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Foundations for Measuring the Development and Emergence of Leadership Behavior

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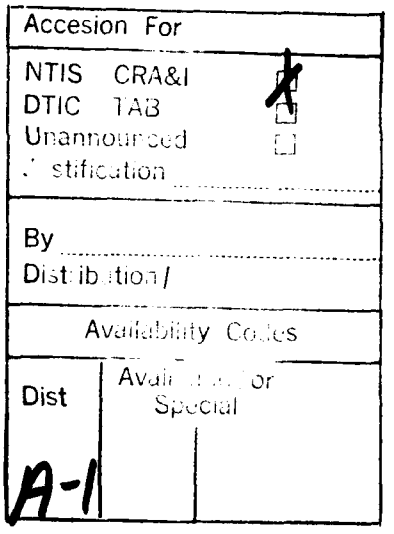

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13. ABSTRACT (Maximum 200 words)

This Research Note describes the models and methods developed for research on developing leadership behavior and effectiveness. An overall framework for longitudinal research on the leadership development process is presented and steps taken to develop construct valid measures of a full range of leadership behaviors are described. Of particular relevance are (1) a model that goes beyond earlier taxonomies of leadership and includes transformation and transactional leadership; (2) a critical incident methodology and categorization scheme for qualitatively assessing leadership behavior; and (3) a behavior observation methodology for recording incidents of leadership across performance settings. These foundations are being applied in research on the emergence and development of leadership in a group of students attending an all-male military college.

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FOUNDATIONS FOR MEASURING THE DEVELOPMENT AND EMERGENCE OF LEADERSHIP BEHAVIOR

EXECUTIVE SUMMARY

Requirement:

In the 1990s and beyond, the effective Army officer will be characterized by a high degree of flexibility, initiative, and ability to lead in complex and often ambiguous circumstances. Additionally, cutbacks in defense spending will require the Army to do more with less, thereby increasing the emphasis on high-quality leadership. Our understanding of how effective leaders are developed in the military needs to be enhanced to train leaders who will augment our military preparedness and overall effectiveness. This is the first in a series of reports on the methods and results of a longitudinal study of leadership and its development on a sample of candidate military officers attending a military college. The purpose of this report is to describe a conceptualization of a broader range of leadership than has been previously examined in the literature and the methods and sources selected to measure this range of leadership. The conceptualization of and methods used to measure leadership are an integral part of effective research on the leadership development process. Once the development process is understood, knowledge of the interactions between individual characteristics (e.g., personality) and organizational requirements (e.g., training) will assist the Army in their selection and training of leaders who exhibit the highest potential.

Procedure:

An overall framework for studying leadership and the leadership development process, using a life-span framework, was constructed. The framework was used to provide a heuristic for modeling the process through which individuals emerge, over time, as more (or less) effective leaders.

Information was collected from the leadership literature to determine the components of leadership measured in the past and the measurement methods used. Data were also collected on site at the Virginia Military Institute (VMI). These data included observations of leader behavior and interviews with leaders and followers, as well as critical incidents of leadership and survey data provided by followers and peers. All possible rater sources for measuring leadership behavior were utilized, including superior, peer, self, and subordinate.

Findings:

This report provides an overview of previous models of leadership and describes how work on transformational and transactional leadership complements and extends those previous models. A brief critique of previous leadership conceptualizations is provided. The measurement methods used in the past and their strengths and weaknesses are described. Additionally, the steps taken to develop construct valid leadership measurement approaches to be used in measuring a full range of leadership are discussed. Of particular relevance are three developments: (1) a model that goes beyond earlier taxonomies of leadership (e.g., task vs. relationship orientation) and covers the full range of leadership; (2) a critical incident methodology and categorization scheme that can be used to assess the full range of leadership behavior qualitatively; and (3) a behavior observation methodology that can be used to

record incidents of leadership in many other settings. The model of leadership developed in this study does not rely on only one paradigm. It emphasizes the transformational-transactional continuum, but also includes components of earlier models. Included in this full range model are transformational and transactional behavior, contingent and noncontingent punishment, initiation of structure and consideration, and managerial decision styles ranging from highly directive to delegative.

Utilization of Findings:

The model and methods developed in this study will be used to measure the leadership behavior of a group of cadets attending VMI (many of whom are also participating in the Army's ROTC program). The measurement of leadership is a performance of leaders over time at VMI and in other military and non-military settings. The leadership measurement methods developed will be applicable to other settings.

FOUNDATIONS FOR MEASURING THE DEVELOPMENT AND EMERGENCE OF LEADERSHIP BEHAVIOR

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FOUNDATIONS FOR MEASURING THE DEVELOPMENT AND EMERGENCE OF LEADERSHIP BEHAVIOR

INTRODUCTION

The primary objective of this report is to describe a methodology developed to measure leader behavior. The measurement of leader behavior is a critical component in the process toward understanding the nature and development of effective leaders. This report is the first in a series describing methods developed and results obtained in a longitudinal study of leadership development and emergence.

In the 1990s and beyond, the effective Army officer will be characterized by a high degree of flexibility, initiative, and ability to lead in complex and often ambiguous circumstances. Additionally, cutbacks in defense spending will require the Army to do more with less, thereby increasing the emphasis on high quality leadership. Our current understanding of how effective leaders are developed in the military needs to be enhanced to augment our military preparedness and overall effectiveness.

An understanding of leader effectiveness requires a systematic investigation of individual attributes and developmental experiences that maximize leadership development, potential, and ultimately performance. Such an investigation has four basic requirements: (1) Individual attributes and developmental experiences must be identified and measured; (2) leadership behavior or performance must be adequately modeled and measured; (3) leadership effectiveness must be defined and assessed; and (4) causal links among attributes and experiences, behavior and effectiveness must be established. The focus of this report is to address the second requirement, namely the identification and measurement of leadership behavior.

The measurement of leader behavior has two important facets. First, leader behavior must be *comprehensively described*. In other words, the full range of leadership behaviors must be assessed. We will highlight in this report how our model of leadership captures a broader range of leadership than prior models. Second, a multi-method approach must be used to adequately capture the potential range of leadership behaviors exhibited by individuals.

Primary Purpose of Report

The purpose of this report is to describe a comprehensive model of leadership and the methods developed to measure leader behavior. This model was developed by applying a thorough review of existing models to the transformational/transactional model developed by Bass and Avolio (1990). The result was an expanded model. Methods developed to measure components of the model are described.

We begin this report by providing an overall framework for studying leadership and its development. The framework discussed in section one models the general process and components involved in studying leadership development. The framework is intended to provide a heuristic for modelling the process through which individuals emerge as more (or less) effective leaders. Development is viewed here as a dialectic process whereby individuals affect the environmental context in which they are evolving, and in turn the environment impacts on the development of the individual. Moreover, we view development as a continuous process of change and reaction to life events that accrue over time, including both major and minor life events. We assume in our analysis of leadership development that the individual plays an active role in the process, and that he or she can contribute or detract from the developmental process. A brief summary of the leadership development study, its objectives and procedures are also provided

to give the reader a perspective of the way measuring leader behavior fits within broader project goals.

Following section one, we provide an overview of previous models of leadership and how work on transformational and transactional leadership complements and extends those previous models. A brief critique of the history of predominant leadership conceptualizations is then provided. The measurement methods used in the past and their strengths and weaknesses are described next. Additionally, the advances made toward the development of construct valid leadership measurement approaches will be discussed. Lastly, leadership measurement is discussed in terms of its relationship to studying the leadership development process.

Studying Leadership Development

Because we view leadership development as a dialectic process, it must be examined over time. Time becomes a significant variable in the analysis of development in that to study change, one must observe a particular phenomenon over some interval of time. A single observation provides the basis for determining differences between one individual and the next. For example, if one measures intellectual capacity at a particular point in time, and between different age groups, finding that at higher ages intellectual scores are lower, the only conclusion that can be drawn from this analysis is that there are differences between age groups in terms of intellectual performance. The basis for such statements is a rather "weak" developmental theory in that one can only observe differences as opposed to changes, e.g., older adults were less intelligent to start with and their lower scores at advanced ages had nothing to do with decline. Weak developmental theories note the occurrence of differences but fail to explain the form and the conditions that contribute to or inhibit the change process.

Conversely, if we can observe a particular phenomenon over time, we have the basis for developing a "strong" developmental theory in which we can examine change rather than simply highlight differences, which may or may not be due to development. A strong developmental theory is characterized by explaining human behavior in terms of its form, the conditions contributing to behavioral change, and the time interval required for change to take place. The beginning point in most theories of development, however, is noticing differences in individuals at a particular point in time, e.g., one individual believes that his actions control events, while another believes that events largely control his actions, and then explaining how those differences evolved.

As noted in the following review of prior research on leadership and its development, most theories of leadership can be classified as "weak" developmental theories in that differences are noted; however, the evolution of those differences over time are generally not well explained. The conceptualization and analysis of leadership has been generally static with respect to incorporating time. Therefore, although leaders may be more achievement-oriented or dominant than those who are not described as leaders, the evolution or development of such tendencies and resulting behavior have not been adequately explained in prior models of leadership.

Using the phrase, the "development of leaders" presupposes that certain events via planned interventions, such as training and education, or those that occur as a consequence of the context in which an individual operates, i.e., "naturally occurring" events, shape the characteristics and subsequently the behaviors of individuals which result in the emergence of what is eventually labelled leadership. In the leadership literature, the development of leaders is often discussed within a very short-term framework of time and around planned interventions, although some exceptions exist.

For instance, when discussing charismatic leadership, Zaleznik (1977) referred to the "twice born" leader. Using this term, Zaleznik intended to explain the emergence of charismatic leadership by specific and albeit extreme situations that occur in a person's life span that shape his or her resolve and result in what is later evaluated as being charismatic leadership. Generally, such leaders experienced an early separation from parents forming a crisis and a painful experience for the leader. Such crises resulted in a sense of isolation, a feeling of being different, and a turning away from the outer world. Zaleznik argues that this shift inward has some redeeming value in that the future leader learns to rely on his or her beliefs and values as a standard of reference for making decisions. By resolving the conflict associated with such crises, the leader ascends to a higher level of development and perspective that helps him or her to solve the problems of others (Bass, 1985).

Crises can come in many forms. Thus, Ghandi's experience with anti-Indian sentiment as a young lawyer in South Africa, could be interpreted as having had such a profound developmental impact on him, that it strongly altered his perspective, and provided the foundation for his return to India to lead a popular movement towards independence from the British empire. Zaleznik interprets such extreme events as causing a change in perspective that results in a different life perspective, as well as leadership orientation. His view is consistent with the psychoanalytic school of thought, that development occurs as a consequence of confronting crises and overcoming them, thus moving one to a higher stage of perspective and development.

We do not necessarily disagree with Zaleznik's basic premise that extreme events and/or crises can have a profound impact on individual development. Rather, we would argue that development may also occur through the accumulation of less extreme "life events" which shape the individual's perspective to the same point, but in less dramatic terms--events that are not necessarily crises nor necessarily negative. Indeed, in Gibbons' (1986) work on the development of transformational leadership, she reported that consistent challenge and support provided by parents was described by individuals rated as highly effective leaders as being one of the more significant life-span events that shaped their respective development. Thus, the parents' style of leading, i.e., setting challenging goals coupled with the support to accomplish goals that encompassed a broad range of different experiences, was consistently seen as being one of the most important factors in the leader's development. In addition, Gibbons (1986) reported that additional factors such as family resources, the number of previous leadership opportunities, role models, and opportunities to take part in formal, as well as informal learning experiences, each contributed to the leader's successful development.

In contrast with Zaleznik's position, Gibbons did not uncover one single event contributing to development, but a pattern of many events (some more critical than others) that helped to shape the leader's perspective and style of behavior. Those leaders were later evaluated by followers in Gibbons' study as transformational. (See our discussion below of this leadership construct.)

Thus far, our discussion underscores an important basis for the study of leader development. The accumulation of specific, perhaps key events and experiences, over time influences the attributes, values, attitudes and behaviors that can be observed at some later points in time when one is attempting to differentiate individuals on some specific dimension, e.g., the leader's behavior or level of effectiveness. Considering this, the study of the leader development should begin relatively early within the target individual's life-span, e.g., upon entry into college. This does not negate

the importance of prior life events, which can be captured and related to leadership emergence via retrospective accounts.

Research Setting and Subjects

The research setting selected for studying leadership development is the Virginia Military Institute (VMI). As part of this study, VMI will also be used for the collection of data relevant to leadership measurement. VMI is a small, all-male military college located in Virginia. VMI's mission is to develop civilian and military leaders. Historically, students were required to enter an ROTC unit for one of the military services and to take a commission if offered. As of the onset of this study, acceptance of commission is voluntary.

At VMI students live, study, attend classes and prepare for military duties in a military environment. The subjects selected for study were all (401) students (cadets) who entered VMI in August of 1991. This class of cadets will be followed from their first year through the second and third years when they practice leading underclassmen. This class of cadets will be referred to as focal cadets, or the Class of '95 (their year of anticipated graduation) throughout this report.

Because students live at VMI 7-days a week, they are exposed to minimal influences from outside the institute. While at VMI, they are trained to endure physical and psychological stress, learn military bearing and customs, and prepare for careers as military or civilian leaders. In many ways the "life" experiences of the students at VMI are similar given the highly structured educational and training environment, unlike those of students attending non-military colleges.

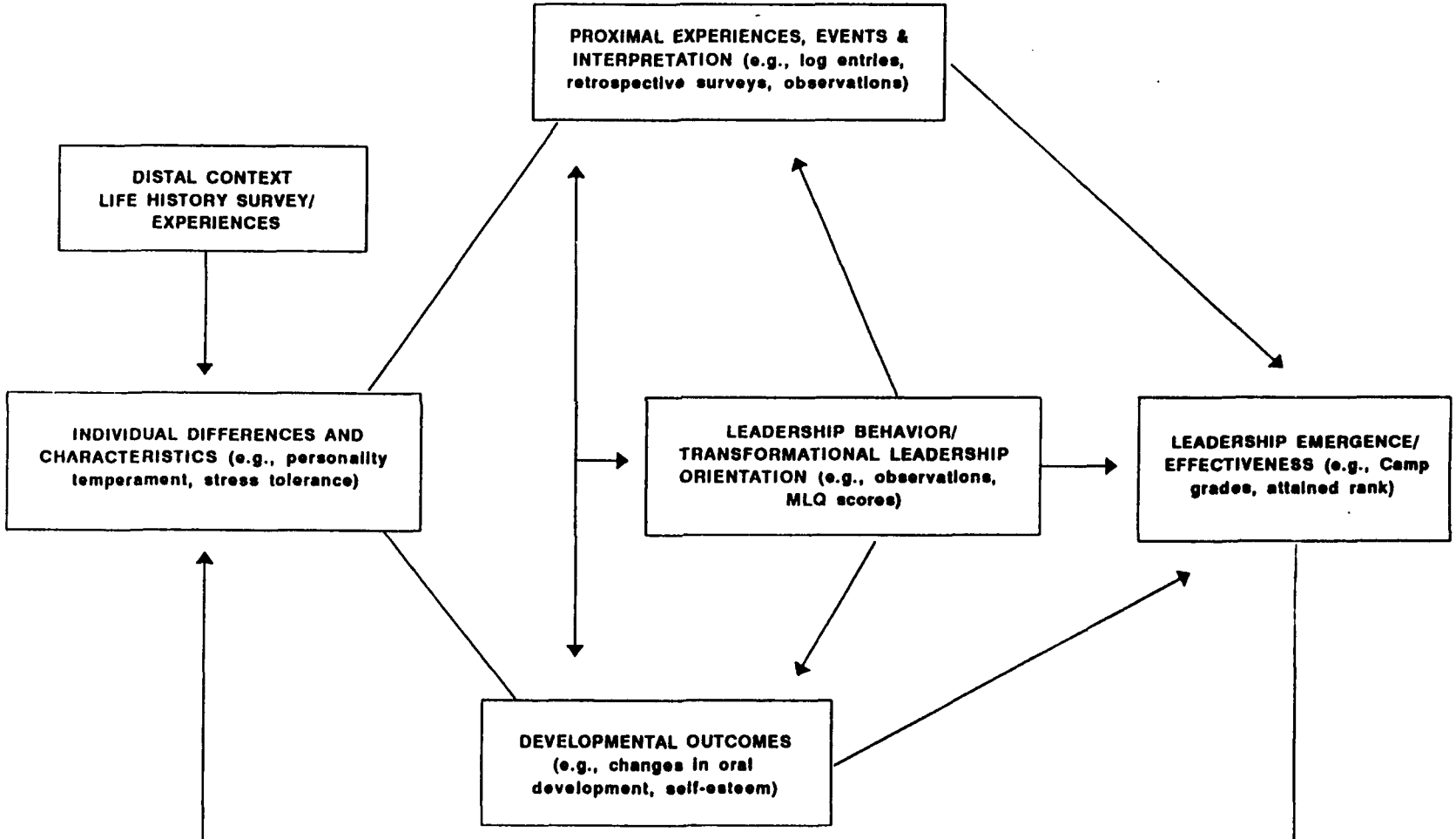
Additionally, unlike non-military colleges, the mission of VMI is to produce leaders and much of their training is aimed at this goal, thus providing an optimal environment for studying leadership development. It is also possible to closely monitor the activities individuals at VMI choose to pursue and their reactions to (e.g. changes resulting from) various experiences.

A Life-Span Framework for Studying Leadership Development

We present in Figure 1 a general model to help characterize the development of leadership and how we intend to assess it longitudinally. In Figure 1, we have attempted to model the change process, as well as highlight how we will attempt to measure such change over time, keeping in mind that the time interval in which we study a particular phenomenon is an important piece in the development of a "strong" theory of leadership.

The longitudinal study referred to in this study begins at the first-day of college for our sample and continues for a minimum of three years. Leadership measurement begins in year 2 when the sample first accepts leadership responsibilities. By design, we can examine prior events that have likely impacted on an individual's development, and the events that occur within the three-year period of the investigation that contribute to leadership emergence and development. (This methodology is similar to that used by Gibbons, 1986.) The accumulation of such data provides the basis for further tracking of target individuals as they move across their life course beyond the three-year period of the current study. Our intent is to refine our focus over time on those events that have the most significant effect on leadership development. Thus, what we expect to accomplish within this period of time is the following: Examine events prior to our intervention (Year 1 of the current study) that are likely to have had an impact on the target individual's subsequent leadership development; assess at the point of

FIGURE 1.
Model of the Leadership Development Process
[Adapted from Avolio & Gibbons (1988)]



NOTE: THE MEASURES IN PARENTHESES ARE EXAMPLES OF CONSTRUCTS IN THIS STUDY.

intervention (when the participants are entering freshmen in college) specific characteristics that predispose individuals to emerge or not emerge as leaders; and then monitor, over time, how current events shape the individual towards a particular style or orientation of leading others. We intend to then measure leadership and to use those measurements to predict leadership effectiveness in the second and third years of the study.

Hence, we begin by examining events that occurred prior to the start of the current investigation. Then we move towards building a profile for each individual at the starting point of our intervention, which we will then monitor for the remaining time in the study to assess change on variables that have been conceptually linked to leadership and its development, eventually using this information to predict performance/effectiveness. As one might anticipate, we will track more closely over time, certain variables where change is expected to occur. With other variables, e.g., intellectual ability, an initial assessment will suffice.

Early Life Events and Experiences. At the top of Figure 1, we indicate that there are certain life events and experiences that result in the development of particular attributes--attributes that have been linked to leadership in prior research. In the current study, our point of intervention is when individuals are entering college as freshmen. Thus, at the very outset of the current investigation, we examined life events that occurred prior to entry into college that have been conceptually related to the leadership model that we will discuss below.

The Life History Questionnaire used in year 1, (a copy of this survey is provided in Appendix A) was developed based on the early work of Owens (1968) and Owens and Schoenfeldt (1979), and more recently Stokes, Mumford and Owens (1989). This survey was created to capture events that are considered to be linked to the development of leadership. The purpose of such measures is to derive a classification scheme through which we can group individuals based on similarities in the patterns of their prior experiences (Stokes et al., 1989).

Unlike much of the research using retrospective biographical surveys, the current survey was developed based on a conceptual model which offered certain predictions regarding the particular life events and experiences that would result in effective leadership development. The Life History Questionnaire provides a look back at events that have shaped the individual's development. These data provide us with a basis for explaining differences in personality characteristics, attitudes and behavior that we observe from the point of intervention, and forward in time.

In addition to the Life History Questionnaire, biographical data was also collected using Assessment of Background and Life Experiences (ABLE), (see Hough, Eaton, Dunnette, Kamp & McCloy, 1990) which is comprised of both biographical and temperament scales relevant to the assessment of leadership.

Individual Differences: Ability, Personality, Temperament and Moral Reasoning. Moving forward from the point of intervention in the current study, (i.e., entry into college) we have collected data in the first year with a broad variety of instruments to help provide a comprehensive profile for each participant in the current study. These variables are used as a basis for describing the general characteristics of the sample and its representativeness with respect to individuals in the same cohort, but not attending a military college. These measures include those for which normative data are available such as SAT scores and personality data. Other variables are included in the test battery and are being used as "markers" for assessing developmental change within the context of the current study. For example, we intend to measure self-esteem, hardiness, and moral development at several points in time to evaluate the impact of "proximal" life events, e.g., indoctrination, early role models, etc., and their impact on each

participant's development. Whereas, with ABLE and the Life History Questionnaire data, we are able to capture "distal" life events that have contributed to the development of a profile for each individual up to the outset of the current investigation.

Within the first year of the current study, we have collected data on each participant using personality measures such as the California Personality Inventory (CPI), (e.g., Dominance, Introversion, Empathy) and Rotter's (Internal vs. External) Locus of Control survey; temperament scales comprised in ABLE, (e.g. Energy, Work Orientation, Emotional Stability, etc.); measures of ability such as SAT scores; interpersonal style measures such as the MBTI; a measure of moral reasoning developed by Rest (1986), called the Defining Issues Test or D.I.T.; and measures of self-esteem and stress tolerance or hardiness. These measures serve two purposes. First, they provide the basis for developing a profile for each individual. Second, there are a number of key variables comprised in these measures that have been shown in prior research to be related to ratings of leadership, leadership emergence and development. Thus, the collection of these measures at the outset of each individual's college career provides the basis for predicting individual behavior later on in years 2 and 3 of the current study. They also provide a basis for predicting leadership, as it develops and emerges over time.

The measures included in the initial battery will help to explain how individuals with varying personal characteristics deal with challenging and stressful events that will confront them during the first three years in college. For example, individuals who enter the study more self-confident than others, due, perhaps, to certain prior life events and experiences, will likely respond to challenges and stressors in different ways than individuals who are low in self-confidence.

Other individual difference measures such as self-esteem, hardiness, and moral reasoning are expected to be impacted by proximal life events, that will in turn, affect the type of leader who will emerge. As noted above, these variables will be tracked more frequently to assess change and its impact on leadership development, emergence and performance, e.g., within the first year we have already collected repeated measures on self-esteem and hardiness.

The Leadership Context. In conjunction with the collection of the individual difference measures described above, we have also begun to collect data to help operationalize the context in which individual development and change are expected to occur. These measures will also be used to refine our indices of leadership and performance in years 2 and 3.

Similar to the measures described above, we are collecting contextual data using multiple measures, multiple sources over multiple periods of time.

The Organizational Description Questionnaire (ODQ), which assesses individual perceptions of the culture of the organization in which they work, was administered in year 1 to freshmen to assess their perceptions of the organizational context. In addition, each participant in the current study has been asked to keep a periodic log, which documents critical incidents and events that he views as relevant to his own leadership development. The logs are used as a method of collecting data from participants which provides an assessment of how the individual views the leadership context in which he is operating. Two general purposes are served by using this approach. First, we are able to collect each participant's perspective of the immediate leadership context (i.e., the type of leadership he observes on a daily basis at VMI) that can be eventually coded and attached to the individual's profile. (This is described in more detail in a later section). Second, since participants are recording events and critical incidents that focus specifically on leadership behavior and actions, we can assess the "models in use" within this context and the relevance of the theoretical framework being tested in the

current study. This data can be used to support the development of measures to assess leadership in years 2 and 3 of the current study.

An understanding of the leadership context and perceptions of leadership from multiple sources has helped in providing the groundwork for measuring leadership. A thorough review of the literature and models of leadership in use was also relevant. These models are discussed in the following section.

THEORIES AND MODELS OF LEADERSHIP

This section briefly summarizes many of the approaches that have been used to understand leadership from "great man" theories through traits and behaviors to current work in cognitive psychology. Then, how these models and theories have collectively influenced the development of a more comprehensive model of leadership that will underlie the work in this study is discussed.

Leadership has been one of the most researched topics in organizational behavior. Numerous definitions have been used, and numerous approaches have been taken to understand this complex phenomenon. For example, over the years, twelve ways of conceiving leadership have dominated the literature. Leadership is...

1. the central element in group change
2. a type of personality
3. the induction of compliance
4. influence
5. a specific set of behaviors
6. a form of persuasion
7. a power relation
8. an instrument of goal achievement
9. the consequence of an interaction
10. a differentiated role
11. the balance between initiation of structure and consideration (or person vs. task-oriented)
12. a position of administration, management, or political appointment in an organizational hierarchy (Bass, 1990).

For the purposes of this project the conception we have of leadership is multifactor. It includes to some extent all of the above conceptions in the multiplicity of analyses we will be completing. In that regard, we will be examining the traits of leaders, their behaviors (viewed via multiple methods and by multiple sources), the relationships leaders have with followers (as well as peers), the style(s) of influence they choose to use, their impact on individuals and groups, and their position. These areas are in part, embedded within an overall framework of leadership that examines the attributes and behaviors associated with avoidant on up through inspirational and charismatic leadership.

In sum, we include in our work a study of leader traits, behaviors, situations, and their interactions. These different conceptions are seen in

the models and theories of leadership that have emerged in the past half-century.

Attribute Models of Leadership: Lists of Traits and Types

Personality traits have reemerged recently in a more refined framework, as important predictors of leadership. Many key attributes and traits were prematurely dropped in prior leadership research (cf. House & Baetz, 1979). Trait models of leadership were popular in the 1940's and beyond. In fact, the earliest models of leadership were simply lists of traits associated with leadership: e.g., Stogdill (1948): capacity, achievement, responsibility, participation, status and esteem. Table 1 shows the factored traits that emerged in 52 leadership studies (Bass, 1990).

Almost as simple are models of leadership which are lists of typologies. Typologies, or clusters of traits and other attributes, have been popular since classical times, because they are simple and easy to communicate to laymen. Thus, in "The Republic", Plato distinguished among timocratic (esteemed), plutocratic (wealthy) and democratic (popular) leaders.

Leaders themselves have been typed since time immemorial. Kings and chiefs, priests and shamans, judges and prophets, warriors and champions were types of leaders in early oral traditions and writings. The social psychological literature has been replete with classifications such as Conway's (1915) which offered three types of crowd leaders: compellers, exponents and representatives. Educational leaders were sorted by Harding (1949) into 21 types: autocrats, cooperators, statesmen, eager beavers, etc. Bell, Hill and Wright (1961) proposed that public leaders be classified as: office holders, reputational leaders, social leaders and influentials. A subset of office holders, city mayors, were typed by Kotter and Lawrence (1974) (according to their agendas, networks, and tasks) into ceremonial mayors, individualists, caretakers, executives and entrepreneurs. Another subset of office holders, namely legislative leaders, were typed by Burns (1978) as ideologues, tribunes, careerists, parliamentarians, or brokers.

Other attribute lists were based on social dynamics, psychoanalysis and personality. Nafe (1930) proposed social psychological categories such as static versus dynamic, impressors versus expressors, volunteers versus draftees, personal versus impersonal, etc. Redl's (1942) psychoanalytic lists included patriarch, tyrant, lover object, object of aggression, organizer, seducer, hero and exemplar. For psychoanalyst Zaleznik (1974), leaders were either charismatic or consensual.

Personality classifications abound in the leadership literature. Best known are the Myers-Briggs types (MBTI) (Myers & McCaulley, 1985) based on Jung's psychoanalytic classification of thought processes which sort leaders into four types (extroverted or introverted, sensing or intuitive, thinking or feeling, and judging or perceiving) and 16 combinations of these four types. Weber's (1924/1947) classification of three kinds of legitimate leaders in formal organizations remains important: bureaucrats, patrimonials, and charismatics. Jennings (1960) conceived of organizational leaders as princes, heroes and supermen. For Maccoby (1979), the types that emerged in organizations depended on the maturity of national economic development: independent craftsmen, paternalists and gamesmen.

One aspect of the current project will examine a select list of personality traits likely to be associated with leadership development and performance at VMI. While traits are not a central part of the focus of this report and are not to be confused with leader behavior, measures of personality traits and MBTI type have been obtained for all focal cadets.

Table 1

Traits of Leadership: A Follow-up

Factor	*Number of Studies Found*	*Example of Study*
Technical skills	18	Borgatta & Eschenbach, 1955
Social nearness, friendliness	18	Hausman & Strupp, 1955
Task motivation and application	17	Creager & Harding, 1958
Supportive of the group task	17	Ghiselli, 1960
Social and interpersonal skills	16	Bartlett, 1959
Emotional balance and control	15	Carter, Haythorn, & Howell, 1950
Leadership effectiveness and achievement	15	Borgatta, 1955a
Administrative skills	12	Borg, 1960
General impression (halo)	12	Mandell, 1956
Intellectual skills	11	Grant, 1955
Ascendence, dominance, decisiveness	11	Klein & Ritti, 1970
Willingness to assume responsibility	10	Flanagan, 1961
Ethical conduct, personal integrity	10	Flanagan, 1951
Maintaining a cohesive work group	9	Cassens, 1966a
Maintaining coordination and teamwork	7	Wilson, High, Beem, & Comrey, 1954
Ability to communicate; articulativeness	6	High, Goldberg, & Comrey, 1956
Physical energy	6	Peres, 1962
Maintaining standards of performance	5	Bass, Wurster, Doll, & Clair, 1953
Creative, independent	5	Wofford, 1970
Conforming	5	Triandis, 1960
Courageous, daring	4	Palmer & McCormick, 1961
Experience and activity	4	Hussein, 1969
Nurturant behavior	4	Crannell & Mollenkopf, 1946
Maintaining informal control of the group	4	Sakoda, 1952
Mature, cultured	3	Stagner, 1962
Aloof, distant	3	Roach, 1956

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Behavioral Taxonomies. More recently, emphasis has shifted from attempts to classify leaders according to personality types to an emphasis upon defining what leaders DO that separates them from nonleaders, i.e., leader behaviors. Unfortunately, the prior taxonomies used to classify leadership behaviors were often limited to the most readily observable behaviors, and those which were associated with task versus relationship orientation. In our project, a more comprehensive behavioral taxonomy based on a broader range of leadership will be the basis of recollection and observation of leadership behavior at VMI.

To briefly summarize the history regarding the development of behavioral taxonomies, one area of interest has been an analysis of the jobs done by managers. These taxonomies focused on the context more than the individual. Hemphill (1949) and Mahoney, Jerdee and Carroll (1965) developed lists which were functional breakdowns of managerial leaders' jobs. A more sophisticated breakdown of tasks was completed by Lau and Pavett (1980) highlighting the importance of assessing the types of decision styles used by leaders in managerial roles. In this investigation, measures of decision or influence style were included as part of the battery of measures of leader behavior. Specifically, we will assess the extent to which a leader's decision-style is directive, consultative, participative or delegative. The arrangements for selecting this range of decision styles will be described in more detail in a later section.

Perhaps the most dominant behavioral approach to the study of leadership from 1965 to 1985 stemmed from work done at Ohio State University which resulted in the Leader Behavior Description Questionnaire (LBDQ) (see Stogdill & Coons, 1957). The principal dimensions measured by most research using the LBDQ were initiation of structure and consideration. In part, these two dimensions were chosen to represent the range of leader behavior because of their conceptual and, in some instances, empirical independence. In essence, this approach assumes that a leader engages in two basic types of behaviors; those emphasizing the initiation of activities (e.g., organizing, defining tasks, planning) and those emphasizing concern for the welfare of group members (e.g., friendliness, openness to suggestions, appreciative). This approach suggests that leaders often interact with followers as a group, rather than individually, and that leaders tend to treat followers similarly, i.e., the leader has a dominant style used with the entire group. (This operational definition coincides with the Average Leaders Style framework (ALS) discussed by Dienesch and Liden, [1986]).

A parallel line of work in the development of behavioral taxonomies rested on whether organizational leaders were task or relations oriented in their attitudes and behaviors. Best known was Blake and Mouton's (1964) grid: 9,1's were high task, low relations; 1,9's, the reverse. Others were 5,5 compromisers, 1,1 abdicators, or 9,9 integrators. The behavioral models tended to become more complex in that the 1's, 5's and 9's referred to scale values on measures of concern for production and concern for people.

Leaders have been typed according to their functions and roles in small groups. Bales and Slater (1955) among many others saw two essentials: productivity and socioemotional support (similar to the task versus relationships dichotomy). The best known classification was that of Benne and Sheats (1948) who posited three types of functional roles: group-task roles (e.g., initiator), group-maintenance roles (e.g., harmonizer) and individual roles (e.g., blocker).

Collectively, there is much commonality in current and previous behavioral taxonomies of leader behavior as is shown in Figure 2 (Bass, 1990). Since we recognized in the current study that some leader behavior is that which addresses followers as a group, measures of initiating structure and

YUKL (1989)	MINTZBERG (1973)	MORSE & WAGNER (1978)	STOGDILL (1963)	BOWERS & SEASHORE (1966)	HOUSE & MITCHELL (1974)	LUTHANS & LOCKWOOD (1984)	PAGE (1985)
Supporting			Consideration	Leader Support	Supportive Leadership		
Consulting					Participative Leadership		
Delegating			Tolerance of Freedom				
Recognizing						Motivating & Reinforcing	
Rewarding							
Motivating	Leader Role	Motivating & Conflict Handling	Production Emphasis	Goal Emphasis	Achievement-oriented Leadership		Supervising
Managing Conflict & Team Building			Integration	Interaction Facilitation		Managing Conflict	
Developing		Providing Development				Training & Developing	
Clarifying			Initiating Structure		Directive Leadership		
Planning & Organizing	Resource Allocator; Entrepreneur	Organizing & Coordinating		Work Facilitation		Planning & Coordinating	Planning & Organizing; Strategic Planning
Problem Solving	Disturbance Handler	Strategic Problem Solving	Role Assumption; Demand Reconciliation			Problem Solving & Deciding	Decision Making
Informing	Disseminator	Information Handling				Exchanging Information	Consulting
Monitoring	Monitor					Monitoring/ Controlling	Monitoring Indicators, Controlling
Representing	Spokesman; Negotiator; Figurehead		Representing; Influencing Superiors			Interacting with Outsiders; Socializing & Politicking	Representing
Networking & Interfacing	Liaison	Managing Environment & Resources					Coordinating

*Indicates behavior not included in the earlier taxonomy.

SOURCE: Adapted from Gary Yukl, Leadership in Organizations (Englewood Cliffs, N.J.: Prentice-Hall, 1989), p. 95.

Figure 2. Approximate Correspondence Among Major Taxonomies.
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consideration will be included as part of the range of leadership behavior assessed. These measures are discussed in greater detail in a later section.

More Complex Theories and Models

Theories, which have attempted to explain the relations among the listed traits and behaviors, have given rise to more complex models comprised of a larger number of variables. Indeed, the oldest and the most recent theories of leadership have a lot in common. The oldest, or the "Great Man theory" (Carlyle, 1841/1907) argued that history and events are shaped by great men. Germany would not have been united in 1870 if Bismark personally had not seized the opportunity. If Bismark had still been in power in 1914, he personally would have prevented Germany from rushing to the defense of Austria, greatly inhibiting the expansion of World War I.

Contrasting the "Great Man Theory" newer ones such as transformational leadership theory, argue that individual followers, groups, organizations and societies are transformed by the leader envisioning, enabling and empowering them to go beyond their standard efforts (Bass, 1985). In this model, the leader is seen as the primary center of influence. However, unlike the "Great Man Theory" there is more attention paid to defining the leader attributes and behaviors that constitute transformational leadership. Also, there is attention paid to the context/culture and the leader, follower, and context/culture interactions. It is this theory which will provide an overall framework for the current research effort.

At one extreme, Hegel and Marx argued that all societal change was determined by historical and economic laws. The conflicts and dialectics within situations were the source of change, not any individuals. Historians and sociologists pursued the situational explanations and models. Situationalism has now been augmented with other non-person explanations of the phenomenon of leadership. One line of argument proposes that change in groups is seen as due to substitutes for leadership rather than the influence of particular individuals (Kerr, 1977). Meindl, Ehrlich, and Dukerich (1985) argued that leadership is often viewed as having a greater and more direct impact on changing followers than is justified by the leader's actions. This view represents a "romantic" view of leadership in the sense that more of the change is attributed to the leader than is warranted by his or her actions. Although representing some grain of truth, there is overwhelming evidence to suggest that leaders do, in fact, influence followers (individuals and/or groups) apart from the situation in which the interaction occurs.

Person by Situation Interactions

Beginning with Stogdill (1948), efforts were underway to integrate both personal and situational approaches in the study of leadership. What leaders can do and what they choose to do depends on circumstances. On the small island of Elba, just off the Italian coast, Napoleon had choices: to be Emperor of Elba or to try to reestablish himself as Emperor of France with hegemony over Europe. On isolated St. Helena, in the South Atlantic, under strict guard, he had no choice (Hook, 1943).

Who emerges as leader likewise depends on situational circumstances. Stogdill (1948, 1974) concluded that there were some personal dispositions associated with leadership such as energy level and cognitive ability. Nevertheless, he also argued that there needed to be a match between the leader's attributes and the needs of the group led or situation. The analysis required attention to both the leader's individual attributes and the demands of the situation.

Bass (1960) concluded that the analysis of variance (ANOVA) model was perhaps a more appropriate description of the person-situation issue. Some of

the variance (and covariance) in any analysis is due to the leader as a person. No matter where you put some people, they will emerge and succeed as leaders. Some of the variance is due to the situation. Universally, we are likely to see more determination in leaders described by Burns (1978) and later by Bass (1985) as transformational. Nonetheless, the transformational leader in Honduras has to be more directive than the transformational leader in Norway. Furthermore, some of the variance will also be due to the statistical interaction of person and situation. Leaders such as Saddam Hussein, become submissive when coerced by immediate military force or threat and return to domineering whenever the force is lifted or the threat becomes less credible. The question is an empirical one as to how much of the variance is due to the three sources: person, situation, and interaction of person and situation.

Pre-Stogdill, the emphasis was on the person; post-Stogdill, on the situation. The emergence of organizational behavior and cross-cultural research was premised on the expectations that situations would make a difference. Thus, after Barnlund (1962) had systematically recomposed groups with changing membership on successive tasks, he erroneously concluded that most of the variance in who emerged as a leader was due to the task circumstances. However in the 1980's, revised analyses and new evidence turned the tide back towards the person. Thus, Kenny and Zaccaro (1983) reexamined Barnlund's results and found that 49 to 82% of the variance should have been attributed to the person.

In the late 1980's, transformational leadership theory has turned back to attending more to the person, but not by neglecting the situation. As Bass (1985) noted, the transformational leader will attempt to change the organizational culture, to modify the situation to meet the needs of the organization. The transactional leader will continue to work within the culture that exists. This is a clear statement underscoring the importance of focusing on both the leader and context when studying leadership.

Psychoanalytic Theories

The situational-personal explanation is seen in psychoanalytic theories of leadership such as Kohut's (1977). For Kohut, charismatic leaders are narcissistic personalities who use their followers to sustain their egos. The followers sublimate their own shame, jealousy, and hate in their idolization of their leader. Bass and Avolio (1989) equate with charismatic leadership such influence based on idolization of the leader. Here we are referring to what Howell (1988) called personalized versus socialized charismatics. The personalized charismatics seek followers that will idolize them without question. This individual is very different from the socialized charismatic, who develops others to their highest potential, even at the risk of questioning the leader. This type of leader is similar to what Bass (1985) labelled transformational. Thus when we refer to leaders who dominate followers and require adoration, we are referring to the personalized charismatic as discussed by Howell (1988).

Much of psychoanalytic theorizing also attempts to explain the adult leader's performance in terms of the circumstances of his or her development as a child. Woodrow Wilson buried his resentments of his father under his idealization of him and set out to become a new world messiah (Freud & Bullitt, 1932). Idealized versus idolized (personalized charismatic) influence of leaders will be one of the important variables in this research project.

Political Theories

Political doctrines ordinarily deal with leadership requirements. Mao Zedung's doctrine called for the leadership to use operant conditioning, consciousness raising, confession, self-criticism and feedback. Agreeing with

Theodore Roosevelt, the leader had to study the unarticulated notions of the public and turn them into succinct, simplified, systematic ideas. This approach is not all that different from the discussions of envisioning leaders, who state in simple terms ideal future states (Bass & Avolio, 1990).

Unquestioning loyalty and obedience tc superiors was fundamental to the Nazi Fuherprincip. On the contrary, democratic leadership formally conceives of a loyal opposition, of majority control with respect for minority rights. Democratic leadership has blossomed into a variety of humanistic theories revolving around the development of the individual within the constraints of an effective organization (McGregor, 1966; Argyris, 1957; Likert, 1967; Maslow, 1965). The tension between authoritative control and the demands for an institution set in a democratic society, as noted in Bass (1992), are clearly seen in VMI's culture.

Social Learning Theories

Dominating social learning theories is the premise that leadership is a matter of learning to do what is expected. A leader needs to learn his or her role to fit organizational policies, follower perceptions, past experience, and the leader's own values and needs (Kahn & Quinn, 1970). The leader needs to learn that which he or she does and does not have authority over (Osborn & Hunt, 1975). Fundamental to our research is a study of the ways in which one's learning about leadership develops during a cadet's four years at VMI. Or, how do past experiences, observations, and role models ultimately impact on leader development?

Social learning theories also provided a basis for exchange or transactional theories of leadership. For Homans (1950), determinants of the leader's influence would include the development of mutual liking of leaders and followers and clarity of the group norms and expectations. For Hemphill (1954) and Stogdill (1959) the emergence and persistence of a leader depended on his or her developing and reinforcing the structures for leader-follower interactions.

Such exchanges and reinforcement paradigms were used by Bass (1960) to explain how leadership can produce group and organizational effectiveness. With path-goal theory, House (1972) tried to show that the reinforcing effects of the leader's behavior depended on whether the task was already structured, on environmental constraints and on follower expectations and preferences. Other theories and models which emphasized the leader as the reinforcer of follower behavior included Mawhinney and Ford's, (1977) use of operant conditioning, and Davis and Luthans' (1979) notions that leaders' and follower's behaviors become mutually reinforcing.

Contingency Theories

The contingency approach was most fully explored and tested with Fiedler's (1967) contingency theory and tests of the derived model. In essence, contingency theories suggest that the leader characteristics that will be most effective differ as a function of situational characteristics. Again, leaders are described as predominantly task or relationship- oriented. The task-oriented leader is presumed to be most effective in situations which are either most favorable to him or her (structured, empowering, esteemed) or most unfavorable to him or her (unstructured, unempowered, unesteemed). The relations-oriented leader is most effective in moderately favorable situations (Fiedler, 1967).

Fiedler and Leister's (1977) multiple screen model suggested and confirmed that intelligent leaders generate effective groups if the leaders have good relations with their bosses. If relations are poor, then it is experienced leaders who generate the most effective groups.

Our research effort will consider how much leader behavior is consistent from year to year in the same cadets (i.e., a person phenomenon) and the extent to which it changes as a function of changing role requirements or contingencies (i.e., a situation phenomenon).

Exchange Theories

Exchange theories suggest that a leader has a unique relationship with each follower, as opposed to the ALS model discussed earlier. Key to Graen's (1976) vertical-dyad linkage model is the importance of the quality of the relationship between each different subordinate and the superior who is leading him or her. The quality is determined by the costs of the exchange and the benefits of the exchange in each relationship. This analysis is required to understand the performance of the group as a whole. Jacobs (1970) couched the exchange of the leader and the led in terms of the status and esteem accorded the leader by the led, the authority invested in the leader, and the equity of the exchange in fulfilling the mutual role obligations of the leader and the led.

One particularly relevant dyadic relationship at VMI is that between the freshmen (focal cadets) and their senior mentors. Our research will pay particular attention to the mentoring relationship as an example of an important dyadic relationship within the VMI context. This relationship will be examined including a much broader range of leadership behaviors and styles than prior research, focusing on both positive and negative features of leadership.

Cognitive Theories

In contrast to the exchange and reinforcement theories of leadership are those which stress that leadership is "in the eye of the beholder". We need to find out the implicit theories of leadership held by the individual leader to determine what the leader will do and why (Pfeffer, 1977). Likewise, we need to know what is in the minds of the followers when they perceive and react to a leader to both understand the leadership process and to measure it more accurately (Eden & Leviatan, 1975). Additionally, attributions of leadership depend on the social realities of the circumstances (Mitchell, Larson & Green, 1977). For instance, how a leader will react to a follower's poor performance depends on the leader's interpretation of whether the follower's poor performance is due to lack of clarity, low motivation, externalities, or bad luck.

Lord (1985) has championed the use of information processing theory to understand follower attributions of leadership. Elements involved include selective attention, comprehension, storage, retention, retrieval and judgement. According to Lord and his colleagues, spontaneous recognition and judgements (such as those required when individuals are asked to rate a leader's behavior) are strongly affected by commonly perceived prototypes of leadership. Recognizing the importance of leadership prototypes, and their impact on ratings and observations, we will include multiple converging perspectives of a leader's behavior (e.g., multiple subordinates, peers, superiors, leaders themselves), using multiple methods in the current study. In this way, the influence of prototypes can be assessed and ultimately minimized. Additionally, we will attempt to get a glimpse of each cadet's leadership prototypes by asking them to describe leadership incidents they have observed. These issues are discussed in greater detail in a later section.

Competency Models

The job analytical approach discussed earlier (see Lau & Pavett, 1980) generated leadership requirements and competency models. Illustrative of such

a competency model is the empirically derived model for naval officers presented in Figure 3 (Winter & Stewart, 1978), which shows the detailed linkages among the initiatives taken by the leader, how they are qualified, the alternative leader behaviors which ensue, and the outcomes.

Special attention to the temperament data collected via the ABLE instrument as well as abilities measured by other instruments will allow us to look at some of these competency-leadership issues.

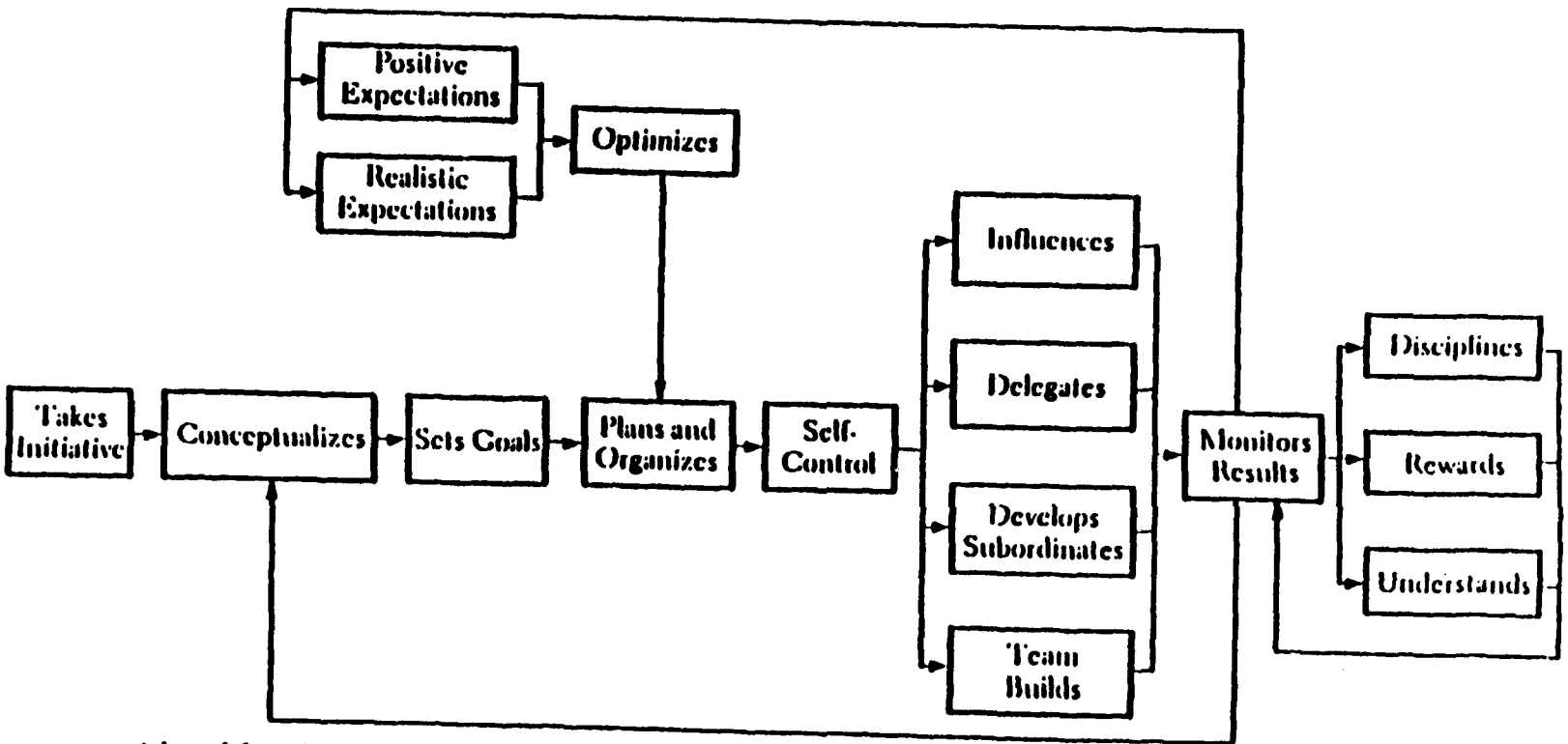
Examining a Broader Range of Leadership

As emphasized in the preceding sections, before 1980, social and organizational psychology research on leadership focused on observable, direct short-term, leader-follower relations--relations referred to by Nicholls (1987) as on the micro-level. Leadership on the macro-level (heads of organizations) and meta-levels (leaders of society) was generally ignored (McCall, 1977) and left to sociology, history, psychoanalysis, and political science. Lewin and Lippitt's (1938) seminal boys' clubs experiment on autocratic and democratic leadership set the paradigm for what followed in social and organizational psychology for the next four decades. But by the 1970's, increasing attention was being directed toward the macro and meta-levels of leadership. In this regard, House (1977) brought charismatic leadership to the attention of organizational psychology. We now frequently read of organizational heads who had a "vision" motivating followers to greater accomplishments and who were able to translate their intentions into realities (Bennis & Nanus, 1985).

Transformational versus Transactional Leadership. Leadership involves both lower and higher order exchanges with followers. A lower order of exchange is represented by a transaction in which followers' needs are met if their performance is as contracted with their leader (Burns, 1978). Leaders and followers enter into such exchanges beginning with a process of negotiation to establish what is being exchanged and whether it is satisfactory (Hollander, Fallon & Edwards, 1977). This leadership depends on the leader's power to reinforce subordinates for their successful completion of the bargain. But a higher order of exchange with followers is also possible. The transformational leader motivates followers to work for transcendental goals and for higher-level, self-actualizing needs instead of immediate materialistic self-interests. An acceleration of effort in followers is seen, along with a higher level of change and development (Burns, 1978).

Until 1980, experimental and survey leadership research tended to be limited to the effects of leadership on lower-order changes, partly for the sake of scientific advancement, and partly because results could be explained in terms of simple cost-benefit exchanges. The more important phenomena of higher-order exchanges and developments caused by leadership did not receive proper attention until the new paradigm of transformational and transactional leadership emerged. The old paradigm of autocratic-democratic leadership and exchange theories of leadership failed to account for the effects of vision, symbolism, and imaging on leader-follower relations.

Burns suggested that transformational leaders also recognize the needs of their followers, but go further than purely transactional leaders by seeking to arouse and satisfy higher-order needs (in terms of Maslow's [1954] need hierarchy). Transformational leaders can move people to transcend their own self-interest for the good of the group, organization or country. Transformational leaders motivate followers and other constituencies to do more than they originally expected or set out to do, as they strive for higher-order outcomes.



SOURCE: *Adapted from Winter (1978).*

Figure 3. An Introduction to Theories and Models of Leadership

Support for the Transformational-Transactional Distinction and Model. Bass (1985) queried 70 South African senior executives as to whether, in their careers, any had experienced a transformational leader as described by Burns. Every one of the executives was able to describe such a leader. The leaders the executives described motivated them to extend themselves, to develop themselves, and to become more innovative. The executives were motivated to emulate their transformational leader. They were led by their transformational leader to higher levels of commitment to the organization as a consequence of a belief in the leader and in themselves. They exerted extra effort for their leader.

The executives' statements and those from the literature on charisma and managerial leadership were sorted by 11 trained judges into transformational and transactional leadership categories. Those statements which all or most of the judges agreed were transformational or transactional were then administered in a survey questionnaire to senior U.S. Army officers who were asked to describe their superior officers. Factor analyses, in this and subsequent studies of business executives and administrators (Bass, 1985; Bass & Avolio, 1990) suggested that the transformational statements could be assigned to four interrelated factors: idealized influence (socialized form of charisma versus personalized), inspirational motivation, intellectual stimulation and individualized consideration. (For convenience, the transformational leadership factors are labeled the "4I's".) They are as follows:

Idealized Influence -- become sources of admiration for followers often functioning as role models. They enhance follower pride, loyalty and confidence and align followers through identification with the leader around a common purpose or vision.

Inspirational Motivation -- articulate in simple ways an appealing vision and provide meaning and a sense of purpose in what needs to be done.

Intellectual Stimulation -- stimulate their followers to view the world from new perspectives; that is, they question old assumptions, beliefs and paradigms resulting in followers' considering new perspectives.

Individualized Consideration -- diagnose and elevate the needs of each of their followers through individualized consideration. They further the development of their followers.

Transactional leadership, which involved an exchange of reward or punishment by the leader for follower compliance, broke into two independent factors which later were further subdivided. They were as follows:

Contingent Reward (CR) -- clarify what needs to be done and exchange psychic and material rewards for services rendered.

Active Management-by-Exception (MBE-A) -- monitor follower performance and take corrective action when deviations from standards occur.

Passive Management-by-Exception (MBE-P) -- only intervene to take corrective action when standards are not met.

Finally, there emerged:
Laissez-Faire Leadership (LF) -- avoid intervening or accepting responsibility for follower actions.

According to a higher-order factor analysis (Bass, 1985) and subsequent research (Bass & Avolio, 1990), the eight factors can be ordered from lowest to highest in activity (4I's, CR, MBE-A, MBE-P, LF). According to empirical findings the eight factors can also be ordered on a second dimension representing what a large body of prior leadership research has termed effectiveness. The 4I's have been found to be most effective as rated by followers, peers and supervisors; contingent reward is next most effective; active management-by-exception, next most effective; passive management-by-exception, less effective; and laissez-faire leadership least effective (or most ineffective) (Bass & Avolio, 1990). Figure 4 displays a general model of the styles on the dimensions of activity, effectiveness and a third dimension of frequency of observation of the style by raters if a leader had a pattern that was optimally effective. In other words, the effective leader exhibits the 4I's to a greater extent, i.e., more frequently, and laissez faire to a very small extent. For instance, the small box labeled LF in the passive ineffective quadrant indicates that for the optimal leader, little laissez-faire behavior is occurring. The large box labeled I's indicates that for the optimal leader much of these active, effective types of behavior occur. Figure 5 displays the profile of what we would consider a suboptimal leader, one who is highly inactive and ineffective. Here, the highest frequencies rated are for the inactive factors of laissez-faire leadership and passively managing-by-exception, thus the large boxes. The lowest frequencies rated are the 4I's, thus the small box.

An additional aspect of contingent leadership behavior that is not specifically reflected in the transformational-transactional model is contingent/noncontingent punishment. Hunt and Schuler (1976) found that contingent reward and punishment behaviors on the part of leaders were associated more with subordinate performance and attitudes than were noncontingent rewards and punishments (Podsakoff, Todor, and Skov, 1982). As such, both contingent and noncontingent rewards and punishments must be considered as part of the full range of leadership behavior. In the present model, these constructs are integrated with contingent reward and management-by-exception (passive and active).

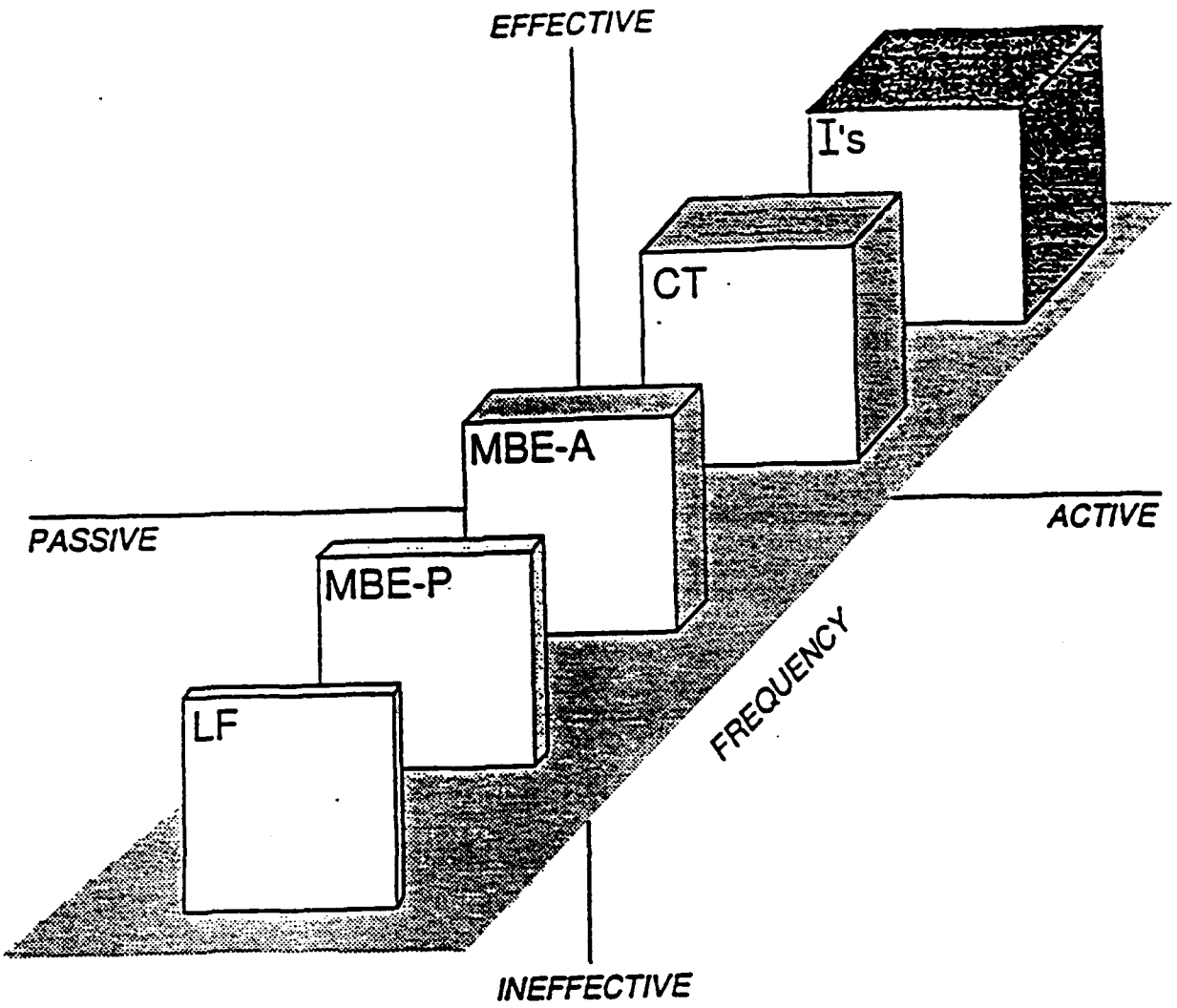
Also relevant to this study, idealized influence will be distinguished in terms of leader behavior (e.g., conveys high ethical standards) and the subsequent attributions made by followers (e.g., is highly trusted). This behavior/attribution distinction is discussed more fully in a later section.

As can be seen, leadership measurement in the present study will incorporate the wealth of knowledge gained from leadership research and theorizing over many years. The transformational-transactional model, with the addition of decision styles, initiation of structure and consideration, and contingent and noncontingent rewards and punishment capture all of the major elements of leadership identified in prior research. (See Table 2.)

At this point, the history of the study of leadership and the rationale for selecting particular dimensions of leader behavior to represent the full range of leadership have been provided. The following section will address more specifically the issues of leadership measurement.

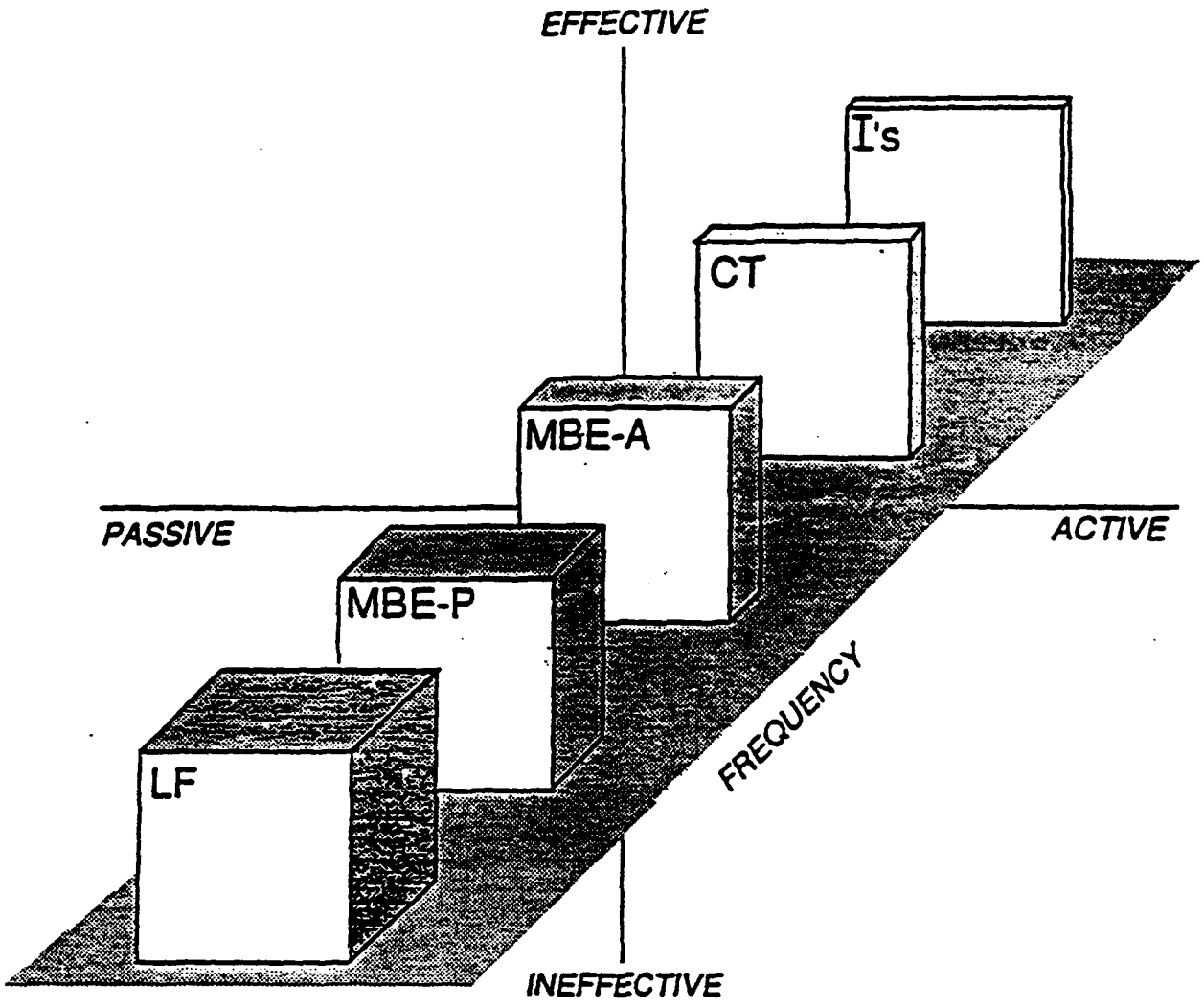
ADDING TO PRIOR LEADERSHIP MEASUREMENT--TRANSFORMATIONAL AND TRANSACTIONAL LEADERSHIP

Paralleling our earlier discussion of leadership models and limitations/problems with measures of leadership, the field of leadership theory and research for many years suffered from what James (1973) referred to as "unmeasured variables problem." Specifically, there were styles, characteristics and behaviors of leaders that differentiated the "best" from the "worst," that were not measured in the battery of leadership instruments



OPTIMAL PROFILE

Figure 4. Optimal Leader Profile
(Source: Avolio & Bass, 1990)



SUB-OPTIMAL PROFILE

Figure 5. Suboptimal Leader Profile
(Source: Avolio & Bass, 1990)

Table 2
Comprehensive Range of Leadership Behavior to be Measured

Transactional Leadership
- Laissez-faire
- Noncontingent Punishment
- Contingent Punishment
- Noncontingent Reward
- Contingent Reward

Transformational Leadership
- Individual Consideration
- Intellectual Stimulation
- Inspirational Behavior
- Charismatic Behavior
- Attributed Charisma

Initiating Structure
Consideration

Management Decision Styles
- Directive
- Persuasive
- Consultative
- Participative
- Delegative
- Nonmanagement

used for nearly four decades. Theoretical models were also deficient in terms of the constructs comprising them. Leadership measures did not tap the range of leadership behaviors, actions and styles that comprised the full range of observable leadership. Simply put, what the "layperson" considered optimal leadership was not reflected in either the leadership models or measures.

The range of constructs tapped by most leadership measures was severely restricted to the most readily observable behaviors, behaviors that primarily represented constructs associated with exchange theories of leadership as discussed earlier (Bass, 1985; Bennis & Nanus, 1985; Tichy & Devanna, 1985). Ironically, the sixty-five taxonomies of leadership reviewed by Fleishman, Zaccaro, Mumford, Korotkin, Levin and Hein (1991), primarily focused on two dimensions or constructs of leadership, i.e., the "people-orientation" of the leader versus the "task-orientation".

The focus of leadership research changed dramatically following Burns' (1978) Pulitzer Prize winning book, which differentiated transactional from transformational leaders. Burns' work affected both the models of leadership being tested and the measures used to assess leadership.

Some Early Discoveries

As described in detail above, in the early 1980s, several groups (i.e., high-level military and industrial leaders) were asked to identify leaders in their present situation or past who had exhibited behaviors representing what Burns (1978) had distinguished as transformational versus transactional leadership. Bass (1985) discovered in early data-gathering sessions that senior executives in both military and industrial organizations had no difficulty identifying someone either in their present job or in the past, who had exhibited behaviors associated with transformational leadership. Ironically, these groups of executive leaders were saying they had observed a broad range of leadership behaviors, which the field of leadership had summarily ignored in its models and measures (Bass, 1985).

The Development of the Multifactor Leadership Questionnaire (MLQ)

The early qualitative work with senior executives described above formed the basis for developing a more systematic tool to assess leadership behaviors that not only represented nontransactional and transactional aspects of leadership, but also transformational. The Multifactor Leadership Questionnaire (Form 4) emerged from this early work as the primary survey used to distinguish transactional from transformational leadership. Other measures developed by Posner and Kouzes (1988) and Sashkin (1988) concentrated on assessing components of transformational leadership, e.g., vision, and did not assess as broad a range as the MLQ.

Early factor analytic results with the MLQ (Form 4) indicated that transformational and transactional leadership could be reliably discriminated by raters, even though the discriminant validity among the transformational leadership factors was low, and there was a relatively high correlation between transformational and transactional contingent reward leadership. The average intercorrelation among the four transformational scales comprising the MLQ has generally been in the .70 - .80 range across numerous samples and organizations. Similarly, contingent reward leadership has correlated in the .40 - .70 range with the respective transformational leadership scales. Further refinements to the MLQ have been undertaken in the middle to latter part of the 1980s, to improve both the convergent and discriminant validity of the survey instrument, resulting in a revised survey labelled the MLQ (Form 5R), that is currently published by Consulting Psychologists Press (see Bass & Avolio, 1990).

Most of the research conducted between 1985 and 1992 used the MLQ (Form 5R) and/or adaptations of the form for different organizational settings (e.g., military or research and development units) cultures and languages (e.g., the MLQ has been translated into German, Chinese, French, Spanish, Arabic, Japanese, Dutch, and Italian) or for basic and applied research projects which resulted in the development of shorter forms (MLQ Form 8), a "pure" behavioral form (MLQ Form 10), and a form used for peer versus subordinate ratings (MLQ Form 6). Currently, Bass and Avolio have attempted to consolidate the various survey forms into a new standard version of the MLQ that will be referred to hereafter as the MLQ (Form 5X).

Over the last 5 to 8 years, Bass, Avolio and their colleagues have been able to observe, in varying degrees, transactional and transformational leadership behavior at virtually all organizational levels (Bass, 1990; Bass & Avolio, 1990; Yammarino & Bass, 1990), across all sectors including private industry (Hater & Bass, 1988; Howell & Avolio, 1991; Ruggiero, 1989), not-for-profit/volunteer organizations (Avolio & Bass, 1992), religious institutions (Onnen, 1987), military (Boyd, 1988; O'Keefe, 1989; Curphy, 1991; Salter, 1989; Yammarino and Bass, 1990) and educational institutions (Cowen, 1990; Koh, 1990). The basic factor structure underlying the model of leadership discussed at the outset of this paper has been confirmed across these varied organizational settings and cultures using a leadership survey translated into different languages.

Recent MLQ Refinements

Recently, a principal components factor analysis of the MLQ (Form 5R) (translated into Italian), with data collected from over 1000 direct reports of 200 senior Italian executives was completed. This data was entered into a hierarchical factor analysis (see Zavala, 1971), in which a series of factor solutions are tested starting with one global factor of leadership to account for all of the variance in leadership ratings, followed by the specification of two factors, three factors and so forth. This analysis revealed several interesting patterns. The hierarchical factor analysis produced the four factors comprising transformational leadership, although as with previous research, the idealized influence and inspirational scales tended to be highly intercorrelated. Next, there were two transactional scales representing what we have referred to above as contingent reward style leadership.

The factors that emerged from the hierarchial solution corroborated those reported by Yammarino and Bass (1990) with a sample of Naval surface fleet officers being evaluated by their immediate subordinates. Specifically, one scale represented the basic level agreements that have been typically associated with contingent reward leadership, e.g., " if you do what we agreed to, then in return you will receive x, y or z". The second scale or factor represented what Yammarino and Bass (1990) referred to as contingent recognition/promises. Items comprising this scale represented a higher-order transaction that takes place when the leader displays recognition for a follower's accomplishment. This type of transaction comes close to representing what we refer to as individualized consideration under the heading of transformational leadership, in that it focuses on recognizing an individual's accomplishments. However, there is no attempt on the leader's part to develop or to elevate the needs of followers as is central to individualized consideration.

What these results indicated is that portions of the contingent reward scale are likely to correlate highly with the transformational scale labelled individualized consideration. By removing those items from the survey, the correlation among the scales comprising transactional and transformational leadership demonstrates higher discriminant validity. This addresses a central criticism of the MLQ by Hunt (1991), Yukl (1989) and Smith and Peterson (1988). Specifically, the MLQ does not adequately discriminate

between transactional and transformational forms of leadership. In fact, what appears to be occurring is that in the "real world" of leadership ratings, you have lower and higher forms, or types of transactions between leaders and followers. If one includes items representing both levels, or more appropriately the full range, then the correlation between transactional contingent reward and transformational leadership is in the .6-.8 range. If one eliminates items representing higher order transactions, which we would not recommend, then the intercorrelation among these scales drops significantly to .2 -.3, indicating adequate discriminate validity (see Howell & Avolio, [1991] below). It is obvious that one must choose between the factorial purity of the instrument and the range of behaviors that one needs to capture when measuring leadership. Turning this threat into an opportunity, the higher-order transactions provide an important conceptual bridge between transformational leadership and the other forms of transactional leadership that dominated the leadership literature for nearly four decades. Leaving out such items would exacerbate the "unmeasured variables problem" presented at the outset of this section.

Results of the hierarchical factor analysis parallel other findings using the MLQ, and may help explain the lack of discriminant validity between transactional contingent reward and transformational leadership, as well as among the transformational scales. Supporting this argument, Koh (1990) used the MLQ (Form 5R) with a large sample of Singaporean principals, each rated by their direct reports. As in earlier research, Koh (1990) confirmed the basic factor structure, finding evidence for a higher-order transformational leadership factor, as well as transactional contingent reward, management-by-exception (active/passive) and laissez-faire or avoidant leadership factors. Koh (1990) was not able to differentiate among the transformational scales and combined them into an overall scale. Koh (1990) noted the problem of a high intercorrelation between transactional contingent reward and transformational leadership. The Koh (1990) study represents a typical pattern that has emerged with research using the MLQ, resulting in more recent refinements discussed below. Specifically, the scales comprising the MLQ are conceptually distinct, however, obtaining adequate convergent and discriminant validity with the survey has posed some problems. Part of the problem is that both forms of leadership are active and effective, thus inflating the correlations among the various scales.

However, theoretical models and the constructs comprising them are often more precise than the measurement instruments available to assess the distinctions specified in those models. Elsewhere, Bass (1974) proposed that the rigorousness of measurement in relation to theory depends on where one is in the time-line of investigating a new theory or model. Rigor and precision are demanded late in the time-line of investigation; early on in it makes sense to be more flexible. Theory is generally more definite, depending more on the adequacy of its assumptions and logic, than the measures available to test the theory. For example, Atoms, X-rays and quarks were discussed and conceptualized long before they could be observed and accurately measured. Theories can evolve and be further refined to better fit the data even if measures lag behind, which they often do. But in the process of evolution, theories lead to the advancement of our understanding and better ways to find confirmatory, reliable and valid measurements. Thus far, this has represented the evolution of transformational leadership theory and the measures used to assess the constructs comprising the model (Bass & Avolio, 1992).

In summary, the original factor structure proposed by Bass (1985) has remained essentially intact over a very broad range of organizations. However, over the last seven years it has become clear that the theoretical structure is more complex than originally proposed.

In a later section we will discuss the factor structure that has emerged from survey research conducted thus far, and then we will expand our

discussion to include other relevant methods and procedures being used to develop the leadership measures that will be incorporated in the current three-year study.

Convergent and Discriminant Validation of the MLQ

Criticisms of the MLQ by Hunt (1991), Smith and Peterson (1988) and Yukl (1989) have centered on several primary issues, each of which either has been addressed or will be addressed in the current research project. One criticism is that the MLQ, unlike earlier surveys such as the LBDQ, is comprised of a "mix of items" representing behaviors, impact and attributions. Each of these respective authors are correct in pointing out this problem, and steps have already been taken to address their concerns. However, before discussing what has been done to improve the psychometric properties of the survey, it is important to address what we think should be measured when assessing leadership.

Leadership is not simply the behaviors one observes via survey instruments. More importantly, we know from a long line of research with the LBDQ, that only measuring leadership behaviors does not necessarily eliminate the impact of general impressions and/or implicit theories on subsequent ratings (see Lord, Binning, Rush & Thomas, 1978; Lord & Maher, 1990; Phillips & Lord, 1986; Rush, Thomas & Lord, 1977). For example, Phillips and Lord (1986) indicated that a one global item measuring leadership has been shown in several independent studies to account for the majority of variance in measures of leadership, such as the LBDQ which is a behaviorally-based instrument. Consequently, simply focusing on behaviors of leaders does not guarantee that one's assessment will be more accurate, nor does this approach capture all facets believed to be relevant to the full range of leadership. For example, House, Spangler and Woycke (1991) as well as Conger and Kanungo (1987) differentiated behavioral forms of charisma (i.e., things the leader does) from those which are attributed, (i.e., reactions followers have to the leader). Conger and Kanungo (1987) operationalized charisma as a relationship between the leader and follower, while also including specific behaviors to represent this construct. The positions presented by these respective authors, and other work in the field, suggest that by ignoring attributed charisma, an important facet of this construct would be overlooked or unmeasured. In fact, the operational definitions of charisma presented by Weber (1947), Shils (1965), House (1977) and other authors necessitate that we measure both attributed and behavioral forms of charisma.

Building on the early criticisms of the MLQ, however, the large percentage of variance accounted for by charisma in the original MLQ (Form 4) research is likely due to the mixture of attributions and behaviors in a single scale. The more general nature of the items comprising the scale has probably resulted in halo effect or error that may have artificially inflated the intercorrelation among the transformational scales. In some sense, the items comprising the charismatic scale were geared towards measuring general impressions regarding the leader, which is consistent with what had been identified by previous authors who had discussed the distinguishing characteristics of charismatic leaders. For example, charismatic leaders are highly trusted by followers, respected and are a source of confidence for others. Of course, such leaders are also typically seen to be intellectually stimulating or individually considerate, which results in the high intercorrelation found among these scales. In effect, the high intercorrelation among these scales may not represent an inflated relationship, to the degree that these factors are positively intercorrelated.

Several steps have been taken, however, to address the concerns raised above regarding the measurement of charisma or as indicated in the full range model, idealized influence. First, studies have been done where the subjects use various methods to evaluate the MLQ items. For example, Bass and Avolio,

(1989) used rankings versus graphic ratings to reduce the intercorrelation among all of the scales comprising the MLQ. By using rankings, raters are forced to differentiate among each of the behaviors and/or characteristics comprising the scales. Bass and Avolio (1989) found that it was possible to reduce significantly the intercorrelations among the transformational leadership scales by half, by simply resorting to a ranking format. In addition, when variance due to leniency effects and general impressions was partialled out, the intercorrelations among the transformational leadership scales were still positive and significant.

Bass and Avolio (1989) also included in their study a measure developed by Lord and his colleagues to assess prototypical attributes of leadership, i.e., leadership at the superordinate level. Subtracting out the variance due to general impressions, leniency effects and implicit theories confirmed the factor structure mentioned earlier, and succeeded in reducing the intercorrelation among the scales.

In subsequent research, alternative strategies have been used to address concerns regarding the mixing of behaviors, impact and attribution items in the MLQ. Over the last several years, Bass & Avolio have collected via individual and group interviews a long list of behaviors and critical incidents representing each of the factors comprising the MLQ. In some cases, managers have identified the leadership factors first, followed by a listing of behaviors, while in other instances behaviors have been used to generate more inclusive categories. Over time, a reliable list of behaviors representing each of the respective transformational and transactional leadership factors has been developed. For example, Table 3 presents a listing of behaviors that have been generated for the four transformational leadership factors. These specific behavioral items have been used in subsequent research reported below.

In 1988, two parallel forms were created that comprised behaviors representing transformational, transactional and nontransactional leadership (i.e., MLQ Forms 10A & 10B). Six content experts allocated the items to the transformational, transactional and nontransactional scales, and determined whether the items represented behaviors, impact or attributions. Only those items that all judges agreed on were included in the final scales. Howell and Avolio (1991) have subsequently used the MLQ (Form 10) in a study of 78 senior managers each rated by their direct reports (N = 322). In their investigation, they evaluated the convergent and discriminant validity of the MLQ scales using a rigorous multivariate analytical tool known as Partial Least Squares Analysis or PLS (See Wold, 1985, for a more detailed description of this procedure). Fornell (1982) indicates that one of the advantages of using PLS in the early stages of theory building is that it allows a test of structural models with latent variables, including items without prespecified scales or factors. In other words, one is able to test relationships among latent variables within the context of the measurement model and/or the nomological network of the latent variables presumed to underlie the model. The scales are formed and tested within the context of the overall measurement model, which is a significant advantage over other procedures which import scales developed in other analyses.

PLS is a combined regression and factor analysis done within the same statistical procedure, in that constructs (or latent variables) in the first stage of analysis are used in regressions that incorporate those constructs (Wold, 1985). It represents one of the "purest" ways to test theoretical models and to construct and validate scales. It also provides appropriate tests to determine whether each of the items representing the latent variables have <u>both</u> convergent and discriminant validity.

Considering previous criticisms of the MLQ regarding its discriminant validity, PLS represented a highly effective procedure for establishing the

Table 3

Transformational Leadership Behaviors

Individualized consideration	
Recognizes individual strengths and weaknesses	Enlarges individual discretion commensurate with ability and needs
Shows interest in the well-being of others	Encourages a two-way exchange of views
Assigns projects based on individual ability and needs	Promotes self-development
Inspirational motivation	
Convinces followers that they have the ability to achieve levels of performance beyond what they felt was possible	Raises expectations by clarifying the challenges
Sets an example for others to strive for	Thinks ahead to take advantage of unforeseen opportunities
Presents an optimistic and attainable view of the future	Provides meaning for actions
Intellectual stimulation	
Encourages followers to reexamine their assumptions	Creates a "readiness" for changes in thinking
Takes past examples and applies to current problems	Creates a "holistic" picture that incorporates different views of a problem
Encourages followers to revisit problems	Puts forth or listens to seemingly foolish ideas
Idealized influence	
Transmits a sense of joint mission and ownership	Addresses crises "head on"
Expresses dedication to followers	Eases group tension in critical times
Appeals to the hopes and desires of followers	Sacrifices self-gain for the gain of others

construct validity of the instrument. This was undertaken in a study reported by Howell and Avolio (1991).

PLS uses as a rule of thumb that one should accept items comprising a particular factor if the item has more explanatory power than error variance (Wold, 1985). This rule of thumb translates into factor loadings that exceed .6 - .7, which is a more strict criterion than the .4 level suggested by Nunnally (1978) using traditional factor analysis. Hence no items were accepted in the final scales if their factor loadings did not exceed the .6 cut-off.

Two criteria were used to examine, on an item-by-item basis, the issue of discriminant validity. One criterion for adequate discriminant validity is that a construct should share more variance with its measures than it shares with other constructs in the model. A second criterion is that no item should load more highly on a construct than the one it is intended to measure. Results reported by Howell and Avolio (1991) indicated that all items included in the final nontransactional, transactional and transformational scales met the criteria specified above, resulting in leadership scales that satisfied a rigorous cut-off for both convergent and discriminant validity.

The items that met the convergent and discriminant validity cut-offs were then used in a predictive validity study whereby ratings collected in year 1 were used to predict unit performance in year 2. Results indicated that transformational leadership strongly and positively predicted unit performance over a one-year period. This study also confirmed the augmentation hypothesis proposed by Bass (1985). Specifically, that transformational leadership augments transactional in predicting the performance of individuals and/or groups over time.

The Howell and Avolio (1991) investigation added to an accumulating body of evidence indicating that the behaviors comprising transformational leadership in particular could be reliably and accurately measured (Bass & Avolio, 1992). Subsequent work is currently underway testing the construct validity of the MLQ (Form 5X) in a variety of different settings. This instrument has been developed based on the work mentioned above, thus it includes items that have been selected by six content experts to represent the factors of leadership mentioned above, as well as the core set of items that were shown by Howell and Avolio (1991) to have sufficient convergent and discriminant validity. In the revised version of the MLQ, items that represent attributed versus behavioral charisma (idealized influence) are also being tested.

Similar versions of the MLQ (Form 8) have already undergone preliminary testing at VMI. Specifically, we have now collected data using the MLQ (Form 8) with 48 second class cadets rating themselves, as well as being rated by their peers and superiors prior to going away to a six week intensive summer camp. Preliminary results have indicated that the scales have adequate reliability and in fact have been shown to have construct validity for predicting the performance of cadets in Army Summer Camp. Specifically, and as we predicted, those cadets that have been most successful in Army Summer Camp were seen by their respective peers (prior to beginning camp) as being more transformational. Additional data are currently being collected from Army ROTC cadets from VMI and from North Georgia College to cross-validate these preliminary results.

The MLQ has also been used at the Air Force Academy by Curphy (1991), producing results similar to those found at VMI. In Curphy's study, MLQ ratings of squad leaders significantly predicted the performance of the cadet squads, i.e., transformational squad leaders directed the higher performing squads.

Pilot Study Army Summer Camp

Selected personal characteristics and peer ratings of transformational leadership ratings were used to predict (in the statistical sense) performance grades in Army Summer Camp and peer ratings of Camp performance. It is important to note that the peer ratings collected prior to Summer Camp and at Summer Camp were generated by independent sources. Results indicated that transformational leadership ratings and self-esteem were positively correlated with performance. (See results presented in Table 4). It is also interesting to note the high correlation between peer ratings of Camp performance and a separate group of peers' ratings of transformational leadership ($r=.59$, $p < .01$). These results suggest that measures of transformational leadership are useful as potential predictors of leadership performance.

Summary

In a relatively short period of time a new theory of leadership has emerged and has been tested in a wide variety of contexts. The basic propositions of this theory and its hypotheses have been supported. As more attention has been directed towards higher forms of leadership, such as charisma and transformational leadership, new and improved measures have evolved to assess these characteristics of leaders. And, as we stated at the outset of this section, we are now getting closer to measuring what many people have described as the ideal characteristics of leaders they have worked with in their past (Bass & Avolio, 1992). The revised version of the MLQ (Form 5X), based upon a number of preliminary analyses, will be used as one measure of transformational and transactional leadership (see Table 2 for a complete listing of the transformational and transactional leadership factors) in this study.

In the following section, we review some of the issues relevant to a multi-method approach for measuring leadership.

LEADERSHIP MEASUREMENT ISSUES

Defining Leader Behavior

Given the many different conceptions of leadership listed earlier, it is not surprising to find that one of the primary concerns in the leadership literature has been the lack of clarity concerning just what we mean by leader behavior. This report began with a list of the differing conceptions of leadership. An additional distinction, relevant to leadership measurement, involved examining the differences between leadership perception, leadership behavior and leadership effectiveness. Uleman (1991) discussed the differences between perception, behavior and effectiveness and the extent to which the three phenomena have been used interchangeably and improperly in defining leadership. Leadership perception refers to judgements, made by those familiar with the leader, that the leader's behavior is "leader like". In other words, the ways in which an individual behaves cause observers to identify that individual as a leader. These perceptions cannot be incorrect because it is the perception that is important. Leadership perceptions are determined by many variables in addition to the leader's behavior, including the leader's appearance, the observer's past experiences, the leader's position, etc. These perceptions while important, tell us little about what the individual identified as the leader actually does.

Leadership effectiveness is also an important construct, and one that will be discussed in depth in future reports on this project. Unfortunately, a number of leadership surveys used in the past have confounded leadership behavior and leadership effectiveness. For instance, an item that reads "my

Table 4

Summer Camp Results--Correlations Among the Predictor and Outcome Measures

	M	SD	SE	MR	TFL	PR	CG
Predictors							
Self-esteem (SE)[a]	45.21	3.34	--				
Moral reasoning (MR)[b]	34.46	11.10	.29*	--			
Transformational Leadership (TFL)[c]	3.46	.69	.21	.10	--		
Outcomes							
Peer ratings of Camp Performance (PR)	113.60	19.06	.29*	.11	.59**	--	
Camp grades (CG)	3.46	1.03	.12	.18	.36*	.76**	--

[a] The maximum score possible was 50.

[b] The average for college students is usually in the 40s.

[c] This measure was scored on a scale from 1 to 5, with a 5 indicating a high level of transformational leadership.

*p<.05

**p<.01

supervisor is extremely dependable" may in some sense be referring to behavior, but it also has an evaluative element. Ultimately it tells us little about what the supervisor did to be seen as dependable. Again, we cannot identify what the leader actually does.

Leadership behaviors refer to concrete acts leaders perform in interaction with others (often subordinates, but also with peers and superiors). Optimally, leadership behaviors should be distinguishable from outcomes, and minimally affected by leadership perceptions. In order to fulfill these requirements, information about leadership behavior must be obtained from multiple sources and must be assessed with multiple methods. Behaviors that are measured with multiple sources and/or methods can be assessed for reliability and construct validity.

Leader Behavior and Effectiveness

In our own research over the last ten years, as well as a growing body of research on the constructs of transformational and transactional leadership (see Bryman, 1992 or Hunt, 1991 for updated reviews), its seems clear that the leadership behaviors and actions that have the greatest impact on individual, group and organizational performance have been the least investigated. For example, Yammarino and Bass (1990) as well as Waldman, Bass and Einstein (1987) have reported results indicating that transformational leadership behaviors are important to performance in military organizations. These results have been corroborated by research in other settings, yet our understanding of how leaders learn and choose to use such behaviors is virtually nonexistent. Thus, one practical benefit of studying the development of such leadership is that we may be able to build in processes to help develop more leaders who display these particular behaviors.

Acquiring Information About Leader Behavior

Once the relevant dimensions of leadership are identified, there are a number of methods that can be used to acquire information about leader behavior. These methods include questionnaires, interviews, observations, and critical incidents. There are three potential sources of information that can be tapped to provide information using the above mentioned methods. These are the leader, individuals familiar with the leader's behavior (i.e., subordinates, peers, superiors), and observers unfamiliar with the leader. The advantages and disadvantages of each of these methods and sources are presented graphically in Figure 6. Each of the sources and methods is described below. Those boxes outlined in bold in the figure represent the source/method combinations that will be used to obtain leadership information in the current study. The methods and sources selected and rationale for their selection will also be discussed.

Methods Available for Assessing Leader Behavior

Questionnaires. One of the only sources published on the subject of leadership measurement is Measures of Leadership (Clark & Clark, 1990). In that source, the primary emphasis was on the design of valid, structured questionnaire instruments. Structured questionnaires have been the most widely used method for collecting data about leadership behavior during the last forty years. Most of these questionnaires have relied upon some type of rating format. The primary advantage of questionnaires is their efficiency. A large amount of information can be obtained in a short amount of time. Surveys can cover a wide number of topics and can be administered to large numbers of individuals in relatively short periods of time. Additionally, with the use of rating formats, the data is easily amenable to statistical analysis. Another advantage of survey methods is the standardization that can be obtained. The same questions are asked using the same wording, frequently under the same conditions. There is no experimenter effect, no questions are

METHODS

SOURCES	Source Biases	QUESTIONNAIRES				INTERVIEWS				OBSERVATIONS				INCIDENTS	
		Checklist		Rating		Structured		Unstructured		Structured		Unstructured			
		STR	WEAK	STR	WEAK	STR	WEAK	STR	WEAK	STR	WEAK	STR	WEAK	STR	WEAK
Self	P S/I E/R	EF AR SC WC AN	CB RP RR	EF AR SC WC	CB RP RR	EF AR	CB TC	QR	TC RC U		CB TC RC EE	QR	TC RC EE	QR F	TC RC EE
Peer	P H/L E/R	EF AR SC WC AN	CB RP RR	EF AR SC WC	CB RP RR	EF AR	CB TC	QR	TC RC U	F	CB TC RC EE	QR	TC RC EE	QR F	TC RC EE
Subordinate	P H/L E/R	EF AR SC WC AN	CB RP RR	EF AR SC WC	CB RP RR	EF AR	CB TC	QR	TC RC U	F	CB TC RC EE	QR	TC RC EE	QR F	TC RC EE
Superior	P H/L E/R	EF AR SC WC AN	CB RP RR	EF AR SC WC	CB RP RR	EF AR	CB TC	QR	TC RC U	F	CB TC RC EE	QR	TC RC EE	QR F	TC RC EE
Unrelated Observer	P E/R									F	CB TC RC EE	QR	TC RC EE		

Figure 6. Illustration of Strengths and Weaknesses of Various Measurement Models.

Figure 6 Key

Source Biases

Prototypes (P)

Halo/Leniency (H/L)

Social Desirability/
Inflation (S/I)

Encoding/Retrieval (E/R)

Methods Strengths (STR)

Qualitative Richness (QR)

Efficient (EF)

Analysis Ready (AR)

Standardized Coverage (SC)

Wide Coverage (WC)

Fidelity/Content Valid (F)

Anonymity Preserved (AN)

Method Weaknesses (WEAK)

Content Bound (CB)

Time-consuming (TC)

Require Coding
(judgement) (RC)

Episodic Error (ER)

Response Patterns (RP)

Unreliable (U)

Recognition, not
Recall (RR)

forgotten or reworded across subjects nor across time. This is particularly advantageous when data is to be collected at numerous points in time. Additionally, questionnaires can often be administered in such a way that the respondent's identity is unknown (anonymity), allowing for more candid responses.

The major shortcoming of this method, however, is the extent to which the information collected is entirely dependent upon the questions asked. Comprehensive and thorough survey development can help alleviate this to some extent, but data collection is still driven by the researcher's theory rather than by the rater's experiences (cf. Adams, Prince, Instone & Rice, 1984). Additional weaknesses of survey methods include the biases that can result from the rater's response patterns, e.g., leniency, or failure to use the entire scale provided (Borman, 1977). Similarly, errors can result from coding, failures of attention, or the inability to read or comprehend what is written. Surveys also require the subject to use recognition forms of memory, rather than recall which may also bias results (Lord & Maher, 1990). Raters can be primed into seeing leader behavior based on their own implicit theories of leadership. For example, when they learn that a leader's group is effective, they may over-attribute the cause of effectiveness to the leader, versus either the followers or the situation (Binning & Lord, 1980).

Interviews. Most leadership theory development as well as leadership survey development begins with interviewing leaders. The reason for this is that interviews provide a qualitative richness that cannot be captured with surveys. When interviews are unstructured, i.e., the questions are open-ended, such as "what does an effective leader do?", or "provide an example of good leadership", the content is provided by the respondent, rather than driven by the interviewer's theories. Both unstructured and structured interviews allow for probing, thus maximizing clarity and detail, and minimizing answers left blank. Additionally, interviews allow the respondent to ask clarifying questions if interview questions are unclear.

The major weakness of unstructured interviews is their unreliability. The major cost of both unstructured and structured interviews is their time-consuming nature. Scheduling as well as questioning require a great deal of time on the part of interviewers. While a questionnaire can be completed by 400 individuals in one hour, 400 interviews could take months to complete. Additionally, once the information is collected, if interviews are unstructured, data must be content analyzed, categorized, or coded in some way. There is also the disadvantage associated with experimenter effects and lack of anonymity which can influence the information obtained.

Observations. Similar to interviews, observations can be conducted in either a structured or unstructured way. The primary advantage of observations is that they are free from many of the response biases that affect questionnaires. This is particularly true when the observer is asked to describe behavior rather than to provide evaluative information about the behavior or its consequences. Observations also provide a richness and content validity in that actual behavior is being observed rather than remembered.

Unstructured observations are useful to get an understanding of the context in which one is working, and the types of interactions that take place. Actual data gathering using an observational method is best done with a structured format (cf. Komaki, Zlotnick & Jensen, 1986). Observations can be done by either participant observers, i.e. those who take part in the activities or situation being observed, or non-participant observers. In either type of observation, the observer can use a structured format, or checklist, to indicate either on an episodic basis or a time sampling basis the types of leader behaviors that are taking place.

Again, a primary disadvantage of observations is their time-consuming nature. Additionally, as Howard (1990) points out, observations are not free from contaminants. Observers, like raters, are subject to errors, and observations still require judgement which is influenced by the rater's experiences. Also, the presence of the observer may cause the leader to act differently than usual. Training raters is particularly relevant to improving the reliability of data gathered by them.

Critical Incidents. Critical incidents are concrete examples of especially noteworthy types of behavior. Usually, the respondent is asked to describe incidents of especially effective or especially ineffective behavior (Flanagan, 1951). The critical incident technique, like unstructured interviews, often allows researchers to get more intimately acquainted with their subject matter in terms of qualitative richness. One contribution of the critical incident approach is that it reveals situation specific aspects of leadership that might otherwise be overlooked.

A number of studies have used the critical incident technique to discover what leaders or managers do to be effective (cf. Yukl, 1981). Critical incidents, once collected, are then often categorized. If not done carefully, the categorization procedure can result in unintended biases (e.g., support for the categorizer's prototypes or theories). Additionally, numerous incidents must be collected to minimize the effect of episodic responding, or the capturing of recent, yet not particularly important incidents as recalled by a respondent.

The leadership logs which were used extensively in the early stages of this project are a type of critical incident methodology. Unlike so many critical incidents studies which were a theoretical in initiation, our logs and their analyses were designed with well-honed theories of leadership and management in mind.

Sources of Information About Leader Behavior

Self-Reports. Fox and Dinur (1988) argued that individuals are often in the best position to validly assess their own abilities and behaviors. One has the most familiarity with one's own inner states and feelings and behaviors, as well as their changes over time. Self-ratings are also less likely than ratings from others to suffer from halo error. However, Podsakoff and Organ (1986) cautioned that self-reports or self-ratings tend to be inflated, suffering from leniency and social desirability biases. Self-ratings also are less accurate than ratings from peers or supervisors when compared to objective criterion measures (e.g., Hough, Keyes, & Dunnette, 1983). Additionally, self-ratings are less highly related to ratings by others (e.g., peers, superiors, subordinates) than peers' superiors' and subordinates' ratings are with one another (Harris & Schaubroeck, 1988).

Regardless of their potential shortcomings, self-ratings of leader behavior provide one perspective of behavior. They are likely to give an understanding of a leader's intentions and what he or she will try to do, although his/her self-motives may be unrealistic and at odds with his follower's ratings. As suggested by Uleman (1991), optimally, multiple sources should be asked to provide information about an individual's behavior, and areas where consistency is found should be considered the most reliable indicators of "true" behavior.

A second reason for the inclusion of self-ratings of behavior concerns the information about the self-rater which can be gleaned by comparing self-ratings to ratings provided by others. Inaccurate self-raters (those with self-ratings that differ greatly from observer ratings) have been found to be poorer performers (cf. Yammarino & Bass, 1990; Atwater & Yammarino, 1992)

Peer Reports. Three literature reviews (Kane & Lawler 1978; Lewin & Zwany, 1976; Reilly & Chao, 1982) have shown that peer assessment is a remarkably reliable and valid measurement device. The typical validity coefficient for peer assessment is around .4, higher than the validity generally obtained with supervisor assessment (cf. Amir, Kovarsky & Sharan, 1970). One explanation advanced for the accuracy of peer reports is social comparison theory, i.e. peers are attentive to the behavior of those in similar positions and of similar status because that information is used in evaluating one's own behavior. The more similar the peers doing the ratings are to the individual being assessed, the more valid the assessments become (Fox, Ben-Nahum & Yinon 1989).

Given the nature of the research environment being studied at VMI, peer assessments should be valid indicators of behavior. Cadets become very familiar with their peers in that they live and work together year-round. Each cadet has numerous opportunities to observe other cadets in leadership roles throughout the year.

Pilot data obtained from cadets going to Army Summer Camp indicated that peer ratings of leader behavior correlated significantly with Camp grades as well as with a different group of peers' ratings of Camp performance. These data (which will be discussed in more detail later) support the conclusion cited above that peer ratings are valid measurement devices.

Superior Reports. Superior evaluations or assessments provide the basis for decisions regarding selection and promotion in most organizations. With few exceptions, superior evaluations are the only source of evaluative information used in decisions regarding promotions of individuals into leadership positions. While superior ratings are valuable, both peer ratings and subordinate ratings have been found to be more useful (i.e., valid) for measuring leader behavior. This is perhaps because a superior's rating of a focal leader is not based upon personal involvement with the leader in "leader-subordinate" interactions. Rather, superiors must base ratings on how they perceive leaders in interactions with subordinates or upon interactions with the leaders in subordinate roles. Regardless, superior ratings are an additional perspective of a leader's behavior.

Research suggests that characteristics of the leader differentially affect superior and subordinate ratings of leaders (Cronbach, 1955). For example, a leader who is conscientious or conforming was rated as more transformational by superiors, while a leader who was intelligent was rated as more transformational by subordinates (Atwater & Yammarino, in press). This suggests that superiors and subordinates are attending to different attributes in the leader when making behavioral assessments of the leader. Consequently it would be useful to obtain both perspectives of leadership.

Subordinate Reports. Subordinate reports are probably the most widely used method researchers use for obtaining information about leadership. While superiors do not interact with leaders as the targets of leader behavior, subordinates are the direct targets of the focal leader's behavior and are likely rating the leader more from first-hand experience. Subordinate reports are particularly important because many leadership behaviors occur of which only the leader and subordinate are aware. Moreover, what the leader does and can do depends considerably on his or her subordinates' attitudes about him or her.

Unrelated Observers. Unrelated observers, (i.e., those individuals who are not in positions superior or subordinate to the ratee) are primarily useful for collecting observational data, either in terms of recording structured or unstructured observations. The advantages of using unrelated observers are to minimize biases that stem from personal involvement with the focal leader, such as halo and leniency. Optimally, to minimize these biases

and maximize the fidelity of observations, observers should be familiar with the observational context, yet not directly related in a subordinate or superior capacity to the focal leader. Komaki, Desselles and Bowman (1989) used trained observers familiar with the context to rate supervisors using a structured observation checklist. A similar procedure will be used in this study.

Sources of Bias in Reported Information

Prototypes. Eden and Leviatan (1975) noted that people have preconceptions or implicit theories about what leaders should do. Subordinates, peers and leaders themselves hold these implicit theories. Implicit theories are cognitive frameworks that individuals use when they encode, process and retrieve information. These implicit theories are important because they affect both behavior and perceptions. Lord, Foti and Phillips (1982) argued that implicit theories reflect the cognitive categories used to distinguish leaders from nonleaders. These categories contain the expected behaviors and attributes that distinguish leaders and nonleaders. What follows from this is that once an individual is cognitively categorized as a leader, a number of attributes and behaviors may be attributed to that individual, regardless of his or her actual behavior, because they fall into the leader category. These implicit theories and prototypes thus can influence a respondent's reports about leader behavior because it becomes difficult to separate actual behavioral episodes from behaviors in one's prototypes when recalling information. The prototypes also affect the ways one reconstructs the past when asked to recall information about a leader (Uleman, 1991).

Encoding and Retrieval. Related to the issue of prototypes, Uleman (1991) discussed the ways in which different individuals categorize information. Different individuals possess different summary categories in their cognitive structure into which observed behaviors are encoded. This means that two individuals who see the same behavior may categorize it differently and store it in memory accordingly. Similarly, different cues trigger different retrievals. People organize information they encode about others not only in terms of the person observed and his or her characteristics, but also in terms of settings, activities, times of day, etc. In summary, when individuals are asked to recall leader behavior, how information was stored and the cues available for its retrieval will influence what is remembered.

Halo and Leniency. Halo error refers to the rater's exaggeration of the intercorrelation among an individual's characteristics or traits (Latham, Wexley & Pursell, 1975). Fox and Dinur (1988) indicated that halo was more problematic when peer ratings were used than when self-ratings were used. Halo is also more problematic when information is ambiguous or inadequate to make the type of rating indicated.

Leniency bias refers to the tendency to describe oneself or others in desirable, yet probably untrue terms. Self-ratings are more subject to leniency errors than are ratings made by others, especially if the rating is to be used for evaluative purposes (Fahr & Dobbins, 1989).

A Multi-Method Approach

There is a virtual consensus among scholars in the leadership field that to be most valid, leadership data about an individual must be obtained from multiple sources, and optimally should be obtained using more than one method (cf. Bass, 1990; Yukl, 1981; Uleman, 1991; Howard, 1990). This is the approach that will be taken in the current three-year study. Specifically, data will be obtained from leaders themselves, peers, subordinates, superiors, and where possible, unrelated observers. The methods used will include each

type of method discussed above. Using multiple methods will allow us to capitalize on the strengths from each method without being constrained by any particular weakness. For example, the use of questionnaires will allow comparability over time and will allow the collection of a large amount of data about a wide range of topics. Augmenting questionnaires with interviews, observations, and critical incidents (leadership logs) will provide a qualitative richness to the data being collected for each target leader, while also minimizing the impact of rater errors on the overall validity and reliability of measures.

While large amounts of data will allow us to capture a great deal of information about leadership, the question arises as to how all of this data will be managed. A number of strategies will be used to summarize the data into its most usable form. First, categorization and classification will be used to summarize the interview and critical incident data. As will be described below, a great deal of work has been done to devise a reliable categorization scheme that captures the full range of leadership behavior to be measured, and impact on followers. Second, a strategy advocated by Uleman (1991) will be incorporated in which both the degree to which a behavior is reported to occur, and the consistency with which various sources report that behavior will be considered as measures of leader behavior. In other words, those individuals who consistently receive high scores on individualized consideration will be scored differently from those who inconsistently receive high scores on that measure. Third, multiple operationalized validation (Howard, Conway & Maxwell, 1985) will be applied. In multiple operationalized validation, each method of measuring a component of leadership will be correlated with a composite criterion which is a linear combination of the standardized scores for the remaining methods used to measure that component. This allows both the creation of composites, as well as an indication of the most valid individual measures, i.e., those that correlate most highly with the criterion.

DEVELOPING MEASURES OF LEADERSHIP

Our primary objective for year 1 of this study was to develop valid measures of leader behavior. Consequently, the work completed in year 1, provides a foundation for assessing leadership behavior in years 2 and 3. Three primary sources have been used to assist us with this objective. First, we have completed an extensive review of prior leadership literature to derive a taxonomy of leadership that broadly represents the types of behaviors one can expect to observe in the most highly effective through to the most highly ineffective leaders. The extent of this work and our conclusions are summarized in a following section.

In addition to other prior leadership research, we have based the development of our leadership measures on our own work conducted over the last 12 years on transformational leadership theory (see Bass, 1985 for an overview of this theory and Bass & Avolio, 1992, for an update of research and conceptual work on the topic). Ongoing work on measures derived from this research has been described in an earlier section of this report.

Finally, we have collected a large amount of data intended to increase the validity of our leadership measures. These data have helped us understand the leadership context, have confirmed and expanded the model and have helped us expand the measures/methods to be used to measure leadership. Specifically, data collected at Army Summer Camp, peer rankings, critical incidents, observations and retrospective survey data have helped us modify our model to capture all relevant dimensions of leadership, and have provided valuable input in the design of leadership surveys. Interviews, critical incidents and retrospective surveys have clarified critical elements of the leadership context. Each of these data collection efforts and its relevance is described below.

Understanding the Leadership Context and Leadership Models in Use—Overview

A number of steps were taken to elucidate the important elements of the context in which leaders function at VMI. These steps included interviews, the collection of critical incidents, observations, surveys, and the administration of the ODQ, which assesses elements or features of the organization's culture that parallel the range of leadership behaviors to be assessed. (See earlier discussion of ODQ). An ongoing assessment of critical incidents throughout the first year has provided us with a general picture of the leadership context and the range of leadership behaviors one can expect to observe within this setting. Additionally, the individual's view of the context around him is affected by the individual's stage of development. Specifically, an individual's cognitive frame-of-reference is linked to his stage of development, which in turn, affects how events are encoded and interpreted. Consequently, if we collect data from only the target individuals, our view of the context will be potentially quite limited based on the individual's stage of development.

To overcome this inherent problem, we have collected critical incident data from other sources who have passed through the same context at earlier points in time, including current upperclassmen, as well as alumni; individuals who operate in the current context, but at different levels from our target sample, such as faculty, staff and officers; and also by observing the context ourselves. Much of this data has been collected using structured interviews and by examining archival data that describe significant features of the context and their origin. (For further information on these archival data, please see Bass (1992)). In combination, we have collected data from multiple sources using multiple measures that provide us with an overall view of the context in which our sample of cadets is developing. Again, these measures help us to systematically code events that will shape development, as well as provide data that will help us determine the construct validity of the model and measures of leadership to be used in the current study.

A retrospective survey measure was also administered late in the academic year to provide an assessment of what was considered by each participant to be the most salient critical leadership events over the course of the first year.

Each of these assessments is described below.

Leadership Context Interviews. Open-ended interviews were conducted with freshmen, upper class cadets, military officers such as the Commandant and the head of the Army ROTC unit, faculty, and VMI alumni. The interviews were analyzed qualitatively. After reading all responses, to each question, categories were created by the principal researchers to capture the major themes. Responses were then placed into the category that best fit the response. Information gleaned from summarizing responses to these interviews has focused our efforts on capturing all relevant aspects of military leadership. A summary of the results from upper class cadet and freshmen, and alumni interviews is provided below:

Upper Class Cadet Interviews (Surveys). A comprehensive set of open-ended questions was presented to 74 upper class cadets for the purpose of securing data on the leadership perceptions of cadets as they mature and progress through four years of college. The questions were presented orally to small groups, and responses were collected in writing. The interviewer discussed the objective of the interview process, summarized the questions, and directed each cadet to complete the survey questions.

The distribution of the upperclass respondents was as follows: First class cadets (seniors) (N = 26, 15 currently held rank in the corps), Second class cadets (juniors) (N = 25, 11 currently held rank), and Third class

cadets (sophomores) (N = 23, 4 currently held rank in the corps). A total of 30 cadets of the 74 currently held rank.

The summation of these data include several comparisons of cadets who held rank in the corps of cadets to cadets who did not hold rank. (Tne rank structure in the corps parallels that in the U.S. Army).

Leadership definitions -- The first question presented asked cadets to provide their definition of the concept of leadership.

The leadership concept that characterized most responses (i.e. 38 responses) involved the control and the influence of others to accomplish a mission (e.g., "ability to influence others to achieve a specific goal"; "leadership is the ability to induce a person, or group of people, to accomplish a goal or set task whereas the person or group attempts this task feeling they are doing this from a personal desire and not just because they were instructed to"; "is the ability to influence individuals in guiding them to attain certain goals"; "leadership is the ability to accomplish a mission"). A number of responses (9) included influence attempts wherein the leader "influenced people to do something that they originally did not want to do."

Other responses (10) focused on the concept of motivation (e.g., "the ability to motivate others through different kinds of reinforcement (positive and constructive) and also to help them see things in a different light"; "the ability to motivate a group of people to accomplish an assigned task or mission"; "the ability to motivate others so they are eventually able to overcome most, if not all, difficult obstacles in everyday life") or the concept of leading-by-example (e.g., "I believe that if I treat them with respect they will do the same thing"; "being able to effectively set an example that other people will respect and follow").

Positive and negative critical incidents -- The second and third questions presented to cadets asked them to describe two positive and two negative incidents of leadership which they had personally observed. A total of 103 positive and 119 negative incidents were reported by the 74 cadets interviewed.

Of the 79 positive incidents that could be clearly placed into one category, the major themes concerned behaviors which involved organization, initiative and taking charge (15 incidents), consideration and concern for others (15 incidents), contingent rewards (12 incidents), acting as a positive role model (12 incidents), and providing instruction/correction (10 incidents).

Of the 119 negative incidents, the major categories included the treatment of freshman cadets (21 incidents), acting as a poor role model (18 incidents) and abuse of rank (26 incidents). The remaining incidents concerned the institution's administrative staff and/or the behavior of Tactical Officers (19 incidents), or could not be placed into one of the categories (35 incidents).

Individuals who have most influenced cadets -- Cadets were asked to list individuals who had influenced them the most during their cadetship and to provide reasons for that choice. Sixty-seven cadets responded to this question. Forty-five responses indicated that other cadets or dykes (mentors) had the greatest influence. Most of those cadets who were mentioned were members of the upper classes, and the remainder were peers.

The major reasons given as to why these cadets were chosen were that they were perceived as effective role models who led by example, that they were involved, effective leaders within the system, or that they had provided

personal assistance in the cadet's academic, physical and psychological adjustment process.

Eighteen responses indicated that members of the faculty, including the ROTC departments, had the greatest influence. The remainder of responses listed a family member.

Personal changes since matriculation -- Cadets were asked how they had changed personally since matriculation. The following 71 responses were reported by cadets: More disciplined, self-confident and higher self-esteem (29 responses); ability to handle stress and manage one's time more effectively (14 responses); more mature (12 responses); more goal-directed (8 responses); and more assertive (8 responses). Fourteen responses, however, reported negative changes as a result of the experience (e.g., "I have obtained a distaste for the military mind, I've lost a little self-confidence"; "I have lost self-esteem, spirit to fight and do good on anything"; "I've learned that no matter where you go you have to deal with political and bureaucratic B.S"; "I care less about what people think of me, and I have become even more of a loner"; "I know what kind of leader I don't want to be"). There was a tendency for these negative changes to be reported by cadets who currently did not hold rank in the corps.

Leadership responsibilities -- Cadets were asked what leadership responsibilities had been placed upon them since they had been at VMI, which positions they had held, what positions they had volunteered for, and to list major leadership responsibilities they held before entering VMI.

As noted earlier 30 of the 74 cadets currently held rank in the corps. Rank and the leadership responsibilities that go with rank were closely associated with class standing. That is, upperclass cadets reported considerably more leadership experiences than second or third classmen. The majority of cadets (53) currently had leadership responsibilities or had held leadership positions since matriculation. These responsibilities or positions included athletic team captains, previous positions in the military rank structure, editorship of the school newspaper, and the like. Forty-one had volunteered for clubs, held a class office, or served as a team captain. The majority of the cadets (55) reported that they had major leadership responsibilities before they entered VMI. There were no differences between cadets who currently held rank and those who did not with respect to leadership responsibilities before they entered VMI.

Freshmen Interviews. Eighteen freshmen were interviewed about leadership using the same format as that described for upper class cadets. These open-ended interviews were also summarized. Freshmen interviewees reported leadership definitions that also centered around such words as the ability to influence, positive motivation, helpful, goal setting, communicating, and guiding. The general notion of what leadership entails and the definition of leadership was quite similar among the freshman and upperclass respondents. There were no respondents who had a negative image with the definition of leadership. The role of leader is to be able to make others follow through positive examples.

Most positive examples of leadership dealt with interpersonal skills and the ability to personalize leadership qualities. Many positive examples used time as an element of caring and showing good leadership skills. Motivation and encouragement were the main illustrations.

Negative incidents of leadership included poor treatment by upper classmen with their ability to scream and tell target cadets to do push-ups or meaningless chores "rather than something useful." An atypical answer was: "A negative critical incident is apathy, when someone blows off responsibility".

Fifteen out of eighteen respondents answered that they had changed positively since their matriculation. Most felt they had become more mature, self-confident, focused, responsible, and strong. The three respondents who responded negatively felt the experience had negative effects. One believed that the experience had made him more tolerant of being insulted. A second felt he had learned to take things less personally, and the third had become angrier and had higher blood pressure.

To summarize, general conclusions can be drawn from these student interviews. Most definitions of leadership, involved behaviors focused on influence, motivation, and leading-by-example. In these definitions, as well as in the items that solicited descriptions of positive and negative critical incidents, one can see dimensions of both transactional and transformational leadership in addition to initiation of structure and consideration. Cadets appeared to be most influenced by the leadership examples demonstrated by other cadets (generally upper classmen), as well as ROTC officers and other members of the faculty.

While rank in the corps of cadets was strongly associated with class standing, the majority of cadets had some leadership responsibilities placed upon them or had volunteered for leadership positions since matriculation. A wide variety of leadership opportunities are offered at VMI, and the majority of cadets take advantage of these opportunities. A sizable percentage of cadets, however, stated that they did not attempt to earn rank in the corps of cadets.

VMI Alumni Interviews/Surveys. Responses from 34 VMI Alumni about leadership development at VMI are summarized below.

1. Most of the Alumni surveyed felt that they had good leadership capabilities, high self-esteem, good moral character, and a high tolerance to stress before entering VMI.

2. Most of the Alumni surveyed knew that they had been challenged by the training and indoctrination system. This brought about two main thoughts: (1) If he can do it, then so can I; and (2) Why am I doing this? In almost all cases the alumni indicated that they wanted to see if they had what it took to meet the challenges presented.

3. Most of the Alumni surveyed felt that the training/education they had received had prepared them well for the rigors of life (overcoming life's obstacles efficiently), but that aspects of isolation made them naive to the corruptions of life (e.g., dishonest people) and socially inept (especially when dealing with women).

4. Most of the surveys were positive in nature. Most of the Alumni surveyed felt that through honor, the indoctrination process, military system, class system, and barracks life, effective leaders were produced.

Observations

Observations of cadet leaders interacting with their subordinates in a number of settings were completed. These observations provided us with a list of situations/events that could be used for future observations of our focal cadets in leadership roles, as well as a better understanding of the types of leadership that occur. A description of the situations identified for future observations is included in Appendix B. These situations were selected because they were constructed in such a way that specific leadership behaviors were required of cadets and directly observable.

Leadership Logs (Critical Incidents)

The leadership logs were designed to capture the leadership experiences the Rats found meaningful. A copy of the log format is included in Appendix C. Each cadet was asked to specifically describe incidents, behaviors and actions that they had directly observed which indicated to them effective or ineffective leadership. The log forms included opportunities for the cadets to describe up to five observations. They were asked a series of questions: What happened? Where did it occur? When did it occur? What was the result? What was your reaction?

Between August 1991 and January 1992, a total of approximately 2800 log entries (observations) were obtained from logs collected at four time periods (August, October, November and January). The first three logs asked cadets to record any significant leadership events that had occurred in the intervening period. The logs obtained in January asked the cadets to comment specifically about leadership displayed by their assigned mentor. These incidents have been categorized. The way the categorization scheme was developed and used is provided in a later section. The categories and sample behaviors for each are provided in Appendix D.

The leader behavior categories used for coding log observations essentially represent the continuum of laissez-faire-transactional-transformational leadership as described by Bass (1985). Additionally, the transactional category has been expanded to include noncontingent reward, noncontingent punishment and contingent punishment as suggested by Podsakoff, Todor, and Skov (1982). The presence or absence of attributed charisma was included in an attempt to distinguish charismatic behaviors on the part of the leader from an emotional reaction on the part of followers. This distinction has been pointed out in the work of Conger and Kanugo (1987). In their words, "charisma must be viewed as an attribution made by followers who observe certain behaviors on the part of the leader" (p. 639). The examples presented in the charismatic behavior category and in the attributed charisma category shown in Appendix D should help clarify this distinction. Again, the form of charisma measured in this study is the more socialized as described by Howell (1988), and which is consistent with what we have referred to earlier as idealized influence.

Initiating structure versus consideration categories were added as supplementary to the nine leadership behavior categories. This was done because in the process of coding leadership logs earlier in the year, it became apparent that the leadership categories did not capture strictly task-oriented behaviors such as providing information about what needs to be done. Additionally, the category among the transformational leadership behaviors concerned with consideration is "individualized" and does not include considerate behavior toward all members of a group.

Management decision styles were included in order to capture the style used by the leader in informational or decision-making interactions with subordinates. While a good deal of association is expected between the decision-styles and leadership behaviors, each categorization will provide unique information as well as allow for the assessment of specific relationships between the two. For example, do leaders who use contingent reward behavior tend to use persuasive, consultative or perhaps directive management styles? What management styles tend to be used by laissez-faire leaders?

The reactions of followers were obtained as part of the leadership log entries. Because leadership behavior derives a large part of its meaning in the reactions it stirs in followers, the impact of behavior was recorded. Follower reactions also provide an indication of the ways particular cadets tend to react to specific leadership behaviors. For instance, some cadets

tend to take noncontingent punishment lightly, and find humor in it. Others find it personally humiliating and find no humor in it. In this sense, follower reactions also provide personal information about the focal cadets.

Leadership Logs; Purpose. The leadership logs and the resultant categorization scheme serve a number of additional purposes.

First, the log entries will provide information about leadership events each cadet found memorable within the first year. This may serve as an important predictor variable.

Second, because leadership behavior, attributed charisma, initiating structure vs. consideration and managerial styles were each categorized for each log entry, we will be able to assess relationships among types of leadership behavior, attributed charisma, and managerial decision styles.

Third, the logs will allow us to compare individuals who later assume particular leadership roles in terms of the experiences they found significant in their first year.

Fourth, the log entries (observations) collected specifically about the mentors will provide us with information about the influence of role models on subsequent leadership development or lack thereof for the focal cadets.

Fifth, the finalized categorization scheme will be used to assess actual leadership behaviors exhibited by our focal cadets when they assume leadership roles in years 2 and 3.

Sixth, the categorization scheme should prove useful for researchers in future attempts to broaden and enhance the study of leadership.

Seventh, analyses of the logs have been informative in terms of the range of leadership behavior we can feasibly measure within the current context.

Leadership Logs; Results. Table 5 presents the results of categorization of 50 randomly selected log entries at each of the four administrations. The reader should keep in mind that five separate categorizations for (1) Leadership Behavior, (2) Attributed Charisma, (3) Initiation Structure/ Consideration, (4) Management Style, and (5) Follower Response were done on each log entry. As can be seen, the usage of various categories changed somewhat over time. This may reflect changes in experiences, or changes in perceptions of critical leadership events. The August administration occurred five days after students arrived. As such, the opportunities to observe leadership behaviors were somewhat limited. Both October and November administrations allowed six weeks of observations to take place. The January administration asked cadets specifically about leadership behaviors of their mentors. Each first-class mentor selects a fourth classmen for whom he is supposed to serve as a teacher/encourager. Somewhat surprisingly, these mentors were observed engaging in a fair amount of contingent punishment. However, they also displayed a high level of individual consideration on a number of occasions, as compared to the general cadet population.

In interpreting the "Can't Say" responses, the reader should know that log coders were encouraged to use the "Can't Say" category when there was insufficient information to make a reliable judgement. "Can't Say" was also used when the behavior did not fit into any category, e.g., the large percentages of "Can't Say" for initiating structure and consideration and for management styles suggest that many observed behaviors do not fall into categories represented by these paradigms.

Leadership Logs; Categorization. Based on the model and the log data collected, a categorization scheme that includes the factors of leadership and

Table 5

Frequencies of Category Usage for Random Samples of 50 Logs for Each Data Collection Period*

CATEGORY	AUGUST #/%	OCTOBER #/%	NOVEMBER #/%	JANUARY (MENTORS) #/%	COMBINED #/%
LEADERSHIP BEHAVIOR					
Laissez Faire	0/0	0/0	0/0	1/.9	1/.2
Noncontingent Punishment	41/30	22/15	40/35	6/6	109/22
Contingent Punishment	20/15	44/31	26/23	31/29	101/20
Noncontingent Reward	0/0	1/.7	0/0	1/.9	2/.4
Contingent Reward	2/1	10/7	5/4	4/4	21/4
Individualized Consideration	29/21	18/13	9/8	35/33	91/18
Intellectual Stimulation	0/0	0/0	0/0	0/0	0/0
Inspirational/ Motivational	13/9	5/4	9/8	3/3	10/2
Charismatic	0/0	0/0	1/.9	1/.9	2/.4
Can't Say	45/33	41/29	27/23	29/27	142/28
ATTRIBUTED CHARISMA					
No	121/88	136/96	104/90	105/98	466/93
Definitely	1/.7	2/1.4	1/.9	0/0	4/.8
Can't Say	25/18	5/3.5	10/9	2/2	42/8
INITIATING STRUCTURE/ CONSIDERATION					
Initiating Structure	2/1	6/4.2	6/5	2/2	16/3
Consideration	29/21	30/21	20/17	53/50	132/26
Both	18/13	15/11	7/6	5/5	45/9
Can't Say	89/65	92/65	83/72	47/44	311/62
MANAGEMENT STYLE					
Directive No Reason Given	14/10	16/11	11/10	3/3	44/9
Directive With Reason Given	16/12	39/27	13/11	25/23	93/19
Persuasive	25/18	16/11	15/13	19/18	75/15
Consultative	3/2	0/0	2/2	0/0	5/1
Participative	8/6	3/2	0/0	0/0	11/2
Delegation	1/.7	0/0	0/0	0/0	1/.2
Can't Say/ Nonmanagement	82/60	67/47	74/64	47/44	270/54
FOLLOWER'S RESPONSE					
Negative	50/36	53/37	53/46	29/27	185/37
Positive	52/38	58/41	26/23	56/52	192/38
Can't Say/ Neutral	40/29	31/22	36/31	22/21	313/26
NUMBER OF OBSERVATIONS	137	142	115	107	501

* Each log may contain from 0 to 5 observations

decision styles mentioned above was developed. (See Appendix D for a description of categories.) Two raters have coded each entry (observation) in the leadership logs. Prior to coding, each rater has undergone extensive training. The training process consists of the following. Each student rater first reviews relevant readings on the model of leadership being examined in the current study. Each rater is also responsible for reviewing the material in Appendix D, entitled, "An Instruction Guide for Scoring Leadership Logs". After reviewing the guide and scoring scheme, any questions the raters have on the material contained in the guide are discussed with the senior researchers.

Next, raters are given a sample of 25 log entries to code with a partner, who is responsible for coding the same log entries. After, the 25 log entries are coded separately, the two raters convene to compute agreement levels prior to discussion, after which they discuss their categorizations and attempt to resolve discrepancies. Agreement levels are again computed based on the team's consensus. Any remaining discrepancies are referred to the senior researchers for resolution.

We have presented in Tables 6 and 7 preliminary findings on the agreement levels among our initial teams of trained raters. Data presented in Table 6 represent initial interrater agreement levels for two teams of raters, each comprised of two members, for a total of 130 observations/incidents. In the first two columns, we calculated agreement levels of the original teams of raters followed in columns three and four with agreement levels based on the switched teams, i.e., one member from each original team was paired to form teams 3 and 4 respectively. Table 7 presents interrater agreement levels (pre and post discussion) for five respective teams of raters, each comprised of two raters. The columns under the heading designated "combined" represent a summary of the aggregated agreement levels for all five teams based on a total of 1454 observations. Samples of log entries were collected from several administrations over time to provide a more representative sample of observations/critical incidents. The switching of coders within teams was done to make sure that consensus was not being forced, resulting in artificially high agreement levels, i.e., that one rater was acquiescing to another. Also, we were concerned that a team of raters would adopt a way of coding that produced reliable results, which were inaccurate. As can be seen in Table 6, agreement levels remained high across the two teams, each independently coding the same log entries. With subsequent raters, we have continually mixed up the groups and have found very little variation in agreement levels. The agreement levels provided in Table 7 represent the percentage of agreement averaged over all log entries coded to date.

As part of the training of raters, we have encouraged them to code behaviors that they were confident fell into a specific category. With other behaviors they were instructed to use the "Can't Say" category. In the early stages of coding log entries, we examined the frequency of usage of this particular category. For a random sample of 50 log entries containing 196 total observations, the percentage use of the "Can't Say" code was as follows: Leadership Behaviors (21%), Attributed Charisma (9%), Initiation of Structure/ Consideration (64%), Management Style (52%) and Follower Reaction (20%). Agreement levels were then recalculated to determine whether previously high agreement levels were simply due to raters coding "Can't Say". Percentage agreement for the coding with and without the "Can't Say" option were as follows: Leadership Behaviors 93% vs. 92%; Attributed Charisma 99% vs. 99; Initiation of Structure/Consideration 96% vs. 90%; Management Style 94% vs. 87; and Follower Response 97% vs. 96.

To continue to maintain these high rates of interrater agreement, the researchers met on a weekly basis with raters to review agreement levels calculated prior to discussion and based on consensus agreement among the two raters. Each rater was encouraged to bring to those meetings any log entries where there were disagreements or questions regarding interpretation.

Table 6
Initial Interrater Agreements on Rating of Logs[1]

	Original Teams		Switched Teams	
Factors:	Team 1	Team 2	Team 3	Team 4
Leadership Behaviors (Charisma through laissez-faire)	75%	91%	86%	92%
Attributed Charisma	91%	93%	89%	99%
Initiation of Structure/ Consideration	95%	100%	88%	96%
Management/Decision Styles	91%	91%	85%	97%
Follower Reactions	100%	93%	90%	98%

[1] Agreement levels are post discussion. Prior to discussion agreement levels were roughly 10-15% lower. These agreement levels were calculated in our first group of trained raters using about 130 observations.

Table 7
Interrater Agreements on Rating of Logs

Factors:	Team 1 Obs. = 728 Pre %	Team 1 Obs. = 728 Post[1] %	Team 2 Obs. = 218 Pre %	Team 2 Obs. = 218 Post[1] %
Leadership Behaviors (Charisma through Laissez-faire)	71.8	97.6	71.0	99.5
Attributed Charisma	87.4	99.3	81.0	100
Initiation of Structure/ Consideration	83.0	98.7	65.0	99.0
Management/ Decision Style	69.8	96.8	64.5	99.5
Follower Reactions	86.4	99.9	86.5	100

Factors:	Team 3 Obs. = 160 Pre %	Team 3 Obs. = 160 Post %	Team 4 Obs. = 63 Pre %	Team 4 Obs. = 63 Post %
Leadership Behaviors (Charisma through Laissez-faire)	71.5	97.5	57.0	94.0
Attributed Charisma	77.0	100	94.0	100
Initiation of Structure/ Consideration	73.5	100	81.0	100
Management/ Decision Style	77.0	100	60.0	100
Follower Reactions	89.0	100	90.0	100

Factors:	Team 5 Obs. = 285 Pre %	Team 5 Obs. = 285 Post %	Combined Obs. = 1454 Pre %	Combined Obs. = 1454 Post %
Leadership Behaviors (Charisma through Laissez-faire)	63.7	98.7	69.4	97.9
Attributed Charisma	86.2	100	85.3	99.6
Initiation of Structure/ Consideration	84.8	99.5	79.5	99.1
Management/ Decision Style	61.3	100	67.7	98.3
Follower Reactions	81.7	100	85.9	100

[1]Pre and post represented the two step process used to derive the codings of the logs. First, each rater coded all of the log observations (pre) and then pairs of raters discussed logs to resolve differences. Percentage of agreement following discussion represents post agreement levels. For example, team 1 coded 728 observations independently (pre), and then discussed those observations to resolve any differences in their ratings (post). The combined category represents the agreements levels across all five teams for a total of 1454 observations.

The agreement levels regarding leadership behaviors and styles prior to any discussion have typically been above 70%, and in some cases are as high as 90 to 100%. After the discussion, the minimum consensus agreement levels have been 85% across all of the categories of leadership, decision styles and follower reactions.

The leadership coding system has resulted in high levels of agreement and the establishment of a framework for qualitatively coding leadership incidents. Ultimately, the relationship between the incidents provided by fourth class cadets during the first year, and what they stated on the Retrospective Leadership Inventory (described below) as being the categories most frequently observed throughout the year can be assessed.

To summarize, the leadership logs provide us with an assessment of the types of leadership and decision styles one can expect to observe in the VMI context. Thus, we can be more confident that the measurement instruments used in years 2 and 3 of the current project are construct valid and indicative of the potential leadership range. The logs also provide scores for each target cadet in terms of the types of leadership models they were exposed to in, perhaps, their most critical year at VMI.

Retrospective Leadership Inventory

A retrospective leadership survey was designed to help capture the global perceptions of our focal cadets' leadership experiences in year 1. A copy of this survey is included in Appendix E. This data has been helpful in providing us with an understanding of the extent to which our categories of leadership are observable at VMI. In fact, each category was acknowledged by the focal cadets as characteristic of the leadership they experienced at least "Once in a While". Data from these retrospective surveys are summarized in Table 8.

Comparison Group

It is important to note, that while we are building information on the current sample and the context in which it functions, data were also collected on a second sample (freshmen at the University of Georgia) focusing on the key prediction variables described earlier. The data collected in this second sample, will provide us with a comparison for assessing change relative to the unique contexts in which these two samples operate. Such comparisons also provide us with the opportunity to assess the impact of repeated measures on participant responses. This is always a critical issue in any developmental research and is being handled by using the comparison sample, by selecting measures that have the highest test-retest reliabilities, and wherever possible, using parallel tests of the same constructs. For example, this year we have measured moral development using a structured survey (referred to as the D.I.T. above) and a clinical interview as described in Appendix F.

Peer Rankings

During the first year, we collected peer rankings of each participant in the current sample. Each freshman cadet was asked to select from a list of all freshman in his company those in the top ten and bottom ten in terms of demonstrated leadership performance. (A company is comprised of approximately 120 cadets, roughly 30 from each of the four classes-freshmen to seniors.) The top and bottom ten were then ranked from best (top to tenth from the top) to least effective (i.e., last to tenth from the bottom). In addition, participants have been evaluated by upperclassmen in terms of their overall leadership ability. To understand the basis for such rankings, raters were asked to describe the dimensions they used to evaluate the best versus the worst leaders. This data provided another estimate of the leadership models in use within this context. A summary of these qualitative results are

Table 8

Summary of Responses to Retrospective Leadership Questionnaire
(Completed by Class of '95, Late April 1992)

Leader Behaviors Experienced During 1st Year at VMI	Mean	Not at all/ Once in a While (Response= 1 or 2)	Sometimes (Response= 3)	Fairly often/ Frequently (Response= 4 or 5)
Charismatic	2.68	47.5%	26.3%	26.1%
Inspirational Motivation	2.56	47.4%	35.4%	17.2%
Intellectual Stimulation	2.33	54.4%	26.7%	15.8%
Individualized Consideration	2.13	68.0%	20.7%	11.3%
Non-Contingent Reward	1.52	84.9%	12.6%	2.5%
Contingent Reward	2.40	60.8%	27.4%	11.7%
Non-Contingent Punishment	3.36	22.9%	30.9%	46.1%
Contingent Punishment	3.73	14.4%	24.6%	61.1%
Laissez-Faire	2.40	56.8%	31.9%	11.2%
Directive- no reason given	3.18	24.3%	38.9%	36.1%
Directive- with reason	2.92	33.04%	42.5%	24.6%
Persuasive	2.57	48.8%	31.9%	19.3%
Delegative	2.73	42.8%	31.2%	26.0%
Participative	2.15	68.3%	21.1%	10.6%
Consultative	1.75	80.7%	13.3%	6.0%
Manipulative	2.30	58.9%	22.1%	18.9%

NOTE: Standard Deviations Range From .83 to 1.2

NOTE: N = 285

provided in Appendix G. Support was provided for the applicability of the transformational/transactional model to the VMI context.

Summary of Development of Measures of Leadership

Beyond our analysis of earlier taxonomies of leadership, including our own and their integration, we have progressed in our understanding of the components comprising a broader range of leadership behavior than has been evaluated in the past. We have tackled the development of our leadership measures from a number of angles discussed earlier in this report. First, we have presented results regarding interviews with cadets and alumni regarding what each target group considers to be effective through to ineffective forms of leadership. Second, we have collected critical incident data from our target sample, identifying leadership behaviors in use within the current context. Preliminary results of this data collection have been presented in this report regarding the analysis of logs. In each instance, we have focused the groups on identifying specific, measurable behaviors that can be used to measure leadership reliably and accurately. We have conducted structured interviews with faculty, staff and senior administrators to extend further the input we have received on leadership behaviors and models. Structured observations have been attempted using checklists of behaviors derived from interviews, surveys and logs to test the validity of the behaviors generated from these multiple sources. Furthermore, we have collected peer rankings of leadership and have asked our target cadets to identify the specific effective and ineffective behaviors that resulted in their choosing a high or low rank. A parallel procedure has been used with upper classmen, who were also asked to rank our focal cadets. We have also used retrospective surveys to corroborate what our target sample felt was the most important leadership events observed over the first year. Finally, we have conducted two pilot studies using a preliminary version of the MLQ. As a result of the data collected we have also developed a behavior checklist and procedure for collecting observational data, paralleling the model of leadership that will be tested in the current investigation.

In sum, based on the multiple sources used to develop the range of leadership constructs to be evaluated in the current study, we are confident that in years 2 and 3, that the measures and sources used to assess leadership will be the most comprehensive used to date in the leadership literature.

DATA COLLECTIONS PLANNED--IMPLEMENTATION OF MEASURES

Figure 6 displays the available methods and sources of leadership information. As noted above, the boxes highlighted in bold indicate the method/source combinations which will be used in this study. For example, questionnaires using a rating format will be administered to leaders, peers, subordinates and superiors. Unstructured interviews will be conducted with a sample of leaders, peers and subordinates. Both structured and unstructured observations will be done by peers and unrelated observers. Critical incidents (leadership logs) will be completed by peers, subordinates and superiors. These methods are discussed in greater detail below.

Survey Measures of Leadership

We have expanded the categories of leadership that we believe should be measured based on data obtained from various sources mentioned above, including our review of current and past leadership research. For example, transformational leadership, now includes measurement of five factors: Attributed Charisma, Behavioral Charisma, Inspirational Motivation, Intellectual Stimulation and Individualized Consideration. (The Idealized Influence factor described earlier has been divided into two components; Attributed and Behavioral Charisma). For transactional leadership there are four factors being measured: Contingent Reward/Promises and Recognition,

Noncontingent Reward, Contingent Punishment and Noncontingent Punishment. Attention to laissez-faire or avoidant leadership is similar to previous measures.

In addition to the factors mentioned above, we have also included the dimensions of initiating structure and consideration, as two additional transactional scales/factors which have repeatedly emerged from research with the LBDQ (Phillips & Lord, 1986). Each of these factors represents behaviors that are not comprised in the standard MLQ survey. Empirically and conceptually, there is some overlap between these scales and those comprising the MLQ, however they are not synonymous. For example, Seltzer and Bass (1990) reported that "consideration" and "individualized consideration" were correlated .69. Consideration represents more of what people refer to as participative approaches to leadership and/or being a "nice guy or gal", concerned with the welfare of the group. Individualized consideration can be directive, it builds on individualization among followers, and subsequently elevates their needs to higher levels. Thus, while the leader who is individually considerate may also be seen as considerate and vice versa, these two constructs are not synonymous and do represent conceptually distinct forms of leadership behavior.

Initiating of structure underlies transactional forms of leadership, but it too is not synonymous with such behaviors. For example, the behaviors comprising the initiation of structure scale do not necessarily represent the level or type of exchanges comprising the MLQ contingent reward scale.

Howell and Frost's (1988) experiment with three styles of leadership--charisma, initiation of structure and consideration--clearly pointed to the need to go beyond initiation of structure and consideration in leadership research. Howell and Frost (1988) found that while initiation of structure and consideration could maintain higher worker productivity, only charismatic leadership (operationalized as idealized influence) could maintain high productivity in the face of conflicting low-productivity norms. Seltzer and Bass (1990) have also shown that while initiation of structure and consideration can partially substitute for transactional contingent reward leadership, much additional variance in effectiveness was accounted for by the inclusion of transactional and transformational leadership.

Adding to the leadership scales mentioned above, we have also included in our assessment strategy the measurement of influence or decision styles. These measures originate in the work on directive versus participative leadership that dominated the leadership literature for three decades, starting with models proposed by Tannenbaum and Schmidt (1958), Blake and Mouton (1964), Hersey and Blanchard (1969), Heller and Yukl (1969), Vroom and Yetton (1973) and Bass and Valenzi (1974). The essential area that we are focusing on with our measures can be summarized with the following question posed by Bass (1990), "Who decides?" At one extreme the leader directs followers with no desire for input from them in the decision-making process. At the other extreme, the leader delegates all responsibility for decision-making to followers. In between these two extremes there are varying levels of participation characterizing the leader's and follower's input in the decision-making process.

Our conceptualization is similar to that of Tannenbaum and Schmidt's (1958), who suggested that directive and participative styles were two halves of the same continuum, with many gradations possible in between. As depicted by Bass (1990), the continuum can be conceived as follows:

Directive--Leader gives orders without explanation and expects compliance. A less extreme form of directedness is accompanied with an explanation or reason for the directive.

Persuasive--The leader accompanies directives with explanations to convince the followers to comply with the directives. Such directives may also be manipulative. At this level, we may also see some bargaining between the leader and follower as to what gets accomplished.

Consultative--The leader seeks out advice from followers to solve a particular problem, but retains the authority to make the decision on his or her own.

Participative--Leader and followers jointly work on a problem and come up with a decision on how to proceed. The leader and followers jointly make the decision.

Delegative--The leader gives the task or problem to followers to solve along with the authority to do so.

This continuum of influence is consistent with conceptualizations offered by Drenth and Koopman (1984), as well as Scandura, Graen and Novak (1986). Also, the measures that we are currently developing to assess these different styles build on the work of Bass and Valenzi (1974), and their conceptualization of varying levels of influence styles.

The Multifactor Leadership Questionnaire (MLQ Form 5X) (described above) will be used to measure transformational and transactional leadership. The Management Styles Inventory (Bass & Valenzi, 1973) will measure managerial decision behavior or styles. Items selected from the Leader Behavior Description Questionnaire (LBDQ) will assess consideration and initiating structure. Items will be adapted from Podsakoff, Todor and Skov (1982) to assess contingent and non-contingent punishment. When combined into one instrument, the above questionnaire will be administered to each focal cadet to describe his own leadership behavior. Four freshmen (subordinates), four upper class (superiors) and four peers in each leader's company will complete surveys about each focal cadet's leadership. Ultimately, each cadet will have 13 surveys completed about his leadership behavior.

In way of summary, the range of leadership behaviors and styles being incorporated into the survey measure of leadership takes advantage of the accumulated research and findings in the leadership field over the last fifty years. The range of factors should help minimize the unmeasured variables problem (noted at the outset of this report), that has characterized previous leadership research.

Qualitative Measures of Leadership--Observations

Observations. Unstructured observations of leadership behavior in a number of situations have been completed. Based on these observations as well as on our model, a behavior checklist has been developed for use in future structured observations (See Appendix H and category descriptions). Additionally, situations have been identified (see Appendix B) in which structured observations can optimally occur in this content. The checklist is designed to be used by trained observers.

Training Observers. Observers will be trained to identify behaviors representative of each leadership behavior and management style category. Training will entail reading category descriptions and behavioral examples followed by discussion with the researchers about any questions or uncertainties. At this point the observers will be asked to code 20 sample behaviors taken from the leadership logs. These examples will have been coded previously by trained coders so the trainee can test himself. If the trainee can accurately code the 20 sample behaviors, he will accompany a trainer (trained by the principal investigators) to code observations. After a trial

period, the length of which will be determined by the senior trainer, the observer will record observations on his own.

Instructions for Observations. Observers will be instructed to identify a third class performing in a leadership role in one of the activities/events previously identified (e.g., Company Room Training; Rat Training). The observer will note the name of the leader and the situation being observed. He will then observe the behavior of the leader for five minutes. After the five-minute observation period, the observer will code the leadership styles, management styles, and follower(s) reaction(s) displayed by the leader during the five-minute time period on a behavior checklist. The observer then begins the process again, observing another leader for five minutes and recording styles etc. The selection of a five minute observation period was based on pretesting done of these various activities/events to determine if this period of time was sufficient to observe leadership behaviors.

Situations for Observation. Two situations will provide particularly useful observational data; Company Room Training and Rat Training. Company Room Training is a situation in which the upper class cadets in each company teach, motivate and discipline the freshman cadets or Rats. A company is comprised of approximately 100 cadets, 20-30 from the freshman sophomore junior and senior classes. The upper class cadets motivate and discipline the freshman cadets. This training occurs 3-4 times a week. Throughout the year the large majority of 3rd class cadets (those in our focal group) will serve as corporals or leaders, and are instrumental in this training. Observations will be made by 1st class cadets (seniors) of the 3rd class assuming leadership roles during Company Training. Since there will likely be differing numbers of observations for different cadets, the data will be aggregated taking number of observations into account.

A second situation, Rat Training (or Rat Challenge, as it is now called), will provide an opportunity to observe a sample of focal cadets working to help freshman develop their physical conditioning. Approximately ten percent of our focal cadets will perform leadership roles during Rat Training. Observations will also take place during ROTC activities and in other situations as described in Appendix D.

Critical Incidents

Critical incidents (leadership logs) will be obtained both from the focal cadets themselves about their own leadership behavior as well as from their subordinates in year 2. Each freshman cadet, will be asked to describe any leadership events he has observed that involved a named cadet. At five different time periods throughout the year, each fourth class cadet will receive two logs each containing space for entries of up to five critical incidents. On each log, a particular cadet in the freshman's company will be identified. The freshmen cadet will describe up to five incidents observed in which that focal cadet was involved. Consequently, each focal cadet will have numerous entries completed by freshmen cadets (10 freshmen cadets completing logs with five possible entries).

Scoring of Observations/Critical Incidents

Given the multi-method nature of leadership measures gathered in this study, the number of data points collected for each subject will vary. Every attempt will be made to compile valid measures of leadership for each cadet, taking the number of entries into account. Log entry and observation scores will be computed by obtaining ratios of entries in a category divided by number of observations. One subject may have a log score of 1/12 for IC and an observation score of 0/1, while another cadet may have a log score of 1/10 and an observation score of 1/3. Certainly, these measures are not perfect and some potential for bias occurs if observational opportunities vary

greatly. However, no attempt to quantify qualitative/observational data will be perfect in this case, since we are studying the processes as they occur rather than creating artificial situations more conducive to unbiased measurement. It is our goal to ultimately have measures of each leadership behavior, aggregated across methods for each individual. For example, a score on individualized consideration (IC) could be computed by averaging survey responses, log entries and observations. It suffices to say that a goal of the institution is to provide all cadets with leadership experience. To that extent, there is an institutional effort to counterbalance the leadership experiences/roles to which a particular cadet is exposed. As our focal cadets move up on the institution, the exposure to leadership roles will become increasingly more differentiated, e.g., not every cadet becomes an officer in the cadet corp. These differences in exposure to leadership roles will be taken into account in our analyses. For example, given the sufficiently large number of cadets, we can compare all cadets within a particular rank to each other with respect to the battery of measures described in this report. Thus, such within group comparisons, as well as between, will help to minimize the potential biases associated with differential exposure to leadership roles.

Aggregating Leadership Measures

Once ratios have been computed for observational and log leadership scores, standardized scores will be computed for survey scores (i.e., self-rating, averaged subordinate ratings, averaged peer ratings and averaged superior ratings), log scores and observational scores. Next the measures will be intercorrelated. If measures show moderate positive intercorrelations, a composite score will be computed. If one type of measure does not correlated with the others, it will be treated independently.

Maximizing Strengths/Minimizing Weaknesses

The multi-method/multi-source approach to be used in this study is designed to maximize methodological strengths and minimize weaknesses in the following ways.

Minimized Source Bias. Data will be collected from all possible sources (e.g., leaders, peers, subordinates, superiors and unrelated observers).

Qualitative Richness/Fidelity. Interviews, observations and critical incidents will capture the qualitative nature of leadership in this setting.

Efficiency/Wide and Standardized Coverage. Questionnaires will provide these strengths.

Anonymity Preserved. Anonymity of the respondent will be preserved in the questionnaire data.

Minimized Content Constraints. The content-bound nature of surveys will be minimized by measuring a wide range of behaviors, by collecting interview, observational, and critical incident data, and by using informational data collected in the design of survey instruments (e.g., interviews, logs, etc.).

Minimized Response Patterns/Unreliability. Data will be inspected for obvious patterns; data will be collected from multiple sources.

Minimized Influence from Recognition Bias. Questionnaires will measure specific behaviors; critical incidents will be collected to supplement questionnaire data.

Effects of Limited Observational Opportunities. As noted above, the choices (self-selection or selection by others) for cadets to assume leadership roles will affect future opportunities for cadets to display

leadership. For example, a cadet who volunteers to be considered for rank in the Corps of Cadets and is selected as Commander of a Company will have a number of opportunities to influence cadets that a cadet without rank will not have. While we recognize the inequalities created for these two types of individuals, we do not see this as a severe limitation of this study for the following reasons.

First, cadets have numerous opportunities to observe one another in informal leadership roles such as among roommates, athletic teams, class activities, etc. These situations provide information about leadership behavior. This is supported by the peer rating data collected from freshmen. Freshmen have NO formal leadership duties, yet they were capable of rating each other's leadership, citing positive and negative leadership examples. Those individuals identified by peers as possessing the greatest leadership capabilities were also very likely to be those selected independently by the upper class cadets to hold 3rd Class Rank (i.e., corporals in their companies). Consequently, we believe peers, subordinates and superiors can assess leadership among cadets who hold rank as well as among those who do not. We do, however, recognize that the opportunities for displaying leadership will likely be greater for those who hold formal leadership positions, and to that extent, we will conduct analyses looking at within and between group comparisons based on breakdowns of the sample such as rank in the corps.

Second, this is a study of leadership development. It is not an experiment. While individual choices or nominations by others to assume leadership positions may cause inequities in the opportunities for observation, these choices and nominations are precisely the types of incidents associated with a cadet's developmental process which we are interested in understanding. Therefore, rather than seeing this as a limitation, we see it as a benefit to examining developmental change.

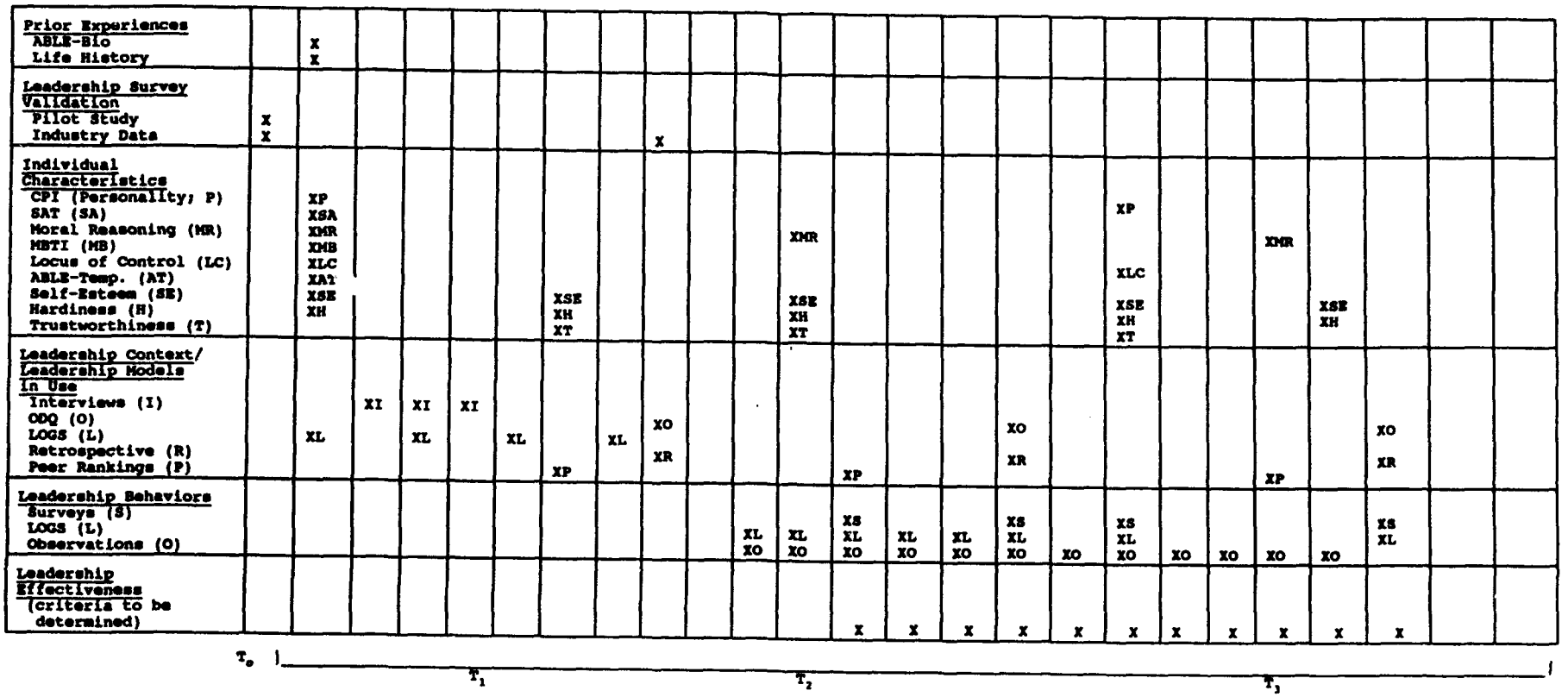
OVERVIEW OF THE LONGITUDINAL DESIGN BEING USED TO STUDY LEADER DEVELOPMENT

The discussion below builds on our earlier comments regarding the assessment of leadership development within a longitudinal framework. In this section, we link the life-span framework for studying leadership development to the measures to be used (see Figures 1 and 7).

In Figure 1 we have provided the conceptual framework that will be used to examine the developmental processes which underlie leadership development and emergence. A more detailed presentation of the methods and measures to be used is delineated in Figure 7. Thus, the model presented in Figure 1 summarizes the overall process associated with individual leadership development including both individual and contextual factors. Figure 7 presents the specific methods and measures that will be used to track development at key points over time. The measures and the point at which they are collected are discussed with reference to the longitudinal model.

The focus of the current study is retrospective with respect to capturing critical life events that have previously impacted on an individual's development and potential to emerge as a leader. In addition, we concentrate on assessing current critical incidents that continue to affect the individual in his development as a leader.

Shown at the far left of Figure 1, there are certain individual characteristics, experiences and prior critical life events that have been shown in prior literature to be associated with the emergence of leadership, i.e, leadership here is operationalized across the full range described earlier in this report. For example, experiencing early exemplary role models



T_o= Prior to Onset of Study
T_1= First Year of Study, August 1991 - Sept. 1992
T_2= Second Year, Sept. 1992 - August 1993
T_3= Third Year, Sept. 1993 - August 1994

Note: Survey administrations are scheduled to be consistent with research design and VMI's schedule of activities.

Figure 7. Longitudinal Design--Data Collection

can result in leaders who have a strong sense of purpose and self-confidence, which may in turn, result in charismatic and visionary leadership. Whereas, experience with early role models that focused more on punitive means of developing an individual may result in leaders who use punitive methods themselves, to control the behaviors of their followers. Consequently, when our target sample entered the first week of orientation, measures assessing a broad range of individual differences were administered. These measures included the CPI, MBTI, ABLE Temperament, Self-Esteem, Hardiness, Trustworthiness, Moral Reasoning, and Locus of Control. In part, these measures represent the end product of developmental experiences to that point in time, and are characteristics that are expected to predict future leadership emergence and development. Our intention is to use these measures to not only track the development of the individual and his leadership potential, but also to predict leadership emergence over time. For example, Howell and Avolio (1992) reported that internal locus of control was a significant predictor of leaders who were rated by their followers as being transformational. The development of one's locus of control, as well as its ability to differentiate leaders of various styles are two key reasons for assessing this construct. A similar basis or rationale exists for our collection of data on measures such as perceived level of autonomy, dominance and affiliation.

As noted above, in addition to collecting these individual difference measures, we were also interested in collecting data on each individual's experiences prior to entering into the institution. Measures used to assess such prior experiences and events included the ABLE biodata survey and the Life History Survey. Unlike many other biographical information blanks, the Life History Survey items were developed and included in the final measure based on their relationship to a conceptual framework of life-span leadership development. Thus, the types of retrospective surveys used here to collect prior life experiences were based on a theoretical framework that targeted the specific types of questions that were included, e.g., we focused on parental styles of punishment and reward because of the linkages that have been established between such styles and later leadership emergence and development. The conceptual framework underlying the biographical surveys also responds to a common criticism of biographical information blanks (BIBs), which suggests that such measures and their development, are limited by "dustbowl empiricism".

Each retrospective BIB contains clusters of items that represent early to more recent life experiences/events that are expected to influence the likelihood of certain target individuals emerging as leaders. For example, we have already indicated that individuals who had parents who were both challenging and at the same time supportive, were more likely to emerge as transformational as opposed to transactional leaders (see Avolio & Gibbons, 1988). Both life history surveys contain items that have been shown through previous research to be related to leadership emergence and development.

In line with the model of development presented in Figure 1, the collection of these individual difference measures early on in the target sample's experience in college, provides us with a comprehensive database to classify individuals according to characteristics shown in prior literature to be indicators of leadership potential, development and emergence. These measures will provide the basis for determining the profile characteristics which are considered construct valid for predicting leadership emergence at the end of year 1 (early prediction), year 2 (intermediate) and year 3 (long-term).

To summarize, our intention is to link early life events to current characteristics of the leader, and in turn to explain how target cadets develop as a consequence of those experiences and their individual characteristics. The underlying assumption regarding development is that

individuals enter the institution more or less prepared psychologically and physically, and therefore will exhibit different developmental trajectories as a consequence of these different profiles.

Referring to Figure 7, we have indicated the range of individual difference measures that are currently being collected to assess both prior life experiences, e.g., ABLE-Bio & Life History, and current individual characteristics, e.g., Locus of Control, Self-Esteem and Hardiness. We also note in Figure 2 which measures will be repeated over time to assess changes in the individual's personal characteristics, as well as his behavior. These measures are used to track development as represented by the individual's personality, temperament, moral reasoning, and so forth. These measures were selected for multiple testing because we expect them to be sensitive to changes in the individual that will later predict leadership development and emergence.

Because cadets at VMI are not a random sample of college students and because their experiences at VMI are tailored toward leadership development, we have also collected baseline measures of individual personal characteristics from male students at a non-military college in the South. These comparison students will also be tracked for four years. This data will provide us with control data in the sense that we can assess change attributable to spending four years in college. For example, if we find that cadets mature in terms of moral reasoning, to what extent might this same maturity be expected in a civilian environment. This data also will allow us to determine the extent to which our focal cadets are comparable in terms of personal characteristics to non-military college students upon admission. This will help us assess the generalizability of our results.

Contextual Events/Experiences

Moving to the top of Figure 1, our focus here is on describing events that occur after entry into college that shape the perspective of individuals in our target sample, and in turn their leadership development. In this regard, we have assessed each cadet's interpretation of critical events surrounding him which have impacted on his perspective of leadership. Specifically, during the first week of the current study, cadets were asked to describe their observations of critical incidents of leadership behaviors that had been demonstrated by other cadets in his class, upperclassmen and/or faculty and staff. The basic premise here is that each cadet, based on his prior experiences and personal characteristics will view leadership experienced within the current context through a variety of lenses. At the most general level of analysis, we were interested in simply knowing what range of leadership models each cadet was exposed to during their orientation into the institution. Secondly, we have also focused on each cadet's reaction to specific events/incidents, which we are now relating to the individual characteristics/profile mentioned above.

Throughout the first six months of the current study we have periodically collected critical incident/observations from each target cadet regarding his respective experiences with various leadership styles (See Figure 7). Our early focus was on all other cadets and/or staff at the institution. However, we have also collected data on each cadet's experience with his respective mentor. At the end of the first six months, we also asked each cadet to provide us with a retrospective account of the leadership styles he had observed from late August through February. Indeed, throughout the entire first year we have systematically collected personal observations from our target cadets with respect to the critical incidents of leadership they've observed. As noted in Figure 7, such critical incident logs have been collected repeatedly over the course of the first year of the current study.

The qualitative log data which has now been coded for each cadet represents each cadet's view of the most critical leadership experiences he was exposed to during the first six months in college. Thus for each cadet we can provide a profile of leadership events he was exposed to, while also being able to determine the institutional model of leadership by aggregating data across all cadets. As noted earlier in this report, this data can be used in part, to determine whether the leadership factors we intend to measure are in fact relevant to the actual behaviors one would expect to observe in the current context.

The critical incident data collected via logs has also been supplemented by interview data collected from a representative sample of the target group of cadets, as well as upperclassmen. This data was collected to confirm the aggregated log data at the institutional level. Specifically, we were interested in examining the institutional model of leadership in use within this context with respect to its range and how frequently certain styles of leadership can be observed. Therefore, the purpose of these interviews was to confirm the model of leadership that emerged from the data collected in the logs.

Paralleling the data that has been collected to assess leadership styles at the institutional level, we have also obtained data regarding the leadership culture, using a survey that taps the range of leader behaviors described earlier in this report (refer to the discussion of the Organizational Description Questionnaire or ODQ developed by Bass and Avolio, 1991). Similar to log data, and as shown in Figure 7, data regarding the target cadet's perception of the culture will be collected at three points in time to track their views of the culture as they move from freshmen to seniors within the institution and are, perhaps, exposed to different role models at different levels.

To summarize, a great deal of emphasis has been placed on assessing each target cadet's view of the context during the early phases of his development within the institution. Based on prior literature, we expect that these early experiences and role models will affect the type of leadership behavior and style exhibited by the target cadets in years 2 and 3.

Developmental Outcomes

In Figure 1, we show that certain characteristics of the target individual may be affected by the experiences he is exposed in both the current and in previous contexts. Development of the individual is a function of his base characteristics interacting with current experiences, shown as a dialectic process in Figure 1. At the outset of the current study, we have targeted several key variables that we intend to track over time via repeated measures, that we expect to be significant indicators of subsequent leadership development. As indicated above, we are reassessing individual levels of moral development, self-esteem, and key personality characteristics to determine whether there are any changes on these characteristics over time. We also intend to link the degree of change and the absolute level on each of these factors to leadership emergence and development. These key marker variables will be tracked over time to assess individual change and development as noted in Figure 7.

Leadership Behavior, Development, and Emergence

The primary focus of the current study is to explain how leaders develop using a comprehensive range of leadership styles to classify individuals. During the first year of the current study we have collected data via critical incident logs, interviews and retrospective surveys to assess the models in use within the current context. Also, our intent has been to identify areas/events where we would be able to reliably observe leadership behavior.

Specifically, our objective is to identify certain core activities and tasks to which all cadets are exposed. This common set of events would then allow us to observe the leadership behavior of our target cadets in an environment analogous to an assessment center, e.g., cadets working in teams on an unstructured problem where each cadet is given the opportunity to "formally" lead the group.

We have collected peer ratings within the first six months of the current study, and at two separate points in time, to assess the early leadership behavior of the target cadets prior to their being formally assigned to various leadership roles within the institution. These assessments provide us with an opportunity to link those cadets who are seen by peers as informal leaders in their groups, to subsequent subordinate evaluations of leadership to be collected in years 2 and 3 of the current study. As noted in Figure 7, we will collect a variety of leadership measures in years 2 and 3 based on the model of leadership and measures developed in year 1. Also, because perceptions likely vary from different vantage points and from different degrees of exposure to the target leader, we intend to collect such leadership measures from multiple sources including followers, peers, self, superiors and external observers.

A Concurrent Validation of the MLQ Leadership Survey

While collecting data on our target group in year 1, we have undertaken a concurrent validation study of the leadership survey that we intend to use in years 2 and 3, revised and modified based on results from this ongoing validation work. Preliminary findings with the MLQ survey indicated that the scales were both reliable and construct valid for predicting those leaders who performed best in a six week intensive simulation where all cadets involved are given equal opportunity to lead. These results will be confirmed in the current year with a larger sample of cadets who have now attended summer camp, and who were rated on the MLQ prior to attending camp.

SUMMARY

In summary, the methods, sources and constructs incorporated in the current project go a long way towards addressing the criticisms of measures such as the MLQ in particular, as well as the other criticisms/problems with leadership measures reviewed in this report. (A summary of the sources and methods used to obtain contextual, individual and leadership data is summarized in Table 9). By using a broader range to classify leadership behaviors, attributes and impact, coupled with multiple methods and sources, improved leadership measurement will result. To our knowledge, no one study has obtained the range of data, across sources, methods and time that will be collected in this study. By the completion of year 2 of this project we should have valid and reliable measures of leadership on each focal cadet in our sample. This will provide the necessary groundwork for the continuation of our study of leadership development and predicting effectiveness into year 3.

Table 9

Measures of Organizational and Individual Variables Obtained as of August 1992

VMI Context		Early Life Experiences		Personal Characteristics		Leadership Experience	
Measure	Source	Measure	Source	Measure	Source	Measure	Source
1. Organization Description Questionnaire	Freshmen	Life History	Freshmen	SAT	All Classes	Leadership Logs	Freshmen
				California Personality Inventory	All Classes		
2. Interviews	Freshmen Upper Class Officers Faculty Alumni	ABLE Biodata	Freshmen	MBTI	All Classes	Interviews	Freshmen Upper Class
				ABLE Temperment	Freshmen		
3. Observations	All classes			Self-esteem	Freshmen Comparison Group	Peer Rankings	Freshmen
				Hardiness	Freshmen Comparison Group	Retrospective Leadership Survey	Freshmen
				Trustworthiness	Freshmen Comparison Group		
				Moral Reasoning (DIT)	Freshmen Comparison Group		
				Moral Reasoning Interviews	Freshmen Upper Class		
				Rotter I/E Locus of Control	All Classes		
				Self-Efficacy	Freshmen		

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APPENDIX A

LIFE HISTORY ASSESSMENT QUESTIONNAIRE

YOUR I.D. NUMBER: _____

LIFE HISTORY ASSESSMENT QUESTIONNAIRE

Bass, B.M. & Avolio, B.J.

Instructions: This questionnaire examines your family and educational history. You will answer this questionnaire using items 1 - 94 on the attached blue grid sheet. Please be sure to mark only one (1) response for each question. If you cannot recall the information being requested in a particular item, or you are uncomfortable answering the question, leave the item blank on your grid sheet and proceed to the next question. Choose the answer that best represents your situation.

There are several questions on this survey that ask you to provide a written response. Please do so and return the survey with the grid sheet.

MARK ALL RESPONSES ON THE GRID SHEET WITH A NUMBER 2 PENCIL

1. In how many different cities, towns, or townships have you lived?
   A. 1 to 3.
   B. 4 to 6.
   C. 7 to 9.
   D. 10 to 12.
   E. 13 or more.

2. To what extent do you read daily newspapers?
   A. Read one or more newspapers thoroughly each day.
   B. Read parts of more than one newspaper each day.
   C. Read parts of a newspaper each day.
   D. Read parts of one newspaper two or three times per week.
   E. Seldom or never read a newspaper.

3. In what area do you feel you have made your major accomplishment, outside of school?
   A. Family activities.
   B. Community activities.
   C. Development of yourself.
   D. Development of your social interests/activities.
   E. Something else. Please specify here: _____

4. Which of the following most nearly fits your pattern of reading?
   A. You devote much time to reading of all kinds including that related to your school work.
   B. You devote considerable time to reading in areas directly related to school, but little time reading other things.
   C. You find that you have little time for reading although you read as much as you can.
   D. About the only reading you do is the newspaper and occasionally a few magazines.
   E. You usually have more important things to do than read.

5. On average, how much of your time is devoted to formal religious activity?
   A. 10 or more hours a week.
   B. 7 to 10 hours per week.
   C. 4 to 6 hours per week.
   D. 1 to 3 hours per week.
   E. 0 hours per week.

6. In recent years, has your health been:
   A. Excellent.
   B. Good.
   C. Fair.
   D. Poor.
   E. Sometimes good and sometimes poor.

7. What have you done (or would you most probably do) if a fellow student had personal habits which you disliked?
   A. Be friendly and hope he or she would improve.
   B. Ask him/her directly to stop, if he/she were annoying you.
   C. Try to help him/her to diminish the bad habits by pointing them out to him/her.
   D. Ignore him/her and his/her habits as much as possible.
   E. Try to get one of you transferred.

8. In general, what has been your experience with people?
   A. There is a lot of good in all people.
   B. There is some good in most people.
   C. People are about as good as they have to be.
   D. A surprising number of people are not very good.
   E. Most people are just no good.

9. Which of the following best describes your feelings towards most people?
   A. I have very few close friends. Generally I do not meet people and make friends easily.
   B. I have a few close friends. Generally, I meet people and make friends, fairly easily although probably not as easily as most people.
   C. I probably have a little less than the average number of close friends since generally I do not have the time or the interest to spend time with them.
   D. I have about the average number of close friends, and I meet people and make friends about as well as most people.
   E. I have many close friends, and I try to take an interest in most of them. I meet people and make friends easier than most people.

10. When someone around you is disturbed about a personal problem, which one of the following do you usually do?
   A. Leave him/her alone and avoid the subject.
   B. Sympathize with him/her.
   C. Encourage him/her to talk it out with you.
   D. Offer advice and suggest a possible solution.
   E. Something else. Please specify here: _____

11. Which one of these characteristics bothers you most in people you meet?
   A. Bragging.
   B. Shyness.
   C. Lack of initiative.
   D. Trying to get something for nothing.
   E. Being very competitive.

12. How often do people tell you their troubles?
   A. Never.
   B. Once in a while.
   C. Sometimes.
   D. Fairly often.
   E. Frequently, if not always.

13. Before you were 18 years of age, how many times did your family move from one house to another?
    A. Never.
    B. Once.
    C. Two or three times.
    D. Four or five times.
    E. You moved every year or so.

14. In what section of town did your family live longest while you were growing up?
    A. Lived in one of the most exclusive sections of town.
    B. Lived in a good but not the best section.
    C. Lived in an average section of town.
    D. Lived in one of the poorer sections of town.
    E. Lived in a rural area outside of town.

15. During most of the time before you were 18, with whom did you live?
    A. Both parents.
    B. One parent.
    C. A relative
    D. Foster parents or non-relatives.
    E. In a home or institution.

16. With how many brothers or sisters did you grow up?
    A. One or more brother(s), no sisters.
    B. One or more sister(s), no brothers.
    C. Both brother(s) and sister(s).
    D. None. I am an only child.

17. With regard to your brothers or sisters you are the:
    A. Oldest.
    B. Youngest.
    C. In the middle.

18. How would you describe your father?
    A. As a well-intentioned but overly-possessive person as far as you were concerned.
    B. As a rather formal sort of person.
    C. As a person with other interests that seemed to detract from his attention to the family.
    D. As a rather flighty and unpredictable person.
    E. None of the above apply. Fill in E and go to item 19.

<u>If your answer to question #18 was A,B,C, or D, skip question #19 and go to question #20. if your answer to question #18 was E, please complete question #19.</u>

19. How would you describe your father? (Answer this question only if you responded "E" to question #18.)
    A. As a very consistent person, in other words, you could count on him to meet similar situations always in the same way.
    B. As an easy-going person who took problems and situations in stride.
    C. As a moody person.
    D. Other. Please specify here: _____

20. How much education did your father have?
    A Grade school or less.
    B. High school.
    C. Some college, but did not graduate; or earned a two-year degree.
    D. 4-year college degree.
    E. A graduate degree (M.A., M.S., Ph.D., etc.).

21. What category best represents your father's main occupation/career track?
    A. Unskilled work.
    B. Semi-skilled or skilled work.
    C. Sales work.
    D. Office clerical work.
    E. None of the above apply. Fill in E and go to item 22.

<u>If your answer to question #21 was A,B,C, or D, skip questions #22 and #23 and go to question #24. If your answer to question #21 was E, please complete question #22.</u>

22. What category best represents your father's main occupation/career track? (Answer this question only if you responded "E" to question #21.)
    A. Military career.
    B. Supervisory work.
    C Scientist/subprofessional (draftsman, geologist, geophysicists, engineer, chemist, etc.).
    D. Professional (lawyer, physician, teacher, etc.).
    E. Other. Please specify here: _____.

23. If you answered Military Career to question #22, what branch of the active military did your father serve in? (Otherwise, <u>skip</u> question #23 and go to question #24.)
    A. Navy
    B. Army
    C. Airforce
    D. Marines
    E. Other: (Coast Guard, Reserves, etc.) Please specify: _____ _____.

24. While in elementary and/or high school how often did your father appear to take an interest in how you were doing in your classes?
    A. Not at all.
    B. Once in a while.
    C. Sometimes.
    D. Fairly often.
    E. Frequently, if not always.

25. Which one of the following was most characteristic of your father while you were growing up?
    A. He was a strict person with strong moral convictions.
    B. He was a strict person, but not highly moralistic.
    C. He was a person of average morals and strictness.
    D. He was a person who was forced to modify his convictions.
    E. He was a person not concerned about moral issues or convictions.

26. What category best represents your mother's main occupation?
    A. Unskilled work.
    B. Semi-skilled or skilled work.
    C. Sales work.
    D. Office clerical work.
    E. None of the above apply. Fill in E and go to item 27.

If your answer to question #26 was A,B,C, or D, skip questions #27, #28 and #29 and go to question #30. If your answer to question #26 was E, please complete question #27. Complete questions #28 and #29 only if your answer to #27 is Military Career.

27. What was your mother's main occupation? (Answer this question only if you responded "E" to question #26.)
    A. Military career.
    B. Homemaker
    C. Scientist/subprofessional (draftsman, geologist, geophysicists, engineer, chemist, etc.).
    D. Professional (lawyer, physician, teacher, etc.).
    E. Other. Please specify here: _____

28. If you answered Military Career to question #27, what branch of the active military did your mother serve in?
    A. Navy.
    B. Army.
    C. Airforce.
    D. Marines.
    E. Other: (Coast Guard, Reserves, etc.) Please specify: _____ _____.

29. If you answered Military Career to question #27, Did you live on a military base while growing up?
    A. Yes.
    B. No.

    If "yes," for how Long?_____.

    Location or location(s):_____.

30. How would you describe your mother?
    A. As a well-intentioned but overly-possessive person as far as you were concerned.
    B. As a rather formal sort of person.
    C. As a person with other interests that seemed to detract from her attention to the family.
    D. As a rather flighty and unpredictable person.
    E. None of the above apply. Fill in E and go to item 31.

If your answer to question #30 was A,B,C,or D, skip question #31 and go to question #32. If your answer to question #30 was E, please complete question #31.

31. How would you describe your mother? (Answer this question only if you responded "E" to question #30.)
    A. As a very consistent person, in other words, you could count on her to meet similar situations always in the same way.
    B. As an easy-going person who took problems and situations in stride.
    C. As a moody person.
    D. Other. Please specify here: _____.

32. Which one of the following was most characteristic of your mother while you were growing up?
    A. She was a strict person with strong moral convictions.
    B. She was a strict person, but not highly moralistic.
    C. She was a person of average morals and strictness.
    D. She was a person who was forced to modify her convictions.
    E. She was a person not concerned about moral issues or convictions.

33. How much independence do you feel your parents allowed you while in high school?
    A. Practically none.
    B. About as much as the rest of your friends.
    C. Typically as much as you wanted, with some restrictions.
    D. Practically unlimited.

34. How did your parents feel on the subject of your career?
    A. Had very strong feelings and outlined what they wanted you to do.
    B. Were interested and helped you outline what you wanted to do.
    C. Were interested, but did not know what you wanted to do.
    D. Showed little or no interest.
    E. Actively opposed what you wanted to do.

35. When you were growing up, about how many books were around the house?
    A. A large library.
    B. Several bookcases full.
    C. One bookcase full.
    D. A few books.
    E. There were no books.

36. Was your mother employed and away from home, at least part-time, while you were growing up?
    A. No.
    B. Yes, she started before you were 5 years old.
    C. Yes, she started between your ages 6 and 12.
    D. Yes, she started between your ages 13 and 18.
    E. Yes, but she started after you were 18 years old.

37. Was your father employed and away from home, at least part-time, while you were growing up?
    A. No.
    B. Yes, he started before you were 5 years old.
    C. Yes, he started between your ages 6 and 12.
    D. Yes, he started between your ages 13 and 18.
    E. Yes, but he started after you were 18 years old.

38. Who brought you up?
   A. Both parents.
   B. Single parent - mother.
   C. Single parent - father.
   D. Some one other than a parent.

39. When you were a child and broke something trying to see "what makes it tick" what did your parents do?
   A. Usually said little or nothing about it.
   B. Became angry and punished you.
   C. Tried to explain to you that it was wrong, becoming angry only in certain instances.
   D. Tried to help you find the answers you were looking for.

40. During most of your school years, were your needs:
   A. Well provided for.
   B. Satisfactorily provided for.
   C. Somewhat meagerly provided for but tolerable.
   D. Unsatisfied most of the time.
   E. Suffered intolerably.

41. Looking back on the days you spent in your family or childhood home, how happy were they?
   A. Very happy.
   B. Quite happy most of the time.
   C. Neither very happy nor very unhappy.
   D. A little on the unhappy side.
   E. Very unhappy.

42. What kind of upbringing did you have?
   A. Strict but fair.
   B. Strict but unfair.
   C. Inconsistent.
   D. Not very strict.
   E. Almost no discipline.

43. For commendable behavior as a child, how were you usually rewarded?
   A. Praised.
   B. Given a present.
   C. Allowed a special privilege.
   D. Given no special attention.
   E. Something else. Please specify here: _____.

44. If you were raised by both of your parents, which one did the disciplining?
   A. Only my father.
   B. Only my mother.
   C. Both equally.
   D. More my father than mother.
   E. More my mother than father.

45. As a child, to whom did you confide in most?
   A. Your father.
   B. Your mother.
   C. A brother or sister.
   D. Some other person.
   E. You usually confided in no one.

46. How do you feel about the achievements of your parents?
   A. Very superior to those of most parents.
   B. Greater than those of most parents.
   C. Equal to those of most parents.
   D. Somewhat less than most parents.
   E. Very inferior compared with most parents.

47. How were you usually punished as a child?
   A. Punished physically.
   B. Reprimanded verbally, or deprived of something.
   C. Sent to your room or some other location for time out.
   D. Told how you should have acted.
   E. Told not to do it again, but seldom punished.

48. Who influenced your conduct most when you were a child?
   A. Your father.
   B. Your mother.
   C. A brother.
   D. A sister.
   E. Someone else. Please specify here: _____.

49. When you were in high school, how old were most of your friends?
   A. They were usually younger than you.
   B. They were about your age.
   C. They were usually older than you.
   D. They were mostly adults.
   E. You did not have an opportunity to make many friends (work, isolated area, you moved too often, etc.).

50. What type of reading, other than school work, did you tend to do most between the ages of 12 and 18?
   A. Adventure stories.
   B. Biography or historical novels.
   C. Books about science.
   D. Magazines, mysteries, love stories, etc.
   E. None of these. Please specify:_____.

51. How would you describe your father as a parent?
   A. He was in every way, the kind of parent you want your children to have.
   B. In general, he tried to be a good parent and succeeded, but there are ways in which you are certain you will be a better parent than he was.
   C. He was too strict or old fashioned and seemed to expect too much of you.
   D. He was too easy on you and didn't require that you do many things you should have done.
   E. You hope to be a much better parent to your children than he was to you.

52. How would you describe your mother as a parent?
   A. She was in every way, the kind of parent you want your children to have.
   B. In general, she tried to be a good parent and succeeded, but there are ways in which you are certain you will be a better parent than she was.
   C. She was too strict or old fashioned and seemed to expect too much of you.
   D. She was too easy on you and didn't require that you do many things you should have done.
   E. You hope to be a much better parent to your children than she was to you.

53. Religion in your home was considered as:
   A. An integral part of your home life.
   B. One of several factors which were important.
   C. A relatively unimportant factor.
   D. Something to be left out of family life.
   E. It was never discussed.

54. How often do you discuss with your parents the kind of work you should do when you got out to school?
   A. Never.
   B. Once in a while.
   C. Sometimes.
   D. Fairly often.
   E. Frequently, if not always.

55. While you were a high school or elementary school student, if you had the chance to be the president of a school or church club, how did your parents feel about this?
   A. Strongly encouraged me to accept.
   B. Encouraged me to accept.
   C. Neither encouraged nor discouraged me.
   D. Discouraged me from accepting.
   E. Strongly discouraged me from accepting.

56. During your teens your family:
   A. Did not care whether or not you brought friends home.
   B. Permitted but did not encourage you to bring some friends home.
   C. Encouraged you to bring some friends home.
   D. Encouraged you to bring any friends home.
   E. Cooperated in making your entertaining with friends successful.

57. During your teens at home, how often would you get into disagreements or arguments with your parents?
   A. Never.
   B. Once in a while.
   C. Sometimes.
   D. Fairly often.
   E. Frequently, if not always.

58. How did your parents feel about the grades you achieved in school?
   A. Were generally very pleased.
   B. Were generally satisfied but thought you should do better.
   C. Did not care about grades as long as you did your best.
   D. Did not care about grades as long as you passed.
   E. Paid very little attention to your grades.

59. As a young person when you did something well, whose praise did you value most?
A. A friend.
B. A teacher.
C. Your mother or father.
D. Did things well for your own satisfaction.
E. Someone else. Please specify here: _____.

60. When you were a child were you punished by your parents for not doing well in school?
A. Never.
B. Once in a while.
C. Sometimes.
D. Fairly often.
E. Frequently, if not always.

61. When you were a child, did your parents give you any material rewards for bringing home good grades from school?
A. Never.
B. Once in a while.
C. Sometimes.
D. Fairly often.
E. Frequently, if not always.

62. As a youngster, how often were you a leader in your group's "gang" or "clique" activities?
A. Never.
B. Once in a while.
C. Sometimes.
D. Fairly often.
E. Frequently, if not always.

63. During your youth when teams were being chosen for games, were you usually picked?
A. Near the first.
B. Around the middle.
C. Near the end.
D. Was usually one of those doing the choosing.
E. Very seldom had time to play games.

64. During your last two years in high school, about how many hours a week, both in and out of school, did you spend in either junior varsity or varsity athletics?
A. None.
B. 1 to 4.
C. 5 to 9.
D. 10 to 14.
E. 15 or more.

65. When you were in high school, did you participate in any of the following clubs, societies, or activities (please make your choice based on the club you were most active in)?
A. Dramatics, debating, or speech clubs.
B. Fraternity or social groups.
C. Music, band, chorus, orchestra, etc.
D. History or foreign language clubs.
E. None of the above apply. Fill in E and go to item 66.

If your answer to question #65 was A, B, C, or D, skip question #66 and go to question #67. If your answer to question #65 was E, please complete question #66.

66. When you were in high school, did you participate in any of the following clubs, societies, or activities? (Answer this question only if you responded "E" to question #65.)
   A. Math or science club.
   B. Literary, magazine, or newspaper.
   C. Intramural sports.
   D. Student government.
   E. Other. Please specify here: _____.

67. In the organizations you belong to, which best describes your participation?
   A. Am not very active.
   B. Am a reliable member, but do not wish to hold a position of importance.
   C. Would like to hold an office, but have not been elected or appointed to one.
   D. Have held at least one important office.
   E. Have held several important offices.

68. How many times during the past five years have you held a position as president, captain, or chairman of any clubs, boards, teams, committees, or study groups?
   A. Never.
   B. Once.
   C. Two to three times.
   D. Four to five times.
   E. More than five times.

69. Which of the following have you ever organized or assisted in organizing? (If more than one, mark the most important to you.)
   A. Athletic team or sports competition.
   B. Financial or charity campaign to raise funds.
   C. Literary, debating, choral, or social clubs.
   D. Have never had an opportunity to organize or assist in organizing any kind of club or event.
   E. Some other than the above. Please specify here: _____.

70. As you grew up, how well did you like school?
   A. Disliked school very much.
   B. Disliked school.
   C. Neither liked or disliked school.
   D. Liked school.
   E. Like school very much.

71. Which response best describes you as a high school student? You were:
   A. One of the most active and popular students.
   B. More active and popular than most students.
   C. About as active and popular as most students.
   D. Not quite as active and popular as most students.
   E. Not very active nor popular as a student.

72. How would you classify yourself as a student in high school
   A. Considerably above average.
   B. Somewhat above average.
   C. Average.
   D. Below average.
   E. Considerably below average.

73. To how many student offices were you elected to in high school?
   A. 0.
   B. 1.
   C. 2.
   D. 3.
   E. 4 or more.

74. When you were a child, did you feel that you received adequate recognition from your teachers for your work in school?
   A. Not at all.
   B. Once in a while.
   C. Sometimes.
   D. Fairly often.
   E. Frequently, if not always.

75. Which one of the following types of teachers did you prefer to have as a student?
   A. Very hard to get good grades from.
   B. Harder than average to get good grades from.
   C. About average in difficulty.
   D. Easier than average to get good grades from.
   E. Very easy to get good grades from.

76. How do you want people to feel about you? (Select the one choice that is most important to you.)
   A. Feel you are capable.
   B. Feel you are tough but fair.
   C. Feel you are a "nice person."
   D. Feel you have a sense of humor.
   E. Feel you are exceptionally intelligent.

77. How have you reacted to the advantages and opportunities that have been presented to you?
   A. You have taken advantage of every opportunity.
   B. You have generally tried to take advantage of any opportunity.
   C. You have taken advantage of some and not of others.
   D. You have not had too many opportunities, but have taken advantage of the ones you have had.
   E. You have failed to take advantage of opportunities presented.

78. How well do you do most things you have decided to do?
   A. You almost always succeed in the things you attempt and do them better than most people could.
   B. You generally succeed in the things you attempt and do them as good as most people could.
   C. You usually get the things done that you attempt, but you seldom do them as well as most people could.
   D. You often find you have bitten off more than you can chew and have to give up.

79. How would judge your self-confidence?
   A. You are very confident of yourself in any phase of activity.
   B. You are quite confident of yourself in most phases of activity.
   C. You have quite a bit of self-confidence about your intellectual ability, but you are not as self-confident about your social abilities.
   D. You have quite a bit of self-confidence about your social ability, but you are not so self confident about your intellectual ability.
   E. You lack self-confidence in both intellectual and social activities.

80. Using your own interpretation of what success means, do you feel you have been successful to this point in your life?
   A. Yes.
   B. Partly.
   C. No.
   D. Not sure.
   E. Not old enough yet to say.

81. If you have thought about something and come to a conclusion, how hard is it for someone else to change your mind?
   A. Not at all hard.
   B. Somewhat hard.
   C. Hard.
   D. Very hard.
   E. Impossible to change my mind.

82. In the past, how have you reacted to competition?
   A. I sought out competitive situations.
   B. If needed, I was willing to enter into competitive situations.
   C. I didn't particularly enjoy competitive situations.
   D. I avoided competitive situations.
   E. In other ways. Please specify here:_____.

83. Which do you feel was most important in forming your convictions about the meaning of life and how to live?
   A. Your parents.
   B. Discussions with other family members or close friends.
   C. Teachers.
   D. Your own observation and meditation.
   E. Religious instruction.

84. Fantasies are:
   A. Something to avoid.
   B. Something to enjoy.
   C. Something to build constructively upon.
   D. Something to promote.
   E. Something to keep to yourself.

85. What do you consider to be the major motivating force in your life?
   A. Prestige or status.
   B. Material gains.
   C. To come up with something new or new ideas.
   D. To gain a position of security.
   E. To help others.

86. Which one of the following seems to be most important to you?
   A. A pleasant home and family.
   B. A challenging and exciting job.
   C. Getting ahead in the world.
   D. Being active and accepted in community affairs.
   E. Making the most of your particular ability.

87. How enjoyable do you find it to talk to people you don't know?
   A. Almost always enjoy it.
   B. Usually enjoy it.
   C. Occasionally enjoy it.
   D. Do not usually enjoy it.
   E. Almost never enjoy it.

88. I would like a job which allowed me to:
   A. be free to experiment with and try new methods.
   B. have broad supervision with the details left up to me.
   C. follow set procedures and always know what to do.
   D. Other. Please specify here: _____.

89. On which one of the following features of your future job (either in the military, private or public sector) would you like to be able to spend more time?
   A. Listening to and/or creating new ideas.
   B. Keeping things in their place.
   C. Passing on detailed information to others.
   D. Getting to really know the people with whom you work.
   E. Correcting errors as they are made.

90. What factor influenced you the most regarding your choice to come to VMI?
   A. Family.
   B. Expected income.
   C. Friends.
   D. Educational opportunities (scholarship).
   E. None of the above apply. Fill in E and go to item 91.

If your answer to question #90 was A,B,C, or D, skip question #91 and go to question #92. If your answer to question #90 was E, please complete question #91.

91. What factors influenced you the most regarding your choice to come to VMI? (Answer this question only if you responded "E" to question #90.)
   A. Future opportunities.
   B. Counselors/teachers
   C. Desire to serve my country.
   D. Accomplishment of an ideal in my life.
   E. Other. Please specify: _____

92. To what extent do you develop new or better ways of doing the work assigned to you?
   A. Never.
   B. Once in a while.
   C. Sometimes.
   D. Fairly often.
   E. Frequently, if not always.

93. How often have you considered changing what you want to do as a career?
   A. Never.
   B. Once in a while.
   C. Sometimes.
   D. Fairly often.
   E. Frequently, if not always.

94. What have been (or would be) your reasons for volunteering your time for public service?
   A. To provide support to the community.
   B. To meet new and interesting people.
   C. To satisfy personal interests (e.g., coach Little League because of my children being on the team).
   D. To further my career.
   E. Other reasons. Please specify here: _____

* * *

Interpersonal Assessment Questionnaire

PART I: Interpersonal Style

Instructions: Listed below are some descriptive statements. For each statement, please judge how frequently you displayed the behavior described by selecting the letter that best represents your opinion and grid in your response on the blue grid sheet using your number 2 pencil. You will use the blue grid sheet to respond to Items 95 and 102. Use the following for the five possible responses:

A . . . Not at all
B . . . Once in awhile
C . . . Sometimes
D . . . Fairly often
E . . . Frequently if not always

Example:

1. I like to make people feel good.

A	B	C	D	E
①	②	③	④	⑤

By griding in "C" you responded "Sometimes."

Items on grid sheet:

95. I use amusing stories to defuse conflicts.

96. I tell amusing stories to make fun of myself.

97. My sense of humor has gotten others out of tough jams.

98. I use humor to take the "edge off" during stressful periods.

99. I make others laugh at themselves when they are too serious.

100. I use humorous situations to get them to think in creative ways.

PLEASE TURN OVER YOUR GRID SHEET AND CONTINUE WITH 101

101. I use a funny story to turn arguments in my favor.

102. I use funny incidents or anecdotes to clarify my point of view to others.

PART II: Interpersonal Style

Instructions: Listed below are some descriptive statements. For each statement, please judge how frequently you displayed the behavior described by selecting the letter that best represents your opinion. You will use the blue grid sheet to respond to Items 103 to 115.

A . . . Certainly always false
B . . . Generally false
C . . . Sometimes true, but sometimes false
D . . . Generally true
E . . . Certainly always true

Example:

1. At parties, I like to be the center of attention.

A	B	C	D	E
①	②	③	④	⑤

By griding in "A" you responded "Certainly always false."

103. In social situations, I have the ability to alter my behavior if I feel that something else is called for.

104. I am often able to read people's true emotions correctly through their eyes.

105. I have the ability to control the way I come across to people, depending on the impression I wish to give them.

106. In conversations, I am sensitive to even the slightest change in the facial express of the person I'm conversing with.

107. My powers of intuition are quite good when it comes to understanding others' emotions and motives.

108. I can usually tell when others consider a joke to be in bad taste, even though they may laugh convincingly.

109. When I feel that the image I am portraying isn't working, I can readily change it to something that does.

110. I can usually tell when I've said something inappropriate by reading it in the listener's eyes.

111. I have trouble changing my behavior to suit different people and different situations.

112. I have found that I can adjust my behavior to meet the requirements of any situation I find myself in.

113. If someone is lying to me, I usually know it at once from that person's manner of expression.

114. Even when it might be to my advantage, I have difficulty putting up a good front.

115. Once I know what the situation calls for, it's easy for me to regulate my actions accordingly.

APPENDIX B

ACTIVITIES/EVENTS FOR OBSERVATION

Rat Training: Rat training is military duty which the rats attend twice a week during the first semester. It includes a leadership reaction course, and a number of obstacle courses designed to build skill and confidence. The training is supervised by upper class cadets.

Company Room Training: Company training consists of approximately 40 minutes daily allotted to the company cadre for training Rats in the company. This time is used to continue training that was initiated during Cadre week and includes training in areas such as marching, drill, room cleanliness, and proper uniform wear.

Team Sports: The Rats that participate in collegiate sports do not attend Rat training. The teams spend the allotted time practicing. Team practice activities can be observed for leadership displayed by the team captain and others.

Rat Workouts: Rat workouts are of two types. "Sweat parties" involve intensive physical workouts, and are usually used as punishment for infractions. "Stoop runs", generally initiated by the upper class, are used in a motivational way.

Rat Olympics: The rat olympics is the final event of Rat training. The companies compete for scores in the various events of Rat training.

Intramurals: Company teams compete in a number of sports. During the second semester, approximately half of the corps compete in intramurals. During this time, Rats will interact with a variety of upperclassmen with whom they have had little contact.

Leadership Training All third class cadets serving in positions of corporal will be observed as they perform leadership roles in structured interactions with Rats.

Army ROTC Activities Cadets assume a variety of leadership responsibilities as part of the Army ROTC structured activities and exercises.

In order to pretest the categorization scheme, upper class cadets serving in formal and informal leadership positions, will be observed during these, and other activities during the first year. Observations will be categorized on an individual basis for a particular cadet leader. This information will be added to the database of leadership measures for each cadet observed. As all cadets serve in at least a minimum number of leadership roles, every attempt will be made to obtain observational data for each cadet in the class of '95.

APPENDIX C

LEADERSHIP LOG

LEADERSHIP LOG

Summary

The purpose of the Leadership Log is to collect information from your perceptions of incidents, behaviors and actions that you have directly observed at VMI which indicate to you effective and ineffective forms of leadership. This information is being collected from all cadets in your class, as well as cadets in more senior classes. Members of our research group will also be observing the interactions that go on at VMI on a daily basis to help determine ways the institution can maximize leadership potential. However, only through your own accounts of what you observed, can we develop a true understanding of how VMI develops effective leaders.

To minimize your time in completing this activity, we are providing you with a structured format to be used in recording your observations. We anticipate that the categories are broad enough to capture the range of observations we expect to obtain from cadets. If our format restricts you in any way from describing a particular event, please add any categories you feel are necessary.

Remember, all of your responses will be kept strictly confidential. They will not impact evaluations of you in any way.

NOTE: IN COMPLETING THIS LEADERSHIP LOG, PLEASE REPORT BEHAVIORS THAT HAVE OCCURRED ONLY DURING THE PAST MONTH.

Instructions

· Please write down two or more incidents of effective or ineffective leadership behavior you have observed since arriving at VMI, in the spaces provided on the attached observation record sheets. Be as specific as you can about your observations citing specific incidents, actions and behaviors.

For Example:

"Three Upperclassmen flamed me on the fourth stoop."
(Bad Example- This type of comment is too general.)

vs.

"My dyke's BR screamed obsentities at me last Thursday in my dyke's room even when I completed the tasks I was asked to do."
(Good Example-This type of comment is more informative.)

"My cadre corporal yelled less this week than last week."
(Bad Example)

vs.

"My cadre corporal demonstrated rifle maneuvers to me without yelling and then allowed me to instruct my group on the same maneuvers because I had it down well."
(Good Example)

Your ID#_____

Date_____

OBSERVATION #1

Who was involved (please indicate leader's position as well as follower(s)' position(s), (e.g., Military Instructor, Academic Instructor, Dyke, Unit Leader, RDC Member, Athletic Team Member, Other Upper Classman, Brother Rat, other). Do not specify individuals' names.

What happened?

Where did it occur?

When did it occur?

What was the result?

What was your reaction?

OBSERVATION #2

Who was involved (please indicate leader's position as well as follower(s)' position(s), (e.g., Military Instructor, Academic Instructor, Dyke, Unit Leader, RDC Member, Athletic Team Member, Other Upper Classman, Brother Rat, other).
Do not specify individuals' names.

What happened?

Where did it occur?

When did it occur?

What was the **result**?

What was your **reaction**?

OBSERVATION #3

Who was involved (please indicate leader's position as well as follower(s)' position(s), (e.g., Military Instructor, Academic Instructor, Dyke, Unit Leader, RDC Member, Athletic Team Member, Other Upper Classman, Brother Rat, other).
Do not specify individuals' names.

What happened?

Where did it occur?

When did it occur?

What was the result?

What was your reaction?

OBSERVATION #4

Who was involved (please indicate leader's position as well as follower(s)' position(s), (e.g., Military Instructor, Academic Instructor, Dyke, Unit Leader, RDC Member, Athletic Team Member, Other Upper Classman, Brother Rat, other).
Do not specify individuals' names.

What happened?

Where did it occur?

When did it occur?

What was the result?

What was your reaction?

OBSERVATION #5

Who was involved (please indicate leader's position as well as follower(s)' position(s), (e.g., Military Instructor, Academic Instructor, Dyke, Unit Leader, RDC Member, Athletic Team Member, Other Upper Classman, Brother Rats, other). Do not specify individuals' names.

What happened?

Where did it occur?

When did it occur?

What was the result?

What was your reaction?

APPENDIX D

INSTRUCTION GUIDE FOR SCORING LEADERSHIP LOGS

INSTRUCTION GUIDE FOR SCORING LEADERSHIP LOGS

I. Overview

II. Qualitative Scoring Process

III. Scoring the Leadership Logs

IV. Categorization Scheme: The leadership logs will be scored on the following factors:

- A. Leadership Behavior
- B. Attributed Charisma
- C. Initiating Structure/Consideration
- D. Management Style
- E. Followers' Reactions

V. Examples of Behaviors in Categorization Scheme

- A. Leadership Behavior
- B. Attributed Charisma
- C. Initiating Structure/Consideration
- D. Management Style
- E. Followers' Reactions

VI. Sample Scoring Sheet

INSTRUCTION GUIDE FOR SCORING LEADERSHIP LOGS (1991-92)

I. OVERVIEW

Qualitative data can provide a rich source of information for evaluating how individuals perceive the world around them. Eliminating the constraints often placed on raters/observers by surveys, the potential range of responses that can be collected is quite large using qualitative procedures. In the case of the leadership logs, the observations that have been collected from cadets (Rats) throughout the Fall semester of 1991, and into the current Spring semester, represent each cadet's (Rat's) personal view of the institutional leadership they have been exposed to while at VMI. The collection of this data serves two broad purposes:

1. To measure the type of leadership role models and experiences Rats are exposed to during their first critical year at VMI. In a general sense, to develop an overview of the leadership experiences cadets found meaningful.

2. To link with each cadet his personal observations of the types of leadership behaviors he has been exposed to in his first year at VMI. Specifically, cadets may be exposed to different experiences/role models, which shape the leadership experiences they have during their first year.

The leadership logs will help capture any specific and unique differences across cadets in the types of leadership experiences/models they have been exposed to in their first year at VMI.

II. QUALITATIVE SCORING PROCESS

As indicated above, the advantage of collecting qualitative data is the lack of restrictions this procedure places on the respondent, regarding the nature of data generated. However, the difficulty we have in using qualitative data concerns the interpretation of general statements or observations generated by raters. By interpretation we mean translating the data from a written qualitative form or passage into codeable responses/scores.

To develop a reliable scoring system for use with qualitative data, it is essential that we provide a high degree of structure for raters to facilitate their interpretation of the data. Without a structured rating scheme, which raters are thoroughly familiar and comfortable with, the interpretation of qualitative data can be highly unreliable or inconsistent. The structure of the rating system will help eliminate biases and increase the consistency and accuracy of an interpretation of data from one rater to the next.

III. SCORING THE LEADERSHIP LOGS

In order to maximize the reliability of ratings and/or consistency from one rater to the next, we have delineated the following steps:

Steps:

1. Provide each rater with the categorization scheme to facilitate coding of critical leadership events/experiences. The categorization scheme covers a very broad range of leadership styles/actions. Each rater will become familiar with the categorization scheme so that coding can be completed in the most efficient and consistent manner possible.

2. Provide key background readings to help explain each of the categories that the raters will use to code data. The readings are specifically targeted towards explaining each of the factors, providing examples of each factor or style of leadership.

3. We will arrange to have 2-3 meetings in which we will discuss the similarity and differences between the respective leadership factors/styles. During these meetings we will practice using the coding scheme on several leadership logs.

4. The four raters will be divided into two teams. Each team will review half of the leadership logs. We will select approximately 10% of the total number of leadership logs for both teams to review. Using this strategy, we will be able to examine the reliability of the ratings within each team as well as between teams on the subset of leadership logs (approx. 10%).

5. Finally, each team will work with a block of ten logs at a time. After each team scores a block of 10 logs, we will examine the inter-rater reliability of the respective teams. If there are points of disagreement among the team members, then we will set those logs aside for further review and discussion. We will strive to achieve the highest agreement possible among the four raters. Points on which the raters cannot agree will be referred to the project directors for evaluation.

Products:

There are several products to be achieved from the rating process outlined above:

a) Numerical scores associated with each of the classified behaviors. For instance, each cadet will have a score

representing the number (or percentage) of log entries which were categorized as "contingent reward behavior" demonstrated by the leader. A similar score will be created for each sub-category coded, (e.g., charismatic behavior, persuasive decision style, etc.)

b) A behavioral checklist to be used in subsequent years to code log entries and to be used by trained observers to record the leadership behaviors exhibited by cadets. This checklist should also have generalizability to leadership behavior in any context.

c) A summary report describing the critical features that represent the leadership behaviors to which cadets are exposed while at VMI.

IV. CATEGORIZATION SCHEME

Instructions to Coders:
We have presented the categories below and coding scheme that you will use to classify the leadership logs. Each major category is further defined with corresponding definitions and example items in Section V. You will be asked to code each log entry on each of 5 dimensions: Leadership Behavior; Attributed Charisma; Management Style; Initiating Structure/Consideration; Follower Reactions.

A. LEADERSHIP BEHAVIOR STYLES The styles listed below represent a broad range of behaviors and actions. The range includes highly active to highly inactive behaviors; very positive to very negative behaviors; behaviors linked to change versus those linked to maintaining the status quo.

1. Transactional Leadership Factors

a. Laissez-Faire - Indicates the absence of leadership, the avoidance of intervention, or both. With Laissez-Faire (Avoiding) leadership, there are generally neither transactions nor agreements with followers (i.e., positive or negative). Decisions are often delayed; feedback, rewards, and involvement are absent; and there is no attempt to motivate followers or to recognize and satisfy their needs.

b. Noncontingent Punishment - The basis of noncontingent punishment is that the acts of punishment by the leader appear to be arbitrary in that they are dealt out without provocation. One cannot link reprimands or punishment to a specific behavior, action and/or level of performance. Here the leader confronts followers in a negative way regardless of how they are doing. The follower never really knows when he will be punished.

c. Contingent Punishment - Contingent punishment may take several forms when an individual fails to live up to expectations, or deviates from norms or agreed-upon standards. Being told of one's failure to meet standards may be sufficient to provide aversive reinforcement for what one did wrong. The leader may administer punishment or there may be loss of support from the leader. Punishment may also take the form of correction, criticism, or negative feedback.

d. Noncontingent Reward - The basis of noncontingent reward is that the acts of reward are not tied to specific behaviors/actions or levels of performance. It does not appear to make any difference how the person performed, they still receive a reward from their leader.

e. Contingent Reward - Involves an interaction between leader and follower that emphasizes an exchange (e.g., the leader promises or provides appropriate rewards --mainly material -- when followers meet agreed-upon objectives). Emphasis is on facilitating the achievement of agreed-upon objectives by followers.

2. Transformational Leadership Factors

a. Individualized Consideration - Followers are treated on a one-to-one basis. Individual needs are recognized and perspectives raised. With Individualized Consideration, assignments are often made to followers to provide learning opportunities. The leader works to develop followers to higher levels of potential.

b. Intellectual Stimulation - Used to encourage followers to question their old ways of doing things or to break with the past. Followers are supported for questioning their own values, beliefs, and expectations, as well as those of the leader and organization. Followers are also supported for thinking on their own, addressing challenges, and considering creative ways to develop themselves.

c. Inspirational Behavior - Provides symbols and simplified emotional appeals to increase awareness and understanding of mutually desired goals.

d. Charismatic Behavior - Generally defined with respect to follower reactions to the leader as well as to the leader's behavior. Followers identify with and emulate these leaders, who are trusted and seen as having an attainable mission and vision. Such leaders are thoroughly respected, have much referent power, hold high standards, and set challenging goals for their followers.

B. ATTRIBUTED CHARISMA

Because charisma is in part an attribution made by the follower, you will be asked to code whether the follower completing the log had strong positive emotions toward the leader, such as a desire to emulate, or a sense of extreme confidence and trust. Please indicate whether it is clearly an attribution of charisma, possibly or clearly not attributed charisma.

C. INITIATING STRUCTURE/CONSIDERATION

1. Initiating Structure - The leader's behavior has a clear task emphasis. Behaviors of this type usually involve providing directions, coordinating work, or attempting to motivate or push workers to greater effort.

2. Consideration - The leader's behavior is person-oriented and has to do with the interpersonal relations in the work groups. Consideration behavior usually involves support for the group and group members, and a general consideration for workers' feelings.

NOTE: Please try to code each log entry into one of these two categories. Often they may overlap with other leadership styles...that's O.K. There may, however, be times when leadership behavior is not identifiable, i.e., "Can't Say" yet the broader initiating structure, or consideration distinction can be made.

D. MANAGEMENT DECISION STYLES

Overview: Up to this point, we have asked you to concentrate on specific leadership behaviors/actions that correspond to the categorization scheme described earlier. Now, we want to shift your focus to the type of decision style used by the leaders described by each cadet. The styles range in terms of the level of involvement that the leader seeks from followers in making decisions.

1. Directive - (No Reason Given) - The leader orders followers to comply with a particular directive order providing no reason for the order. Simply, the leader gives an order and expects compliance without question or explanation.

2. Directive - (With Reason Given) - The leader orders followers to comply with a directive, while also providing some reasons and/or rationale to explain the directive. The explanation can encompass the purpose of the directive, why they have been chosen, what the intended goal is, how their efforts will help, etc.

3. Persuasive - Not an order; not telling - The leader attempts to convince the follower to behave or think as the leader suggests.

4. Consultative - The leader seeks information from followers prior to making and communicating his decision. Followers are given the opportunity as well as possibly encouraged to offer information, opinions, or reservations regarding a particular decision the leader wishes to make or pursue. Ultimately, the leader then makes the decision after receiving the desired input.

5. Participative - The leader involves followers in the decision making process by seeking their advice and information pertinent to the decision. The leader and his followers work together to produce a decision. In contrast with "Consultative", here the leader and his followers jointly arrive at a decision.

6. Delegative - The leader provides followers with the authority to make the decision on their own. Followers are given total responsibility to make the decision.

E. FOLLOWER REACTIONS

An important aspect of leadership is the way in which it affects followers. The logs include a question assessing the follower's reaction to the incident. You will be asked to code whether the follower felt very positively, positively, neutral, negatively, or very negatively as a result of the leader's behavior.

V. EXAMPLES

Sample behaviors in each of the categories described above are presented in this section to assist in the coding process.

A. EXAMPLES OF LEADER BEHAVIOR

1. Laissez Faire
   - Avoids getting involved when important issues arise.
   - Takes no action even when problems become chronic.
   - Says he is not responsible for followers' work.
   - Fails to follow-up on requests for assistance.
   - Is absent when important questions arise.

2. Noncontingent Punishment
   - Holds followers accountable for things over which they have no control.
   - Yells at followers for no good reason.

- Writes followers up for actions on a random basis.
- Administers penalties whether a follower performs well or poorly.
- Often expresses disappointment, but never explains why followers are being disciplined.
- Tells a follower he is a failure, regardless of what he does.

3. Contingent Punishment
   - Is alert to mistakes and enforces rules when mistakes occur.
   - Arranges to know if something has gone wrong.
   - When followers fail to perform up to standards/ expectations, they are told what they did wrong.
   - Calls attention to deviations from standard levels of performance.
   - Chastizes a follower if his work is not as good as a fellow cadet's.

4. Noncontingent Reward
   - Followers feel well treated by their leader no matter what they do.
   - Gives followers compliments regardless of their performance.
   - Praises followers when they do well as well as when they do poorly.

5. Contingent Reward
   - Followers earn credit with him by doing their job well.
   - Gives followers what they want in exchange for his support.
   - Lets followers know how they are doing.
   - Followers decide what they want; he/she shows them how to get it.
   - He sets agreements about how much he expects followers to do and what they will get for their efforts.
   - Makes clear what followers can expect if their performance meets designated standards.
   - Makes sure that followers receive rewards for good performance.
   - Talks about commendations and promotions for good work.
   - Works out agreements with followers on what they will receive if they do what needs to be done.
   - Tells followers what to do to be rewarded for their efforts.
   - Followers can negotiate with him/her about what they can receive for what they accomplish.
   - Points out what followers will receive if they do what needs to be done.
   - Provides support in exchange for required effort.
   - Pays a follower a compliment when he does a good job.
   - Praises followers when their performance is especially

good.
- Commends followers when they do a better than average job.

6. Individualized Consideration
- Treats each of his followers as individuals with different needs and aspirations.
- Singles a follower out for special praise when he does something out of the ordinary.
- Encourages followers to put their free time to good use.
- Encourages followers to express their opinions.
- Expresses appreciation for followers' efforts.
- Gives personal attention to members who seem neglected.
- Promotes continuous self-development.
- Treats each follower as an individual rather than just a member of the group.
- Listens to each follower's concerns.
- Provides advice when it is needed.
- Works with each follower on a one-on-one basis.
- Spends time teaching and coaching each follower.
- Focuses followers on developing their strengths.

7. Intellectual Stimulation
- Clarifies the value of questioning assumptions.
- Tells followers to back up their opinions with good reasoning.
- Presents new ideas to encourage a rethinking of ideas which had never been questioned before.
- Generates solutions followers hadn't considered.
- Encourages followers to solve problems by using reasoning and evidence, rather than unsupported opinion.
- Suggests new ways of looking at things.
- Suggests ways to get to the heart of complex problems.
- Encourages non-traditional thinking to deal with traditional problems.
- Provides reasons to change followers' ways of thinking about problems.
- Encourages followers to look at problems from more angles.
- Sparks followers' thinking by getting them to "imagine if.....".
- Questions the status quo.
- Seeks divergent perspectives when solving problems.
- Emphasizes that followers must change their way of thinking to prepare for new opportunities and problems.
- Encourages followers to rethink their ideas as new information becomes available.
- Encourages followers to rethink problems before taking action.
- Re-examines critical assumptions to question whether

they are still appropriate.
- Asks "What if...?"
- Provides new ways of looking at things which used to be puzzling.
- Enables followers to think about old problems in new ways.
- Encourages followers to express their ideas and opinions.

8. Inspirational Behavior
- Arouses awareness of what is important to consider.
- Articulates a compelling view of future opportunities.
- Sets high standards.
- Talks optimistically about the future.
- Introduces new challenges.
- Tells followers to raise what they expect of themselves.
- Focuses attention on being successful.
- Envision exciting new possibilities.
- Provides continuous encouragement.
- Expresses confidence in followers.
- Shows followers how they can align their interests with those of the organization.
- Accents the positive.
- Shows determination to accomplish what he sets out to do.
- Excites followers with visions of what they might accomplish.
- Talks enthusiastically about what needs to be done.

9. Charismatic Behavior
- Conveys a strong sense of purpose.
- Talks about how followers can overcome adversity.
- Expresses his/her vision of what is really important to consider.
- Makes personal sacrifices for the good of others.
- Gives followers a sense of power and confidence.
- Emphasizes the importance of trust in each other to overcome any obstacle.
- Creates a loyal following.
- Builds the confidence of others in him/her.
- Instills pride in being associated with him.
- Displays extraordinary talent and competence in whatever he undertakes.
- Emphasizes the importance of having a collective sense of mission.
- Emphasizes the importance of key values and ideals.

- Demonstrates a strong conviction to his beliefs and values.
- Perseveres in his efforts to maintain ideals.
- Takes stands on difficult issues which builds

followers' respect for him.
- Gets followers to sacrifice their own self-interest for the good of the group.
- Shows that he/she is guided by his/her inner-direction.
- Behaves in ways that are consistent with his expressed values.

B. EXAMPLES OF ATTRIBUTED CHARISMA

Attributed Charisma
- He/she gives followers a sense of power and competence.
- Has a powerful, dynamic, and magnetic presence.
- In followers' minds, he/she is a symbol of success and of accomplishment.
- Followers are ready to trust him/her to overcome any obstacle.
- Followers express complete confidence in him/her.
- His/her determination gets followers to keep trying.
- Has a special gift of seeing what is really important for followers to consider.
- Followers indicate that he is a leader to be emulated.

C. EXAMPLES OF INITIATING STRUCTURE AND CONSIDERATION

1. Initiating Structure
   - He talks about how much should be done.
   - He assigns people under him to particular tasks.
   - He emphasizes the quantity of work.
   - He plans daily activities in detail.
   - He changes the duties of followers without first talking it over with them.
   - He stresses being ahead of competing groups.
   - He sees that followers have the material they need to work with.
   - He sees to it that the work of the followers is coordinated.

2. Consideration
   - He backs up the followers in their actions.
   - He puts suggestions made by people in the work group into action.
   - He treats all people in the work group as his equal.
   - He helps new group members make adjustments.
   - He seeks information from group members.
   - He engages in friendly jokes or comments during group meetings.
   - He works right along with the group.
   - He keeps the group informed.
   - He discourages individual criticism of group behavior.
   - He makes followers feel at ease when talking with them.

D. EXAMPLES OF MANAGEMENT DECISION STYLES

1. Directive (No Reason Given)
   - Tells subordinates what the schedule is for work without giving reasons.
   - Sets deadlines for completion of work.
   - Specifies what the standards are for work.

2. Directive (With Reason Given)
   - Tells subordinates what is expected of them and why they are doing what they are doing.
   - Assigns tasks and explains his rationale for doing so.
   - Explains the rules (procedures, codes of conduct, etc.) and why they must be followed.

3. Persuasive
   - Sells decisions to subordinates explaining how it will benefit them.
   - Promises certain rewards or privileges for subordinate compliance with directives.
   - Provides key information to subordinates to support his directives.

4. Consultative
   - He alone makes the final decisions, but he obtains subordinates' opinions beforehand.
   - He does not act or decide on important matters before hearing the opinions of his subordinates.
   - He talks things over with subordinates and then decides what action to take.

5. Participative
   - He and his subordinates analyze problems before they reach a decision.
   - He works together with subordinates to come up with solutions to problems.
   - Decisions are based on mutual agreement or consensus.

6. Delegative
   - Gives subordinates the authority to follow their own course of action (or to make their own decisions).
   - Outlines the tasks/assignments and indicates that it is up to subordinates how they will execute the assignment.
   - He sets general guidelines for completing work, but lets subordinates set their own goals and objectives.

E. FOLLOWER REACTIONS

An important aspect of leadership is the way in which it affects followers. The logs include a question assessing the follower's reaction to the incident. You will be asked

to code whether the follower felt, positively, neutral, or negatively, or as a result of the leader's behavior.

NOTE: In cases where you cannot make a decision about a scoring category, please code the category "Can't Say".

LEADERSHIP LOG SCORING SHEET

Each leadership log should receive a score in five areas: Leadership Behavior, Attributed Charisma, Initiating Structure/Consideration, Management Style, and Emotional Response of the Follower. Use the sample behaviors given in the instruction guide for determining leadership and management categories.

Column	Number/Item in Column
1	**Rater Number** 1 = John 2 = Allison 3 = Trupti 4 = Natalie
2	**SPACE**
3-11	**Rat's Identification Number**
12	**SPACE**
13-15	**Year (month and # year)**
16	**SPACE**
17	**Observation Number 1**
18	**SPACE**
19	**Leadership Behavior Observation Number 1** 0 = Laissez-Faire 1 = Noncontingent Punishment 2 = Contingent Punishment 3 = Noncontingent Reward 4 = Contingent Reward 5 = Individualized Consideration 6 = Intellectual Stimulation 7 = Inspirational Motivation/Behavior 8 = Charismatic Behavior 9 = Can't Say
20	**SPACE**
21	**Attributed Charisma Observation Number 1** 0 = No 1 = Definitely 9 = Can't Say
22	**SPACE**
23	**Initiating Structure/Consideration Observation Number 1**

0 = Initiating Structure
1 = Consideration
2 = Both
9 = Can't Say

24 SPACE

25 Management Style Observation Number 1
0 = Directive-No Reason Given
1 = Directive-With Reason Given
2 = Persuasive
3 = Consultative
4 = Participative
5 = Delegation
9 = Nonmanagement/Can't Say

26 SPACE

27 Response of the Follower Observation Number 1
0 = Negative (-)
1 = Positive (+)
9 = Can't Say or neutral

28 SPACE

29 Observation Number 2

30 SPACE

31 Leadership Behavior Observation Number 2
0 = Laissez-Faire
1 = Noncontingent Punishment
2 = Contingent Punishment
3 = Noncontingent Reward
4 = Contingent Reward
5 = Individualized Consideration
6 = Intellectual Stimulation
7 = Inspirational Motivation/Behavior
8 = Charismatic Behavior
9 = Can't Say

32 SPACE

33 Attributed Charisma Observation Number 2
0 = No
1 = Definitely
9 = Can't Say

34 SPACE

35 Initiating Structure/Consideration Observation Number 2
0 = Initiating Structure

1 = Consideration
2 = Both
9 = Can't Say

36 SPACE

37 Management Style Observation Number 2
0 = Directive-No Reason Given
1 = Directive-With Reason Given
2 = Persuasive
3 = Consultative
4 = Participative
5 = Delegation
9 = Nonmanagement/Can't Say

38 SPACE

39 Response of the Follower Observation Number 2
0 = Negative (-)
1 = Positive (+)
9 = Can't Say or neutral

40 SPACE

41 Observation Number 3

42 SPACE

43 Leadership Behavior Observation Number
0 = Laissez-Faire
1 = Noncontingent Punishment
2 = Contingent Punishment
3 = Noncontingent Reward
4 = Contingent Reward
5 = Individualized Consideration
6 = Intellectual Stimulation
7 = Inspirational Motivation/Behavior
8 = Charismatic Behavior
9 = Can't Say

44 SPACE

45 Attributed Charisma Observation Number 3
0 = No
1 = Definitely
9 = Can't Say

46 SPACE

47 Initiating Structure/Consideration Observation Number 3
0 = Initiating Structure
1 = Consideration
2 = Both

9 = Can't Say

48 SPACE

49 **Management Style Observation Number 3**
0 = Directive-No Reason Given
1 = Directive-With Reason Given
2 = Persuasive
3 = Consultative
4 = Participative
5 = Delegation
9 = Nonmanagement/Can't Say

50 SPACE

51 **Response of the Follower Observation Number 3**
0 = Negative (-)
1 = Positive (+)
9 = Can't Say/neutral

52 SPACE

53 **Observation Number 4**

54 SPACE

55 **Leadership Behavior Observation Number 4**
0 = Laissez-Faire
1 = Noncontingent Punishment
2 = Contingent Punishment
3 = Noncontingent Reward
4 = Contingent Reward
5 = Individualized Consideration
6 = Intellectual Stimulation
7 = Inspirational Motivation/Behavior
8 = Charismatic Behavior
9 = Can't Say

56 SPACE

57 **Attributed Charisma Observation Number 4**
0 = No
1 = Definitely
9 = Can't Say

58 SPACE

59 **Initiating Structure/Consideration Observation Number 4**
0 = Initiating Structure
1 = Consideration
2 = Both
9 = Can't Say

60 SPACE

61 **Management Style Observation Number 4**
0 = Directive-No Reason Given
1 = Directive-With Reason Given
2 = Persuasive
3 = Consultative
4 = Participative
5 = Delegation
9 = Nonmanagement/Can't Say

62 SPACE

63 **Response of the Follower Observation Number 4**
0 = Negative (-)
1 = Positive (+)
9 = Can't Say/Neutral (0)

64 SPACE

65 **Observation Number 5**

66 SPACE

67 **Leadership Behavior Observation Number 5**
0 = Laissez-Faire
1 = Noncontingent Punishment
2 = Contingent Punishment
3 = Noncontingent Reward
4 = Contingent Reward
5 = Individualized Consideration
6 = Intellectual Stimulation
7 = Inspirational Motivation/Behavior
8 = Charismatic Behavior
9 = Can't Say

68 SPACE

69 **Attributed Charisma Observation Number 5**
0 = No
1 = Definitely
9 = Can't Say

70 SPACE

71 **Initiating Structure/Consideration Observation Number 5**
0 = Initiating Structure
1 = Consideration
2 = Both
9 = Can't Say

72 SPACE

73	**Management Style Observation Number 5** 0 = Directive-No Reason Given 1 = Directive-With Reason Given 2 = Persuasive 3 = Consultative 4 = Participative 5 = Delegation 9 = Nonmanagement/Can't Say
74	SPACE
75	**Response of the Follower Observation Number 5** 0 = Negative (-) 1 = Positive (+) 9 = Can't Say/Neutral (0)
76	SPACE

You may put your scores directly on the leadership logs. Once the logs have been coded, you will need to enter the coded numbers into a computer data file. You may transpose your entries onto a coding sheet, or you may enter them directly from the logs. If you will be working at a terminal other than LSG563, you must use a coding sheet, as the logs should not leave that room.

APPENDIX E

RETROSPECTIVE LEADERSHIP INVENTORY

RETROSPECTIVE LEADERSHIP INVENTORY

As part of the ongoing leadership research project of which you have been a part this year, we would like you to review your first year at VMI and examine the type of leadership you've been exposed to at VMI. During the year, you have been exposed to a number of individuals who have attempted to influence you and who have acted, (or have been in a position to act) as your leader.

At this point in the year, we are asking you to summarize your view of the leadership experiences you have been exposed to at VMI by evaluating how much of the time your leaders this year acted similar to the descriptions provided on the next page. In other words, looking back over the year, how would you characterize your treatment by leaders in general, rather than by any specific person.

For example, if you think the leaders that you have had contact with at VMI avoided leadership "fairly often," you would fill in the number 4 of the answer sheet next to the item #1, Avoided Leadership. (This item and other leadership description items are presented on the following pages.)

If you think leaders at VMI acted in a way where they were punishing you no matter what you did, in other words, the punishment you received had nothing to do with your performance or behavior, and this occurred frequently, if not always, you would fill in a 5 for item #2 Arbitrarily Punished.

Please read the descriptions next to each of the 16 items on the following pages before deciding the extent to which your leaders, over the year, acted in this manner.

Please record your answers on the blue answer sheet. REMEMBER TO FILL IN YOUR SOCIAL SECURITY NUMBER IN THE BOX FOR IDENTIFICATION.

Thanks for your help with our research! As always, we will continue to keep all information you provide strictly confidential.

Sincerely,

Dr. Alan Lau
Dr. Leanne Atwater
Dr. Bruce Avolio
Dr. Bernard Bass

RETROSPECTIVE LEADERSHIP INVENTORY

Please use the following scale to indicate the frequency with which the leaders you interacted with (e.g., cadre, upper classmen, regimental officers, class officers, dykes), overall, acted in each of the following ways. Record the appropriate answer on the blue answer sheet.

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

1. Avoided Leadership--Leaders made no attempt to motivate you or to recognize or satisfy your needs. Decisions by leaders were delayed; feedback, punishment and rewards were absent. There was little or no interaction between you and the leaders.

2. Arbitrarily Punished--Leaders punished you regardless of how you performed or behaved, and you never really knew when you would be punished.

3. Contingently Punished--Leaders punished you when you did not live up to the leaders' expectations, when you violated a rule, or when you did not perform well. When you were being punished you knew why, and may have even anticipated it.

4. Contingently Rewarded--Leaders rewarded you for doing a good job, or for accomplishing a goal.

5. Noncontingently Rewarded--Leaders complimented you, or rewarded you regardless of how well you had done.

6. Individually Considerate--Your needs were recognized by leaders, and you were treated as an individual, rather than just as a member of a group. Leaders were obviously interested in developing you to be the best you can be.

7. Intellectually Stimulating--Leaders supported you for thinking on your own, and encouraged you to come up with creative solutions to problems.

8. Inspirational--Leaders provided a lot of encouragement, were enthusiastic about what needed to be done, and expressed confidence in you.

9. Charismatic--Leaders made personal sacrifices for others, and emphasized the importance of key values and ideals. Leaders were highly respected and served as role models of the kind of leader you want to be.

10. Arbitrarily Directive--Leaders told you what to do, and/or how to do it but gave no reasons. Scheduled work, set deadlines, specified standards with no explanation.

11. Directive with Reason--Leaders told you what to do and/or how to do it but also told you why. Indicated what was expected; assigned tasks with reasons for assignment; explained the rules.

12. Persuasive--Leaders sold you on what needed to be done and/or how to do it. Explained why rules were beneficial, why your compliance was necessary, and provided information to support their positions.

13. Manipulative--Leaders said what they thought you wanted to hear, not what you needed to hear; played politics; changed their behavior to fit the occasion.

14. Consultative--Leaders asked your opinion before they decided what needed to be done and/or how to do it. They talked things over with you and other followers before taking actions.

15. Participative--What you needed to do and how to do it were based on reaching agreement between the leaders and followers. The leaders worked with followers to reach solutions to problems.

16. Delegative--Leaders told you what needed to be done but let you and/or other followers decide the way you needed to do it. They set general guidelines but let you and other followers carry out the details as you saw fit.

APPENDIX F

MORAL DEVELOPMENT INTERVIEWS

Moral Development Interviews

A stratified random sample, of 58 freshmen cadets was interviewed to assess each cadet's level of moral development. Cadets selected for these interviews equally represented each quartile of the peer rankings collected in November. In addition, three first class cadets were interviewed, who represented the top student leaders at VMI. The interview technique utilized the Subject-Object Interview developed by Robert Kegan (1982) at Harvard University. Kuhnert and Lewis (1987) provided a theoretical rationale for predicting relationships between level of moral development and transactional and transformational leadership.

The hour-long assessment interview entails getting the cadet to describe, and then comment upon, experiences at VMI (and/or prior to VMI) that have evoked strong emotional reactions. The broadest frames of reference the cadet uses in reflecting upon his emotionally significant experiences become the basis for arriving at an overall stage of development score. Using a priori scoring categories, cadets can be scored as functioning at one of Kegan's stages or in transition between two stages.

Kegan has identified five major stages and transitions in the development of most adults. At each stage, information is selected and organized consistently within the existing framework. Each stage forms a coherent understanding of reality and represents a new and unique way in which individuals organize experience. For example, as a cadet develops, he constructs a moral frame of reference that guides his perceptions of, and behaviors toward others. Further, there is an expansion of his ability to reflect upon and understand his personal goals and objectives, others' goals and objectives, rules of exchange between people as they strive toward their goals and objectives, and, finally, any overarching values or beliefs that transcend personal goals and commitments to others. The taped interviews were conducted by Dr. Karl Kuhnert of the University of Georgia (UGA) and six doctoral students, all of whom were

trained in the Subject-Object Interview technique. The interviews were conducted during two separate visits to VMI during March and April. The interview data is being transcribed to assist in the scoring by UGA staff.

The data obtained from the interviews will be analyzed in conjunction with the D.I.T. (Rest, 1986). Both measures will assess and validate the relationship between moral development and transactional and transformational leadership. An objective of this research is to understand the developmental process through which individuals become effective leaders. We intend to interview the same cadets over the next two years to assess changes in stages of moral development.

APPENDIX G

SUMMARY OF COMMENTS FROM PEER EVALUATIONS

SUMMARY OF COMMENTS FROM PEER EVALUATIONS
Cadet J. Goodwin

During the month of December of 1991, the Rat Mass did Peer Evaluations. As a part of that evaluation, the rats were asked to explain their choices with descriptions of the selected cadets' activities and/or traits used in making these evaluations. The rats gave descriptions for their top five choices of the best and the worst leaders in their company by class. These comments have been read and summarized into eight categories. Some of the descriptions fell into more than one category and were thus tallied more than once. This was allowed due to the fact that the rat when describing leaders included in his comments more than one of the traits or behaviors as reasons for exemplary leadership. This summary provides a look at what the rats perceive as good leadership, and how they as a group define that term.

The eight categories into which the descriptions of leadership fall follow very closely two models of leadership: The charismatic model of leadership and the transformational model of leadership. The combination of the two describes a leader who is self-confident, successful, competent, a role model for others, has a concern for the well-being and success of others, has high expectations of others and the confidence in them to succeed, strong motivational influence, both personally and for the group as a whole, possesses followership as well as leadership, is a "team-player," and keeps himself informed and abreast of current information that may be pertinent. No one individual described possessed all of these characteristics, but these characteristics were the most frequently described as the behaviors of the best leaders in a particular company.

Although self-confidence in and of itself does not make a good leader, self-confidence was described as one of the leading traits of a good leader. This category as a broader definition also included the possession of strong convictions and the willingness to pursue them readily. A leader with a great deal of self-confidence without any convictions becomes merely a tool for the will of another who may actually be the leader of the group in question. Another aspect included in this category was the need or desire to influence others toward the path desired by the individual. This is the instrument by which the individual's convictions are expressed to others as well as a means for the confidence of the individual to be expressed and augmented if the individual is successful in influencing the group toward his own goal. This characteristic appeared in 19.4% of the descriptions given by the rats. An example of this characteristic would be when a particular rat calls a company meeting of his brother rats and leads a discussion on how they, as a group, are going to win the Garnett Andrews competition or go out as a group on a motivational run.

The second category entailed a combination of competence and

success as well as a concern for the well-being of others around him. It appeared in 19.4% of the responses as well. This describes the behavior of the individual as well as a positive outlook on life that may be shared with others. This closely describes B. M. Bass's "transformational leader." The individual expresses a concern for the group members on an individual basis that may have no direct effect on the goals of the group or their accomplishment. This may help with a personal problem of one of the group members or even to the extent of merely socializing when it is unnecessary, with the purpose being to learn more about each individual within the group and their own unique talents and personalities. This category also includes behaviors of the individual being described that make him appear to be competent and successful in a general sense. The individual in this case was usually older and more mature than the rest of the group and also had more experience in life or the military. This individual may have been regarded by some as the obvious choice as a leader due to his age. The experience accumulated by these men in many cases could be valuable in the environment of the Barracks and thus many of them willingly shared their knowledge with their Brother Rats. This accumulation of knowledge has given these men an advantage to succeed in the environment that they exist in and thus there also may be a positive bias toward them in the Peer Evaluations.

The ability to articulate one's ideas and thoughts is a distinctive behavior of an emergent leader in a group setting. This ability supports very strongly other behaviors; particularly the need or desire to influence others within the group. Without the ability to express thoughts and goals effectively the need or desire to influence others remains unfulfilled, which in turn may affect other behaviors of the individual indirectly. This behavior was selected by the rats to a lesser extent than the two previous ones. This behavior seems to have been more of a secondary and supporting behavior than some others. It was selected by the rats in 11.6% of the responses. One of the examples of this behavior is a rat who during company meetings voices his ideas for the company to show "unity" at various events such as pep rallies, football and basketball games, and during the normal course of a week with displays of "unity" to the rest of the Corps.

The fourth characteristic that appeared was role modeling. The men selected were looked up to and emulated for some part of their outlook on life or personality. The individuals that were selected in this category are typified by certain characteristics that include success, willingness to help others, physical fitness, and the ability to withstand the fury of the upperclassmen and the cadre without flinching. These men who could withstand the "flaming" were selected most often through this category in combination with the concern for others' well-being. This may denote the ability to control emotions without the complete loss of them. There is a definite distinction

between the two within the ability to withstand "flaming." This characteristic was selected in 13.8% of the responses.

The next characteristic involves the individual having high expectations for himself and others combined with the confidence that everyone involved will succeed. This is supported with the individual's concern for the success of others in their endeavors. This characteristic appeared in 15.3% of the responses given. This characteristic can be exemplified by an individual who not only exceeds the standards of the cadre, but tries to assure that his entire company also exceeds the standards. This individual checks to assure that rooms are clean before the morning inspection, and helps others shine their brass and shoes to maintain an excellent personal appearance. This characteristic also shows during Rat Training and other forms of military duty. The individual being described in one case stopped on the VMI Obstacle Course to teach a Brother Rat the proper method of overcoming an obstacle, and in another case spent extra time on a Sunday afternoon going over the basics of rifle manual. This is a primary characteristic in this model of leadership.

The sixth characteristic defines the individual as a motivator of the company. This is both personal and group directed motivation. This behavior appeared in 16.6% of the responses giver by the rats. The individual is described as always "putting out" and "never quits." This behavior tended to appear most often during the Rat Training activities when company morale was low or a member of the group was having difficulty succeeding at one of the obstacles. This characteristic was also seen to appear frequently with another trait, particularly with the need and/or desire to influence others. This person also exhibited high personal motivation by consistently performing above and beyond the requirements of his duties, as well as giving up personal free time to maintain an "on top of things" status within the Rat System itself. This is also a primary characteristic of this model although it consistently tends to appear with other characteristics.

The seventh behavior as defined and described by the rats is the quality of followership and the ability to be a "teamplayer." This also closely follows Bass's transformational leadership model. This behavior appeared much less frequently than the others, only 3.8%, possibly due to the fact that it may have been assumed by many of the rats that everyone is a "teamplayer." This is likely in light of the number of low ratings given to those who are not "teamplayers" in the negative ratings section of the Peer Evaluation. This is a secondary characteristic in light of the fact that it is mentioned so infrequently, as well as that when it is mentioned in a description it is in passing, as if the reader were to have already assumed that fact. This behavior had a tendency to appear often in combination with the

second and third behaviors, competent and successful behaviors and the ability to articulate goals and ideas.

The last characteristic can be described as the individual keeping himself and others informed of current information that may have an impact on the daily lives of the rats as well as their goals. This characteristic appeared only 3.8% of the time and was usually the only behavior mentioned in the description. Thus it may follow that this characteristic is extraneous to the model, but due to its frequency it needs to be included until further study can be made regarding its importance.

Seven and 1/2% of the responses given by the rats were discarded due to the illegibility of the manuscript. This is unfortunate but can be expected when attempting to analyze data of this nature. This percentage also includes responses that simply were not given by the rats. In these cases, the rat in question may have given a description for one of the individuals being rated, but failed to give a description for the remainder. In this case the data given was used and the unanswered sections were placed into this section. In addition, another 7.5% of the responses were discarded due to the failure of the rat to interpret the instructions accurately. In many of these cases, the response was too general and illicited no usable data. In some cases the rat would describe an individual with the statement, "He is a good leader." This type of response merely confirms the fact that the rat rating the individual believes that this individual is a good leader, but supplies no support for this statement or any other usable data.

These characteristics are taken directly from the descriptions that were given by the rats, and in many cases retain the word usage of the description. These characteristics as a unity compose a model of leadership that the rats themselves follow and presumably believe in. This model may be compared to the definitions of leadership given by individual rats during the Rat Interviews that were initiated in the Fall of 1991. This comparison may produce some form of idea of the development of the concept of leadership at the Virginia Military Institute.

APPENDIX H

BEHAVIOR CHECKLIST AND CATEGORY DESCRIPTIONS

Rev. 9/12/92

OBSERVATIONAL RATER GUIDE

Instructions to Observers:

Step 1: Please fill in the date, your name (observer), the name and identification number (if possible) of the leader you are observing and the situation being observed, e.g., Rat challenge, Company Room, etc.

Step 2: Observe the leader for 5-minutes, or as long as the leader and follower(s) are interacting.

Step 3: Using the leadership coding scheme attached, record the leadership style you believe the leader was demonstrating by using the 5-point frequency rating codes next to the appropriate style(s).

Step 4: Record the management style you believe the leader was demonstrating.

Step 5: Record what you believe was the follower's response.

Date: _____

BEHAVIOR CHECKLIST

Your Name: _____

Name of Person Observed: _____
First Last
(Please Print)

ID of Person Observed: _____

Activity Observed: _____

Based on your 5 minute observation, please rate the leader's behavior and follower's reaction for EACH of the four categories.

Rate the extent to which the leader engaged in each category you observed. If you did not observe that type of behavior, leave blank.

4 = To a very large extent.
3 = To a large extent.
2 = To some extent.
1 = To a small extent.
0 - Not at all.

Rate

LEADERSHIP BEHAVIOR

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
Inspirational/Charismatic	4	3	2	1	0
Intellectual Stimulation					
Individualized Consideration					
Contingent Reward					
Non-Contingent Reward					
Contingent Punishment					
Non-Contingent Punishment					
Laissez-Faire					
Can't Say					

Rate

MANAGEMENT STYLE

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
	4	3	2	1	0
Directive-No Reason					
Directive-With Reason					
Persuasive					
Consultative/Participative					
Delegative					
Can't Say/Non Management					

Rate

INITIATION OF STRUCTURE
CONSIDERATION

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
	4	3	2	1	0
Initiation of Structure					
Consideration					
Both					
Can't Say					

Rate

FOLLOWER RESPONSE

	To a very large extent	To a large extent	To some extent	To a small extent	Not at all
	4	3	2	1	0
Positive					
Negative					
Can't Say					

CATEGORIZATION GUIDE FOR SCORING OBSERVATIONS

I. OVERVIEW

Qualitative data can provide a rich source of information for evaluating how individuals perceive the world around them. Eliminating the constraints often placed on raters/observers by surveys, the potential range of responses that can be collected is quite large using qualitative procedures. The collection of observational data serves two purposes.

1. To measure the type of leadership displayed by the focal cadets.

2. To link with each cadet, observations of the types of leadership behaviors he has exhibited.

The leadership observations will help capture any specific and unique differences across cadets in the types of leadership they practice. The observations will serve as a supplement to leadership data collected via other methods.

II. QUALITATIVE SCORING PROCESS

As indicated above, the advantage of collecting qualitative data is the lack of restrictions this procedure places on the respondent, regarding the nature of data generated. However, the difficulty we have in using qualitative data concerns the interpretation of observations generated by raters. By interpretation we mean translating the data into codeable responses/scores.

To develop a reliable scoring system for use with qualitative data, it is essential that we provide a high degree of structure for observers to facilitate their interpretation of events. Without a structured rating scheme, which raters are thoroughly familiar and comfortable with, the interpretation of qualitative data can be highly unreliable or inconsistent. The structure of the rating system will help eliminate biases and increase the consistency and accuracy of an interpretation of events from one rater to the next.

III. CATEGORIZATION SCHEME

Instructions to Coders:
We have presented the categories below and coding scheme that you will use to classify observations. Each major category is further defined with corresponding definitions and example items in Section IV. You will be asked to code each observation on each of 4 dimensions: Leadership Behavior; Initiating Structure/Consideration; Management Style; and Follower Response.

A. LEADERSHIP BEHAVIOR STYLES

The styles listed below represent a broad range of behaviors and actions. The range includes highly active to highly inactive behaviors; very positive to very negative behaviors; behaviors linked to change versus those linked to maintaining the status quo.

1. Transformational Leadership Factors

a. Inspirational/Charismatic Behavior - Generally defined with respect to follower reactions to the leader as well as to the leader's behavior. Followers identify with and emulate these leaders, who are trusted and seen as having an attainable mission and vision. Such leaders are thoroughly respected, have much referent power, set high standards and challenging goals for their followers. The leader provides symbols and simplified emotional appeals to increase awareness and understanding of mutually desired goals.

Examples:
a. Talks optimistically about the future.
b. Expresses confidence in followers.
c. Conveys a strong sense of purpose.
d. Instills pride in being associated with him.

b. Intellectual Stimulation - Used to encourage followers to question their old ways of doing things or to break with the past. Followers are supported for questioning their own values, beliefs, and expectations, as well as those of the leader and organization. Followers are also supported for thinking on their own, addressing challenges, and considering creative ways to solve problems.

Examples:
a. Tells followers to back up their opinions with good reasoning.
b. Encourages followers to rethink their ideas as new information becomes available.

c. Individualized Consideration - Followers are treated on a one-to-one basis. Individual needs are recognized and addressed. Assignments are often made to followers to provide learning opportunities. The leader works to develop followers to higher levels of potential.

Examples:
a. Gives personal attention to members who seem neglected.
b. Spends time teaching and coaching each follower.

2. Transactional Leadership Factors

a. Contingent Reward - Involves an interaction between leader and follower that emphasizes an exchange (e.g., the leader promises or provides appropriate rewards --mainly material -- when followers meet agreed-upon objectives). Emphasis is on facilitating the achievement of agreed-upon objectives by followers.

Examples:
a. He sets agreements about how much he expects followers to do and what they will get for their efforts.
b. Pays a follower a compliment when he does a good job.

b. Noncontingent Reward - The basis of noncontingent reward is that the acts of reward are not tied to specific effort, behaviors/actions or levels of performance. It does not appear to make any difference how the person performed, they still receive a reward/recognition from their leader.

Examples:
a. Followers feel well treated by their leader no matter what they do.
b. Gives followers compliments regardless of their performance.

c. Contingent Punishment - Contingent punishment may take several forms when an individual fails to live up to expectations, or deviates from norms or agreed-upon standards. Being told of one's failure to meet standards may be sufficient to provide punishment for what one did wrong. The leader may administer punishment or there may be loss of support from the leader. Punishment may also take the form of correction, criticism, or negative feedback.

Examples:
a. Is alert to mistakes and punishes when mistakes occur.
b. When followers fail to perform up to standards/ expectations, they are told what they did wrong.

d. Noncontingent Punishment - The basis of noncontingent punishment is that the acts of punishment by the leader appear to be arbitrary in that they are dealt out without provocation. One cannot link reprimands or punishment to a specific behavior, action and/or level of performance. Here the leader confronts followers in a negative way regardless of how they are doing. The follower never really knows when he will be punished.

Examples:
a. Holds followers accountable for things over which they have no control.
b. Administers penalties whether a follower performs well or poorly.

e. Laissez-Faire - Indicates the absence of leadership, the avoidance of intervention, or both. With Laissez-Faire (Avoiding) leadership, there are generally neither transactions nor agreements with followers (i.e., positive or negative). Decisions are delayed; feedback, rewards, and involvement are absent; and there is no attempt to motivate followers or to recognize and satisfy their needs.

Examples:
a. Avoids getting involved.
b. Takes no action even when problems become chronic.

B. INITIATING STRUCTURE/CONSIDERATION

a. Initiating Structure - The leader's behavior has a clear task emphasis. Behaviors of this type usually involve providing directions and coordination of work.

Examples:
a. He talks about how much should be done.
b. He sees to it that the work of the followers is coordinated.

b. Consideration - The leader's behavior is person-oriented and has to do with the interpersonal relations in work groups. Consideration behavior usually involves support for the group and group members, rather than focusing on the individual and his development.

Examples:
a. He treats all people in the work group as his equal.
b. He helps new group members make adjustments.

c. If the leader appears to be demonstrating both initiating structure and consideration, check both.

d. If you are unable to identify a style from your 5-minute observation, check "Can't Say".

C. MANAGEMENT DECISION STYLES

Overview: Up to this point, we have asked you to concentrate on specific leadership behaviors/actions that correspond to the categorization scheme described earlier. Now, we want to shift your focus to the type of decision style used by the leader. The styles range in terms of the level of involvement that the leader seeks from followers in making decisions.

a. Directive (No Reason Given) - The leader orders followers to comply with a particular directive providing no reason for the order. The leader gives an order and expects compliance without question or explanation.

Examples:
a. Sets deadlines for completion of work.
b. Tells what the standards are for work.

b. Directive - (With Reason Given) - The leader orders followers to comply with a directive, while also providing some reasons and/or rationale to explain the directive. The explanation can encompass the purpose of the directive, why they have been chosen, what the intended goal is, how their efforts will help, etc.

Examples:
a. Tells subordinates what is expected of them and why they are doing what they are doing.
b. Explains the rules (procedures, codes of conduct, etc.) and why they must be followed.

c. Persuasive - Unlike the two forms of Directive behavior, this style is not an order nor telling; the leader attempts to convince the follower to behave or think as the leader suggests based on information provided by the leader.

Examples:
a. Sells decisions to subordinates explaining how it will benefit them.
b. Provides key information to subordinates to support his directives.

d. Consultative/Participative - The leader seeks information from followers prior to making and communicating his decision. Followers are given the opportunity as well as possibly encouraged to offer information, opinions, or reservations regarding a particular decision the leader wishes to make or pursue. Ultimately, the leader then makes the decision after receiving the desired input. The leader

involves followers in the decision making process by seeking their advice and information pertinent to the decision. The leader and his followers work together to produce a decision. In contrast with "Persuasion," here the leader and his followers jointly arrive at a decision.

Examples:
a. He talks things over with subordinates and then decides what action to take.
b. He works together with subordinates to come up with solutions to problems.

e. Delegative - The leader provides followers with the authority to make the decision on their own. Followers are given total responsibility to make the decision.

Examples:
a. Gives subordinates the authority to follow their own course of action (or to make their own decisions).
b. He sets general guidelines for completing work, but lets subordinates set their own goals and objectives.

f. Can't Say/Non Management, e.g. flaming for no apparent reason. - If you are unable to identify a management style from your 5-minute observation, check "can't say/non management."

C. FOLLOWER REACTIONS

An important aspect of leadership is the way it affects followers. The checklist includes a question assessing the follower's reaction to the incident you have observed. You will be asked to code whether the follower felt, positively or, negatively, as a result of the leader's behavior. "Can't say" can also be used if the follower's reaction is unclear.