, 1985) and gender items,

discovered that a combination of masculine and feminine gender-role characteristics best predicts the Transformational Leadership style.

The Transformational Leadership construct had significant correlations with masculine and feminine gender items. Recall also that in a later study regarding gender characteristics and leadership (1993), these same researchers found that both male and female leaders were perceived as satisfying to work with whether they displayed masculine or feminine characteristics. However, while male leaders were considered effective whether they displayed either masculine or feminine characteristics, female leaders were not perceived as effective when displaying feminine characteristics as when displaying masculine gender traits. Although Amilo-Metcalf and Alban-Metcalf (2001) were not able to conduct statistical analyses in their study of Transformational Leadership due to the small number of identified female managers, these researchers did note they did not detect any significant differences between managers of different sexes on the Transformational Leadership factors. Jordan (1992) argues that Transformational Leadership assists in minimizing social constraints associated with gender. The following research question is suggested:

RQ2: Is there a difference in Transformational Leadership as measured by the Multifactor Leadership Questionnaire between men and women, controlling for years of general employment experience and years of leadership experience?

## CHAPTER 3 - METHODOLOGY

This chapter addresses the subject population, including recruitment procedures as well as issues of response rates and characteristics of the participants. The next topics addressed are procedures for collecting data, critical reviews of the instruments used to measure the constructs of Transformational Leadership and the instruments used to measure cognitive complexity in the interpersonal realm. Specific information regarding how the data were managed and analyzed concludes this chapter.

### Subject Population -The Naval Oceanographic Office

The Naval Oceanographic Office, the location for this study, is based at the Stennis Space Center in south Mississippi near the city of Gulfport. At the time of this study, Captain Tim McGee, a career naval officer and graduate of the Naval Academy, had served as head of this command for approximately two years. However, recently he has been promoted to a position in Washington, D.C. At present he is working in both positions, the recently awarded position in Washington, D.C. and the position at Stennis Space Center.

Military personnel comprise only 5% of the workforce at the Naval Oceanographic Office, the other 95% are civilian employees. The workforce is highly skilled and consists of the following categories of employees: scientific and engineering, 55%; technical, 17%; professional, 11%; clerical, 10%; military, 5%; other, 2%. Many of the supervisory personnel hold advanced degrees at the masters and doctoral level. Employees total approximately 850; of these usually at least 100 are deployed on ships, precluding their participation in a study.



The mission of the office is stated as “We tell you what you want to know about the ocean-top to bottom.” They acquire this knowledge from a variety of sources including buoys, unmanned vehicles and sensors placed into the ocean, data exchange agreements with other agencies and countries, survey ships, an extensive oceanographic library, naval platforms, satellites, and specially equipped aircraft. The center collects data, integrates this data and provides models to a number of mostly military customers, primarily the United States Navy. These customers then use the data to plan military strategies. Products may be delivered in a variety of ways, but are usually transmitted by the World Wide Web as classified or unclassified information. However, the oceanographic office also provides services such as harbor mapping to other countries in exchange for the use of the information they collect. At present their ships are collecting data in the oceans off Singapore, Croatia, Italy, South China, in the Arabian Gulf and other locales that have been determined as essential to national strategic interests.

This office recently has undergone a reorganization from a matrix style to a more functional approach. Matrix management was developed in the early 1960s as a response to the line-staff concept prominent in organizations. Advocated by proponents such as Cleland (1984), matrix management was described as “a departure from the classical model of management in favor of a multidimensional system of sharing decisions, results, and rewards in an organizational culture characterized by multiple authority-responsibility-accountability relationships” (p. 3). However there have been numerous problems reported with this approach, most notably the dual reporting aspect (Moravec, 1984), which according to Schrage (1998) creates ongoing tension because of conflicts

concerning the difficulty of assessing accountability and responsibility. De Latt (1994) has noted power struggles as managers attempt to usurp each other's authority.

CAPT McGee believed that the diversity of products and variety of customer needs required divisions reflecting the different types of products customized as required. He found the matrix model proved difficult to implement. He felt that a functional approach would allow for more rapid customization of products to better meet customer needs. CAPT McGee believes this model to be more production oriented or "how our folks who pay our bills look at us." He also believes this model allows the office more flexibility in rapidly responding to demands from their customers, for whom a delay in receipt of information, or receipt of inaccurate or incomplete information, may have deleterious consequences. For example, NAVO employees may be involved in such potentially life saving tasks as mapping regions in the ocean floor where mines may be laid or providing weather and ocean information to ships involved in war efforts.

According to CAPT McGee, prior commanders had attempted reorganization efforts, but due to the political nature of this command, they were thwarted by the complaints of managers demoted in the efforts. Consequently, prior to the reorganization, CAPT McGee surveyed the staff to determine if there was any support for his efforts. According to CAPT McGee, there was a clear mandate for change among the employees. He also traveled to Washington, D.C. to secure the support of the appropriate elected officials. In his reorganization efforts, more than 50% of the department heads were demoted or reassigned. The majority of those demoted or reassigned department heads opted to retire from the command.

The center's operating budget is approximately \$150 million per year. The center receives its funding through the Department of Defense as designated by Congress.

The new organization is comprised of the commanding officer who has the assistance of both a deputy/technical director (civilian) and an executive officer (military). Nine department heads report directly to the executive officer. Their departments are as follows: logistics and management services (N1); oceanography (N3); geophysics/acoustics (N5); major shared resource (N7); ocean projects (N9); warfighting support (N2); hydrography (N4); engineering (N6); and plans, programs and resources (N8). Each of these departments is subdivided into divisions run by division heads. The divisions are further subdivided into branches, headed by a team leader.

The individual in charge of leading CAPT McGee's efforts at reorganization is CDR R. J. Kren who heads the plans, programs and resources department (N8). At the present time, his efforts are focused on ascertaining what products are produced for whom and what resources (time, materials, manpower) it takes to produce these products. Over 80 different products have been identified by CDR Kren's efforts, and he is quickly making headway into determining which are the most profitable and can be produced with the least resources. In addition to this criteria, however, are national security concerns since some of the products may be less profitable, but are still important to the United States Navy. At present, the NAVO office has no way to determine how quickly products are produced in response to requests, nor how well the products meet their customers' needs, although constant requests for information/products from both government and civilian sources suggest that this information is both needed and utilized. They have no direct competition from any other agency, either private or federal.

Products are of two general types: strategic, related to military objectives often months in development; and tactical, which require a quick turnaround, from a few hours to a few weeks. As indicated previously, products are usually sent to users via the World Wide Web. They are actually posted on web sites: NIPRNET, which is an unclassified web site is used by the general public and academic community; and SIPRNET, the classified web site, used by military customers and the Department of Defense. The hits on these web sites have increased considerably during the years for which data is available. For example the number of server hits on the SIPRNET site in 1998 was 849,200 and increased to 1,505,201 in 1999; products hits increased in 2000 to 446,304 from 294,500 in 1999 and 200,212 in 1998. Product hits on the unclassified web site increased from 808,563 in 1998 to 3,142,822 in 2000. On both these web sites customers as diverse as surfers and fisherman interested in currents, water temperature, and wave models are contrasted with the Navy Seals who are concerned with national security. The customer service department headed by Christine Jarrett funnels customer requests to the appropriate departments. This is a relatively new function and at the present time some customers are still serviced directly by the individual departments. However, the long-term plan is to route all customer requests through customer service in order to better track product development times and customer satisfaction.

Because of the sensitive nature of NAVO's interactions with other countries, information must be gathered with great diplomacy and with other cultures acknowledged and respected. CAPT McGee has spent approximately 25 per cent of his time on diplomatic missions to countries where NAVO ships are temporarily stationed for data gathering purposes. In fact, just recently NAVO's efforts included the retrieval

of the Japanese fishing vessel the Ehime-maru, sunk by the Navy submarine Greenville on February 9, 2001.

Department heads are kept abreast of developments throughout the organization by weekly staff meetings (briefings) where each department head makes a short Power Point presentation, and gives updates on projects, problems encountered and resolved (or not), etc. Also CAPT McGee has begun a more rigorous cost accounting program, requiring department heads to specify where funds received were spent. These issues are addressed in meetings that are held as needed.

All of the staff is employed by the United States Government, the Navy personnel through the Department of the Navy and the civilian employees as United States government employees. A union represents some civilian employees, the American Federation of Government Employees local 1028, affiliated with the AFL-CIO. Rhett Hamiter is president of the local chapter. Approximately 170 of the 800 eligible employees belong to this union. Each United States government employee's position is designated by "GS" and a number following: the numbers range from 1-15 and designate a hierarchy of education and experience, G-1 being the lowest and G-15 the highest. Recent college graduates, for example, are usually hired into G-7 positions and can expect to advance from that level. Clerical staff is usually designated as G-6 or below.

A command climate survey was conducted in January 1999. A committee of union representatives, management representatives, and non-union employees developed the questionnaire and another similar committee analyzed the results. Six hundred and forty-two surveys were returned for a response rate of 65%. While this response rate appears adequate, it compares with a 92% response rate in 1997 when a similar survey

was conducted. According to the summery statement of “items needing improvement” the command employees appeared most concerned with the following:

- ◆ safety issues such as alcohol consumption aboard ships/duty stations and lack of regularly scheduled safety meetings;
- ◆ management/leadership issues such as compromising integrity, inadequate instructions regarding what is expected of employees, lack of a business approach, recognition not given when deserved, promotions not based on performance, reprimands not given when needed and managers not practicing Total Quality Leadership (although training had been provided).

Issues which were cited as being adequately addressed by the command included the following:

- ◆ neither discrimination nor sexual harassment appeared to be a problem at NAVO;
- ◆ community involvement;
- ◆ recognition of importance of quality and safety;
- ◆ good understanding of roles and missions;
- ◆ good relationships between supervisory staff and employees;
- ◆ opportunities for training abound

#### Recruitment Procedures

Prior to collecting data, the researcher spent approximately nine months developing relationships and interviewing the NAVO staff. In addition, in early November of 2001, she met with the senior management team comprised of CAPT McGee; the Human Resources Director, Mike Owens; the Director of the Logistics and Management Services

Department, CDR Hershel Rector; the Chief Legal Council, Dr. Rob Young; and the Executive Office, CDR Pete Furze. During this meeting, a brief outline of the research goals and the survey instruments used were presented and discussed.

During this meeting, the researcher obtained permission to conduct the study throughout the entire organization. Because the departments, divisions, and branches are clearly delineated, direct reports of supervisory and management personnel were easily matched with their leaders. Each direct report received a copy of the MLQ short form with a cover asking for the following demographic data: sex, classification (GS level), years of education, years of management experience (if any), years of work experience, years in present position, civilian/military, and other information as deemed important to this research. (Appendix E). Each manager or supervisor (leader) received a copy of the Role Category Questionnaire as delineated by Bureson (1988), taking into consideration the findings of Zorn, McKinney and Moran (1993) who suggested that “the particular assessment task as well as the context influence the subset of constructs accessed...the meaningfulness of constructs determines the likelihood of their use in particular constructions” (p. 164). Demographic data was also gathered with this instrument in a manner similar to that used for the MLQ (Appendix D).

The rights to reproduce 875 copies of The Multifactor Leadership Questionnaire Rater Form (MLQ Form 5x-Short, Bass & Avolio, 2000) were purchased from Mind Garden, Inc. This instrument was distributed to all direct reports of supervisory or management personnel (n=753). However, during this period, 85 non-supervisory personnel were on “extended official travel,” indicating they were temporarily (two months) assigned aboard ships and did not have the opportunity to complete the

questionnaires, providing a recalculated potential sample of 668. The Role Category Questionnaire (Burlison, 1988) was distributed to all management and supervisory personnel, who comprise a total of one hundred and one employees.

These instruments were placed in envelopes randomly coded from listings which detailed the branch, division, and department level. In this manner, employees were matched with their leaders, but could not be individually identified. These envelopes contained a brief explanation of the study with assurances of anonymity (Appendix A). A seal was placed inside each envelope in order that participants could seal the envelope after completing their surveys with assurance that the seal would be broken only by the researcher.

Because this command distributes surveys on a biannual basis, there was both a distribution and retrieval system that assured anonymity. Each envelope was addressed with the name and department number of the Total Quality Coordinator, A.J. Reed, to whom all organizational surveys are sent. Because of his position, Mr. Reed is perceived by all NAVO staff as a neutral party. Recipients were asked to return the questionnaires within a two and one half week period, and although most were collected during this period, additional questionnaires were collected for approximately six weeks. In addition, as per the suggestion of the personnel director, the researcher prepared a brief introduction to herself and a very general orientation to the study which was placed on an employee internet bulletin board with an e-mail address to the researcher in order that employees who had questions or concerns could have them addressed (Appendix B). CAPT McGee also distributed electronically an “all-hands” e-mail encouraging participation in the survey (Appendix C).



A total of 338 Multifactor Leadership Questionnaires were returned for an overall response rate of 51%. However, 42 of these surveys were not usable due to not being returned in their randomly coded envelopes or not being completed, yielding 296 surveys, a response rate of 43%. Of 101 total areas, these surveys represented 77 different departments, divisions, and branches (76% representation). Forty-one Role Category Questionnaire envelopes were returned. Twenty-seven were usable and complete for the testing of Hypothesis One. However, of these only twenty-two could be used to test Hypothesis Two because of matches with employees who also completed the Transformational Leadership instrument on their managers/supervisors. Only nine Role Category Questionnaires could be matched with both completed Multifactor Leadership Questionnaires and organizational outcomes to test Hypothesis Three. The others either were not completed, only partially completed, or referenced areas to which no MLQ's were returned.

The response rates by the supervisors and managers of NAVO were less than optimal. Also a large percentage of the Role Category Questionnaires that were returned were not usable due to being incomplete or partially complete. However, the response rates of the subordinates, while somewhat low, did ultimately represent an overwhelming majority of areas.

When investigating response rates, it appears as though the scholarly literature approaches this dilemma from three perspectives: those that deal with the characteristics of the individuals being sampled; those that address the document itself, an issue that will be only briefly addressed since the two surveys used have been tested and retested in populations to assure ease of completion; and those that investigate the context in which

the survey is being completed and how some of these contextual issues can be controlled or addressed. That is, investigators either have looked at which types of populations may be most or least likely to return completed surveys, which types of surveys are most likely to be completed, and what types of interventions within the survey situation itself can impact the return process.

Regarding characteristics of likely respondents, Picavet (2001) discovered that women and more highly educated individuals demonstrated higher response rates to mail surveys. Synodinos and Yamada (2000), while conducting a longitudinal investigation of survey response rates in Japan, also found that women have a higher rate of return than men. Baruch (1999), in an investigation which included 175 different studies in the years 1975, 1985, and 1995, found that executive managers produced the lowest level of response rates as compared with other levels of management, and organizational representatives overall had lower rates of survey returns compared with individual participants. This contrasts with Dambrot, et al. (1985), who discerned that nontenured instructors with fewer years of service tended to have a higher refusal rate to submit requested study information than those tenured professors eligible to teach graduate courses. However, in general educators and students appear to respond to surveys at higher rates than other populations as noted by Green, Baser, and Hutchinson (1998) in a meta-analysis of 193 survey studies.

Survey characteristics, including length (shorter) and university sponsorship, have been discerned by Ransdell (1996) to increase response rates. In-person interviews, not surprisingly, were discovered by Picavet (2001) to produce better and more complete surveys than self-administered ones. Interventions which affect the context in which the

surveys are completed also appear to impact return rates. For example Lynn (2001) has suggested that monetary incentives can possibly increase response rates and in fact demonstrated that although interviewers did not believe incentives made a significant difference, they did increase rates of participation significantly. Ransdell (1996) has concurred that monetary incentives may spark increased interest in the completion and return of surveys as has Church (1993), while Biner and Kidd (1994) have emphasized that these should be offered prior to completion of the survey. James and Bolstein (1992) found that monetary incentives included with the initial survey request increased response rates. These researchers used monetary amounts of increasing value and found that response rates increased significantly from one dollar to five dollars and from five dollars to twenty dollars. However, respondents who were offered fifty dollars upon completion and return of the survey did not return their surveys at a significantly higher rate than the control group that received no incentive.

A cover letter if written appropriately may also increase rate of responses to surveys. Biner and Kidd (1994) found that a cover letter intended to induce a feeling of obligation for an enclosed incentive (as opposed to framing the incentive as simply an appreciative gesture) increased response rates to mail surveys. However, Biner (1988) discovered that higher response rates were garnered from individuals who received a cover letter emphasizing personal choice (that is, responding to the survey was a matter of choice), rather than one emphasizing the importance of the research and the urgency of responding.

In a review of literature in the Human Resources Management area, Roth and BeVier (1998) discovered that advance notice, follow-up reminders, and salience were

significantly associated with response rates. Matsumoto (1997) also discovered salience was directly related to response rates, an observation that Martin (1995) also has made. Rogelberg et al. (2001) discovered that attitudes toward a survey, which these researchers believed have two components, survey enjoyment and perceptions of the value of survey research (survey value), were independently related to data collected in surveys. Specifically, survey enjoyment was related to how quickly surveys were returned, demonstrated willingness to participate in future survey research, item response rates, and how accurately directions were followed. Survey value was related to how willing participants were to participate in future research, following directions, and whether all survey items were completed.

This research appears to have significant implications regarding this study. Although this study did not include monetary incentives, CAPT McGee in his “all hands” e-mail (Appendix C) did link the survey to the union request for additional management/supervisory training, providing professional incentives for employees and managers to complete their surveys. A cover letter (Appendix A) was sent with each survey, assuring anonymity and emphasizing each individual’s personal choice in responding Biner (1988), while linking the research to a doctoral dissertation being completed at Louisiana State University (Ransdell, 1996). Follow-up (Roth and BeVier, 1998) was conducted by both the Director of Human Resources and the Total Quality Assurance Coordinator by memos and in-person reminders to personnel encouraging them to complete the questionnaires. In addition, the researcher prepared a brief introduction to the study and herself (Appendix B), which was posted on an electronic bulletin board available to all employees. In this brief memo, she also provided an e-mail

address where interested individuals could contact her with questions. She received no e-mail correspondence.

In spite of organizing and supporting this study to insure a high rate of return, the surveys, especially the Role Category Questionnaires for management and supervisory personnel, were completed and returned at a very low rate. In fact, the Role Category Questionnaires returned provide little statistical power. Cohen (1969) indicates that assuming a medium effect size, statistical power for a sample size of 22 is .17 and statistical power for a sample size of 9 is .12.

Rather than compare at the high rate of return of the Command Climate Surveys, they were returned at the rate of return of smaller surveys conducted by the Total Quality Assurance Office, which experiences response rates of 12%-31% on surveys sent out to select personnel, usually regarding questions pertaining to work-related travel. The rationale for the low rate of return appears to be at least two fold.

The first is this study, although begun prior to September 11, 2001, was completed after this date. The information concerning NAVO's structure and culture was collected over a seven-month period prior to September 11, but the distribution and collection of surveys was conducted in November of 2001. Although this organization provides a variety of services to many different customers, the Department of Defense is the largest customer of NAVO. NAVO provides warfighting support and classified strategic information that assists the military arm of the United States government plan and implement operations. After September 11, 2001, the United States declared war on terrorism, specifically the Al-Qaida network. Because of this, the managers and

supervisors, intensely involved in providing classified strategic information to the military, may not have had the time to complete and return surveys. In addition, the surveys may not have been particularly salient to the managers and supervisors.

Although the first explanation requires little elaboration, the second does. Individuals who are placed in the role of supporting forces whose lives depend on the accuracy and timeliness of complex models that represent the compilation of data from a variety of sources throughout the world may not view completing a Role Category Questionnaire where they are asked to provide a description of a liked and disliked acquaintance as a task that is especially important or relevant to them at this time. Perhaps the issue of survey value (Rogelberg et al., 2001) impacted the supervisors and managers who were requested to complete the RCQ. The issue of salience in relationship to the managers' professional orientations may also be an issue. As noted earlier, scientific and engineering professionals comprise over half of the workforce. Because of a more scientific orientation, issues which reflect a social scientific orientation may not be especially salient to these NAVO employees.

The other event that occurred while the study was completed was the transfer to CAPT. McGee to a post in Washington, D.C. and the assignment of a new officer to take command of NAVO. When CAPT. McGee took command at NAVO, he initiated an organization-wide restructuring that reassigned some managers and supervisors to subordinate roles, while promoting others to management. Present managers and supervisors, some of whom have been in their positions for relatively short tenures, may be uncertain as to how secure their positions may be. These individuals have experienced major changes in their organization; they have no way of knowing whether additional

major changes may now be in the offing. In fact, the majority of those managers who returned Role Category Questionnaires appeared to have been in their positions for quite some time: 64% had held their positions for five years or longer, the mean length of time the managers who returned completed Role Category Questionnaires had held their positions was 9.4 years. These descriptive statistics provide some support for the premise that the situation may not provide an environment where anyone in a managerial role, especially an individual new to a managerial role, may act in any way to draw undue attention to himself/herself. Although all participants were assured anonymity, they may have read this information with some trepidation and skepticism, exacerbated by the uncertainty of what expectations a new commanding officer might bring to the organization.

### Instrumentation

#### Transformational Leadership Instruments

There are several instruments identified as measuring the construct of Transformational Leadership, some of which discriminate among how the different variables are operationalized. Of all the instruments purporting to measure constructs specifically associated with Transformational Leadership, the MLQ 5x-Short form has been found to demonstrate the highest levels of both validity and reliability, although the factor structure, especially of the older versions of the instrument, has been questioned.

Other instruments which purport to tap into the construct of Transformational Leadership include the Transformational Leadership Behavior Inventory, designed by Podsakoff and MacKenzie (1989). Podsakoff, MacKenzie, and Bommer (1996) have used this instrument in research to measure what the designers have identified as six key

dimensions of Transformational Leadership. These include the following: articulating a vision, encouraging group goal formation and acceptance, expectations of high performance, modeling appropriate behavior, individualized support, and intellectual stimulation. While appearing more comprehensive than the Multifactor Leadership Questionnaire (Bass, 1985), The Leadership Behavior Inventory has been utilized infrequently in research and there are questions as to whether the instrument actually measures the six independent dimensions, i.e. some of the items may tap into similar constructs.

Also utilized in research identifying Transformational Leadership is the Leadership Assessment Inventory (Burke, 1991). This instrument uses a six-point scale (0=completely uncharacteristic and 5=completely characteristic) across 18 pairs of descriptive items. These respective pairs each contain a response that reflects an orientation conceptualized as either more transactional or transformational in nature. That is, this instrument represents transactional and Transformational Leadership as a dichotomy. Responses are computed producing a Transformational Leadership score between zero and 90, the higher scores indicating a greater degree of Transformational Leadership. The inverse of this score provides an analysis of transactional managerial behaviors. Measures of reliability and validity of scores from this instrument do not appear as consistent as for the Multifactor Leadership Questionnaire (Church & Waclawski, 1998), nor has it been used as frequently as the Multifactor Leadership Questionnaire. There are also problems with the distinction that the authors make regarding transformational and transactional leadership as dichotomous behaviors rather than behaviors that may in fact be complementary.



Alimo-Metcalfe and Alban-Metcalfe (2001) have recently developed the Transformational Leadership Questionnaire for use in United Kingdom organizations, arguing that there are cultural distinctions, specifically an “organizational embeddedness” (p.2) resulting in the concept of a leader as a servant that is not reflected in the Multifactor Leadership Questionnaire. Because this instrument has been so recently developed and tested inadequately, it is difficult to determine the veracity of these researchers’ claims.

The Multifactor Leadership Questionnaire (Bass, 1985) has been used most extensively in assessing the qualities of Transformational Leadership. The original instrument was generated from a total of 142 items resulting from an open-ended survey completed by 70 senior executives and a concurrent search of literature. Ostensibly, the instrument identifies Transformational Leadership behaviors, transactional behaviors, and laissez-faire behaviors. The Transformational Leadership behaviors as identified by Burns (1978) and Bass (1985, 1995) of idealized influence, inspirational motivation, intellectual stimulation and individualized consideration were demonstrated to have high reliability (alpha values of .76 to .89). In some instances the transformational factors have been found to be highly correlated (Bycio, Allen, & Hackett, 1995; Keller, 1992), suggesting that while Transformational Leadership is distinguished from ineffective management, some individuals completing the questionnaire may not distinguish among the specific factors. Fairhurst (2000) suggests that the idealized influence (charisma) section of the Multifactor Leadership Factor measures metabeaviors rather than specific charismatic leader behaviors.

Bass (1995,1998) has indicated that the Multifactor Leadership Questionnaire identifies the construct of Transformational Leadership, distinguishing it from the concepts of transactional leadership, management by exception leadership, and laissez-faire leadership. Transactional leadership, based on the concept of contingent reward, is conceptualized as an agreement by the leader and the follower to specific behaviors required for task completion including appropriate follow-up to the task completion. Management by exception is less effective than contingent reward and occurs when the only leader behaviors displayed are those exhibited when deviancies from the norm are discerned in the performance(s) of subordinate(s). Laissez-faire leadership is the least effective and most inactive, representing a lack of transaction and unused authority (Bass, 1998). Den Hartog, Van Muijen and Koopman (1997) argue that their statistical analysis indicated laissez-faire leadership is not a component of transactional leadership or what these researchers termed passive management by exception, but rather a completely different type of leadership (or non leadership). Bass (1998) certainly makes a similar point when he argues that this type of leadership is characterized by a lack of transactions.

In response to the criticisms leveled at the Multifactor Leadership Questionnaire, Bass and Avolio (2000) developed a later edition of this instrument, the MLQ Form 5X-Short. This 45-item instrument was originally validated and cross-validated using 14 separate samples totaling 3860 raters. Four items measure each of nine separate constructs: idealized influence attributed, idealized influence behavior, inspirational motivation, intellectual stimulation, individualized consideration, contingent rewards, management-by-exception active, management-by-exception passive, and laissez-faire.

Alpha reliabilities reported by the researchers for these constructs identified in a six-factor model are as follows:

<u>Construct</u>	<u>Initial Sample</u>	<u>Replication Sample</u>
Idealized Influence	.92	.92
Inspirational Motivation	.83	.78
Individualized Consideration	.79	.78
Contingent Reward	.80	.74
Management-by-Exception Active	.63	.64
Management-by-Exception Passive	.84	.86

Also included in this instrument are items that measure an employee's willingness to expend extra effort, job satisfaction, and perceptions of effectiveness of his/her superior. Nine samples (N=2154) were used in the original confirmatory factor analysis. An additional five samples (N=1707) were used in the replication analysis.

The intercorrelations between items that measure Transformational Leadership behaviors (idealized influence attributed, idealized influence behavior, inspirational motivation, intellectual stimulation, and individualized consideration) range from .76 to .86. The Transformational items also exhibit correlations of .67 to .77 with contingent reward items (those measuring transactional behaviors) and are negatively correlated with management-by-exception active and passive behaviors and avoidant behaviors (Avolio, Bass, & June, 1999). Regarding the high correlations between transformational and

transactional scales, Bass and Avolio (2000) have written that the high correlations between the transformational scales and transactional contingent reward scales were expected for several reasons. First, both transactional and Transformational Leadership represent active, positive forms of leadership. Second, leaders have been shown in repeated investigations to be both transactional and transformational. Third, the consistent honoring of transactional agreements builds trust, dependability, and perceptions of consistency with leaders among followers, which are the basis for Transformational Leadership.

This instrument is usually completed by the leader's direct reports. Tests of within group measures versus between group measures have demonstrated that most subordinates tend to rate their leader in a similar manner. Medley & Larochelle (1995) discovered that subordinates who rated the same leader according to leadership style produced highly reliable similar profiles. Bass, Waldman, Avolio, and Bebb (1987) averaged subordinates' scores to derive a composite leadership score for each leader, based on within-group similarity, as did Waldman, Bass, and Yammarino (1990). It appears subordinates' ratings, while similar among their group, may be dissimilar to self-ratings from their leaders, although leaders' ratings of themselves regarding their perceived leadership abilities have been used in some studies (Ohman, 2000). Bass and Avolio (2000) have included a self-rating instrument in the MLQ Form 5x-Short. Church and Waclawski (1998) administered the Leadership Assessment Inventory to subordinates who rated their leaders and leaders who rated themselves. They discovered, "Interestingly enough, however, while participants in the present study envisioned themselves as being more transformational in the approach to managing others, the direct

reports of these same individuals provided ratings that were significantly more transactional” (p. 101). Podsakoff and Organ (1986) have noted similar problems with self reports. This may be due to the tendency noted by Bandura (1991) of individuals displaying inconsistencies between what they practice and what they prescribe.

Lord, Binning, Rush and Thomas (1978) have suggested that performance cues may effect ratings of leaders’ behaviors; that raters may be influenced in their assessments of leaders by reported outcomes of their groups’ performances. They noted that in an experiment where participants were provided information regarding a group’s performance, the leaders of groups who were identified as higher achieving were rated higher on Transformational Leadership behaviors. However, this study utilized short video segments during which respondents unfamiliar with either the group or the leader were asked to assess leadership skills of group leaders, making it difficult to determine what, if any, relationship Lord et al.’s (1978) findings may have to the actual practice of leadership within groups or between individuals within organizations.

There have also been some questions concerning how a subordinate’s prototypes of leaders affect their perceptions of their leaders. Bass and Avolio (1989) used forced rankings in the administration of an earlier version of the MLQ and discovered that participants who used the ranking format appeared to be less effected by their prototypical view of leaders, yielding more “independent assessments of transactional and Transformational Leadership” (p. 525). The researchers speculate that the forced ranking requires respondents to process information in a more controlled manner.

## Cognitive Complexity Instruments

In order to assess an individual's level of cognitive complexity, Crockett (1965) developed the Role Category Questionnaire (RCQ). A subject is asked to produce his/her impressions of two other individuals, one liked and the other disliked, either orally or in writing, although the written form is the most frequently used. The subject is encouraged to include as much information as possible and the results can be analyzed for the number of constructs contained (differentiation), abstraction, and/or organization (Burleson, & Waltman, 1988). Burleson, Sypher, and Applegate (1982) have determined that scores on the RCQ are independent of verbal ability measures, silencing the critics who have contended that the instrument may tap into other areas than interpersonal cognitive complexity. Echoing these results are Allen, Mabry, and Preiss (1997), who also discovered "cognitive complexity is not confounded with measurement of cognitive ability" (p. 136).

In comparison to another measure of cognitive complexity, the Bieri, Atkins, Briar, Leaman, Miller, & Tripodi (1966) grid-based measure, the Role Category Questionnaire is "more consistently and powerfully related to person-centered communication" (Applegate, Kline, & Delia, 1991, p.208). According to Burleson (1987), individuals who display high levels of differentiation also display high levels of abstraction and organization. Therefore, analyzing the RCQ for differentiation only has been determined to provide a good indicator of an individual's cognitive complexity in regard to interpersonal communication skills. Martin (1991) has revised the RCQ slightly to produce his Relational Cognition Complexity Instrument (RCCI). Individuals responding to this instrument are asked to describe a relationship with a romantic partner,

a close friend, and a family member. A strict time limit is imposed. These responses are then analyzed as to their abstractness and number of different characteristics. However, the RCQ continues to provide the best assessment of an individual's interpersonal cognitive complexity

### Statistical Analysis

Role Category Questionnaires were scored as per the instructions of Burleson & Waltman (1988) by two Ph.D. graduate students. Burleson and Waltman (1988) delineate six rules for scoring the Role Category Questionnaire. The first addresses the situations which arise when it is debatable as to whether a phrase should be counted as one or two constructs or when two "nearly synonymous" (p.26) qualities are mentioned, and indicates that credit for multiple constructs should be given. Rule two addresses adverbial or adjectival qualifiers and indicates that when they are intrinsic parts of the noun they modify, they are considered with the noun as one construct. Rule three deals with identical words and indicates these must be scored only once. However, words which are similar in meaning but not identical are scored twice. Rule four addresses "idiomatic constructions" (p.26), possibly comprised of several words that are nonetheless scored as one construct. Rule five states that only qualities relevant to the task should be scored, indicating that information concerning the individual's social role or age should not be scored. Rule six states that general statements such as those that address the nature of mankind or reflect the subject's feelings are not scored unless they reflect characteristics of the individual being described. In this study, interrater reliability was 98.3%. The RCQ provided a total score based on the number of constructs identified

by the participant as being associated with liked and disliked peers, the higher scores indicating greater cognitive complexity in the interpersonal communication realm.

### Outcome Measures

Outcome measures were assessed addressing Avolio, Yammarino, and Bass' (1991) concerns with identifying common methods variance when data is collected from a single source. They have suggested a continuum which ranges from occasions which have a high probability of reflecting single-source effects, causing a covariation in the ratings of two constructs that is *not* reflective of the true score correlation, to data collection methods that decrease the likelihood of covariation. These occasions, which have a high probability of reflecting single-source effects, are presented when a researcher uses an identical source, identical construct and identical method. The next rating strategy that has a lesser probability of reflecting single-source effects is when an identical source and identical method are used, but the researcher addresses a different construct. The third strategy which has a still less likely probability of reflecting single-source effects is when an identical source is used and identical construct is tapped, but a different method is used for each.

The fourth strategy involves the use of an identical source, but a different method and different construct. The fifth strategy uses a variation in time interval with either the first, second, or third strategies; the sixth strategy uses a variation in time with the fourth strategy. Therefore, a greater variation in either constructs, time intervals, or methods will decrease the likelihood that any covariation in the ratings of the constructs is due to single-source effects, increasing the probability of the scores representing true score correlations. Therefore, although the Multifactor Leadership Questionnaire measures the



outcomes of employee satisfaction, perceptions of supervisor effectiveness, and the willingness to expend extra effort, and these were analyzed in relationship to Transformational Leadership scores, additional outcomes were identified to reduce the possibility of covariation. Outcomes identified were as follows: number of awards presented to individuals on an annual basis; monetary amounts of awards presented to individuals; “on the spot” awards; turnover within departments; and non-mandatory professional development. Of these, data could only be collected for the monetary amounts of “on the spot” awards.

The first hypothesis was tested by use of Hierarchical Linear Regression. In testing the first hypothesis, the GS Level was entered as the dependent variable and years of general and management experience and years of education were entered as independent variables in step one. Scores on the Role Category Questionnaire were entered in step two.

The first research question was tested by use of a confirmatory factor analysis, obtaining both the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and the Bartlett’s Test of Sphericity to determine if factor analysis was appropriate for the correlation matrix. Because the factor analysis revealed a factor structure different from that obtained by Bass and Avolio (2000), this new factor structure guided the remaining analyses. Cronbach’s alphas were derived for the newly identified factors.

The second hypothesis was tested in a manner similar to the first; each score of the two newly identified Transformational Leadership factors was entered in independent analyses as the dependent variable. Entered in the first step as predictor variables were years experience, education level, years of management experience, and years of general

employment experience entered in step one and Role Category Questionnaire scores entered in step two. It must be noted that the researcher recognized the sample provided very poor statistical power. For the sample size in this analysis, testing hypothesis two, assuming a medium effect size, Cohen (1969) indicates statistical power is .17. Also noted is the violation of regression assumptions which assumes a sample size adequate to provide at least five responses for every variable analyzed in ordinary least squares regression and ten to twenty responses in hierarchical regression. Thus these analyses were conducted with the knowledge that any results would be questionable based on the small sample size.

The third hypothesis was tested by hierarchical regression analysis with scores on the Multifactor Leadership Questionnaire used as the mediator variable (Baron and Kenny, 1986). That is, this hypothesis suggests that the relationship between cognitive complexity and outcomes is mediated by Transformational Leadership Scores. The greater the relationship between cognitive complexity and Transformational Leadership and between Transformational Leadership scores and outcomes, the weaker the direct relationship between cognitive complexity and outcomes. That is, Transformational Leadership is the mechanism by which the independent variable (cognitive complexity) is able to influence the dependent variable (outcome). Variations in the cognitive complexity significantly account for variations in the Transformational Leadership and variations in Transformational Leadership significantly account for variations in the outcome variable.

A possible dependency problem was considered. This could be caused by the design of having more than one direct reports providing Multifactor Leadership

Questionnaire assessments on the same supervisor. To compensate for this problem, the scores of the direct reports would have to be averaged and analyzed using the same outcome data. However, because of the small numbers of RCQ's returned that could be matched with subordinates' averaged scores and data being unavailable for some departments, this would have provided a small sample size of only 9, again violating regression assumptions and providing statistical power of .12 (Cohen, 1969). Although this analysis was considered, it was not conducted due to the small sample size resulting in poor statistical power and an extreme violation of regression assumptions.

Research Question two addressed the possible differences in Transformational Leadership between men and women, controlling for years of general employment experience and years of leadership experience. Only three of the Role Category Questionnaires were returned by women (11%). This analysis was not conducted.

Therefore, a combination of statistical techniques were used in the analysis for this study. These include deriving of Cronbach's alpha, hierarchical regression analysis, and confirmatory factor analysis. Results were analyzed by using SPSS Graduate Pack 9.0 for Windows.

## CHAPTER 4 - RESULTS

Under the leadership of CAPT McGee, it appears that the organization is following the advice of Bass (1993) when he suggests that organizations should move to change their organization cultures to facilitate the development of Transformational Leadership. Important to note is that Transformational Leadership appears better suited and appears to be more readily accepted in organizations that are less structured, stable, and orderly. However, as Fullagar, McCoy, and Shull (1992) demonstrated, even in union-dominated organizations that are noted for their strict rules, regulations, and hierarchies, Transformational Leadership makes a discernable and measurable difference in outcomes.

Also, a meta-analysis conducted by Lowe, Kroeck, and Sivasubramaniam (1996) revealed that “directly contrary to expectations, transformational leadership behaviors were more commonly observed in public organizations. For all transformational scales, “the mean scores of leaders in public organizations were significantly greater than the mean scores of leaders in private firms” (p. 405).

In noting the Pawar and Eastman (1997) typologies, however, it becomes evident that the organization exemplifies qualities that both facilitate and inhibit this type of leadership. Facilitators include reorganization efforts which have focused on adaptation (a more functional organization to produce specialized products more quickly) rather than efficiency although efficiency is also being emphasized; and the development and enhancement of boundary spanning units. Specifically the customer service department has been enlarged, commensurate with providing a broader range of services to customers, both internal and external. Conversely, inhibitors include the hierarchical

structure, departments, divisions, branches reflective of the Pawar and Eastman (1997) machine bureaucracy, and the strict job classification system (GS). However, regarding these inhibitors, the hierarchical structure appears to be supplemented by adhocracy (Pawar and Eastman, 1997), or the groups of self-managed teams in each division and branch. In addition, the departments and jobs at the higher levels have been opened to more competition, allowing many more employees who might be eligible for positions to apply. Also impacting leadership decisions are negotiations with the employees' union (to which only a small percentage of eligible employees belong). The research, specifically the meta-analysis of Lowe, Kroeck, and Sivasubramaniam (1996) which found, contrary to expectations, that Transformational Leadership was found to a greater extent in leaders in public institutions provides an interesting backdrop for these findings.

However, the small numbers of Role Category Questionnaires returned by supervisory personnel have placed severe limitations on the possibility of generalizing any results of the statistical analyses. In spite of the limitations detailed in the preceding chapter, statistical analyses to test the hypotheses were conducted. These are detailed in the following paragraphs.

A total of two hundred and ninety-three completed and usable Multifactor Leadership Questionnaires were returned (43%). One hundred and seventy seven males completed the Multifactor Leadership Questionnaires (59.8%) and one hundred and sixteen females (39.2%). Ages of respondents ranged from 20 to 66 years with a mean age of 43.81 years. The range of their total work experience and years in their present positions varied widely, to be expected for an organization as large as NAVO, from one to 45 years with an average of 20.46 years of work experience. Respondents reported

time spent in their present positions ranged from one to 35 years with an average of 7.69 years. Educational levels of respondents ranged from a high school diploma to ten years of college, reflecting the employees who have earned Ph.D. degrees. Employees averaged slightly over four years of post high school education (4.11 years).

Hierarchical regression analysis was utilized to test the first hypothesis, which states: “H1 Participants who score higher on the Role Category Questionnaire will be in higher level positions as determined by their GS rating, controlling for educational level, years of management experience and years of general employment experience.” As Bates, Holton, and Burnett (1999) have indicated, “the goal of regression analysis is to estimate the most representative model in a given sample of data. A representative model is one that yields the best, linear, unbiased estimate of parameters that minimize the sum of squared errors of prediction” (p.343). A total of 24 usable Role Category Questionnaires were available for this analysis (the difference being additional RCQs that were returned, but had no employees or outcomes to match for other analyses). The first model, which included years of education, years of employment, and years of management experience, yielded no statistical significance. Statistical results for each variable are as follows: years of education,  $t(21) = .694$ ,  $Beta = .143$ ,  $p = .495$ ; years of employment,  $t(24) = -1.472$ ,  $Beta = -.380$ ,  $p = .156$ ; years of management experience,  $t(24) = 1.287$ ,  $Beta = .329$ ,  $p = .212$ . This first model did not yield any statistical significance or account for any significant variance,  $F(3,21) = 1.068$ ,  $p = .384$ ,  $r^2 = .008$ . However, the addition of the Role Category Questionnaire did offer predictive ability in relationship to government service level and explained a significant amount of variance, but in the opposite direction from what was predicted. Specifically, the model yielded the

following results:  $F(4,20) = 3.212$ ,  $p = .034$ ,  $r^2 = .269$ . The statistics for the RCQ in this model are as follows:  $t(20) = -2.915$ ,  $Beta = -.537$ ,  $p = .009$ . Although this appears puzzling and counter-intuitive, the small number of cases analyzed and the small amount of variance may have led to these results. An analysis of the Role Category Questionnaires returned in relationship to GS level reveals that 88.8% of the cases were either GS levels 13 (13 cases) or 14 (11 cases). The remaining three cases were GS level 6, GS level 15, and GS level 16. Therefore the cases which included minimal numbers of responses, which revealed very little variance as to GS levels, most likely produced results that, while interesting in that they run counter to the prediction, have no real theoretical value.

The first research question was tested by confirmatory factor analysis where all the items in the Multifactor Leadership Questionnaire were entered. This factor analysis produced the following factor table:

Rotated Factor Matrix

Item	Description	Factor 1 Inspirational	Factor 2 Respectful	Factor 3 Avoidant	Factor 4 Punitive	Factor 5	Factor 6
26	articulates vision	.779	.200	.221	.000	.165	.000
9	talks about future	.695	.153	.169	.000	.135	9.97
14	sense of purpose	.668	.327	.256	.134	.172	.000
13	talks about goals	.644	.287	.291	.107	.000	.117
34	mission	.623	.315	.341	.000	.171	.142
10	instills pride	.614	.529	.239	.000	.000	.000
36	confidence						
	about goals	.585	.380	.320	.000	.000	.391
15	coaches	.547	.390	.323	.125	.253	.000
31	develops strengths	.531	.530	.307	.000	.384	.140
6	values & beliefs	.504	.155	.000	.122	.000	.000
30	different angles	.500	.483	.262	.000	.425	.000
32	new ways	.477	.458	.188	.117	.456	.000
25	displays						
	confidence	.438	.201	.345	.000	.000	-.108
11	specific						
	responsibilities	.419	.389	.311	.179	.000	.000
19	treats as						
	individual	.278	.711	.276	.000	.000	.180
21	builds respect	.483	.638	.389	.000	.000	.000

1	assistance for efforts	.324	.622	.232	.48	.000	.000
23	moral and ethical consequences	.291	.562	.365	.116	.000	.000
8	seeks differing perspectives	.345	.525	.124	.000	.000	-.143
35	expectations met	.436	.515	.264	.000	.135	.491
29	different needs	.135	.493	.000	.000	.000	.100
18	goes beyond self interest	.222	.434	.239	.000	.000	.101
16	rewards clear	.281	.297	.143	.000	.134	.000
2	examines appropriateness	.134	.220	.000	.101	.000	-.119
12	takes action when things go wrong	-.328	-.236	-.735	.000	.000	.000
20	action when problems become chronic	-.242	-.226	-.723	.000	.000	.000
28	avoids decisions	-.247	-.223	-.687	.000	.000	.000
5	avoids involvement	-.182	-.276	-.638	.000	.000	-.104
33	delays response	-.164	-.361	-.635	.000	.000	.000
3	fails to intervene	-.143	.000	-.534	.000	-.142	.000
7	absent when needed	-.177	-.403	-.464	.000	-.129	.000
17	“ain’t broke”	.000	.233	-.255	.122	.000	.000
27	attention to failures	.143	.000	.000	.654	.116	.119
4	focuses on mistakes	.000	.000	-.179	.592	.000	.000
24	keeps tracks of mistakes	.000	.000	-.131	.556	.000	-.164
22	attention on failures	.139	.177	.112	.523	.000	.000

A Kaiser-Meyer-Olkin measure of sampling adequacy was satisfactory at .95 for the leadership measure. Bartlett’s test of sphericity was also significant for this analysis, approximate Chi-Square = 6652.47, df = 703, p. = .000, indicating that factor analysis was appropriate for the correlation matrix. Four factors were identified using the approximate criteria of a loading of .60 on one factor. That is, items were selected if they loaded at or near .60 on one factor and did not load higher than .60 on another factor. Items twenty-six, nine, fourteen, thirteen, thirty-four, ten, thirty-six, and fifteen loaded on the first factor which was named “inspirational.” Items twenty-six, “articulates a compelling vision of the future”; thirteen, “talks enthusiastically about what needs to be accomplished”; and nine, “talks optimistically about the future”; were previously



identified by Bass and Avolio (2000) as inspirational motivation. Fourteen, “specifies the importance of having a strong sense of purpose,” and thirty-four, “emphasizes the importance of having a collective sense of mission,” had been identified as idealized influence (behavior). The next items which loaded on factor one were ten, “instills pride in me for being associated with him/her,” identified by Bass and Avolio (2000) as idealized influence (attributed); thirty-six, “expresses confidence that goals will be achieved,” previously identified as inspirational motivation; and fifteen, “spends time teaching and coaching,” as individual consideration.

Items nineteen, twenty-one, one, twenty-three, and eight loaded on the second factor titled “respectful.” Item nineteen, “treats me as an individual rather than just as a member of a group,” had been identified by Bass and Avolio (2000) as individual consideration; twenty-one, “acts in ways that build my respect,” as idealized influence (attributed); item one, “provides me with assistance in exchange for my efforts,” as contingent reward (considered a transactional feature); twenty-three, “considers the moral and ethical consequences of decisions,” as idealized influence (behavior); and eight, “seeks differing perspectives when solving problems,” as intellectual stimulation.

Items twelve, twenty, twenty-eight, five, thirty-three, and three loaded on the third factor, titled “avoidant.” Items twelve, “waits for things to go wrong before taking action”; three, “fails to interfere until problems become serious”; and twenty, “demonstrates that problems must become chronic before taking action”; had been previously identified (Bass & Avolio, 2000) as management-by-exception-passive. Items five, “avoids getting involved when important issues arise”; thirty-three, “delays

responding to urgent questions”; and twenty-eight, “avoids making decisions”; are identified as laissez-faire leadership.

Items twenty-seven, four, twenty-four, and twenty-two loaded on the fourth factor. Item twenty-seven, “directs my attention toward failures to meet standards”; item, four, “focuses attention on irregularities, mistakes, exceptions, and deviations from standards”; item twenty-four, “keeps track of all mistakes”; and item twenty-two, “concentrates his/her full attention on dealing with mistakes, complaints, and failures”; were all identified by Bass and Avolio (2000) as “management by exception – active.”

Alpha reliabilities computed for the four factors were as follows:

<u><i>Factor</i></u>	<u><i>Alpha</i></u>
One	.92
Two	.87
Three	.87
Four	.67

Since the factor structure did not support that of Bass and Avolio (2000), the first two newly identified Transformational Leadership factors were used to test the remaining hypotheses. These were selected since they included the items believed by researchers to reflect Transformational Leadership behaviors. The third factor, “avoidant,” and the fourth factor, “punitive,” are thought to reflect behaviors that are antithetical to Transformational Leadership.

The second hypothesis was also tested by hierarchical regression and is as follows: “Role Category Questionnaire scores of supervisors/managers will predict

Transformational Leadership as measured by the Multifactor Leadership Questionnaire Form 5X-Short. That is, participants who demonstrate greater interpersonal cognitive complexity as measured by the Role Category Questionnaire will also be rated higher on Transformational Leadership behaviors on the Multifactor Leadership Questionnaire by their direct reports than those who score lower on the Role Category Questionnaire, controlling for years experience, educational level, and years of management experience.” This hypothesis was not supported, the model yielding  $F(4,15) = .517$ ,  $p=.724$ ,  $r^2=.121$ . Statistics for the RCQ [  $t(15) = -.650$ ,  $p=.526$ ,  $Beta = -.166$ ] indicate that interpersonal cognitive complexity alone also does not significantly predict Transformational Leadership scores on the Multifactor Leadership Questionnaire.

The third hypothesis was tested by the use of hierarchical regression and is as follows: “H3, transformational leadership as measured by the Multifactor Leadership Questionnaire mediates the relationship between cognitive complexity as measured by the Role Category Questionnaire and organizational outcomes.” The only organizational outcome available for this model was that of monetary “on the spot” awards. While other organizational outcomes are not affected by common source bias (as opposed to measures of employee satisfaction, perceptions of leader effectiveness, and willingness to expend extra effort which are assessed by the MLQ), this was the only outcome for which data could be obtained that was thought to be related to managerial expertise. “On the spot” awards were suggested by both Human Resources Director and the individual in charge of the change effort. They reflect awards given to departments for exceptional performance at the discretion of the supervisor or manager. This was tested by comparing the change in  $r^2$  from a model with only RCQ to a model that adds the newly

identified Transformational Leadership factor one as derived from direct reports. Scores obtained from supervisors on the Role Category Questionnaire appeared to predict the amount of monetary “on the spot” awards,  $F(1,58)=32.556$ ,  $p=.000$ ,  $Beta=.600$ ,  $r^2=.348$ . However, the addition of the newly identified first Transformational Leadership Factor did not account for any significant amount of variance in the outcome variable:  $F$  change  $(2,57)=.039$ ,  $p$  change  $=.844$ ,  $Beta=-.021$ ,  $r^2$  change $=.000$ . As noted previously in this study, the possible dependency caused by using all scores of direct reports rather than an average score is noted. However, the extremely small sample size precluded this analysis.

A hierarchical regression conducted in the same manner with the second newly identified Transformational Leadership Factor produced similar results. The Role Category Questionnaire again appeared to be related to the outcome variable of “on the spot awards,”  $F(1,59)=31.356$ ,  $p=.000$ ,  $Beta=.589$ ,  $r^2=.347$ . Again adding the second Transformational Leadership factor did not account for any additional variance in this model:  $F$  change  $(2,58)=.137$ ,  $p$  change  $=.712$ ,  $Beta=.039$ ,  $r^2$  change  $=.002$ . Hypothesis three was not supported. Although the RCQ alone was a significant predictor of the amount of “on the spot awards” received by a department  $F(1,59)=31.356$ ,  $p=.000$ ,  $r^2=.347$ ,  $Beta=.589$ , adding Transformational Leadership Scores produced a change that was not significant,  $F$  change  $(2, 58) = .039$ ,  $r^2$  change  $= .000$ ,  $p$  change  $= .844$ . These results indicate that although cognitive complexity predicts this particular outcome, there is no apparent relationship between cognitive complexity and Transformational Leadership. That is, the addition of Transformational Leadership scores did not subsume

the variance accounted for by the RCQ, and accounted for no significant variance of its own.

Additional statistical analyses, while not testing hypotheses specific to this study, did reveal results commensurate with scholarly literature. A number of studies have suggested that transformational leadership predicts increased levels of employee satisfaction (Medley & Faye, 1995; Deluga, 1988; Koh, Steers and Terborg, 1995; Hater and Bass, 1998), and extra effort expended by followers (Yammarino and Bass, 1990). However, the effects of single-source bias must be considered in reviewing these results since these items were included in the Multifactor Leadership Questionnaire and respondents completing the questionnaire were rating their perceptions of their supervisors' leadership abilities at the same time and within the same instrument as they were indicating their willingness to expend effort, their perceptions of the effectiveness of the managers/supervisors, and their job satisfaction. These outcomes were tested in relationship to the two newly identified Transformational Leadership factors. These factors correlated at .7 and were placed into three different models, looking at their combined influence on the outcome variables of extra effort, effectiveness, and satisfaction. These variables in combination predicted an employee's reported satisfaction with his/her manager's leadership,  $F(2,290)=307.302$ ,  $r^2=.677$ ,  $p=.000$ , Beta (Factor One)=.542, Beta (Factor Two) = .348; willingness to expend extra effort,  $F(2,285)=322.356$ ,  $r^2=.691$ ,  $p=.000$ , Beta (Factor One) = .578, Beta (Factor Two)=.320; and perceptions of the manager's effectiveness,  $F(2,285)=349.412$ ,  $r^2=.708$ ,  $p=.000$ , Beta (Factor One)=.488, Beta (Factor Two) = .426. Collinearity statistics revealed a VIF of 1.954, well below the ten that Kennedy (1985) considers as harmful collinearity.

## CHAPTER 5 – REVIEW OF RESULTS, COMMENTARY, AND CONCLUSION

The first hypothesis, “Participants who score higher on the Role Category Questionnaire will be in higher level positions as determined by their GS rating, controlling for educational level, years of management experience and years of general employment experience,” addressed the proposed connection between interpersonal cognitive complexity and upward mobility. This hypothesis was formulated on the basis of research by Sypher and Zorn (1986), who discovered that scores on the Role Category Questionnaire were correlated with upward mobility in employees in an insurance company.

They suggested that cognitive complexity in the interpersonal communication realm was a strong predictor of upward mobility; more cognitively complex employees were found at higher levels within the organization. Fisher (1986) suggests leaders may be more “differentiated” (p. 205), and notes the necessity of effective leaders having to differentiate between situations and individuals as they frame appropriate and effective responses. Burlison (1987) writes that differentiation and integration are both indices of increased cognitive complexity, and while the Role Category Questionnaire appears to measure only differentiation, differentiation and integration are closely related; consequently, the RCQ can be considered a measure of both indices of interpersonal cognitive complexity.

However, Hypothesis One was not supported in this research and in fact, scores on the Role Category Questionnaire negatively predicted upward mobility in the organization as indicated by GS Level. That is, individuals returning the RCQ who had higher scores on this instrument were actually in lower levels of the organization.

However, statistical analyses require both a large enough sample and enough variance to test hypotheses. Unfortunately, neither were available in testing this hypothesis. Only 24 useable RCQ's were returned and of these almost 90% represented only two consecutive GS Levels (GS 13 and GS 14). The few remaining surveys represented GS Levels 15 and 16 and one represented GS Level 6. There was therefore very little variance in this small sample.

Most interesting was a factor analysis conducted to ascertain if a similar factor structure to that proposed by Bass and Avolio (2000) could be derived from the 292 Multifactor Leadership Questionnaires that were returned by the employees of this organization. This was addressed in research question two which read, "Does the analysis support a six lower-order factor model of idealized influence, intellectual stimulation, individualized consideration, contingent reward, active management-by-exception, and passive-avoidant?" A six-factor confirmatory analysis revealed only four factors that were determined by using the criteria of .60. That is, items were selected for inclusion in a particular factor if they loaded at or near .60 on one factor and did not load higher on another factor. Of particular note are the items that loaded on the first two factors. Both Factors One and Two included items which previously had been identified with Transformational Leadership. Both factors had items which had been identified as idealized influence (behavior), items fourteen and thirty-four in factor one and item twenty-three in factor two. Both factors also contained items that were identified as idealized influence (attributed), item ten in factor one and item twenty-one in factor three. Individual consideration was the additional concept identified by Bass and Avolio (2000) that loaded on both factors, item fifteen on factor one and item nineteen on the second

factor. The third factor contained items that had been identified with ineffective leadership, specifically laissez-faire leadership and management-by-exception-passive. The fourth factor included factors identified as management-by-exception active.

The second hypothesis, designed to extend the research of Zorn (1990), read, “Participants who demonstrate greater interpersonal cognitive complexity as measured by the Role Category Questionnaire will also be rated higher on Transformational Leadership behaviors on the Multifactor Leadership Questionnaire by their direct reports than those who score lower on the Role Category Questionnaire, controlling for years of experience, educational level, and years of management experience.” Zorn (1991) discovered that leaders scoring higher on the Role Category Questionnaire also received higher scores on the Multifactor Leadership Questionnaire and used person-centered messages that were perceived by the employees as having greater effectiveness and impact.

This hypothesis was not supported, the statistical analysis revealing no significant relationship between scores on the Role Category Questionnaire and Transformational Leadership as measured by the new identified transformational factors of the Multifactor Leadership Questionnaire. This analysis failed to support the findings of Zorn (1991) or those of Kunhnert and Lewis (1987), who argue that Transformational Leadership is strongly related to cognitive interpersonal development, even delineating stages through which an individual may progress to finally attain the highest level, stage four. Again, the limited number of Role Category Questionnaires may call into question the veracity of these results. It is impossible to determine whether this sample would or would not have supported Kunhnert and Lewis (1987) and Zorn (1991) had enough Role Category



Questionnaires been returned to support a statistical analysis. Cohen (1969) indicates that, assuming a medium effect size, statistical power for a sample size of 22 is .17 and regression analysis normally requires that a sample provide a minimum of five responses for every variable tested.

The propositions of Fisher (1986) and Kunhnert and Lewis (1987) that leaders who are more differentiated and cognitively complex are more effective were partially supported by the results of a hierarchical regression used to test Hypothesis Three, which read, “Transformational leadership as measured by the Multifactor Leadership Questionnaire mediates the relationship between cognitive complexity as measured by the Role Category Questionnaire and organizational outcomes.” That is, scores on the RCQ appeared to be a significant predictor of the only identified organizational outcome, that of “on the spot awards.” However, the addition of scores from the Multifactor Leadership Questionnaire produced a change that was not significant. Again the small number of Role Category Questionnaires returned calls these results into question. Also the limitations of only having one organizational outcome to include in the model must be considered. It was originally anticipated that a greater number of organizational outcomes could be measured and utilized for this study. These would have been factor analyzed, perhaps isolating factors that could then be tested independently in this model. However, it was not possible given the limitations of the organization to provide the information necessary at the level of specification required for the other outcomes originally identified. These included voluntary turnover of employees, awards other than monetary awards, participation in non-required development activities, and others.

Research question two was designed to investigate the possible differences between men and women regarding their use of Transformational Leadership in an organization. Carliss (1998) discovered that manager's superiors rated females as higher in Transformational Leadership than their male counterparts, but there were no significant differences in the ratings of subordinates between the sexes. In a study involving three similar samples of banking industry leaders, Bass Avolio and Atwater (1996) found that women were rated higher than men on transformational leadership items by their subordinates in two groups, but found no differences between men and women in the third group. Because the Transformational Leadership constructs had been demonstrated to have significant correlations with both masculine and feminine gender items (Hackman, Hills, Furniss, & Patterson, 1992) and the equivocal results of other studies, the research question asked, "Is there a difference in Transformational Leadership as measured by the Multifactor Leadership Questionnaire between men and women, controlling for years of general employment experience and years of leadership experience?" However, only three of the Role Category Questionnaires returned were completed by women so this research question could not be tested.

The instrument used for this study was the latest edition of the Multifactor Leadership Questionnaire, 5x-Short (Bass & Avolio, 2000) developed in response to criticisms of the earlier instrument, the Multifactor Leadership Questionnaire. For example, the factors of earlier instrument had been found to be highly correlated (Bycio, Allen, & Hackett, 1995), suggesting that while Transformational Leadership is distinguished from ineffective management, individuals completing the questionnaire may not distinguish among the specific factors. While the new instrument was developed

to address these concerns, the actual items were not altered, nor was the factor structure radically altered. This study appears to validate the concerns of the criticisms of the earlier editions of the MLQ in that although respondents appear able to distinguish Transformational Leadership from ineffective leadership, they may not discriminate among the particular factors. Both factor one (“inspirational”) and factor two (“respectful”) contained items identified with Transformational Leadership; however, many of these items, although loading on different factors, had referenced the same concepts according to the analysis by Bass and Avolio (2000).

These two new factors were used in analyzing cognitive complexity, transformational leadership, and organizational outcomes. The Role Category Questionnaire appeared to be related to the organizational outcome of “on the spot awards,” but the addition of factor one in the first model and factor two in the second model did not account for any significant amount of change.

While proposed as a more complete model of leadership by Burns (1978) and Bass (1985, 1990, 1993, 1997, 1998), Transformational Leadership remains a puzzle to which we only have enough pieces to discern the eventual image, yet are not certain of the specific pieces. For example, other theories of leadership include specification of the contexts under which the principles of the theory operate as well as leader and follower needs (Woford, Whittington, and Goodwin, 2001). These theories also include characteristics which either facilitate or impede the development of their theoretical perspective concerning how leaders influence their followers. That is, the situational aspects of other theories suggest that effectiveness of leadership is situationally and culturally determined, at least in part. In addition, specific characteristics of both leaders

and followers are addressed. There have been few studies that have begun to explore these avenues in relationship to Transformational Leadership. In addition, the most frequently used instrument to test this construct, the Multifactor Leadership Questionnaire, demonstrates a questionable factor structure.

The studies that have attempted to discern which types of organizational contexts are optimum for the development of transformation leadership have provided some insight. Although Pawar and Eastman (1997) write that more flexible organizations which exhibit less structured hierarchies facilitate Transformational Leadership, there is also evidence to the contrary. Fullagar, McCoy, and Shull (1992) have discovered that Transformational Leadership produces measurable differences in union-dominated organizations identified by strict rules, regulations, and hierarchies, and a meta-analysis (Lowe, Kroeck, and Sivasubramaniam, 1996) revealed that Transformational Leadership behaviors were more common to public organizations noted for rigid organizational structures and well-established hierarchies.

The theory is also sadly lacking in any specification of leader characteristics that would allow for the development of Transformational Leadership. Zorn's (1991) study linking Transformational Leadership to cognitive complexity indicates that highly developed interpersonal schemata may be associated with Transformational Leadership, but Judge and Bono (2000) discovered that Transformational Leadership may be linked to leader personality, specifically the traits of Agreeableness, Extraversion, and Openness to Experience. Perhaps Transformational Leadership is both influenced by personality and interpersonal cognitive complexity. This may explain why Bass and Avolio discovered that "nearly 50 percent of the self ratings on transformational leadership could

be attributed to heritability, while 50 percent could not” (p. 5). These researchers have suggested that in investigations of differences in self-rated Multifactor Leadership Questionnaires 25 to 50 percent of the variance can be attributed to heredity. That is, perhaps Transformational Leadership is in part determined by personality factors and in part by interpersonal cognitive complexity, although in what types of combinations remains a mystery.

Unfortunately, this study, although ambitiously designed to further the work of Zorn (1991) and Kunhnert & Lewis (1987) concerning Transformational Leadership and interpersonal cognitive complexity, was only able to provide statistical analyses that supported the results of other researchers concerning Transformational Leadership and outcomes such as employee satisfaction, willingness to expend extra effort, and perceived effectiveness of the supervisor, although these results being gleaned from the same source may be subject to response bias (single source variance). Statistical analyses revealed a factor structure that was different from the one reported by researchers Bass and Avolio (2000), perhaps suggesting the difficulty of obtaining data on such nebulous concepts as “idealized influence” (Bass & Avolio, 2000). However, this study did reveal that within organizations, as with life, change is inevitable. The changes that occurred within the organization during the time the study was conducted, specifically the events of September 11, 2001, and the change of command may have contributed to the lack of responses from supervisory personnel, precluding meaningful statistical analyses.

This organization provides war support to the military of the United States of America. The information for the war support effort, collected from throughout the world via ships, planes, and remote devices, is analyzed and formulated into models that

are used by the Department of the Navy in planning military maneuvers. While NAVO provides information concerning water currents and temperature to surfers off the California coast, this is not their primary responsibility. Much of the information they receive and process is classified and has strategic implications that can result in battles being won rather than lost, and lives of military personnel being saved rather than sacrificed.

Certainly the effects of September 11, 2001 had serious repercussions for the personnel of NAVO, many of whom must have recognized that they were transformed from providing war support in name only to providing information integral to their country's struggle to prevent innocent citizens from dying in terrorist attacks. Data was collected from this organization approximately two months after the attacks of September 11, 2001, after NAVO had been mobilized to provide information that would guide military efforts in and around Afghanistan. The entire atmosphere and culture was radically changed. One small example is that the visitors' center that had been opened to the public and was the site of summer space camps was closed. While individuals not employed at Stennis had always been required to check in and register, they were now required to have an employee escort and their vehicles were subject to being searched. Automobiles often were searched prior to entering the gates. Parking lots were secured and parking was disallowed at many locations where visitors had been permitted to park. Additional security measures implemented are classified.

It is not difficult to surmise that salience (Matsumoto, 1997; Martin, 1995) may have been an operative factor in the poor response rate of the Role Category Questionnaires. Specifically, individuals who are intricately involved in war support

efforts may not view an instrument such as the Role Category Questionnaire, which requires describing a liked and disliked peer, as particularly relevant. In addition, the value of completing the surveys (Rogelbert, 2001) may have appeared lessened in regard to other duties which certainly increased in importance. Also, although the time it takes to complete the survey is minimal, the supervisors were spending large portions of their days in meetings directed toward the war efforts.

The second event that occurred during the data collection portion of this study was the transfer of CAPT McGee to Washington, D.C. and the assignment of another Captain to lead the NAVO organization. Rather than promote someone from within the organization, another individual was transferred and assigned this duty. As noted previously, CAPT McGee led the organization through the most comprehensive changes ever attempted at NAVO. Previous change efforts had been thwarted by political concerns, but CAPT McGee was able to placate all stakeholders in his reorganization effort. However, this effort displaced many longstanding supervisors and managers.

The assignment of a new commanding officer certainly must have introduced some uncertainty into the organization, especially into the managerial arm. Since an individual from within the organization was not selected, the employees would have no frame of reference as to how a new captain would manage or what tools he would use to facilitate his leadership of NAVO. Into this uncertainty the study was introduced.

The study was carefully designed to enhance response rates by advance notice by CAPT McGee (BeVier, 1998) that linked the study to a union request for additional management/supervisory training (providing incentives for employees and managers to complete their surveys), and a cover letter emphasizing personal choice in responding

(Biner, 1988). The cover letter also linked the research to a doctoral dissertation being completed at Louisiana State University (Ransdell, 1996). In addition, follow-up (Roth & BeVier, 1998) was provided by both the Director of Human Resources and the Total Quality Assurance Coordinator by memos and in-person reminders. In spite of these efforts, response rates were dismally low. Perhaps this was caused by the uncertainty of the change of command combined with the necessity of focusing all energies toward America's war efforts.

However, Transformational Leadership is a construct that deserves additional scrutiny. The population of our small planet continues to swell with people who are increasingly individualistic. The necessity for leaders to inspire and assist as they attempt to merge their interests with the interests of the societies and organizations they represent is paramount. Especially now, in the wake of disasters in which thousands of individuals have lost their lives, not only in America, but in Bosnia, in Somalia, and in other venues throughout the world, a leadership model that elevates followers rather than uses them to further a leader's questionable ends deserves additional study and analysis, from an empirical as well as a critical perspective.

Transformational Leadership is being studied. Bono and Judge (2000) in noting the popularity of Transformational Leadership Theory revealed that "more articles cited transformational or charismatic leadership theory than all the other leadership theories combined...specifically, 207 post-1990 articles cited transformational leadership theory, whereas 190 cited all the other theories combined" (p. 251). While popular, Transformational Leadership has not been tested in ways that may complete the puzzle, and the instruments used to test the factors have not proved to be reliable. The research



community still is attempting to determine the appropriate contexts, the characteristics of individuals that may predict Transformational Leadership, and the needs and characteristics of the followers that may facilitate its expression. The hypotheses proposed in this research could provide valuable pieces to the puzzle and should be tested in organizations that might either provide a larger sample so that even a small percentage returned would be large enough for a thorough statistical analysis, or where compliance in returning the surveys might be better assured. Organizations that are not experiencing the dramatic changes that NAVO experienced in a relatively short period of time might be better situated to participate in a study in a more meaningful fashion.

Transformational Leadership may be an inspired model of leadership. However, it must be studied critically in order to ascertain whether it truly addresses timeless behaviors that are fundamental to leadership. The components and associated behaviors must be identified and investigated. Follower characteristics and behaviors must be carefully observed and charted as they respond to Transformational Leaders. Although this theory ambitiously suggests that a Transformational Leader may behave in a manner that elevates both the leader himself and the follower to higher levels of accomplishments, at present it is woefully incomplete in terms of both how the theory is specified and how it is measured.

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APPENDIX A - COVER LETTER INSERTED WITH SURVEYS

The survey(s) contained within this envelope will be used as the basis of dissertation research for Suzette Bryan, a Ph.D. student in Speech Communication at Louisiana State University in Baton Rouge Louisiana. Managers, supervisors, department heads (in short, anyone with leadership responsibilities) should have received forms A and B. Employees should receive only form A. The numbers on your instrument(s) have been randomly assigned.

These survey instruments should each take only a few minutes to complete and should reflect your actual opinions. **NO EMPLOYEE OR MANAGER WILL BE IDENTIFIED INDIVIDUALLY IN THIS STUDY AND ALL RESULTS WILL BE REPORTED IN THE AGGREGATE.** No one is required to complete the survey, but the greater the rate of return, the more helpful the results will be to further knowledge in the area of Organizational Communication. Your envelope contains a seal to be placed over the flap of the envelope. This seal will be broken only by the researcher. When you have completed your survey(s) please place it(them) in the envelope addressed to A.J. Reed at N82 where Suzette will collect the unopened envelopes. Your prompt attention will be appreciated. Please return the completed survey(s) no later than Wednesday, November 21, 2001.

*Thank you for your assistance with this research.*



APPENDIX B - RESEARCH INFORMATION PLACED ON EMPLOYEE BULLETIN BOARD

This study has been designed by Suzette Plaisance Bryan to be used as the basis of her dissertation research as she pursues a Ph.D. at Louisiana State University in Baton Rouge, Louisiana in the area of Organizational Communication. Suzette received her undergraduate degree from Louisiana State University and her Master's Degree from the University of Mississippi in Oxford, Mississippi. Her interest in organizational communication is a result of years of conducting leadership training and being a manager herself. She presently lives in Mandeville with her husband, John, two children, Ben and Whitney, and two dogs.

Working with the staff at NAVO has been especially exciting for Suzette because of the professionalism and commitment exhibited by everyone she has encountered. The survey instruments contained within the envelopes each employee has received should only take a few minutes to complete and should reflect his/her actual opinions. **No employee or manager will be identified individually in this study and all results will be reported in the aggregate.** No one is required to complete the survey, but the greater the rate of return, the more helpful the results will be to further knowledge in the area of Organizational Communication. As noted, each envelope contains a seal to place on the envelope after the survey(s) have been completed that will be broken only by the researcher (Suzette). Please place your completed forms in the envelope addressed to A.J. Reed, N82 where Suzette will retrieve these for analysis. Your prompt attention to these surveys is appreciated: returning them prior to the Thanksgiving holiday would be most helpful.

Thank you for taking the time to read this information. Hopefully, this will address any questions you may have regarding this research. Additional questions can be sent to Suzette at [suzette@charter.net](mailto:suzette@charter.net).

APPENDIX C - "ALL HANDS" E-MAIL SENT BY CAPT MCGEE

> From: McGee, Timothy CAPT  
> Sent: Tuesday, November 06, 2001 4:57 PM  
> To: NAVOCEANO  
> Subject: LEADERSHIP TRAINING SURVEY  
>  
> NAVO,  
>  
> Each of you will soon be receiving a Leadership Training Survey. One of  
> the Union's initiatives has been to provide supervisors with leadership  
> training. This is a superb initiative. There are many kinds of leadership  
> training available. We are beginning to focus in on a leadership technique  
> know as "transformational leadership". Ms Bryan is working on her PhD  
> Thesis on Transformational Leadership and more specifically tying good  
> communication skills to transformational leaders. The survey has been  
> designed so that you can complete this in a few minutes. The results will  
> be used to focus how NAVOCEANO trains leaders at all levels of our  
> organization and it will be used as a baseline for future improvement.  
> Great care has been taken to insure your anonymity. Department codes are  
> necessary in the survey so the information can be used in the proper  
> context. Your sealed surveys will be delivered directly to Ms.Bryan and  
> she will re-code the organizational structure with random numbers.  
> Finally, the results will be looked at only in the aggregate. In short -  
> don't panic, your honest, thoughtful and realistic assessment will help us

- > find out where we are and how to train better leaders. This should be
- > about a three minute drill. Thank you very much for your time. With
- > highest regards.
- >
- > Tim
- >
- > Captain Tim McGee
- > Commanding Officer
- > Naval Oceanographic Office
- > (228) 688-4203
- > [McGeet@navo.navy.mil](mailto:McGeet@navo.navy.mil)
- >

APPENDIX D - SURVEY INSTRUMENT – ROLE CATEGORY QUESTIONNAIRE

## Survey B

Age \_\_\_\_\_ Years in present position \_\_\_\_\_ Years in management \_\_\_\_\_  
Total years of employment \_\_\_\_\_ GS Level/military rank \_\_\_\_\_ Years of  
education \_\_\_\_\_ Highest degree obtained \_\_\_\_\_ Sex \_\_\_\_\_ # of direct reports  
(subordinates) \_\_\_\_\_

Our interest in this questionnaire is to learn how people describe others. Our concern here is with the habits, mannerisms – in general, with the personal characteristics, rather than the physical traits – which characterize a number of different people.

In order to make sure that you are describing real people, we have set down a list of two different categories of people. In the blank space beside each category below, please write an identifying symbol for a person of your acquaintance who fits into that category. Be sure to use a different person for each category. ***THIS IS ONLY TO ASSIST YOU SPECIFYING THE INDIVIDUAL, DO NOT USE AN ACTUAL NAME OR IDENTIFYABLE NUMBER.***

1. A person your own age whom you like: \_\_\_\_\_.
2. A person your own age whom you dislike: \_\_\_\_\_.

Spend a few moments looking over this list, mentally comparing and contrasting the individuals you have in mind for each category. Think of their habits, their beliefs, their mannerisms, their relations to others, and any characteristics they have which you might use to describe them to other people.

Please look back to the first sheet and place the symbol you have used to designate the person in category 1 here \_\_\_\_\_.

Now describe this person as fully as you can. Write down as many defining characteristics as you can. Do not simply put down those characteristics that distinguish him/her from others on your list, but include any characteristics that he/she shares with others as well as characteristics that are unique to him/her. Pay particular attention to his/her habits, beliefs, ways of treating others, mannerisms, and similar attributes. Remember, describe him/her as completely as you can, so that a stranger might be able to



determine the kind of person he/she is from your description. Use the back of this page if necessary. ***Please spend only about five (5) minutes describing him/her.***

This person is:

Please look back to the first sheet and place the symbol you have used to designate the person in category 2 here \_\_\_\_\_.

Now describe this person as fully as you can. Write down as many defining characteristics as you can. Do not simply put down those characteristics that distinguish him/her from others on your list, but include any characteristics that he/she shares with others as well as characteristics that are unique to him/her. Pay particular attention to his/her habits, beliefs, ways of treating others, mannerisms, and similar attributes. Remember, describe him/her as completely as you can, so that a stranger might be able to determine the kind of person he/she is from your description. Use the back of this page if necessary. ***Please spend only about five (5) minutes describing him/her.***

This person is:

APPENDIX E - SURVEY INSTRUMENT – MULTIFACTOR LEADERSHIP  
QUESTIONNAIRE FORM 5X-SHORT

## Survey A

Age \_\_\_\_\_ Sex \_\_\_\_\_ Years in Present Position \_\_\_\_\_

Total Years of Work Experience \_\_\_\_\_ Total Years of Education \_\_\_\_\_

Highest Degree Obtained \_\_\_\_\_ GS Level/Military Rank \_\_\_\_\_

Please use the following items to rate your leader (supervisor, manager, boss).

Forty-five descriptive statements are listed on the following pages. Judge how frequently each statement fits the person you are describing. Use the following rating scale:

Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
0	1	2	3	4

### THE PERSON I AM RATING . . .

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Provides me with assistance in exchange for my efforts.....                                   | 0 | 1 | 2 | 3 | 4 |
| 2. Re-examines critical assumptions to question whether they are appropriate.....                | 0 | 1 | 2 | 3 | 4 |
| 3. Fails to interfere until problems become serious.....   | 0 | 1 | 2 | 3 | 4 |
| 4. Focuses attention on irregularities, mistakes, exceptions, and deviations from standards..... | 0 | 1 | 2 | 3 | 4 |
| 5. Avoids getting involved when important issues arise.....                                      | 0 | 1 | 2 | 3 | 4 |
| 6. Talks about their most important values and beliefs.....                                      | 0 | 1 | 2 | 3 | 4 |
| 7. Is absent when needed.....  | 0 | 1 | 2 | 3 | 4 |
| 8. Seeks differing perspectives when solving problems.....                                       | 0 | 1 | 2 | 3 | 4 |
| 9. Talks optimistically about the future.....  | 0 | 1 | 2 | 3 | 4 |
| 10. Instills pride in me for being associated with him/her.....                                  | 0 | 1 | 2 | 3 | 4 |
| 11. Discusses in specific terms who is responsible for achieving performance targets.....        | 0 | 1 | 2 | 3 | 4 |
| 12. Waits for things to go wrong before taking action.....                                       | 0 | 1 | 2 | 3 | 4 |
| 13. Talks enthusiastically about what needs to be accomplished.....                              | 0 | 1 | 2 | 3 | 4 |
| 14. Specifies the importance of having a strong sense of purpose.....                            | 0 | 1 | 2 | 3 | 4 |
| 15. Spends time teaching and coaching.....   | 0 | 1 | 2 | 3 | 4 |

Continued ->

	Not at all	Once in a while	Sometimes	Fairly often	Frequently, if not always
	0	1	2	3	4
16. Makes clear what one can expect to receive when performance goals are achieved.....	0	1	2	3	4
17. Shows that he/she is a firm believer in "If it ain't broke, don't fix it.".....	0	1	2	3	4
18. Goes beyond self-interest for the good of the group.....	0	1	2	3	4
19. Treats me as an individual rather than just as a member of a group.....	0	1	2	3	4
20. Demonstrates that problems must become chronic before taking action.....	0	1	2	3	4
21. Acts in ways that builds my respect.....	0	1	2	3	4
22. Concentrates his/her full attention on dealing with mistakes, complaints, and failures.....	0	1	2	3	4
23. Considers the moral and ethical consequences of decisions.....	0	1	2	3	4
24. Keeps track of all mistakes.....	0	1	2	3	4
25. Displays a sense of power and confidence.....	0	1	2	3	4
26. Articulates a compelling vision of the future.....	0	1	2	3	4
27. Directs my attention toward failures to meet standards.....	0	1	2	3	4
28. Avoids making decisions.....	0	1	2	3	4
29. Considers me as having different needs, abilities, and aspirations from others.....	0	1	2	3	4
30. Gets me to look at problems from many different angles.....	0	1	2	3	4
31. Helps me to develop my strengths.....	0	1	2	3	4
32. Suggests new ways of looking at how to complete assignments.....	0	1	2	3	4
33. Delays responding to urgent questions.....	0	1	2	3	4
34. Emphasizes the importance of having a collective sense of mission.....	0	1	2	3	4
35. Expresses satisfaction when I meet expectations.....	0	1	2	3	4
36. Expresses confidence that goals will be achieved.....	0	1	2	3	4
37. Is effective in meeting my job-related needs.....	0	1	2	3	4
38. Uses methods of leadership that are satisfying.....	0	1	2	3	4
39. Gets me to do more than I expected to do.....	0	1	2	3	4
40. Is effective in representing me to higher authority.....	0	1	2	3	4
41. Works with me in a satisfactory way.....	0	1	2	3	4
42. Heightens my desire to succeed.....	0	1	2	3	4
43. Is effective in meeting organizational requirements.....	0	1	2	3	4
44. Increases my willingness to try harder.....	0	1	2	3	4
45. Leads a group that is effective.....	0	1	2	3	4

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## VITA

Suzette Bryan received her Bachelor of Science degree from Louisiana State University in May of 1976. Her major and minor were speech pathology and English, respectively. She received a graduate fellowship from the University of Mississippi where she graduated with a master's degree in speech pathology in 1979, achieving a 4.0 grade point average. She is presently attending Louisiana State University where she plans to graduate in May of 2002 with a Doctor of Philosophy degree. Her major is speech communication and minor is human resources development.

Mrs. Bryan's experience includes working in a variety of settings. She served as director of community services working with outreach programs at Hudspeth Center in Whitfield, Mississippi. During her five year tenure at Hudspeth Center, Mrs. Bryan was promoted seven times and was responsible for all community programs. These included group homes, a work center, and an evaluation team. After relocating to Dallas, Texas, Mrs. Bryan secured employment with a privately owned company that included both long term care centers for the elderly as well as a concrete paver company. Working as both director of personnel and public relations, Ms. Bryan wrote and prepared advertising and newsletters. She also planned public relations functions. Additionally, she responded to EEOC complaints and developed a personnel manual. She was later hired by Bright Bank in Dallas, Texas as a management trainer for Bright Mortgage and was promoted nine months later to corporate training manager for the entire Bright organization. This organization was comprised of seven different companies with over 900 employees.

Publications in which Mrs. Bryan has been involved since enrolling in the doctoral program include the Instructor's Manual for the book Cognition, Communication, and Romantic Relationships, a study which garnered the "Best Student Paper" award from the Louisiana Speech Communication Association (2000), and a paper accepted for presentation at the Western Communication Association conference (2002). She has presented papers as a member of the Organizational Communication panel at the Louisiana Speech Communication Conference (2001) and serves as a reviewer for the Louisiana Communication Journal.

Mrs. Bryan has served as an adult literacy volunteer in both Richardson, Texas and Ft. Lauderdale, Florida. She has been involved in the Junior League of Richardson, chairing both the Adult Literacy project and the Peer Intervention project. She presently volunteers in the Junior Great Books program.