IMPLICIT LEADERSHIP THEORY:

DIFFERING INFLUENCE IN TASK ENGAGED VS.

TASK UNENGAGED SUBJECTS

by

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Abstract

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This research examined subjects' involvement with a task on the direction and strength of their leader perceptions. Leader perceptions were considered in terms of implicit leadership theories (ILTs), a perceptual simplification similar to a stereotype. Leader labels (e.g., 'effective' or 'ineffective') trigger an ILT which influences leader perception in both summary judgements and memory for specific behaviors. Being perceived as an effective leader is necessary to be influential in ways other than blatant coercion.

Subjects included 97 female and 49 male students from a college in upstate New York. Dependent variables included ratings of general leader impression, leader behavior, and a quality assessment of the group+leader interaction. Task involvement was defined as a tri-dimensional construct: 1) 'cognitive engagement', interest and attentiveness, 2) 'affective response', an emotional reaction, and 3) 'behavioral participation', active involvement. Task involvement was manipulated by participation in the task and through verbal and written prompts. Analyses of variance and planned comparisons were used to test the hypotheses.

The hypotheses were based on the reasoning that task-involved subjects would be more accurate and less extreme in their judgements about leaders. The first hypothesis posited that task-involved subjects are less susceptible to the biasing influence of leader labels in summary judgements of overall leadership effectiveness. The second hypothesis posited that task-involved subjects are less influenced by leader labels in behavioral ratings. Neither hypothesis was supported. The third hypothesis posited that task-involved subjects would be less influenced by leader labels in evaluating workgroup performance. Subjects made their own quality evaluation, instead of being provided one as in other ILT research. This hypothesis was also not supported. However, subjects' evaluations of workgroup performance were also not significantly influenced by leader labels. Subjects whose overall quality assessment was higher rated the leader significantly higher on both leader behaviors and on general leader impression. Additional analyses on causal attribution for outcomes suggest that task-uninvolved participants place more emphasis on the role of the group and how well they worked together in achieving an outcome. Task-involved participants were found to perceive the leader as more causally potent in determining the outcome. Theoretical and practical contributions and suggestions for future research are presented.

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Chapter I

Introduction

Leadership has been defined in numerous ways. A leader is a person and leadership is a process (McGregor, 1944, in Hollander, 1985 p. 487), although many early definitions failed to make this distinction. The leader role is salient in leadership because leaders typically show more activity than those around them and are more influential (Hollander, 1985 p. 487). However, leadership is not the leader's task alone -- without followers there can be no process of leadership (Machiavelli, 1532, among others). Hollander (1985 p.486) notes that most contemporary definitions of leadership point out that the attainment of group, organizational, or societal goals involves a process of interdependent influence between leaders and followers. The notion that leadership is a joint influence process highlights the importance of the follower in leadership. The study of implicit leadership theory (ILT) is, almost, more concerned with followers than with leaders; specifically, it emphasizes what followers expect from leaders, and specifically how this perception of leaders affects their behaviors.

Definition of Implicit Leadership Theory and Importance of Follower Perceptions

ILT can be defined as a constellation of 'attributes', broadly defined, both personal and situational, which make our perception of someone as a leader or as an effective leader more likely and influence the strength and direction of our evaluative responses to them (Lord & Maher, 1991). These perceptions are accompanied by follower emotional, cognitive, and behavioral reactions, with important implications for the outcomes of the leadership process (Hollander, 1992).

ILT evolved as a result of two separate trends: the historical movement in leadership models of including the follower and follower perceptions of leaders as an important element in the leadership process; and, the increasing application of cognitive approaches to topics in psychology in general.

Individuals learn about leaders directly through their experiences in contexts which contain authority figures, and also indirectly, through such vehicles as children's stories and media exposure to political leaders, as examples. Children in first grade are able to differentiate leaders from nonleaders and state the factors that separate these two groups of people (Matthews, Lord, and Walker, in Lord & Maher, 1991). Thus, by an early age, individuals appear to have fairly consolidated ideas about what leaders are like, or should be like, and these ideas are shared by many people; individuals apply these ideas, or implicit theories, in forming perceptions and making evaluations about leaders (Phillips, & Lord, 1981, among others).

Research in the area of social cognition has long indicated that perceivers simplify and package the information presented to them by the most complex of stimuli -- people. Schemata, general impressions, stereotypes, implicit personality theories and categories are related perceptual simplifying mechanisms which reduce cognitive load, but lead us to an understanding of others that is summary in nature and essentially incomplete. Our perception of others, however, defines our reality of them. Our perception of leaders – their traits, behaviors, motivations, abilities, effectiveness, the situational constraints under which they labor, etc., similarly and inescapably, defines our leaders.

Being perceived as a leader is required to be influential beyond a strictly formal role (Lord & Maher, 1991) characterized by blatant power and coercion. As such, happily, in many circumstances follower perceptions provide the critical source of a leader's legitimacy and ability to influence. Hollander has long noted (see e.g., 1958, 1992) it is essential to recognize the importance for leaders of being perceived so by followers. This concept is still central to many of our contemporary leadership models.

Trait and attribute-based leadership research can be viewed in a new light when attributes are considered in terms of the extent to which they are considered by followers to be important for leaders (i.e., honesty), and the extent to which 'objectively' possessed traits (i.e., intelligence) are, and if they are, perceived by others. The work done on leader emergence is notable here as well, as arguably being allowed to 'emerge' as a leader is dependent on fitting at least some aspect of a group's shared conceptualization of a leader. Behavioral approaches, such as the Ohio State Research and its emphasis on consideration and initiating structure behaviors rely on follower ratings – in essence, on individuals' perceptions of leader behavior.

More recent transactional approaches (cf. Hollander, 1978, 1992) hold that the leadership process is a joint or 'reciprocal' product of perceptions of the leader by followers and the perceptions of followers by the leader. Hollander's ongoing writing and research on the idiosyncrasy credit model of leadership highlights the importance of being perceived as competent and loyal to group norms to earn follower support for innovation. His work on appointed vs. elected leaders (as in Hollander, 1992) illustrates

another aspect of follower perceptions -- the importance of appointed leaders taking the time to 'earn the right to influence'.

The importance of follower perceptions is also inherent in one current emphasis in the leadership field, that is, on transformational and/or charismatic leaders (cf. Bass, 1995). Clearly, to be considered a charismatic leader one needs to be perceived that way.

Finally, many of the vehicles used in organizations to identify, evaluate, and promote leaders rely on assessments made through human perception. Being perceived as a leader is an important success factor in management assessment centers, succession planning systems, performance appraisals, 360° feedback programs, and selection interviews.

Overview and Purpose of the Present Research

Much of the current thinking and writing on the topic of leadership is inextricably focused on how leaders influence followers in the leadership process. At bottom, followers' perceptions of a leader define that leader in their eyes.

Research and writing in the area of ILT seeks to define more clearly the attributes of individuals' underlying theories of what a leader should be. This includes a consideration of both shared characteristics and individual and cultural differences; how these schemata influence perceptions and evaluations of leaders; and, the cognitive processes through which ILT exerts its influence.

At this time, however, some fairly basic questions remain unanswered which would help to more fully understand the factors that influence leader perceptions. In particular, it is not clear in which situations or circumstances followers will have and use

very cursory leadership perceptions, and what factors promote the development and use of more sophisticated schemata.

The present research was designed to examine the presence of a moderating influence of followers' task involvement on their perceptions and evaluations of a leader. Task involvement was defined as a tri-dimensional construct of 3 components: 1) 'cognitive engagement', or interest and attentiveness, 2) 'affective response', or an emotional reaction, and 3) 'behavioral participation', or active involvement. Task involvement was manipulated by having subjects participate in the actual task and through verbal and written prompts. Subjects included students from a college in upstate New York. Dependent variables included ratings of general leader impression, leader behavior, and a quality assessment of the overall group plus leader interaction and outcomes. Analyses of variance and planned comparisons were used to test the hypotheses.

Dissertation Preview

Chapter 2 contains a review of the leadership literature, highlighting the trend of incorporating follower perceptions of leaders into a consideration of the leadership process. It also presents a review of the origins of the basic implicit theory concept in the study of person perception and social cognition. A review of the ILT empirical literature follows. Hypotheses and research questions are also presented. Chapter 3 provides a discussion of research design and methodology, including participants and procedures for quantitative investigations. Chapter 4 presents the results of the quantitative studies.

Finally, Chapter 5 contains a discussion of the findings, including theoretical/practical contributions, limitations, and directions for future research.

Chapter 2

Literature Review and Research Questions

This chapter provides key background information for the present study. First, the history of leadership studies is discussed. Second, empirical ILT literature is reviewed. Third, this background information is integrated and explored. Finally, the present hypotheses are listed.

ILT: Historical Overview and Origins in Earlier Leadership Models

As one would expect of such a long history of inquiry, models of leadership have been many and varied. Each new approach has carried with it some unique perspective on what constitutes a leader and what parameters define the leadership process. ILT represents one of the more recent approaches to the broad study of leadership, and can be viewed as a logical extension of earlier leadership research. Other influences from areas of inquiry outside of leadership, particularly the broad field of person perception, have had a profound influence on the development of ILT, and will be discussed in detail in the following section. Here, briefly, an historical progression of approaches to leadership is presented. The trend in leadership research which provided the impetus for the development of ILT is highlighted. This trend is one in which, increasingly, the perceptions of leaders by followers are explicitly included in leadership models.

Initially, leadership was seen as analogous to 'leader'. A single person, and his or her traits and characteristics, were viewed as the crucial factor in the understanding of leaders and leadership. Eventually, pessimism surrounding this definition of leadership

led to greater and greater incorporations of contextual factors in models describing the leadership process. Gradually, these contextual factors came to include followers and later, more specifically, followers' perceptions of leaders were included as influential elements in the leadership process. Some authors have even argued that a leader exists only in the eyes of others, arguing that 'leader' is used as an explanatory construct by individuals due to needs we have for understanding and controlling our environments (Calder, 1977; Pfeffer, 1977).

Writings about leadership date back centuries. Most of the earliest writings emphasized special qualities that made men leaders. This 'great man' approach greatly influenced the earliest leadership models. It was often taken to mean that leaders are born, not made (e.g., Galton, in Hollander, 1985, p. 491). The trait approach grew out of the 'great man' theory (Hollander, 1985, p. 491) and dominated the study of leadership for the first half of this century. The trait approach stressed the personal qualities of leaders and held that leaders differed from non-leaders on some crucial traits.

Research on the traits of leaders attempted to isolate qualities which differentiated leaders from non-leaders, or to explain why some leaders were effective and others ineffective, although the distinction between these two questions was not always made explicit and upheld in research (Landy, 1985). Leader emergence refers to the study of who becomes a leader in a demand situation of some kind, such as the Leaderless Group Discussion exercise of Bass (1954), whereas leader effectiveness refers to the study of relationships between some aspect of a leader and desired outcomes of the leadership situation.

A number of factors have been related to successful leader emergence, including quantity of verbalizations (Maurer & Lord, 1991; Sorrentino & Boutillier, 1975; Stein & Heller, 1979) and perceived competence (Michener & Burt, 1975; Patchen, 1974). Lord & Alliger (1985) found that frequency of responses was the only factor consistently associated with leader perceptions in leaderless groups. Many explanations have been proposed to account for the phenomenon of leader emergence. In what can be viewed as one of the earliest statements regarding ILT, Hollander and Julian (1969) argued that leaders are allowed to emerge when they fit the shared conceptualization of a leader held by followers.

Researchers involved with the trait approach explored the relationship between numerous personal factors, such as height, intelligence, self-confidence, dominance, extraversion, among many others, and leadership measures. The results of many years of trait studies were summarized in two very influential reviews, by Stogdill (1948) and by Mann (1959). The over-arching conclusion of both these reviews was that no traits consistently differentiated leaders from non-leaders across a wide variety of situations. Since these reviews were published, few writers and researchers have seriously considered the trait approach, with the exception of some personality- and psychoanalytically-oriented authors (e.g., Bentz, 1990; Hogan, 1994; Kernberg, 1974, 1985; Zaleznik, 1984), a focus by some researchers on the trait of intelligence (e.g., Fiedler & Garcia, 1987), and, although some might argue with its categorization here, some aspects of the current focus on charismatic/transformational leadership may belong here as well (e.g., Hunt, 1999).

The trait approach to leadership may have been dismissed too quickly following these reviews. These reviews have also often been misinterpreted. In particular, these findings are often generalized to the relationship between leader traits and leader effectiveness. For example, as noted by Lord and Alliger (1986), Landy (1985) cites the Mann and Stogdill reviews as having demonstrated that no relationship exists between personality factors and leader effectiveness. However, both the Mann and Stogdill reviews dealt with leader emergence and the perception of leadership in groups with no formal leader. The title of Mann's review, "A Review of the Relationship Between Personality and Performance in Small Groups", is misleading in that the relationships he investigated were between personality factors and attained leadership status as measured by either group member ratings, leader nominations, or observer ratings, not performance measures.

Trait studies almost always used standardized personality measures of traits, and not group members' perceptions of these traits or the degree to which they perceived these traits as defining leaders. This is noteworthy because although there is undoubtedly a correlation there is probably not a perfect one-to-one correspondence between some personal qualities as they are perceived by observers and as they exist within someone as measured by a personality scale. Also, Mann emphasized the low correlations he found rather than the consistency of the trends evident in some of the relationships he investigated. For example, 88% of the 196 relationships between leadership and intelligence were positive, 92 of the 196 significant in the predicted direction. Finally, as Gibb (1968) notes, layperson's descriptions of leaders almost always include trait terms.

The pessimism surrounding the trait approach to leadership provided the impetus for researchers to look elsewhere in order to understand the leadership phenomenon, and as a result, some interrelated developments surfaced. The behavioral approach attempted to capture what a leader actually did -- his or her behavior. Situational approaches emphasized the context of the leadership process, usually focusing on the demands and constraints of the task at hand. Later, contingency and transactional models focused on the interaction of situational factors and leader qualities. Some of these models included variables which specifically addressed the perception of leader qualities by followers and the perception of follower qualities by leaders, and the outcomes associated with these perceptions.

The behavioral approach is generally credited to researchers at Ohio State University. Here, a program of research on leader behavior was begun in 1947, with most of the early work conducted with military groups (see for example Stogdill & Shartle, 1948; Shartle, Stogdill, & Campbell, 1949, all as in Hollander, 1985, p. 493). Based on the kinds of actions engaged in by those in leadership positions, researchers constructed and compiled over 1,800 items regarding leader actions. Each item was scored in terms of the frequency with which the behavior was exhibited. A basic instrument for assessing leader behavior was developed, the Leader Behavior Description Questionnaire (LBDQ), which is completed by subordinates to describe a leader's behavior (see Fleishman, 1953; Stogdill, 1963; Stogdill & Coons, 1957).

The LBDQ was administered repeatedly to subordinates of managers in many different organizations (Hemphill & Coons, 1957; Stogdill, 1963). Halpin and Winer

(1957) factor analyzed the questionnaire results from repeated administrations of the LBDQ, and four main factors emerged. Two factors which accounted for most of the variance in the ratings were labeled consideration (C) and initiating structure (IS). The C factor includes behaviors that are indicative of mutual trust, respect, warmth, and rapport between the leader and his or her group. The IS factor is comprised of organizing behaviors, the defining of group activities, and the assignment of task-related roles to individuals. The Ohio State researchers concluded that these two dimensions were the crucial factors underlying leader behavior and that most leader behaviors could be classified on one of these two dimensions (Hollander, 1985, p.494).

Extensive research has been carried out on the several extant versions of the LBDQ. The basic factor structure has been replicated at different times, in different cultures, and with additional proposed factors, with C and IS factors usually accounting for approximately 80% of the variance in the ratings (Landy, 1985). A great number of research studies have evaluated the relationships between C and IS and numerous leader effectiveness, group morale, and group productivity variables, among other dependent variables. Stogdill (1974) summarized the results of many studies relating C and IS to group productivity, cohesiveness, and satisfaction and found 54 positive relationships, 18 zero relationships, and 5 negative relationships. He concluded that group productivity and satisfaction are influenced by C and IS, and that the most effective leaders display high frequencies of both dimensions of behavior.

The Ohio State research has had, and continues to have, in a way, an extensive impact on the study and practice of leadership. However, it is worth reiterating at this

point that the LBDQ demands that subordinates provide their perceptions of the amount of behavior exhibited by their supervisors. These responses had been assumed, in the main, to reflect, in reality, what supervisors actually did.

The situational approach to leadership, surfacing concomitantly with the behavioral approach, explicitly recognized the importance of contextual factors in the leadership process. As Hollander (1985, Hollander & Offerman, 1990) notes, the emergence of this perspective is most notably associated with the writings of Hemphill (1949), Sanford (1950), and Gouldner (1950), although the early underpinnings of this approach date back centuries to individuals who discussed leaders as being a 'product of the times'. In the sixteenth century Machiavelli (1532) wrote that 'opportunity' or finding a situation in which the exercise of power was needed or possible was an essential prerequisite for the exercise of leadership.

The situational approach attempts to identify the demands on a leader in a particular situation. As the task is a very salient aspect of the leadership situation, early research on the situational approach focused on the task, in an attempt to identify similarities and differences across situations which had a moderating effect on who emerged as a leader (see for example Carter & Nixon, 1949; Bell & French, 1950). Although the particular task was usually seen in research as defining the situation in its entirety, Homans (1974) noted that 'sentiments', or the past history and the feeling tone of a group were important aspects of the leadership situation. Due to contextual differences, the necessary leadership functions were viewed as varying across situations, and some

small emphasis was placed on leader qualities which were particularly appropriate for different situations (Hollander, 1985, p. 497).

Although the situational approach arose as a reaction to the shortcomings of the trait approach, it erred in the opposite direction. Whereas trait approaches emphasized individual characteristics and ignored contextual factors, the situational perspective was sometimes taken too literally and is characterized by a neglect for individual qualities. In addition, as noted by Hollander (1985), the mutual exclusivity of 'leader' and 'situation' ignores the fact that a leader and situational elements interact to comprise the total leadership situation. The situational perspective is important for the purposes of this paper because it paved the way for offshoots which considered more and more elements, or contingencies, of the leadership situation, some of these offshoots explicitly including the role of followers in the leadership process.

The best known contingency model is that of Fiedler (1978). His model incorporates a leader quality, esteem for the least preferred co-worker (LPC), and situational variables. The most effective leaders are found in situations in which their LPC quality is supported by particular aspects of the situation (the 'situational favorability'). The perception of the leader by followers is, albeit surreptitiously, included in one of the situational variables, 'leader-member relations', which can be defined as the amount of loyalty and support the followers provide the leader. There have been many justified criticisms of Fiedler's model; one which is particularly appropriate here is that, as Hollander (1985) notes, the followers are attributed little

importance in defining the leadership situation except in terms of how they determine an aspect of situational favorability.

Hollander (1978) has proposed, explicitly, that the leadership process is a joint or 'reciprocal' product of perceptions of the leader by followers and the perceptions of followers by the leader. In this transactional approach, the leader is not treated as the exclusive powerholder in the leadership process. Followers have expectations of how a leader should be and should act. A leader must conform to these expectations, because his or her power and ability to direct the actions of others depends on validation from followers, which is earned by fitting their shared expectations.

Hollander has also focused more specifically on "followers", noting the differential impact of leader appointment and election on the psychological identification of followers. He and his colleagues have demonstrated how election creates a greater sense of involvement in followers (Ben-Yoav, Hollander, & Carnevale, 1983), and has also pointed out that follower expectations are often higher for elected leaders (Hollander & Offerman, 1990).

Dienesch and Liden (1986) also address and differentiate the follower role in their leader-member exchange theory. A leader forms dyadic relationships with subordinates and these relationships differ between employees. The nature of the specific relationship affects how the leader regards and treats each employee, and vice-versa.

These transactional models, which address with greater sophistication the roles, types, and influence of followers enhance our understanding of the leadership process. It should not be assumed that all followers are "created equal", and that their varying levels

of involvement and influence may be disregarded in understanding the process of leadership.

The next two models to be discussed here hold that leadership is a cognitive construction used by individuals to understand and explain events in the workplace. Thus, leadership is not an objective reality, and 'leaders' exist only in the eyes of followers. Pfeffer (1977) argues that organizational participants need to believe that leaders have an important causal effect on organizational outcomes. This is because such an attribution emphasizes personal rather than environmental control of events. Leaders serve a symbolic function, and a scapegoat function -- they can be blamed when things go wrong, and problems can be 'fixed' by replacing leaders. The possibility that perceivers will allocate responsibility for outcomes through dispositional leadership attributions is heightened by factors which make leaders salient. Such things as inaugurations, the leader selection process, and the symbols that go along with leadership positions (e.g., special offices) are examples of such factors.

Pfeffer argues that leadership does not account for much of the variance in organizational outcomes, and further suggests that, thus, it is likely that actual strengths or weaknesses do not account for much variation in the selection of leaders. Those individuals who have control over leader selection decisions may have ideas, implicit or explicit, about what constitutes an effective organizational leader. Individuals who fit these shared expectations are more likely to be selected.

Calder (1977) also presents a conceptual model of the perception of leadership as an attributional phenomenon, stating that 'leadership is a prime manifestation of our bias

towards perceiving personal causes for behavior'. Calder presents a detailed model, comprised of several stages of information processing, describing how leadership perceptions are formed. Calder argues that leadership is a label for behavior which, when applied to a person, locates the reasons for that behavior within the personal qualities of the individual to whom it is applied.

Calder maintains that labeling someone as a leader is an inference made on the basis of behaviors. These behaviors should be typical of a class of behaviors, but they must be different from those of other group members. Observation of actual physical behaviors is not necessary for the leader label to be applied. The (presumed) effects of the behavior may be all that is necessary. After perceiving behaviors and/or their effects, the perceiver either takes or discounts the behaviors as being evidential of the personal quality of leadership. What is taken as evidential are behaviors which are typical of what our naive characterizations of leaders are, through what Calder calls 'typicality inferences'. These typicality inferences are made on the basis of presumptions held by individuals that personal leadership qualities produce certain behaviors and effects.

Typicality inferences themselves are not sufficient for the perception of some individual as a leader. The next step the perceiver uses before attributing the leader label is a determination of alternative explanations of the behavior. Much of traditional attribution theory is applied by Calder at this point, with the final determination of 'leader' or 'nonleader' made on the basis of cues which lead either to a dispositional (leader) attribution, or a situational or more complex attribution. The consistency, consensus, and distinctiveness evaluation dimensions of Kelly (1927), as well as the social desirability

evaluation dimension of Jones and Davis (1965) are applied at this point in making attributions of leadership.

Most recent in the area of leadership are the models which show the integration of leadership and cognition, illustrating the current prominence of cognitive approaches in psychology in general (Hollander & Offerman, 1990).

Lord (1985) has proposed that leader perceptions can be explained in terms of five information processing steps: selective attention/comprehension, encoding, storage and retention, information retrieval, and judgement. Based on literature in the area of ILT and the more general field of social cognition, Lord argues that information simplification and distortion can occur in any of these information processing stages and influence perceptions of leaders. Information simplification and distortion can occur because of human limits on the amount of information which can be processed, the influences of automatic information processing (outside of conscious awareness) as opposed to more controlled information processing, and the tendencies of perceivers to categorize stimulus information on the basis of implicit theories of leadership.

Thus leadership models have consistently moved to a greater and greater incorporation of the perceptions of followers as important elements in the leadership situation. Hollander (1978), Pfeffer (1977), Calder (1977), and Lord (1985) explicitly state that the perception of someone as a leader is contingent on the fit between a potential leader's characteristics and some underlying, 'naive' conceptualization on the part of the follower of what a leader should be like.

Much of the research in ILT has focused on the ways in which implicit theories influence descriptions of leader behavior, and the cognitive mechanisms which underlie the 'packaging' of information about individuals which lead to their being perceived alternatively as leaders or as nonleaders. For a basis on which to study leadership as a perceptual phenomenon, ILT researchers turned to the broad area of person perception, which for a long time has been concerned with how individuals package information in perceiving others. The following discussion traces the development of the field of study which hypothesizes implicit theories and other simplification strategies as a potent force in person perception.

ILT: Origins in Person Perception

The field of person perception is concerned with the accuracy with which and the processes by which individuals perceive and know the characteristics, qualities, and inner states of other persons (Tagiuri, 1969). Historically, the roots of this area of inquiry began with investigations of the recognition of emotions, stimulated by Darwin's writings on this topic (1872, in Bruner & Tagiuri, 1954). Throughout the 1930's, the expressions and recognition of emotions was central to the field. During the 1920's and 30's, emphasis came to be placed upon the judgment of personal qualities of others. Most early research concentrated on the accuracy of such judgments.

Research on the accuracy of judgements of the personal qualities of others led to the discovery of 'response sets' or 'judgmental effects' which were construed as errors in person perception. Perhaps the best known of these errors is the 'halo effect', a term coined by Thorndike (1920) but first observed by Wells in 1907 (in Bruner & Tagiuri, 1954). Wells found that individuals tended to rate others on the basis of a general impression, introducing a spuriously high correlation into their ratings, and indicating that perceivers tend to overestimate the magnitude of the relationship among attributes. An additional 'error' was described in 1931 by Newcomb and in 1936 by Guilford (both as in Bruner & Tagiuri, 1954). Guilford referred to this error as a 'logical error', in which judges displayed that they have certain preconceptions about what traits go with other traits. The discovery of these and other errors, and other influences as well, led to a trend in research to examine more directly the ways in which judges package information in

order to perceive and make sense of the complexity of the stimulus in person perception, with 'errors' becoming in and of themselves subject matter for investigation.

In 1954 Bruner and Tagiuri first used the term 'naive, implicit personality theory' (IPT) to describe the phenomenon that individuals appear to infer relationships among attributes of people. The term can also be used more broadly, to indicate a set of assumptions that people have about why others behave in the ways that they do (Schneider, 1973). The use of 'implicit' to describe 'personality theory' is intended to convey that an individual's beliefs about trait relationships are inferred from her descriptions of people and her expectations of individuals and groups; it is unlikely that individuals can explicitly and parsimoniously state their beliefs about which traits most likely are found with other traits, or which categories they use to describe others and form expectations of others (Rosenberg & Sedlak, 1972a). While a variety of techniques have been used to investigate IPT, most typically co-occurrence methods are used which require subjects to indicate the likelihood that a person with attribute X will have attribute Y (Bruner, Shapiro, & Tagiuri, 1958; Ebbesen & Allen, 1979; Hays, 1958; Schneider, 1973).

Rosenberg and Sedlak (1972a) note that IPT is evident in everyday behavior in at least two ways. First, it can be found in the ways in which individuals describe themselves and others in conversation and in writing -- for example, 'dizzy blondes', 'dumb jocks', 'crooked politicians', and 'intellectual snobs'. Intelligent, friendly, self-centered, ambitious, and lazy were found by Rosenberg and Sedlak (1972b) to be the terms most used by college students in free-response descriptions of people they knew.

Among these terms, intelligent and friendly tended to be used together to describe the same person, but intelligent and self-centered were not often found together.

A second and related way in which IPT is evident in everyday life is in the attribute inferences individuals draw from a personality description. For example, if one is given a description of an individual as 'beautiful and very rich, but she really keeps to herself and will not talk to many people', which additional attributes would be generated by the recipient of this description? -- 'snob'? Perhaps more often than 'shy'?

The reader may rightly question whether, in reality, beautiful, rich, and private women are more likely to be snobbish than they are to be shy. The issue is one of realism -- to what extent are IPT's accurate? The issues of accuracy in IPT are essentially the same as those assessed in earlier work on person perception. Thorndike's halo effect is again relevant here -- perceivers tend to form general impressions of others which they use to assess more specific qualities. This does not mean, of course, that people regularly perceive others with IPT's that are widely discrepant from reality. However, while some beautiful, rich, and private women may be snobs, perceivers do a disservice to those who are shy through this over-inference of qualities which sometimes tend to be found together, because they are not always found together.

The early research of Solomon Asch (1946, 1952) on impression formation also stimulated interest in the packaging process in person perception. Impression formation is the process of drawing inferences about the personality and mood of others (Friedman, 1983). Working in the Gestalt tradition, Asch believed that perceived human characteristics were part processes of a configuration of personality which had gestalt

characteristics (Bruner & Tagiuri, 1954). To demonstrate the organized nature of general impressions of personality, Asch (1946) gave subjects lists of traits which supposedly described a person. He then asked subjects for their impressions of the hypothetical person, using several written measures. One group received the following list of traits: intelligent, skillful, industrious, warm, determined, practical, and cautious. A second group received an identical list except that cold had been substituted for warm. The warm and cold groups reported very different overall impressions. Asch concluded that a change in one quality could produce a basic change in overall impression and that gestalten were operational in forming impressions of personality. Asch emphasized the spontaneousness with which impressions are formed, as did other early researchers in person perception and impression formation (Winter & Uleman, 1984).

Later research on impression formation centered on identifying the major cues and information used by individuals in forming impressions. The impact of a great variety of cues on drawing inferences about personality have been assessed: these include actual persons, photographs, voice recordings, and trait information (Ekman, in Tagiuri, 1969). The conclusion drawn by one extensive reviewer of this literature is quite succinct -- people can form impressions of others on the basis of almost any information, no matter how scant; also, they can do so with a relatively high degree of consensus (Tagiuri, 1969).

One profitable line of inquiry concerning what information individuals use and the processes by which they use it in understanding others has been provided by research in the area of attribution theory. In broadest terms, attribution theory is concerned with

the ascription of characteristics to any entity (Shaw, 1975). An assumption of attribution theory is that individuals need to understand events in the world around them, and in response to this need they develop a 'naive' psychology of behavior (Heider, 1958). Attribution is a rational, controlled process through which people draw conclusions about others (Feldman, 1981). As Lord and Smith (1983) note, attribution theory has been applied to understanding causality for a specific event, to assessing responsibility for some outcome, and to assessing the personal qualities of individuals involved in some event. Notably, the importance of the situation in the perception of behavior has always been recognized in attribution theory (Hastorf, Schneider, & Polefka, 1970).

Although several cues have been proposed to be used by persons in forming attributions, the present brief discussion will be limited to the use of consensus information in the attribution process. Kelly (1967) defined consensus as the extent to which others behave similarly in a situation being considered. If others behave similarly, then an act has high consensus; if not, then an act has low consensus. High consensus acts do not stimulate a person (causal) attribution, whereas a low consensus act is a vague cue which may lead to a person attribution or a more complex attribution. Jones and McGillis (1976) highlight an additional type of consensus information which they call 'category-based expectancies'. In essence these are stereotypical ideas concerning the behavior of categories of people (e.g. Blacks, females, presidents). When individuals behave in a manner consistent with a stereotype of some category, we interpret their behavior in relation to the stereotype (e.g., hulking, slow-speaking college football player fails English 101 -- what did you expect from a dumb jock?). Jones and McGillis further

note that this categorizing behavior occurs almost automatically, without much thought. Only if an individual behaves in a manner inconsistent with category-based expectancies does a perceiver make a more thoughtful attributional analysis.

Most recently, the use of categories in person perception is receiving considerable attention. However, the notion that people use categories in perceiving others is not a new one. In their 1954 review Bruner and Tagiuri explicitly state that attention is needed to assess the ways in which naive subjects categorize others. Stereotypes, which can be defined as qualities attributed to large groups of people (Tajfel, 1961, in Hamilton & Rose, 1980), have for some time been regarded as categories used in the perception of others. Much research has indicated that people use categories extensively in person perception, based on such things as physical appearance, race, gender, social occupation, and many other things as well (cf. Abelson, 1976; Fiske & Cox, 1977, in Cantor & Mischel, 1979). Categorizing others, as Tagiuri (1969) points out, serves an important function for the perceiver, as it allows for simplification of what could potentially be an overwhelming array of stimuli. As Cantor and Mischel (1979) note, categories also provide a symbolic representation of the world which allows for communication through shared category names. They also note that when a target individual fits well into a particular category, memory for the details of his or her behavior improves in general. However, the use of categories may also encourage the erroneous attribution of characteristics to categorized individuals. If an individual is classified in a category, perceivers may attribute category qualities to the individual which do not in fact exist.

Rosch and her associates (in Lord, Foti, & Phillips, 1982) have elaborated in depth on an explicit model of object perception. Although this model is intended, as stated, for the perception of objects, its basic elements have been applied to person perception (e.g., Cantor & Mischel), and in fact it has become one of the most predominant models in this area. It has also been applied to leader perception (e.g., Lord & Alliger, 1984; Lord, Foti, & Phillips, 1982; Lord & Maher, 1991; Maurer, Maher, Ashe, Mitchell, Hein, & Van Hein, 1993)), and so it will be described in some detail at this point.

In Rosch's model, categories are thought to be structured on both a vertical and a horizontal dimension. The vertical dimension is structured hierarchically and is arranged on the basis of inclusiveness. The superordinate is the broadest and most inclusive level, the basic level is less inclusive, and the subordinate level is the least inclusive. An example will illustrate: if furniture is classified as the superordinate category, table would occur at the basic level, and kitchen table would fall in the subordinate level (see Figure 1). At each vertical level, the horizontal dimension is concerned with the differentiation among categories. At the superordinate and basic levels, categories are related on the horizontal dimension in terms of 'family resemblance', which is a pattern of overlapping similarities between categories. Each category has more attributes in common with that category and fewer in common with members of overlapping categories.

Many category boundaries tend to be 'fuzzy' -- thus, cognitive categorization may be based on a 'prototype'. A prototype can be defined as an abstract collection of attributes most commonly shared by members of a category. 'Cue validity' refers to the

probability of accessing a particular category given a certain attribute. Thus, attributes common among differentiated categories at the same level have low cue validity.

Cantor and Mischel (1979) have advanced the notion that person perception also proceeds on the basis of categorical assignments, with the internal structure of person categories analogous to that hypothesized by Rosch for object categories. Person categories are also 'fuzzy', and such categories are also organized around prototypes. Thus, to oversimplify, in perceiving people, we classify individuals into categories based on the match between our perceived characteristics of them with those which comprise our prototypes.

Summary and Integration: Origins of ILT

Several lines of inquiry have been instrumental in the development of the ILT approach to the perception of leaders. Earlier leadership research failed to yield a single theory which could adequately and completely explain leaders and the leadership process. A general historical progression found in approaches to leadership has been greater and greater incorporation of followers' perceptions of leaders as important elements for understanding leadership. Pfeffer (1977) and Calder (1977) have gone so far as to suggest that leaders exist only through the perceptions of others. These general developments led some contemporary leadership researchers to look further into the perceptions of leaders by followers, and in doing so, they incorporated research from the area of person perception and social cognition.

Research on how individuals perceive others has long indicated that there is a degree of simplification in the process of person perception -- some packaging of stimulus information. Individuals consistently display that they have certain preconceived notions about what personal characteristics tend to be found together. These characteristics, in reality, may often be found together but are not always found together. From very little information presented about a stimulus person, individuals can draw inferences about other characteristics, and they can do so with a high degree of consensus. Individuals use general impressions, implicit personality theories, stereotypes, and categorization, all aspects of the same general phenomenon, to simplify person perception. While this simplification does occur, reducing the cognitive load on

an individual in perceiving others, information may be lost or qualities incorrectly attributed through this process.

ILT represents a specific case of the simplification strategies used by individuals in person perception. Leaders are people, of course, unless one believes that they exist only in the eyes of their followers, and their perception by organizational participants has been deemed important for the understanding of the leadership process. What are the implications of a shared, 'naive' conceptualization of what a leader should be for the study and understanding of leadership? Research on ILT has investigated the presence of such a simplification strategy, its implications for measuring leader behavior, the qualities which comprise a shared ILT, individual differences in ILT, and the cognitive processes through which ILT has its influence.

Review of the ILT Literature

The Impact of ILT on Leader Behavior Questionnaires

A great deal of the research on ILT has specifically addressed the effects of ILT on ratings of leader behavior. This is an important area of study, as much of contemporary leadership research in organizations uses leader behavior descriptions, in great measure due to the influence of the Ohio State research. In the main, these reports had been assumed to accurately capture the behavior of leaders. However, there is a body of evidence that has led some to conclude that these measures may be capturing something else, or something in addition to, actual supervisory behaviors. ILT is proposed to impact upon behavioral ratings through a mediating influence. Thus, when

asked to rate leader behavior, respondents use an ILT to rate specific behaviors in a manner consistent with the ILT (Eden & Leviatan, 1975; Foti, Fraser, & Lord, 1982; Larson, 1982, 1984; Lord, 1985; Lord, Binning, Rush, & Thomas, 1978; Lord, Foti, & Phillips, 1982; Mitchell, Larson, & Green, 1977; Phillips & Lord, 1981, 1982; Rush & Beauvais, 1981; Rush, Phillips, & Lord, 1981).

Factor Structure. Some of the earliest studies of ILT demonstrated that individuals have preconceived notions about what leaders do and about what leader behaviors tend to occur together. In 1966 Julian and Hollander (in Hollander, 1985, p. 524) found that given only minimal information regarding leader characteristics, in various combinations, subjects produced consistent responses to questions about various aspects of the leader. In 1975 Eden and Leviatan, using the leadership subscales from the Survey of Organizations, instructed 235 subjects to use it to describe 'a plant you do not know. It is Plant X, it makes food products, and it is located in a central region of the country'. The leadership subscales of the Survey of Organizations were developed in 1966 by Bowers and Seashore, who conceptualized and measured four factors of leader behavior. The four leadership scales: support, work facilitation, interaction facilitation, and goal emphasis, were based on the factor analysis conducted by Halpin and Winer (1957) using the LBDQ developed at Ohio State University. The support and work facilitation dimensions are analogous to the C and IS dimensions, respectively.

Eden and Leviatan factor analyzed the questionnaire responses and compared the factor structure and item loadings with those obtained in 1970 by Taylor and Bowers, who used the same items for obtaining descriptions of supervisory behavior in an oil

refinery. The results of both studies were very similar. Four factors emerged in the Eden and Leviatan analysis, with each item loading on only one factor. Thus, in the absence of all but minimal information about an organization, with no information about a supervisor, subjects attributed the same relationships among leader behaviors and made ratings along the same dimensions as did individuals who actually observed and rated their leader.

Similar findings were reported by Rush, Thomas, and Lord (1977), where subjects read a brief description of a department supervisor and completed the LBDQ, which was then factor analyzed. The resulting factor structure was compared to that obtained in a 1975 study conducted by Schriesheim and Stogdill, where subjects actually rated their supervisor using the LBDQ. Again, the factor structures and item loadings were very similar. Weiss and Adler (1981), using the Survey of Organizations, replicated the findings of Eden and Leviatan, by asking subjects to think of an imaginary organization and a fictitious supervisor and to use this information in responding to the leadership subscales.

The central question which stems from the above research is where did these factor structures come from, if they are not the result of observing supervisory behaviors? These researchers concluded that the factors and behavioral covariances had been brought by the respondents to the measurement situation 'in their heads', in the form of implicit theories of leadership. There are potential implications of these findings for much of leadership research which relies predominantly on subordinate responses to questionnaires to measure leader behavior, although they do not necessarily indicate that

the factor structures obtained in ratings of actual supervisors are inaccurate reflections of behavioral covariances. However, when such leader behavior description questionnaires are used in organizational settings, to what extent do the responses reflect actual supervisory behavior and to what extent are they, if at all, capturing ILT? What contextual cues may influence respondents' perceptions of leaders? These issues are discussed in the following section.

Performance Cue Effect. Rush et al. (1977) evaluated the effect of performance information on subjects' responses to the LBDQ. Brief written descriptions of supervisors given to subjects were altered slightly to vary performance cues on how well the department had performed (either the department was described as one of the best in the company or one of the worst). The impact of the performance cues on mean levels of rated C and IS behavior was highly significant -- accounting for 33% and 42%, respectively, of the variance in the ratings. This phenomenon, that performance information can alter behavioral ratings, came to be called the performance cue effect (PCE). These findings do not necessarily imply that in applied settings the effects of knowledge of work group performance by subordinates on leader behavior ratings would be this profound, or even exist. One could argue that subjects in this experiment were so impoverished in terms of information about the supervisor, having no information of actual behavior, that they had to work backwards and substantially over-use performance information.

Lord, Binning, Rush and Thomas (1978) evaluated the PCE in a study which manipulated both leader behavior and performance feedback. These researchers used two

fifteen-minute videotapes of a four-person group with a designated leader engaged in a sentence unscrambling task. Both leaders exhibited equal amounts of leadership behavior, but one leader exhibited 28 IS behaviors and the other leader only 8. After viewing the videotape, one third of the subjects randomly received good performance feedback, one third negative performance feedback, and one third received no performance feedback, resulting in a 2 X 3 factorial design. The performance feedback consisted of descriptions on how well the group had done relative to other groups which had worked on the task. The LBDQ was used as the dependent measure. The results indicated highly significant main effects of both the leader behavior and the performance feedback manipulation. Notably, the interaction between performance cues and the behavior conditions was not significant, indicating that the amount of IS leader behavior had little impact on how subjects adjusted their ratings to accommodate the performance cues. This result, taken in conjunction with the highly significant main effects, indicates that performance information was not used merely as a substitute for insufficient behavioral information, because the subjects had enough behavioral information to make relatively accurate ratings.

Rush and Beauvais (1981), using almost exactly the same methodology as Lord et al., with videotapes as stimuli, allowed subjects to complete only the LBDQ items which they felt could be confidently and accurately rated, as well as also requiring some subjects to complete the entire questionnaire. The bogus performance information had a significant effect on LBDQ ratings in both conditions, and the PCE was not significantly altered by allowing subjects to rate only the items they felt sure about. Thus the authors

conclude that the PCE cannot be explained by sheer information impoverishment of the respondents. It appears instead that individuals have expectations that effective work group performance and frequent C and IS leader behaviors go together, and that ineffective work group performance and relatively less frequent C and IS leader behaviors also go hand in hand.

Mitchell, Larson, and Green (1977) conducted three studies to assess the effects of performance information on ratings of leader behavior. In the first study, subjects listened to a tape recording of a group meeting, with the leader's voice identified. The group was engaged in a task concerning making decisions about the most appropriate entrance requirements for incoming freshmen. Before hearing the tape, half the subjects were told the group had performed well (had provided the best recommendations), and half were told that it had performed poorly (had provided the worst recommendations). Afterwards, subjects completed the LBDQ. Subjects who were told the group had performed well rated the leader as exhibiting significantly more structuring behavior. Measures of C behavior were not significantly different for the high and low performance groups.

The second study had a sample of subjects view a thirty minute videotape of a group meeting with a designated leader. The group members were acting as members of a research and development team, for the purpose of generating a proposal to alleviate absenteeism and turnover in their company. Again, before exposure to the stimulus material, subjects were provided with performance feedback. Half the subjects were told they were viewing a videotape of a group which had provided the best proposal, and half

were told they were seeing the group which had provided the worst proposal. Here, both the C and IS leader behaviors were rated significantly higher in the high performance group.

The third study used groups composed of two naive subjects and a confederate leader, who worked together on a task for thirty minutes. The task was complex, involving reading a case history about a company and making decisions about ten issues facing the organization. Performance feedback was again provided to the subjects, but this time after the completion of the group session. The confederate leader was blind to the performance feedback condition. In this last experiment, there were no significant differences between groups on ratings of supervisory C and IS behaviors.

One way in which the third Mitchell et al. study, which yielded no significant differences between groups on ratings of leader behavior, differed from the first two studies was in the timing of the bogus performance information. In the third study, performance feedback was presented after the group interaction. Larson (1982), using videotapes of a group interacting with a leader, explicitly manipulated timing of performance feedback (pre - post stimulus observation) and found no significant effect of timing. Larson, Lingle, and Scerbo (1984) found that post-observation performance cues produced stronger effects on LBDQ ratings than did pre-observation performance cues. These researchers also provided evidence that the effect of pre-observation cues is due to selective encoding of leader behavior in memory, while the post-observation effect is due to a reconstruction of how the leader probably behaved, on the basis of some cues, independent of behavioral information actually recalled from memory.

Several other researchers have presented performance information after exposure to stimulus material, consisting of either written descriptions or videotapes, with significant differences still found on ratings of leader behavior as a result of the performance information (Butterfield & Thomas, 1978; Larson, Lingle, & Scerbo, 1984; Lord, Binning, Rush, & Thomas, 1989; Phillips & Lord, 1981,1982; Rush & Beauvais, 1981), although these results are more consistent for IS behavior than for C behavior. Thus, the timing of the performance information does not explain the lack of significant findings.

Perhaps a more important difference between the first two and third Mitchell et al. studies is the fact that in the third study participants actually interacted with the leader on a problem solving task. This is clearly the most externally valid manipulation of the three studies, in considering the application of these results to the use of ratings in applied leadership research. Perhaps when individuals actually interact with a leader in a goal-related manner, they get the most behavioral information about him or her, in the most personally relevant manner, and so they do not exhibit to the same degree the over-reliance on performance information to infer leader behaviors.

In a group-type situation, it seems quite likely that first-hand information is more readily available regarding the extent to which the leader, and the other group members, are jointly responsible for the outcomes of the leadership process. Knowledge of group performance has been found to considerably affect questionnaire ratings of group process. Staw (1975) provided groups which had worked together on a thirty minute puzzle task with post-interaction bogus performance cues, which consisted of how well

(or poorly) they had done relative to other groups. Group members told that they had "done quite well" rated their groups as being significantly higher in cohesiveness, influence, and communication than did members of groups who were told their performance was negative. Binning and Lord (1980) had subjects meet for one hour on three separate occasions, spread out over five days or less. Again, bogus performance feedback had a significant effect on ratings of group processes, in the expected manner.

Finally, the sample size in the third Mitchell et al. experiment was quite small, with sixteen subjects in the good performance condition and fourteen in the negative performance condition, which may have led to a lack of statistical power in isolating significant between-groups differences. Such a small sample size may not have allowed idiosyncratic differences between groups to equalize over experimental conditions. Also, there is the possibility that the confederate leader's behavior was not consistent over the experimental trials. However, performance feedback was alternated on a random basis over trials, and presented after the group interaction, so behavioral differences systematic to either condition seem unlikely.

In any case, the final assessment of whether and to what extent performance feedback affects leader behavior descriptions in applied settings is vague. It appears to have a pronounced effect on leader behavior ratings in situations where raters are uninvolved in the leadership process. It may be that where subjects experience greater involvement in the leadership process, through having an active role in an interacting group, the impact of the PCE on leader behavior descriptions diminishes.

Accuracy in Memory for Specific Behaviors.

Implicit theories are one type of cognitive simplification strategy which can affect memory for specific behaviors (Tesser, in Rush, Lord, & Phillips, 1981). If perceivers use ILT to rate specific behaviors, it follows that they may falsely recognize specific nonpresent behaviors which are congruent with their ILT. That this occurs has received some empirical support.

Phillips and Lord (1982) had independent groups of subjects rate the extent to which 53 behavioral statements were prototypic of effective leaders and ineffective leaders. From these, a thirty-item leader behavior description questionnaire was developed, containing ten behavioral items each for prototypically effective, prototypically ineffective, and prototypically neutral leader behaviors. A second sample of subjects watched a fifteen-minute videotape of a problem-solving group with a designated leader, who exhibited five instances of prototypically good leader behavior, five instances of prototypically bad leader behavior, and five instances of prototypically neutral leader behavior. The behaviors exhibited by the leader were five of the ten behaviors in each of the three categories from the questionnaire. Half the subjects were told after viewing the videotape that the group had performed second best and half were told it had performed second worst of twenty groups. A significant performance X prototypicality interaction indicated that subjects given good performance feedback 'recalled' significantly more prototypically effective behaviors. Prototypically neutral items were not affected by the performance feedback as subjects were relatively capable of distinguishing between present and absent prototypically neutral items.

Using very similar methodology, Phillips (1984) also investigated recall for nonpresent ILT-consistent behaviors. Subjects watched a videotape constructed exactly like the one used by Phillips and Lord (1982). Here, however, before subjects watched the tape, they were told either that the leader was very effective or very ineffective, with a control group receiving no initial leader label 'prime'. The thirty-item questionnaire was again used. There were significant effects of the leader label manipulation on ratings of prototypically effective and prototypically ineffective behaviors. Subjects 'recalled' more behaviors which were consistent with the initial label they had received, with recall for prototypically neutral behaviors unaffected by the leader label prime.

Maurer and Lord (1991) attempted to better understand the impact of prototypes in leader perception, and the generalizability of earlier ILT findings to actual organizational settings by simulating the "cognitive demand" characteristic of real group interactions. This research used no leadership primes, the target person was not identified as a leader, and no group performance information was provided. Also, an interesting aspect is the manipulation for cognitive demand, which also appears to simulate greater involvement on the part of participants in the high cognitive demand condition.

Using subjects viewing videotapes of a problem-solving group, Maurer and Lord created high cognitive demand using in concert the following manipulations: during the viewing subjects were given written materials relevant to the problem the group was discussing; a distracting confederate (speaking, questioning aloud) was strategically placed among viewers; subjects were seated in close physical proximity; and subjects

were told they would present to the group a list of their own solutions to the problem, so they should work on formulating suggestions while the tape was running.

Here, however, subjects did not rely any less on leadership prototypes in the high demand than in the low demand conditions. That is, being more "involved" in the problem solving event did not lessen the impact of ILT: actors displaying more prototypical behaviors were rated more favorably than those displaying less prototypical behaviors across cognitive demand conditions.

There is the question, however, of the importance placed upon the subjects to "participate" in the decision making task and whether or not they perceived the problem as one deserving of any attention. The authors do not include a description of the problem on which the video group was working. In addition, results of the manipulation check show that subjects in the high cognitive demand group did not devote more of their time during the video to thinking of solutions. They also did not provide more suggestions than did subjects in the low cognitive demand group, although specifically directed to think about alternative solutions.

Thus, ILTs do appear to act as a mediator between observation and subsequent recall of behaviors. When subjects are encouraged to categorize leaders as effective or ineffective, either through initial labeling, through performance cues, or from observed behavior, they recall more ILT-consistent than inconsistent behaviors. Prototypically neutral leader behaviors, which would not be an aspect of a simplified general impression of an effective or ineffective leader, are not influenced by leader labels or performance feedback and are recalled more accurately.

While ILT can cause respondents to falsely recognize nonpresent ILT-consistent behaviors, as mentioned previously, when an individual fits well in a category, memory for the details of his or her behavior can improve in general (Cantor & Mischel, 1979). Rush et al. (1981) investigated the effects of a temporal delay in ratings of leader behavior. Subjects had been exposed to a videotaped four-person problem solving group with an appointed leader who displayed either many or few IS behaviors. Performance feedback (good, bad, or none) was also a manipulated variable. Half the subjects rated the leader's behavior, using several subscales from the LBDQ, immediately after viewing the videotape, while the other half completed the LBDQ after a 48 hour delay. All subjects also completed a specially constructed memory test concerned with factual information presented on the tape. There were significant differences between the immediate and delayed rating group in terms of accuracy, as measured by the specially constructed memory test, with subjects in the immediate condition displaying greater memory for factual information presented on the tape.

However, although subjects in the delayed conditions displayed decrements in memory for factual information over time, the behavioral ratings were as accurate in the delayed condition as they were in the immediate condition. These authors interpreted these findings to indicate that subjects had initially used the performance feedback and behavioral information to form a simplified leadership impression. When subjects in the delayed rating condition were asked to make ratings, they relied on their ILT to make responses. This simplified impression allowed for summarization and memory of leader behaviors consistent with the initial impression, and thus, subjects were able to rate

behaviors on the basis of this summary impression, which allowed for less 'memory' loss than that displayed for recall of factual information presented on the tape.

However, taking the research on ILT-induced distortions in leader behavior descriptions as a whole, there are difficulties in generalizing these findings to the use of leader behavior descriptions in organizations, and as has been suggested by researchers in the area, to organizational leadership evaluation situations such as assessment centers, performance appraisal, salary increases, and movement decisions such as promotions and transfers (e.g., Lord & Maher, 1991). Specifically, one issue is to what extent can the perceptions of leaders based on leader labels and observations of videotapes be considered analogous to the perceptions formed during the on-going nature of organizational life? The research indicates that subjects can be induced to form 'snap' impressions, and to use these initial impressions to rate leader behavior and recognize nonpresent ILT-consistent behaviors, with strictly observational exposure to a leader of a "disinterested observer" nature.

Performance feedback has been found to influence ratings of group process variables in interacting groups (Staw, 1975; Binning & Lord, 1980). However, it may well be that there are differences associated with ratings of group process and leader behavior. These studies indicate that groups will, in some fashion, take responsibility for group-level outcomes. In work groups, would group performance information which discounts an initial leader impression lead to a re-evaluation and selective recall of leader behavior, or would group members look elsewhere to affix responsibility for work group outcomes -- perhaps at themselves? By this line of reasoning, using only ratings of leader

behavior does not answer the question of how, 'in real life', groups use performance information in leader perception. Do group members use performance information to change their perception of a leader, of their group process, or, most likely, some combination of the two?

Organizations are structured around groups of individuals who are bound together by many things (e.g., level of education, training, competence) not the least of which is, in some form, a common goal (Etzioni, 1969). It seems extremely likely that in many situations in organizations, individuals experience some level of involvement in the process of leadership. That they do is one of the basic tenets of transactional models of leadership. It should not be assumed, as some researchers imply, that research based on the strictly "disinterested observer" paradigm which has characterized almost all of ILT research is readily transferable to all leader perception situations in organizations.

Shared Characteristics of ILT

The research discussed thus far provides some indication that an ILT is shared by perceivers. The work of Eden and Leviatan (1975) and Rush et al. (1977) indicated that respondents to leader behavior questionnaires, provided with minimal information, rate leader behavior along the same dimensions that individuals who actually rate supervisory behavior do, and also that they have ideas about what leader behaviors tend to be found together. Subjects appear to have, in particular, implicit ideas that C and IS are independent behavioral dimensions, and that C behaviors tend to occur together and IS behaviors also tend to occur together.

While the Rush et al. study was conducted here in the United States, as was much of the initial LBDQ research, the Eden and Leviatan study was conducted in Israel. Bryman (1987) replicated their findings in England. There thus appears to be some level of cross-culture transferability of this research, at least to "westernized" cultures.

Combining research on the PCE with earlier research conducted on C and IS, it appears that good group performance is perceived to go hand in hand with effective leaders, and leaders with effective work groups are perceived as displaying high frequencies of C and IS behavior. Poor work group performance is perceived as accompanied by ineffective leadership, with leaders of poor performing groups seen as displaying relatively lower frequencies of C and IS behavior.

In the research of Phillips and Lord (1982), simply developing the questionnaire on prototypically effective and ineffective behaviors indicated that subjects did have shared ideas about what behaviors were characteristic of effective and ineffective leaders. Phillips (1984) and Lord and Alliger (1985) have also used similarly developed questionnaires, and found consensus among subjects as to what constitute characteristically effective, characteristically neutral, and characteristically ineffective leader behaviors.

Additional studies have been conducted which attempt to pinpoint other leader qualities and behaviors which comprise an ILT which is widely shared. Lord, Foti, and DeVader (1984) had college students develop a list of traits which they felt were associated with eleven different types of leaders (military, educational, business, religious, sports, world political, national political, financial, minority, media, and labor).

Eleven attributes were found to be associated with at least three of these categories of leaders. These traits included (the proportion of categories to which the trait applied is enclosed in parentheses): intelligence (.92), honesty (.64), outgoing (.55), understanding (.45), verbally skilled (.45), aggressive (.36), determined (.36), industrious (.36), caring (.27), decisive (.27), dedicated (.27), educated (.27), and well-dressed (.27). Singer (1990) also found that undergraduate students' ILT was quite similar to that of middle managers.

Staw and Ross (1980) had subjects study one of eight case descriptions describing an administrator's behavior. Three variables were systematically manipulated in the descriptions: consistency vs. experimentation in course of action; minimum vs. maximum commitment of organizational resources to the course of action; ultimate success vs. failure of the outcome of the administrator's action. Subjects rated the leader on the overall quality of his work and indicated whether he should receive a raise and a promotion. All three independent variables yielded significant main effects. An interaction between consistency, resource allocation, and ultimate success was significant such that the administrator was rated highest when he was consistent, allocated minimum resources, and was ultimately successful.

Lord, DeVader, and Alliger (1986) conducted an interesting analysis using studies from Mann's (1959) review. A validity generalization was carried out on fifteen of the twenty-eight independent studies in Mann's review which in their original form contained the data necessary for the analysis, and twelve subsequent studies were also included. The correlation used for each study in the analysis was between a standardized test of a

leader's personality trait and a measure of leader perception (e.g. group member or observer ratings). Six traits were evaluated: intelligence, dominance, adjustment, extroversion-introversion, conservatism, and masculinity-femininity. The results indicated that intelligence, dominance, and masculinity were significantly associated with leader perceptions. Thus it appears that the 'objective' presence of a few traits, as measured by standardized personality inventories, is indeed related to the perception of individuals as leaders across a wide variety of situations. Of course, these results do not indicate that traits themselves differentiate effective from ineffective leaders.

Much of the research done on leader emergence, usually through leaderless group discussions, is relevant here. As mentioned previously, several qualities have been found to be consistently related to leader emergence. These include quantity of verbalizations (Maurer & Lord, 1991; Stein & Heller, 1979) and speaking first (Hollander, 1974). Many researchers have formulated hypotheses about why various qualities are consistently significantly correlated with leader perception measures and leader emergence. As mentioned previously, Hollander and Julian (1969) have proposed that leaders are allowed to emerge when they fit the shared conceptualization of a leader held by followers -- in essence, although not phrased this way, their shared ILT. It seems very likely that many variables associated with leader emergence could be explained as aspects of ILTs; which of these are most widely shared and apply across situations is an empirical question.

There thus are several leader qualities or behaviors that are consistently associated with the perception of leadership; however, with the exception of the validity

generalization of Lord et al. and the findings complied across many studies by Stein and Heller (1979) on rate of participation, these studies have been situation-specific. Thus it is impossible to say, for example, that consistency is always important for an individual to be perceived as a leader. What qualities are important may vary across situations, with situations broadly defined; this has been exactly the premise of contingency models of leadership, and also is a prediction of the categorization model of leader perceptions, to be discussed in greater detail subsequently.

Finally, while a discussion of the traits of intelligence and masculinity-femininity in leadership is beyond the scope of this paper, a few additional comments will be offered. Intelligence, either perceived or objectively measured, seems to be a desirable quality for leader perceptions which displays considerable generalizability across situations. Leader gender has also consistently been associated with leader perceptions, with males more likely to be perceived as leaders, but this may have been due to the relative paucity of mixed-sex groups in leader emergence research, and in fact appears to be a trend which is changing (Hollander, 1985, p. 523).

Individual Differences in ILT

Research in the area of implicit personality theory has shown some indication that there are individual differences in IPTs (Schneider, 1973; Weiss & Adler, 1981), but little research has explicitly assessed the role of individual differences in ILTs. Weiss and Adler (1981) evaluated differences in cognitive complexity on ratings of leader behavior. Cognitive complexity was defined as differentiation among constructs available for describing others, and was measured using Bieri's modified Role Construct Repertory

Test. As mentioned previously, these researchers had subjects think of an imaginary organization and supervisor, and then complete the Survey of Organizations leadership subscales. Two separate factor analyses were conducted, one for ratings of subjects high in cognitive complexity, and one for ratings by subjects who were classified as low in cognitive complexity. They found no differences between subgroups on factor structures and item loadings, and the factor structures which emerged replicated those found by Eden and Leviatan. Perhaps, however, the inclusion of a 'mid-level' cognitive complexity group would have aided in differentiating among the groups and provided a more exact test of the effects of cognitive complexity on leader behavior ratings.

Butterfield and Powell (1981) provided subjects with brief written case descriptions of managers, and then had subjects complete the C and IS scales from the LBDQ on the basis of this limited information. Female subjects gave the managers significantly higher ratings on both C and IS than did male subjects. However, sex of the ratee explained less than 2% of the variance in the ratings.

Lord, Phillips, and Rush (1980) using four-person problem solving groups with no designated leader, had subjects rate other group members on perceived leadership after they had worked together on a task. Female subjects rated other group members significantly higher on two single items -- how much leadership they had exhibited and how much they had contributed to task completion. These researchers also found that external locus of control subjects rated other group members significantly higher on measures of perceived leadership than internal locus of control subjects.

Kinder, Peters, Abelson, & Fiske (1980) found no differences across Republicans and Democrats, liberals and conservatives, young and old, men and women, Southerners and Northerners, and the educated and less well-educated in the trait terms comprising their conception of an ideal president (e.g., competent, trust-worthy). Maurer et al. (1993) found small but statistically significant differences between Democrats and Republicans on the traits of an effective political leader. Republicans rated such a leader as slightly more patriotic, aggressive, religious, tough, and optimistic, and slightly less humanitarian than did Democrats.

In addition, Maurer et al. found some differences based on level of political involvement, operationalized as a) knowledge of the campaign platform of the two then-current presidential candidates; b) rating of the personal importance of the election outcome; and c) whether subjects had voted in the two previous presidential elections. Politically involved respondents described an effective political leader as being more decisive and persuasive and having higher moral standards. Low-involvement subjects described this leader as somewhat more likable, easygoing, authoritarian, and religious.

Thus the extant ILT literature offers little in the way of illuminating potential individual differences in ILT, and a lack of systematic investigation makes general comments impossible.

The Internal Structure of ILT: A Cognitive Categorization Perspective

Lord, Foti, and Phillips (1982), borrowing from the work of Rosch (in Lord, Foti, and Phillips, 1982) and Cantor and Mischel (1979), discussed earlier, have proposed that the perception of leaders proceeds through categorical assignments, and that ILT reflects

the structure and content of cognitive categories used in leader perception and classification. These authors have proposed a model of leader perceptions based on the categorization scheme proposed by Rosch for object perception and by Cantor and Mischel for person perception.

Lord et al. hypothesize that the classification of leader/nonleader occurs at the superordinate level. It is the most inclusive level in the classification system, where one would expect few attributes common to all leaders. The basic level categories are less inclusive and reflect the kinds of leaders found in the world: world political, national political, military, religious, business, education, sports, labor, finance, media, and minority. For each basic level category, there is an analogous nonleader category: politician, diplomat, soldier, minister, businessman, teacher, athlete, union member, banker, reporter, and minority-rights supporter. The subordinate level categories are the least inclusive, and the authors explain that these may reflect subcategories of those at the basic level, for example, Kennedy-type national political leader vs. Reagan-type national political leader (see Figure 2). Because the boundaries of categories are fuzzy, at the superordinate and basic level, category assignment proceeds by a comparison of stimulus attributes with category prototypes. A prototype, to reiterate, is an abstract collection of attributes most commonly found in category members. Thus, the context, including performance information, and the traits and behaviors of potential leaders provide cues to perceivers which allow for categorization.

Empirical research supports some of the premises of this leader categorization model, in the areas of the use of prototypes in rating behaviors, and the existence of some

differentiation among leader categories at the superordinate and basic hierarchical levels. Rush et al. (1981), manipulating (videotaped) leader behavior and performance feedback, found that most of the variance in LBDQ ratings could be explained by a single item measure of amount of leadership exhibited. Thus when subjects completed the LBDQ, perhaps they did not rely on stimulus behaviors, instead incorporating all cues (leader behavior and performance) into a general impression, which was then classified into a previously learned categorization system. Then, the authors argue, the category ***prototype*** was used to fill in the missing details about the stimulus' behavior.

The findings of Phillips and Lord (1982) and Phillips (1984), that subjects 'recalled' more behaviors prototypic of effective or ineffective leaders, when all subjects had watched an identical videotape but leader label (effective/ineffective) or performance feedback had been manipulated, can also be taken as evidence of the influence of prototypes in recalling leader behavior, as nonprototypic behaviors were not influenced by performance information or by leader labels. This evidence is for the most part quite indirect, however, and does not support the use of prototypes specifically in leader perception, although they are often cited as doing so, because these results are equally indicative of a more general categorization phenomenon such as IPT, a general impression, or stereotyping.

In a more direct test of the categorization model, Foti, Fraser, and Lord (1982) used a Gallup poll survey titled 'President Carter's Phase Portrait' to investigate whether different leader labels imply different leader characteristics, in a test of superordinate and basic level category differentiation. The Gallup poll consists of seventeen traits and

behaviors, worded in positive terms and then in negative terms. Respondents choose which of the pair of opposites describes the person in question: for example 'decisive'/indecisive', and 'bright/not too bright'. These researchers had subjects rate the extent to which each item fit their image of either a leader, political leader, effective leader, or effective political leader. Across items, the prototypicality ratings of leader and political leader were significantly different, as were the political leader and effective political leader ratings. Effective leader and leader ratings were not significantly different, however.

In a second experiment, a single item, 'has strong leadership qualities', was correlated with ratings on all other items, using original Gallup poll data (n=1509). The most prototypical Gallup items were also the most highly correlated with the single leadership item from the Gallup poll. Using data from five Gallup polls conducted during Carter's presidency, these researchers reported that those items most prototypical of effective leadership changed most when Carter's leadership rating (single item) changed. Phillips and Lord (1982) also found that the LBDQ items which received the highest prototypicality ratings for effective and ineffective leaders were most strongly distorted by bogus performance feedback.

Kinder, Peters, Abelson, and Fiske (1980) found that an "ideal president" category was used in an evaluative manner with the then incumbent president, also President Carter. However, quite contrary to what ILT would predict, the Kinder et al. study showed that the qualities that voting subjects thought important for an ideal president,

those that were used in an evaluative manner with the current incumbent, were weighed no more heavily in their vote than were the qualities rated less important.

The findings of these studies indicate that certain attributes are more central in determining leader perceptions, and thus provide some support for the use of prototypes in leader perception. Subjects also had different notions about what characteristics were most associated with the different leader categories of leader and political leader, and political leader and effective political leader, providing some support, albeit quite limited, for the hypothesized category differentiation at the basic level.

Lord, Foti, and DeVader (1984) conducted research designed to more explicitly test some of the hypothesized relationships of the internal structure of leader categories. According to Rosch's original model, basic level categories are related on the basis of family resemblance, an overlapping pattern of similarities between categories. Using the hypothesized eleven different basic level leader categories and analogous nonleader categories, these researchers had subjects write down as many attributes in five minutes as they thought applied to one particular basic level leader category or an analogous nonleader category. Eleven attributes were found to be associated with at least three of the leader categories. These traits included (the proportion of categories to which the trait applied is enclosed in parentheses -- the family resemblance score): intelligence (.92), honesty (.64), outgoing (.55), understanding (.45), verbally skilled (.45), aggressive (.36), determined (.36), industrious (.36), caring (.27), decisive (.27), dedicated (.27), educated (.27), and well-dressed (.27). This finding supports the notion of family resemblance in basic level leader categories, or at least pounds home the lessons learned

from trait and situational theories of leadership. With the exception of intelligence, no attribute was seen as a critical feature which must be possessed by all 'varieties' of leaders.

Using family resemblance scores for 59 leader attributes and 26 nonleader attributes, cue validity scores were calculated for each attribute. Following Rosch, cue validity was operationalized in terms of conditional probabilities: the conditional probability of being perceived as a member of one basic level leader category given some attribute. Cue validities of leader and nonleader attributes were then correlated with leader and nonleader family resemblance scores. As would be expected given the hypothesized internal category structure, leader family resemblance was positively correlated with leader cue validity ($r=.49$, $p> .001$), and nonleader family resemblance was negatively correlated with leader cue validity ($r=-.55$, p .001). Prototypicality scores were calculated for leader attributes by an independent sample, and correlational analyses revealed that prototypicality and leader cue validity were positively correlated ($r=.42$, $p> .001$), as were prototypicality and leader family resemblance ($r=.40$, $p> .001$), indicating that the most prototypical attributes were high in cue validity and that, as would be expected, prototypical attributes are significantly related to leader family resemblance.

Again following the work of Rosch, Lord et al. hypothesized that the most prototypical attributes should be most accessible in memory. Prototypicality has been found to be associated with recall speed (Cohen, in Lord et al., 1984). Prototypicality ratings of twenty five two-word behavioral statements were generated by subjects, yielding subsets of items of prototypical leader behaviors, neutral behaviors, and

antiprototypical behaviors. Using computer terminals, a new sample of subjects were shown the behavioral statements, and their reaction time to rate the behavior in terms of its prototypicality was measured. Results indicated a significant negative correlation between prototypicality and reaction time (r=-.42), suggesting that more prototypical items were more easily accessed.

When a perceiver is involved in some situation with others, there are many possible categories that could be accessed. In most of the above research, 'leader' has been a very salient category. Lord et al. had subjects reads vignettes about a district manager in a large company and complete a leader behavior description questionnaire. These researchers found no differences between the leader behavior ratings for subjects who had been 'primed' to perceive leadership and subjects who had received no primes. The prime consisted of having some subjects make prototypicality ratings on a sample of leader behavior items. However, given that all subjects read a vignette about the district manager describing his behaviors, one has to wonder whether the stimulus materials could have reasonably allowed for the use of any other category or cognitive schema other than 'leader' or similarly, 'supervisor'. Others researchers have used stimulus materials which could plausibly have been organized by perceivers around other categories or other cognitive organizing schema as well as in terms of leader categories, and have found that the type of schema used affects encoding of information into memory and the way in which the information is organized (Foti, 1983, in Lord, 1985; Foti & Lord, 1987). It should be clear that in organizational life there are many potential cognitive organizing schema that perceivers can use, including person categories, and

also event schema, and future research might profitably assess what contingencies or individual differences influence what organizing schema are used.

Lord and Alliger (1985), using groups with no designated leader and measures of leader perception compared different information processing models of leader perceptions. Each group member rated each other on five items, for example, amount of leadership exhibited, and also indicated how willing he would be to choose the ratee as a leader for a successive work group. Each model was compared in terms of its ability to predict leadership ratings. One model is especially pertinent here. It tests whether leader perceptions are derived by comparing stimulus qualities or behaviors to a leader prototype. Group members' behaviors were observed and rated in different categories of leader behavior. It was hypothesized that prototypical patterns of behavior would contribute more to perceptions of leadership that nonprototypic or antiprototypic patterns of behavior. However, using subjects who interacted with one another in completing a task, the results provide no support for this hypothesis.

One potential explanation for the nonsignificant findings in that subjects were using some other schema besides 'leader' to encode and organize information. Another possible explanation is that the biasing effect of categorization is not as pronounced when subjects become involved in the leadership situation, whether through actually participating in task completion or through knowledge- and affect-driven involvement as in the politically involved group in the Maurer et al. study. Interacting groups may have information about the extent to which other group members' behavior was related to task performance or other group outcomes. Involved participants may be better able to assess

whether 'prototypical' behaviors were actually conducive to goal attainment. Categorization, however, does seem to apply to leader perceptions made strictly by "disinterested observers", by subjects who are not actively engaged with the leader in task completion, and who experience no personal involvement with or responsibility for the end product of the leadership situation.

Leader Perception: Cognitive Categorization or Attribution?

There are actually two alternative ILT interpretations regarding the cognitive processes which are responsible for leader perceptions. Although both involve ILT, one is rooted in the concept of attribution and the other is based on the leadership categorization theory discussed above. Some research has explicitly compared the models to determine which better explains leader perceptions.

The attributional interpretation holds that 'leader' is a label applied to others on the basis of a causal analysis. This interpretation assumes a high degree of information processing, a careful weighing of multiple pieces of information, and a specific quasi-scientific attributional analysis (Lord & Smith, 1983). This perspective assumes that an attributional analysis ***precedes*** leadership perceptions. The attributional interpretation of leader perceptions has been argued by both Pfeffer (1977) and Calder (1977). The categorization theory interpretation is that salient features or behaviors of a potential leader initiate a limited search for a category prototype. This process involves much less information processing. If a person is categorized as a leader, then the prototype is used to make judgments about the person. By this explanation, any causal attributions follow the initial leader categorization.

Phillips and Lord (1981), using a videotape of a four-person problem solving group with a designated leader, manipulated leader salience (the same tape had been filmed concurrently at two different angles -- in one tape, the leader was made more salient through close-up shots and by keeping him in the center of the visual field), performance feedback, and the configuration of alternative plausible causes. This last variable was manipulated through first varying information presented to subjects about the ability and motivation of the group members, and the dullness of the task, resulting in augmenting or discounting causal schema about the leader's impact on group performance. For example, high ability and motivation of group members are inconsistent with poor performance, so causal ascription to the leader should be augmented under these conditions when group performance is low, and causal ascription to the leader should be discounted under the high performance condition when ability and motivation of members is high. Subjects rated the extent to which the leader was perceived to be a causal agent for the group's performance using ten items, and also provided their global evaluation of the amount of leadership exhibited on a single item. Subjects also completed the C and IS scales from the LBDQ.

While all three variables yielded significant main effects, hierarchical regression analyses indicated that almost all of the variance associated with the experimental manipulations could be explained by the single item assessing amount of leadership exhibited; adding causal ascriptions and the experimental manipulations did not add significantly to the explained variance.

Similar results are reported by Lord and Alliger (1985). Their findings indicated that most of the effects of the experimental manipulations could be explained in terms of a general leadership impression (single item), independent of causal ascriptions to the leader. This supports the categorization interpretation that causal ascriptions are a result of, not an antecedent to, perceptions of leadership.

Lord, Foti, and DeVader (1984), using written vignettes, altered the prototypicality of a supervisor's behavior and performance information. Subjects answered several questions regarding the degree to which the supervisor was responsible and accountable for the performance of his department. Significant interactions indicated that attributions of the causal importance of the supervisor increased as the supervisors behavior ranged from antiprototypical through prototypical. These results are consistent with the categorization interpretation of leader perception that causal inferences are derived from prior leader categorization. However, it would be interesting to see what the results of this experiment would have been if information about the group members was provided.

In a more specific test of the processes underlying the formation of leader perceptions, Cronshaw and Lord (1987) specified and operationalized a priori three alternative models of leader perceptions: a categorization model (attributional reasoning is not necessary in forming perceptions of a leader), an attributional model (attributional reasoning is required to form perceptions of a leader), and an independent model (observers use both categorization and attributional reasoning in forming perceptions of leaders). These researchers varied prototypicality of leader behavior and consensus

information using four twelve-minute videotapes of the same four-person work group with a designated leader. Consensus information was manipulated by varying other group members' prototypical and antiprototypical behavior relative to the leader. The dependent variables included a five-item general leader impression measure.

In terms of operationalizations, the categorization model would be supported if only the leader prototypicality manipulation impacted as a main effect on leader perceptions. The independent model would be supported if both the prototypicality and consensus manipulations had significant, independent main effects on leader perceptions. The attribution model would be supported by an interaction between leader prototypicality and consensus information, because the impact of the prototypicality manipulation should be higher under conditions of low rather than high consensus if explicit attributional analyses precede leader perceptions. The main effect of prototypicality was significant, that for consensus was not, and an interaction was opposite to that predicted by the attribution model. Thus, these results support the categorization model of leader perceptions that categorization precedes causal inferences.

A crucial question which follows from this research is to which leadership situations can these findings be generalized? Clearly, these results are more applicable to the perception of leaders with whom individuals have no direct contact. In organizations, do individuals make leadership perceptions through attributional analyses or through categorization? The research clearly supports a categorization process, but this may be more of a methodological artifact than anything else. Yet again, the issue is one of external validity.

The Phillips and Lord study indicated that information on group members, when available, ***was used*** in making evaluations of leaders. When group members are made salient, either visually or through description, they become a more influential factor in leader evaluation. In fact, it seems rather counter-intuitive to attempt to understand, in 'real life', group members' leader perceptions without considering the members' contribution to the end-products of the leadership situation -- group members ostensibly would do so.

One need not look far into the attribution theory literature to find differences associated with 'actors' and 'observers' in the information used in forming inferences, the processes by which inferences are formed, and the final inferences which are made (e.g., Jones & Nisbett, 1972; Monson & Snyder, 1977; McElroy, 1982). Usually these differences are summarized in terms of the focal person being salient to observers, with the situation being more salient to actors. All of the research which has tested attribution and categorization in explaining leader perceptions has used observers, through videotape-viewing or vignette-reading, and not actors. Organizational participants are, quite clearly, in many circumstances more like actors than they are like observers. In other circumstances they are "involved observers", and in others, "disinterested observers".

While noting that actor/observer differences exist in attributional analyses does not indicate that categorization is not the process through which leader perceptions are formed in organizations, it indicates that research which has compared attribution and categorization has not been sensitive to differences associated with the perception of

leaders through interpersonal relationships and the perception of leaders through observation. The generalizability of these findings should be limited to the latter case.

Summary and Discussion

ILT researchers first provided evidence of a naive, shared, layperson's conception of what dimensions underlie leader behavior and what leader behaviors tend to occur together. Then, because the evidence for the existence of ILT was obtained using commonly utilized measures of leader behavior, concern was expressed as to what these behavioral measures were really capturing when they were used in organizational settings. The influence of other-leader, contextual cues was evaluated, and a number of studies indicate that group performance information has a marked effect on ratings of leader behavior.

Research has indicated that individuals selectively recall behaviors which are consistent with their impression of a leader. Such impressions can be formed from experimenter-provided labels, through information provided regarding level of work group performance, or from observed behaviors. Perceivers use their ILT to rate supervisory behaviors, and will falsely "recall" specific non-present behaviors which are congruent with their ILT.

The final assessment, however, of whether and to what extent performance cues and leader labels affect leader behavior descriptions in applied settings is vague. Performance cues appear to have a pronounced effect on leader behavior ratings in situations where raters are uninvolved in the leadership process and where they are provided a description of group performance. The pattern of research findings suggests that, where individuals do become involved in the leadership process through having an active role in the task as an interacting participant (as in the nonsignificant findings of the

two studies, Lord & Alliger, 1985, and Mitchell et al., 1977, which used interacting groups), the biasing effect of performance cues appears to diminish.

In addition, certainly 'real' work groups may be provided with an external evaluation of their performance. However, it would not be remarkable to suggest that they also come to their own assessment of performance quality, which may, or may not, match that of the external evaluation. When work group participants make evaluations about the performance of any group member, including the leader, their internal vantage point may allow for a different perspective on the effectiveness of behavior. No study has evaluated the effects of the PCE on leader behavior ratings where subjects generate their own assessment of the quality of the end-products of the leadership process.

Research has also begun to identify the cognitive processes by which ILT has its influence. There is some evidence that in forming perceptions of leaders, based strictly on observation, prototypes are important integrating mechanisms which direct the perception and categorization of leaders. Leader perceptions based on the low-load cognitive process of observation are more a result of a 'snap' categorization, rather than an explicit causal reasoning process as argued by both Pfeffer (1977) and Calder (1977). Only one study (Lord & Alliger, 1985) used subjects interacting in a group to assess whether leader perceptions were derived by comparing stimulus qualities or behaviors to a leader prototype. However, the results of this study provide no support for the prototype hypothesis.

Much has been made of the findings that leader behavior description factor structures can be replicated under conditions of minimal information, that performance

cues have a large impact on ratings of leader behavior, and that respondents selectively remember and rate aspects of leader behavior which are consistent with their initial leadership impression, in effect, their ILT. These findings have been discussed by ILT researchers in terms of their implications for the measurement of leader behavior and for leader behavior research in organizational settings. By one interpretation, the impact of ILT on leader behavior questionnaires raises issues about any research which uses such questionnaires, and even about the veridicality of describing consideration and initiating structure behaviors as the most important dimensions of actual leader behavior, as has been suggested (Lord & Maher, 1991, p.92).

Such ILT research has been influential. The use of leader behavior description questionnaires, whether by researchers or practitioners, had once been a highly popular practice. The LBDQ had been generally assumed to be a reasonably realistic reflection of what respondents' supervisors actually did. ILT researchers have challenged this assumption -- so much, so often, and so convincingly that few reviews of the leadership area do not contain a blanket cautionary statement advising the reader against the validity of leader behavior descriptions. Indeed, submissions to volumes of the biennial Leadership Symposia published during the 1980's (e.g., Hunt, Hosking, & Schriesheim, 1984) were rejected on the grounds of the use of leader behavior description questionnaires (Bryman, 1987).

Methodological limitations, in particular the 'uninvolved observer' research designs characteristic of ILT research, lead to the question of whether the impact of ILT is as robust and generalizable as the seminal ILT research would lead us to believe. ILT has

also been generalized far beyond its apparent biasing effects on leader behavior descriptions, and perhaps to situations beyond those warranted by the experimental findings. Lord and Maher (1989) conclude that, "the same basic prototype matching process is used to form leadership perceptions (classify people as leaders or nonleaders) from either directly experienced (face-to-face contact) or indirectly experienced, socially communicated behavioral information" (p. 8).

Lord and Maher (1989) also describe leadership perceptions as being formed through daily contact and the normal flow of interpersonal activities, using "recognition-based" cognitive processing. Recognition-based processing is relatively automatic, and expected in organizational life because of the high information processing demands characteristic of such settings. And, the authors continue, as ILT often influences leader perceptions automatically, it is very influential in developing perceptions of leaders in such situations.

Other examples of applications of ILT research include Lord and Maher's (1989, 1991) description of how "atypical" leaders, such as "minorities and females", will have a particularly difficult time being perceived as leaders. This is so because as such individuals are rarely in leadership positions, they do not fit existing conceptualizations of typical leaders.

As another example, Lord and Maher also recommend that the goal of leadership training programs should be to help leaders identify the traits and behaviors which make up their subordinates' prototypes of effective leaders, and then to act accordingly (Lord & Maher, 1991, p.64).

If one fully accepts the work and conclusions of ILT researchers, it would be impossible to believe, for example, that assessment center judgments have much value as behavioral assessments, that 360 degree feedback provides accurate behavior descriptions, especially where employees rate supervisors, or even that job analysis questionnaires can be accurately completed by subordinates, and this list could go on and on.

There are, however, critical and unanswered questions in the area of ILT and leader perception. At issue is the question of the external validity of research findings, and the related issue of a lack of information regarding the moderating factors which condition the impact of ILT 'in real life'. How influential is ILT, really, in organizational life? Can we ever hope to assess leader behavior?

Of all the research studies explicitly investigating ILT, only 2 used group interactions and both yielded nonsignificant results. However, consistent significant results about the impact of ILT have been demonstrated when videotapes, tape recordings, or written materials were used as stimuli. Thus it is the conclusion of this reviewer that little has been offered in the way of evidence that leader behavior description questionnaires, used in settings where subordinates rate supervisors with whom they are actively involved in task completion, are susceptible to the same influences that ILT apparently has for rating leaders in 'uninvolved observer' situations.

This is not to suggest, however, that ILT is unimportant in leader perceptions, as a considerable amount of research belies such a conclusion. On a broader scale, the prevalence of cognitive simplification strategies in social cognition is well established, and is not challenged by this reviewer. It seems, however, that there are different perceptual

circumstances in which one could find oneself when perceiving a potential leader -- a continuum perhaps, ranging from uninvolved observation to involved participation. It also seems and is suggested by this review of literature that the influence of ILT would vary over such perceptual circumstances. The uninvolved observation situation appears to be the type of circumstance to which ILT research is most appropriately applied and where ILT would seem to have its greatest influence.

Making inferences and 'filling in the blanks' is the inevitable consequence of the use of implicit theories, schemata, and other cognitive simplification strategies. However, it has been demonstrated that individuals differ in the schemata that they have available to them and how they use them in processing information (Fiske & Kinder, 1981; Kim & Baron, 1988; Mackie, Hamilton, Schroth, Carlisle, & Gersho, 1989; Ostrom, Lingle, Pryor, & Geva, 1980). The less information an individual has about an attitude object, the more likely inferences are (Ostrom, et al., 1980; Rapoport, Metcalf, & Hartman, 1989). The probability that inferences will be made is also increased when individuals are asked to make some choice about the attitude object (Higgins & Bargh, 1987, p.387), such as answer a series of questions.

As for 'involvement', the term has been used thus far in this paper to refer in general to two situations: 'uninvolved', for situations in which subjects view a videotape of a leader interacting with a group, and 'involved' where subjects actually interact with a leader to accomplish some objective. There would seem to be more, however, to 'involvement'.

'Involvement' as a construct and a variable has been used in several fields of study, including industrial psychology, where it can be defined as the extent to which an individual identifies psychologically with his or her job (Blau, 1985). The term is also used and defined in a somewhat similar manner in the area of social cognition and political psychology. Its most complete definition in this context was provided from a review of relevant literature by Fiske and Kinder (1981), and this definition is still used by researchers in the political area (e.g., Maurer et al., 1993).

The Fiske and Kinder definition of 'involvement' consists of three conceptually distinct but realistically overlapping components: 1) 'cognitive engagement', or interest and attentiveness, 2) 'affective response', or an emotional reaction, and 3) 'behavioral participation', or active involvement. Fiske and Kinder apply their definition of involvement to the area of social cognition in general, arguing that people's involvement with invoked schema is critical to understanding more thoroughly how schemata guide and influence our perceptions.

The strictly observational research paradigms characteristic of all ILT research where significant findings are noted do not include a 'behavioral participation' component, nor would it seem a 'cognitive engagement' or 'affective response' component, either with the task or with the leader. The task or problem on which the videotaped group is working has not been considered particularly important. The task, when mentioned, would not seem to be of the type that would stimulate either cognitive engagement or an affective response. Examples of tasks include observing sentence unscrambling (e.g., Lord, et al., 1977), observing the solving of a numerical puzzle (e.g., Phillips & Lord,

1981), and, seemingly at best, observing a group of strangers discussing the finances of their fictitious company (Cronshaw & Lord, 1987). The tasks used in all other published research studies in the ILT area, which contained significant findings and where subjects observed a leader interacting with a group, are listed in Appendix B. When considering this list it becomes apparent that stimulating cognitive or affective engagement with the task was not a goal of any of the studies investigating ILT.

Fiske and Kinder (1981) demonstrated that political involvement influences information processing and information recall. Schema were invoked through the use of labels, either 'Democrat' or 'Communist', using written descriptions of a country which were almost identical except for the label provided to describe its political system. Low involvement subjects remembered more schema consistent information about 'Communists' and 'Democrats', whereas involved subjects recalled both schema consistent and inconsistent information equally. When asked to describe their 'country', low involvement subjects tended to recall in sequence prototypical attributes of whatever political system label they had received (e.g., as a Communist country, they have limits on emigration). Involved subjects tended to cluster information in a more sophisticated way: they focused on the attributes which were inconsistent with the label they were given. Said another way, low involvement subjects noted schema consistent information and ignored the rest, whereas involved subjects noted both schema consistent and inconsistent details.

In their seminal review, Fiske and Kinder (1981) also note that there are differences in low involvement and involved subjects in terms of the inferences they make based on schema labels. Low involvement subjects made predictions consistent with

schema labels, and their predictions tended to be more extreme (e.g., what would you expect the population density of this country to be? For Communist, extremely dense, for Democrat, not at all dense). Involved subjects made predictions closer to the scale midpoint, apparently less influenced by the label they had been given.

Given Fiske and Kinder's findings regarding the role of involvement in the use of schemata, applying the variable of involvement to the study of ILT appears to be a way to enhance our understanding of the influence of ILT in applied settings, and the factors which moderate its biasing influence. Applying the Fiske and Kinder definition of involvement to a work group in an organizational setting hardly seems a stretch: in almost all arrangements of this kind there is a behavioral engagement with the task, at some level and in some way, even if the behavior is strictly cognitive. Also, although not always the case, there may well be an affective and cognitive engagement with the task. Simply put, in many situations in organizations employees are involved with the work task and are concerned with the quality of the end product.

Involvement with the task would seem to influence perceptions of the leader's influence on task completion and result quality. Task involvement would seem to stimulate more sophisticated schemata or implicit theories about the 'workgroup plus leader situation', as the more that is known, understood, and appreciated about the task, the greater the awareness of the leader's actual behavioral influence on the task completion process.

In sum, it is beneficial to build on the foundation of research in the ILT area by enhancing the external validity of research designs, and assessing what factors moderate

the influence of ILT in organizational life. It is more complete to consider the effect of ILT on the use of leader behavior descriptions in applied settings by manipulating the level of task involvement of the raters of leader behavior. Doing so provides us with a greater understanding of the relative impact of ILT in varying perceptual circumstances, instead of only the strictly 'uninvolved observer' situation where the impact of ILT has been clearly demonstrated. Finally, such an investigation was certainly warranted as we continue to understand the complex effects of ILT in the organizational arena.

Hypotheses

Thus it was hypothesized that:

1. The ILT of task involved subjects, as measured by a general leader impression scale, is less influenced by leader labels than is the ILT of task uninvolved subjects.

2. Task involved subjects are less influenced by ILT in completing leader behavior description questionnaires than are task uninvolved subjects, as measured by the impact of leader label on subjects' LBDQ ratings.

3. Task involved subjects are less influenced by leader labels in their evaluation of group performance than are task uninvolved subjects, as measured by subjects' evaluations of the quality of the end products of a task group's interaction.

4. Task involved subjects display greater accuracy in memory for factual details of leader behavior than do task uninvolved subjects, as measured by a factual memory test administered after watching a videotape of a leader interacting with a group.

Chapter 3

Research Design and Methodology

This chapter provides an overview of the research methods used in the present investigation.

Videotape Stimulus

To test the above hypotheses, subjects viewed a specially-constructed videotape, depicting a four-person problem solving group interacting with a designated leader.

The individuals were in the roles of the Vice President for Academic Services and 3 Directors from an unnamed college located in the United States. The 3 Directors report to the Vice President for Academic Services. The group discussed using pass/fail grading for ***all*** college courses. The Vice President for Academic Services was the designated leader for this group, and displayed 5 clear instances each of prototypically good, prototypically neutral, and antiprototypical leader behavior. The behavioral examples of good, neutral, and antiprototypical behavior were identified using the research of Lord and Alliger, 1985, Phillips, 1984, and Phillips and Lord, 1982 on this topic. It was thought that a separate independent rating of the level of prototypicality of a series of leader behaviors was not necessary, as well-established literature and research exists in this area.

This video group was convened for an emergency 12 minute meeting to provide their input on the possibility of this new academic policy. Their recommendations had to be turned into the President and Provost of the college at the end of the meeting, as the presiding council of the college, including the President, Provost, and all Deans, met that evening to decide on the policy.

Materials and information that the video group used for the meeting are included in Appendix A.

Dependent Variables

There were 4 dependent variables. Two required subjects to rate the behavior of the leader identified on the videotape. The other two required subjects to evaluate the quality of the decisions reached by the video group, and to recall factual information and details observed on the videotape.

1. LBDQ. The C and IS subscales from Form XII of the LBDQ (Stogdill, 1963) were used. This version was chosen because it displays the most favorable psychometric properties of the existing versions of the LBDQ.

2. General Leadership Impression. A 5-item scale was constructed, measuring overall or general leader impression. Examples of items included, "amount of leadership exhibited", and "to what extent did this person fit your image of a leader". A GLI measure provides a global, undifferentiated evaluation of a leader. The use of such a measure to capture ILT has been well established in the literature. Such measures have been used by Cronshaw and Lord (1987), Foti, et al. (1982), Lord and Alliger (1985), Lord, et al. (1980), Lord et al. (1984), Maurer et al. (1993), Phillips and Lord (1981), and Rush et al. (1981), among others, and typically consist of from 1 to 5 items. The GLI measures used by these researchers were reviewed in the construction of the GLI measure used for this research.

3. Quality. A 10-item scale was constructed to measure subjects' perceptions of the quality of the decisions reached by the video group. Items included, "to what extent do

you agree the group reached the best possible solutions", and "to what extent do your agree with the decisions the video group reached".

This scale was used to assess subjects' evaluations of group performance, and to measure the impact of performance information on leader behavior descriptions where subjects generate an evaluation, as opposed to receive an evaluation of group performance.

4. Factual Memory. A 20-item measure was constructed to measure the accuracy of subjects' recollection of factual details about the leader's prototypical, neutral, and antiprototypical behavior during the meeting. This measure was constructed using behavioral instances of prototypical and antiprototypical leader behavior identified from available research. This information was also used to structure the leader's behavior on the videotape. Ten items each were included for prototypical and antiprototypical behavior. Five of the 10 items in each area were actually demonstrated behaviors of the leader on the videotape.

The use of such a measure to capture the biasing influence of ILT in terms of the 'recognition' of non-present but ILT-consistent behaviors, or the 'non-recognition' of present but ILT-inconsistent behaviors, has precedent in the literature. Such a measure has been used by Phillips and Lord (1982) and Phillips (1984). The measures of these researchers were reviewed in the construction the factual memory test for this research.

Independent Variables

There were 2 independent variables.

1. Leader Label. Subjects were informed, in writing, on a random basis that the group leader has been either effective or ineffective in his previous role as a leader in similar groups. One third of the subjects served as a control condition and received no leader label.

2. Task Involvement. Subjects were assigned to either a task involved or uninvolved condition. The manipulation was constructed so as to address cognitive, affective, and behavioral components of task involvement. The task uninvolved condition was designed to replicate the typical 'uninvolved observer' paradigm of ILT research. Task involvement was manipulated as follows:

Task Involved:

Subjects were assigned at random to 3-5 person groups. The task of the group was to work for 15 minutes to generate recommendations on the issue of pass/fail grading for ***all*** college courses. They were provided with the same written scenario and information as the video group (with the exception of the designated leader of the video group, who was coached to display the 5 instances each of prototypical and antiprototypical leader behavior).

The experimenter verbally provided this information to subjects immediately after separating them at random into 3-5 person groups:

"You will be participating in an experiment about work groups. While you are participating in an experiment, discussions regarding pass/fail grading are currently taking place at many colleges. While we are interested in having you as part of our experiment about work groups for research purposes, we are also equally interested in your views, as

college students, on whether pass/fail grading is better than letter or numerical grades for the primary purpose of higher education.

"After you work as a group on the issue for 15 minutes, you will view a videotape of a 4-person group working on the same issue.

"After you view the videotape, you will be asked to answer some questions about the leader and the work group on the videotape. You will also be provided with the opportunity to give your specific suggestions on the issue.

Task Uninvolved:

Subjects did **not** work in groups or receive the information provided to the video group, as did the subjects in the task involved condition.

The experimenter verbally provided this information to subjects before showing the videotape:

"Let me make one thing perfectly clear. This is just an experiment. We are only interested in having you view a group work together for research purposes, and that is simply the question they will work on. The specific issue they are discussing has no relevance to the experiment."

Design

The design for this experiment was a 3 X 2 factorial design with 20 subjects per cell. The two independent variables, task involvement (involved, uninvolved) and leader label (effective, ineffective, or none), were between subjects factors. According to Campbell and Stanley (1967) this constituted a post-test only comparison groups design.

Procedure

Task Uninvolved.

Subjects participated in the experiment for approximately 35 minutes.

Upon arrival, the experimenter provided subjects with a verbal description indicating that the experiment concerns how groups work together with a leader on tasks. She then explained that subjects will watch a 12 minute video of a work group and then spend about 15 minutes answering questions about what they have seen.

The experimenter indicated that the work group consists of persons in the roles of the Vice President for Academic Services and 3 high-level directors, who report to the Vice President. She told subjects that the group is discussing a new pass/fail grading policy. The experimenter then verbally administered the task uninvolved "prompt" using the scripted text provided in the description of the task involvement independent variable.

Subjects were then provided with brief written instructions and given approximately 3 minutes to silently read them. The instructions briefly described the scenario for the policy and identified the 4 members of the group. The written instructions also described the Vice President as either effective or ineffective in his previous role as a leader in similar groups, or no leader label was provided.

The experimenter then turned on the video, and after the tape ended, distributed and then collected the measures, and finally debriefed the subjects.

Task Involved.

Subjects participated in the experiment for approximately 55 minutes.

Upon arrival, the experimenter provided subjects with a verbal description indicating that the experiment concerns how groups work together with a leader on tasks. She then explained that subjects will be put into groups, work as a group for 15 minutes, and then watch the 12 minute video and spend about 15 minutes answering questions.

The experimenter indicated, as in the task uninvolved condition, that the work group consists of persons in the roles of Vice President for Academic Services and 3 high-level directors, who report to the Vice President. She told subjects that the group is discussing a new pass/fail grading policy. The experimenter then verbally administered the task involved "prompt".

Subjects were provided with written instructions and given approximately 3 minutes to silently read them. These instructions were the same as those provided to the video group. The group then discussed the pass/fail grading issue for the 15 minute work period.

The experimenter called time at the end of the 15 minute work period. She then explained that subjects would have an opportunity to document their suggestions on the issue.

The experimenter then introduced the videotape. Written instructions were passed out to subjects. At this point, they were the same instructions administered to the task uninvolved group. The instructions briefly described the scenario for the policy, identified the 4 members of the group, and provided the leader label (effective, ineffective, or none).

The experimenter then turned on the video, and after the tape ended, distributed and then collected the measures, and finally debriefed the subjects.

Statistical Analyses

An ANOVA and planned comparisons were performed on each dependent variable. H1, H2, and H3 specified interactions between the task involvement and leader label variables. The specific analyses performed for each hypothesis are detailed below. A diagram of the 3 X 2 factorial design is provided to assist in description.

		LEADER LABEL		
		Effective	***ineffective***	***control***
TASK INVOLVEMENT	***task uninvolved***	1	3	5
	task involved	2	4	6

H1: The ILT of task involved subjects, as measured by a general leader impression scale, is less influenced by leader labels than is the ILT of task uninvolved subjects.

DV: General Leader Impression (GLI)

Planned comparisons of cell means:
1 > 3 and 1 > 2
2 > 4 and 4 > 3

H2: Task involved subjects are less influenced by ILT in completing leader behavior description questionnaires than are task uninvolved subjects, as measured by the impact of leader labels on subjects' LBDQ ratings.

DV: LBDQ

Planned comparisons of cell means:
1 > 2
4 > 3

H3: Task involved subjects are less influenced by leader labels in their evaluation of group performance than are task uninvolved subjects, as measured by subjects' evaluations of the quality of the end products of the video groups' interaction.

DV: Quality scale

Planned comparisons of cell means:
1 > 2
4 > 3

H4: Task involved subjects display greater accuracy in memory for factual details of leader behavior than do task uninvolved subjects, as measured by a factual memory test administered after watching a videotape of a leader interacting with a group.

DV: Factual Memory

Planned comparisons of cell means:
2 > 1
4 > 3
6 > 5

Additional Analyses

A variety of additional analyses were performed on the data. Separate multiple regression analyses were used to assess the moderating effect of perceived quality on general leadership impression and LBDQ ratings. Leader label, level of involvement, and the quality measure were regressed on the GLI and LBDQ to determine the additional predictive value provided by this variable in determining perceptions of leaders. Other analyses are described more fully in the following Results chapter.

Chapter 4

Results

Data Analyses. All data were analyzed using SPSS Base 10.

Sample Size and Characteristics.

Usable data were collected from 147 subjects. The data were collected at a co-ed college in upstate New York. Ninety-seven (97) participants were female, and 49 male. One-hundred-seventeen (117) were undergraduate college students. The remaining 30 subjects were either graduate students, faculty members, or adult acquaintances of the research assistant. Ninety six (96) of the 147 subjects total were employed at the time of their participation in the research. One-hundred-thirty eight (138) identified their race as white. Nineteen (19) was the median age, and 127 were under the age of 25. As such, the majority of the sample consisted of white females under the age of 25. This is consistent with the general demographic characteristics of the college.

One hundred twenty six (126) subjects participated in a manipulation check (manipulation check 1) of the task involvement manipulation. Twenty-one additional subjects participated in an additional manipulation check (manipulation check 2) of the task involvement manipulation.

Sixty three (63) subjects were assigned to the task involved condition, and 63 to the task uninvolved condition. Forty seven (7) subjects were assigned to the leader label effective condition, 40 to the ineffective condition, and 39 to the control (no leader label) condition. The distribution of subjects among conditions is shown in Table 1.

Table 1: Subject Distribution Among Task and Leader Label Conditions

Count

		leader label			
		effective	ineffective	control	Total
task condition	uninvolved	25	20	18	63
	involved	22	20	21	63
Total		47	40	39	126

Manipulation Checks of the Task Involvement Independent Variable.

As stated above, one hundred twenty six (126) subjects participated in a manipulation check of the task involvement variable. The purpose of this manipulation check was to ensure that sufficient differentiation was created by the experimental manipulation between the task involved and uninvolved conditions. Subjects were assigned at random to either the involved or uninvolved condition, participated in the experimental manipulations, and then completed the dependent measures as well as a task involvement scale, described below.

A 10-item scale was constructed to measure task involvement. The scale addressed each of the 3 components of the Fiske and Kinder definition of involvement: cognitive engagement, affective response, and behavioral participation. It was decided that a measure had to be specially constructed to measure task involvement, as there was no existing scale which provided the direct and specific measurement sought. Various operationalizations of the Fiske and Kinder definition are provided in the literature, with no one consistent measure emerging; various operationalizations (e.g., Maurer et al.,

1993) were reviewed in the construction of the scale, as were measures of 'task involvement' available in the literature on job design.

This measure was also administered during the actual experiment, as a check on the robustness of the task involvement manipulation throughout the course of data collection.

Task Involvement Measure.

Items. The following items (Table 2) were used to measure task involvement.

Table 2: Task Involvement Items

Item =	
TI23	I was interested in the decision the video group reached.
TI24	The issue is personally important to me.
TI25	This issue should be important to all students.
TI26	The topic should be discussed in greater detail.
TI27	I would participate in further discussion on the topic.
TI28	I would like to voice my opinion on this issue.
TI29	Watching the group's discussion was interesting.
TI30	This is, in reality, a really big issue.
TI31	All students should all discuss this issue.
TI32	This issue will affect me personally.

Scale Mean and Standard Deviations. The mean for the task involvement scale was 3.2231and the standard deviation .7182.

Reliability. Alpha reliability was .8461, calculated across the 147 subjects who completed this measure.

Results of Manipulation Check 1:

As shown in Table 3, a t-test on the means of the task involvement measure for subjects in the task involved vs. task uninvolved conditions was significant (t= -3.456, p<.001). The results of manipulation check 1 can thus be interpreted to conclude that there was significant differentiation caused by the task involvement experimental manipulation.

Table 3

Manipulation Check 1: Task Involvement

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Task Involvement	Equal variances assumed	1.616	.206	-3.456	124	.001	-.4349	.1259

Item Level T-tests on Task Involvement Measure.

To further understand the components of task involvement, t-tests were run on each item comparing task-involved and –uninvolved groups. Significant differences, detailed in Table 4, were found on 6 of the 10 items. All in the items were in the expected direction, with subjects in the involved condition agreeing more strongly that:

- This issue should be important to all students
- This topic should be discussed in further detail
- I would like to participate in further discussion on this topic

- I would like to voice my opinion on this topic
- This is, in reality, a big issue
- All students should discuss this issue

Table 4

Significant Item Level t-tests on Task Involvement Measure

	t-test for Equality of Means				
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
TI25	-4.108	124	.000	-.65	.16
	-4.108	122.871	.000	-.65	.16
TI26	-2.887	123	.005	-.56	.19
	-2.887	122.937	.005	-.56	.19
TI27	-2.443	124	.016	-.49	.20
	-2.443	121.299	.016	-.49	.20
TI28	-2.169	123	.032	-.44	.20
	-2.168	122.732	.032	-.44	.20
TI30	-4.222	124	.000	-.79	.19
	-4.222	120.762	.000	-.79	.19
TI31	-2.542	123	.012	-.46	.18
	-2.542	122.994	.012	-.46	.18

Manipulation Check 2.

A second manipulation check was also conducted. An additional group of 21 subjects participated in this check of the task involvement manipulation. This group of subjects was randomly assigned to 3-5 person groups, worked for 15 minutes on a topic unrelated to pass/fail grading (sentence unscrambling), and then completed the rest of the study as a task uninvolved participant with the leader label 'effective'. The purpose of this aspect of the manipulation check was to rule out the possibility that interacting as a group, even on an unrelated topic, is related to differences in the level of task involvement.

The pattern of results that would support this manipulation check is

1. no significant difference on the level of task involvement between subjects participating in manipulation check 2 and subjects who participated in the task uninvolved condition, and by

2. significant differences on level of task involvement between the manipulation check 2 subjects and subjects in the task involved condition.

A one-way ANOVA and post hoc tests were used to evaluate the results of manipulation check 2. The one-way ANOVA was significant ($F=6.239$, $p<.003$), as shown in Table 5.

Table 5

Manipulation Check 2: Anova between Manipulation Group 2, Task Involved, and Task Uninvolved Subjects

TASKINV

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.005	2	3.002	6.239	.003
Within Groups	69.297	144	.481		
Total	75.301	146			

Means and standard deviations between the 3 comparison groups on the task involvement measure are provided for reference in Table 6 below.

Table 6

Means and Standard Deviations on Task Involvement Measure for Manipulation Check 2, Uninvolved, and Involved Subjects

TASKINV

	N	Mean	Std. Deviation
manipulation check 2	21	3.2667	.6094
uninvolved	63	2.9984	.6539
involved	63	3.4333	.7552
Total	147	3.2231	.7182

Post-hoc tests were then used to evaluate further the between-groups differences on the task involvement dependent variable. These results are included as Table 7.

The post-hoc tests found no significant differences on the level of task involvement between subjects participating in manipulation check 2 and subjects who participated in the task uninvolved condition. This provides the first pattern of results needed in manipulation check 2, and supports the effectiveness of the manipulation in causing perceived differences in task involvement among subjects.

However, post hoc analyses on level of task involvement also showed no significant differences between the manipulation check 2 subjects and subjects in the task involved condition. This finding does not provide the second pattern of results needed to support the effectiveness of the experimental manipulation.

Table 7

Post Hoc Comparisons on Task Involvement between Manipulation Check 2, Task Involved, andTask Uninvolved Subjects

Dependent Variable: TASKINV

	(I) task condition	(J) task condition	Mean Difference (I-J)	Std. Error	Sig.
Tukey HSD	manipulation check 2	uninvolved	.2683	.1748	.275
		involved	-.1667	.1748	.606
	uninvolved	manipulation check 2	-.2683	.1748	.275
		involved	-.4349*	.1236	.001
	involved	manipulation check 2	.1667	.1748	.606
		uninvolved	.4349*	.1236	.001
Scheffe	manipulation check 2	uninvolved	.2683	.1748	.311
		involved	-.1667	.1748	.636
	uninvolved	manipulation check 2	-.2683	.1748	.311
		involved	-.4349*	.1236	.003
	involved	manipulation check 2	.1667	.1748	.636
		uninvolved	.4349*	.1236	.003

*. The mean difference is significant at the .05 level.

Item Level Analyses in Task Involvement Measure.

Further item-level post hoc analyses were conducted on task involvement items across the 3 groups. Significant differences were found on 7 of the 10 task involvement items. However, all differences were between the uninvolved and involved conditions and between the manipulation check 2 and uninvolved conditions. No significant differences were found at the item level between manipulation check 2 and task involved subjects.

It is interesting to note that, after watching the video of the leader and group discussing pass fail grading, manipulation test 2 subjects, who interacted as a group to unscramble sentences, agreed significantly more strongly than task uninvolved subjects with the following items:

- I was interested in the decision the video group reached.
- This issue should be important to all students.
- The topic should be discussed in greater detail.
- I would participate in further discussion on the topic.
- Watching the group's discussion was interesting.
- This is, in reality, a really big issue.
- All students should all discuss this issue.

Manipulation Check Results Summary.

The experimental manipulation did produce a significantly higher level of task involvement. However, simply interacting as a group on an unrelated task, prior to viewing the videotape and completing the experiment, also produced a higher level of task involvement when measured at the item level.

Stimulating a higher level of task involvement in one group over another was the goal of the experimental manipulation, and was achieved. What remains murky in interpretation is the 'cause' of it.

The 'task involvement' construct was essentially borrowed from work in political psychology on the construct of 'political involvement', and defined by 3 components: 1) 'cognitive engagement', or interest and attentiveness, 2) 'affective response', or an emotional reaction, and 3) 'behavioral participation', or active involvement (Fiske & Kinder, 1981). Politically involved subjects use both label consistent and inconsistent information in generating evaluations about an attitude object, whereas politically uninvolved subjects focus on label-consistent information and tend to ignore the rest in their evaluations (cf. Fiske & Kinder, 1981).

True 'political involvement' implied by the components of the Fiske & Kinder definition would appear to represent a complex series of behaviors, thoughts, and emotions experienced by an individual over a relatively lengthy period of time. Using this term as a descriptive would seem to fit the individual who is and has been scanning for and assimilating relevant information, coming to judgments about the information, and acting on the combined cognitive efforts and affective responses behaviorally, through voting, active participation in political campaigns, discussions with others, etc., etc. In sum, political involvement may represent a more sophisticated, deeply held, thoroughly integrated, cognitive-emotion-behavior system than that prompted by participation as a task involved subject in this research. It is likely that the artificiality of the experimental situation could not replicate 'involvement' with the task to the same degree as 'involvement' with politics for the individuals in this category.

In addition, following the Fiske & Kinder definition of political involvement, the cognitive response of personal interest and attentiveness does not appear to have been achieved in the experimental manipulation. While task involved participants rated the 6 emotionally- and behaviorally-oriented questions significantly differently from uninvolved participants in the expected direction, the same was not true of the remaining 4 items, each which addressed the interest and attentiveness component. It is difficult to conceive of a politically involved individual not differing significantly from an uninvolved individual in the extent to which they would answer affirmatively to the following questions about an important political topic:

- I was interested in the decision the group reached

- This issue is personally important to me
- Watching the group discussion was interesting
- This issue will affect me personally

These were the 4 items from the task involvement scale on which task involved and uninvolved participants did not differ significantly.

The task involvement measure used for the purposes of this research consisted of a 10-item scale which was intended to measure cognitive, affective, and behavioral aspects of task involvement. A 10-item scale may be too short to measure a construct as potentially complex as 'involvement'. Despite the adequate alpha reliability of the scale (.846), the construct validity of the scale may be questionable.

At this point, it can only be concluded that interacting as a group on a task, even a task seemingly unrelated to a following evaluative scenario and prior to observing and evaluating a group and leader, does produce a higher self-report of task involvement.

Tests of Hypothesis: Test of H1.

The first hypothesis evaluates how influential subjects' ILT's are in their summary judgements about leaders, depending on whether they are involved or uninvolved in the task situation. Specifically, the ILT of task involved subjects, as measured by a general leader impression scale, is less influenced by leader labels than is the ILT of task uninvolved subjects.

Support for this hypothesis would be indicated initially by a significant task condition x leader label interaction. Specific planned comparisons, indicated below, would then provide the more specific pattern of results to support this hypothesis.

		LEADER LABEL		
		effective	*ineffective*	*control*
TASK INVOLVEMENT	*task uninvolved*	1	3	5
	task involved	2	4	6

DV: General Leader Impression (GLI)

Planned comparisons of cell means:
1 > 3 and 1 > 2
2 > 4 and 4 > 3

General Leader Impression Measure

Items. A 5-item general leader impression (GLI) measure was constructed to measure 'overall' or 'general leader impression'. A GLI measure provides a global, undifferentiated evaluation of a leader. The use of such a measure to capture ILT, as described previously, has been well established in the literature. The 5 items and their response scales are included in Table 8 below.

Table 8: General Leader Impression Items

Item #						
GL6	What amount of leadership did the person demonstrate?	Very High	High	Neither High Nor Low	Low	Very Low
GL7	How typical is this person of a leader?	Very Typical	Typical	Neither Typical Nor Atypical	Atypical	Very Atypical
GL8	How willing would you be to choose this person as a formal leader?	Very Willing	Willing	Neither Willing Nor Unwilling	Unwilling	Very Unwilling
GL9	How frequently did the person engage in leadership behavior?	Very Frequently	Frequently	Neither Frequently Nor Infre-Quently	Infre-Quently	Very Infre-Quently
GL10	To what extent did the person fit your image of a leader?	A Great Extent	Some Extent	Neither Did Nor Didn't	Not Very Much	Not At All

Reliability. Alpha reliability was .843, calculated across the 147 subjects who completed this measure.

Prediction of Overall General Leader Impression Score.

Given the fairly non-specific nature of typical GLI items, stepwise multiple regression analyses were conducted, regressing each item on the overall general leader impression score, to determine the incremental predictive value of each item. Interestingly, 73% of the variance in total GLI score can be explained by the single item "to what extent did the person fit your image of a leader". The least predictive item, although still significant was, "how typical is this person of a leader?" (incremental R^2 change of .032, F Change =8.237, $p<.000$).

GLI Means and Standard Deviations

The means and standard deviations for overall GLI, by task involvement condition, are provided in Table 9 below.

Table 9

Means, Standard Deviations, and N's for the Overall General Leader Impression Dependent Variable

Dependent Variable: GENLDR

task condition	leader label	Mean	Std. Deviation	N
uninvolved	effective	3.4000	.7439	25
	ineffective	2.6200	.7702	20
	control	3.4889	.6144	18
	Total	3.1778	.8049	63
involved	effective	3.3000	.8480	22
	ineffective	2.3100	.7181	20
	control	3.0762	.6340	21
	Total	2.9111	.8430	63
Total	effective	3.3532	.7871	47
	ineffective	2.4650	.7516	40
	control	3.2667	.6510	39
	Total	3.0444	.8317	126

ANOVA Results.

A 2-way ANOVA was used to test the hypothesis, as shown in Table 10. The main effect of leader label is significant (F=18.775, p<.000), as is the main effect for task condition (F=4.403, p<.038). However, the interaction between task condition and leader label is not significant (F=.517, p<.598).

Table 10

Tests of Between-Subjects Effects

Dependent Variable: GENLDR

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	22.565[a]	5	4.513	8.474	.000
Intercept	1147.011	1	1147.011	2153.814	.000
L_LABEL	19.997	2	9.999	18.775	.000
TASK	2.345	1	2.345	4.403	.038
L_LABEL * TASK	.550	2	.275	.517	.598
Error	63.906	120	.533		
Total	1254.320	126			
Corrected Total	86.471	125			

a. R Squared = .261 (Adjusted R Squared = .230)

Main Effects of Leader Label on GLI.

Given the existing ILT literature, a strong main effect of leader label was anticipated. Post hoc analyses, detailed in Table 11, show that subjects informed that the leader had been effective in previous situations of this type rated the leader significantly higher on the GLI measure than subjects told the leader had been ineffective in such situations. This is as one would clearly expect.

However, also as shown in Table 11, a more consistent pattern of significant differences in overall GLI rating emerged between the ineffective label group and the

control group ratings, than between the effective label group and control group GLI ratings. Said another way, subjects told a leader had been ineffective consistently and significantly rated the leader lower than subjects not provided a leader label. But, subjects told a leader had been effective in similar situations did not always rate the leader significantly more favorably than subjects who received no leader label prompt. It is interesting to note this finding: subjects appear to have 'used' the ineffective leader label more so than the effective label in their overall impression of the favorability of the leader.

Table 11

Post Hoc Comparisons on GLI Across Leader Label Conditions

Dependent Variable: GENLDR

Tukey HSD

(I) leader label	(J) leader label	Mean Difference (I-J)	Std. Error	Sig.
effective	ineffective	.8882*	.1570	.000
	control	8.652E-02	.1581	.848
ineffective	effective	-.8882*	.1570	.000
	control	-.8017*	.1642	.000
control	effective	-8.6525E-02	.1581	.848
	ineffective	.8017*	.1642	.000

Based on observed means.

*. The mean difference is significant at the .05 level.

GLI Item-Level Analyses Across Leader Label Conditions.

In the item level post-hoc analyses, as seen in Table 12, we see again, but now at the GLI item level, significant differences are found ineffective and effective, and ineffective and control on GLI ratings. However, on no item is there a significant difference between effective and control ratings of leader behavior. Clearly, in this

research, the ineffective label appears to have carried more weight than the effective label in determining subjects' overall, generalized, leadership perceptions.

Table 12

Post Hoc Item-Level GLI Comparisons Across Leader Label Conditions

Tukey HSD

Dependent Variable	(I) leader label	(J) leader label	Mean Difference (I-J)	Std. Error	Sig.
GL6	effective	ineffective	1.21*	.18	.000
		control	9.05E-02	.18	.870
	ineffective	effective	-1.21*	.18	.000
		control	-1.12*	.20	.000
	control	effective	-9.05E-02	.18	.870
		ineffective	1.12*	.20	.000
GL7	effective	ineffective	.55*	.18	.006
		control	1.28E-02	.18	.997
	ineffective	effective	-.55*	.18	.006
		control	-.54*	.20	.022
	control	effective	-1.28E-02	.18	.997
		ineffective	.54*	.20	.022
GL8	effective	ineffective	.76*	.21	.001
		control	.15	.21	.765
	ineffective	effective	-.76*	.21	.001
		control	-.61*	.23	.023
	control	effective	-.15	.21	.765
		ineffective	.61*	.23	.023
GL9	effective	ineffective	.85*	.22	.000
		control	-1.62E-02	.22	.997
	ineffective	effective	-.85*	.22	.000
		control	-.86*	.24	.001
	control	effective	1.62E-02	.22	.997
		ineffective	.86*	.24	.001
GL10	effective	ineffective	1.24*	.21	.000
		control	.36	.21	.212
	ineffective	effective	-1.24*	.21	.000
		control	-.88*	.24	.001
	control	effective	-.36	.21	.212
		ineffective	.88*	.24	.001

*. The mean difference is significant at the .05 level.

Main Effects of Task Conditions on GLI.

The main effect of task condition on overall GLI ratings is interesting, with task uninvolved subjects rating the leader slightly higher than task involved subjects. As shown in Table 13, further t-test analyses at the item level revealed significant differences between task involved and uninvolved subjects on 2 of the 5 GLI items, including GL10, which, as described previously, which was most predictive of overall GLI across all conditions:

GL8: How willing would you be to choose this person as a formal leader? and

GL10: To what extent did the person fit your image of a leader?

In both cases, task uninvolved subjects rated the leader significantly higher than task involved subjects, regardless of any (or no) leader label received.

Table 13

Significant Item-Level GLI Differences between Task Involved and Task Uninvolved Subjects

	t-test for Equality of Means				
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
GL8	2.086	124	.039	.38	.18
	2.086	121.303	.039	.38	.18
GL10	3.009	124	.003	.60	.20
	3.009	123.988	.003	.60	.20

Summary of H1 Findings.

It had been hypothesized that task involved subjects would be less influenced by leader labels in their ratings of general leader impression than would task uninvolved

subjects. The overall pattern of results, in particular the lack of a significant task condition x leader label interaction, do not support this hypothesis. Instead, we see that leader label impacts subjects' general leader impression regardless of their level of task involvement.

An interesting addition to the existing body of research in ILT is found, however, in noting the apparently greater influence of an 'ineffective' leader label on general leader impression, in contrast to an 'effective' leader label. This had not been reported in ILT research to date. It is, however, not surprising. The overuse of negative information has often been noted in research on the interview process. Schmitt (1976) noted in his exhaustive review that researchers concluded either that negative information is weighed too heavily, or, that negative information is weighted appropriately but that positive information is not weighted heavily enough. The interview process, inherently summary and evaluative, is also regarded as an area where implicit theories of ideal candidates distort interviewers' assessments (cf. Hakel, Hollman, & Dunnette, 1970; London & Hakel, 1974, as in Schmitt, 1976).

Test of H2.

The second hypothesis addresses how influential subjects' ILT's are in rating *specific* leader behaviors, in contrast to evaluating general leadership items as in H1, depending on whether a subject is task-involved or –uninvolved. Specifically, it is hypothesized that task involved subjects are less influenced by ILT in completing leader behavior description questionnaires than are task uninvolved subjects, as measured by the impact of leader labels on subjects' LBDQ ratings.

As with the first hypotheses, a significant leader label x task involvement interaction would provide support for the hypothesis. The planned comparisons which would support the hypothesis are charted below.

		LEADER LABEL		
		effective	***ineffective***	***control***
TASK INVOLVEMENT	***task uninvolved***	1	3	5
	task involved	2	4	6

DV: LBDQ

Planned comparisons of cell means:
1 > 2
4 > 3

LBDQ Measure.

The C and IS subscales from Form XII of the LBDQ (Stogdill, 1963) were obtained from Ohio State University and used for this research. This version was chosen because it displays the most favorable psychometric properties of the existing versions of the LBDQ. The LBDQ contains 98 items asking subjects to rate the frequency of demonstration of leadership behaviors. Raters use a 5-point scale, anchored from 'never' through 'occasionally' to 'always'.

Reliability. LBDQ reliability calculated on this sample was .919.

The means, standard deviations, and sample sizes by task condition and leader label are provided in Table 14 below.

Table 14

Means, Standard Deviations, and N's for the LBDQ Dependent Variable

Dependent Variable: SMEAN(LBDQTOT)

task condition	leader label	Mean	Std. Deviation	N
uninvolved	effective	2.9053	.3047	25
	ineffective	2.9087	.2419	20
	control	2.9174	.3287	18
	Total	2.9098	.2890	63
involved	effective	3.0548	.2733	22
	ineffective	2.9239	.1201	20
	control	2.8481	.2556	21
	Total	2.9443	.2417	63
Total	effective	2.9753	.2970	47
	ineffective	2.9163	.1886	40
	control	2.8801	.2897	39
	Total	2.9271	.2659	126

ANOVA Results.

A surprising pattern of results emerged in testing H2, given the ILT literature, as shown in Table 15. A significant main effect of leader label was expected, but the main effect of leader label was not significant, nor was the main effect of task condition, and the interaction between task condition and leader label was also not significant.

Table 15

Tests of Between-Subjects Effects

Dependent Variable: SMEAN(LBDQTOT)

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta Squared
Corrected Model	.510[a]	5	.102	1.471	.204	.058
Intercept	1068.119	1	1068.119	15394.284	.000	.992
TASK	3.154E-02	1	3.154E-02	.455	.502	.004
TASK * L_LABEL	.262	2	.131	1.888	.156	.031
L_LABEL	.211	2	.106	1.523	.222	.025
Error	8.326	120	6.938E-02			
Total	1088.387	126				
Corrected Total	8.836	125				

a. R Squared = .058 (Adjusted R Squared = .018)

LBDQ Item Level Analysis on Leader Label.

Separate 1-way ANOVAs were calculated on LBDQ items across leader label conditions: effective, ineffective, and control. Post-hoc tests were conducted to identify between groups differences. Significant between group differences were found on only 14 LDBQ items. All these differences were in the anticipated direction, with subjects in the effective leader label condition rating the leader higher than subjects in the control or ineffective label condition, or, subjects in the ineffective leader label condition rating the leader lower than control or effective label condition subjects.

In contrast to the results found with leader label prompts on the GLI measure in H1, the LBDQ, clearly a far more behaviorally-oriented measure, appeared less susceptible to the biasing influence of leader labels. Behaviorally-oriented measures have been found to be less susceptible to the biasing impact of implicit theories (Gioia & Sims, 1985).

Summary of H2 Findings.

The second experimental hypothesis addressed whether task involved subjects would be less influenced by leader label-induced general leader impressions in rating specific leader behaviors than would their task uninvolved counterparts. The pattern of results does not support this hypothesis. Instead, the effect of leader label did not lead to even the expected main effect on LBDQ ratings. Subjects appear to have not only been uninfluenced in LBDQ ratings by their task involvement or uninvolvement, they also appear to have been relatively unswayed in their behavioral ratings by a characterization of the leader as effective or ineffective in similar decision making circumstances.

Finally, to note, where significant differences were found at the item level between leader label groups, the 'overuse' of the ineffective label did not appear, as it had in item-level GLI comparisons.

Test of H3:

The third hypothesis addressed whether task involved subjects are less influenced by leader labels in evaluating group performance than task uninvolved subjects, as measured by subject evaluations of the quality of the end products of the video group's interaction.

The third hypothesis also specifies an interaction between task condition and leader label. The specific planned comparisons that would support the hypothesis are included below.

LEADER LABEL

effective ***ineffective*** ***control***

TASK INVOLVEMENT	***task uninvolved***	1	3	5
	task involved	2	4	6

DV: Quality scale

Planned comparisons of cell means:
1 > 2
4 > 3

Quality Dependent Variable.

Quality Scale Items.

A 10-item quality scale was constructed. These items are shown in Table 16. Subjects were asked to rate several aspects of the 'quality' of the group: its process, the decisions they reached, and also of the leader, using a 5-point scale from strongly disagree to strongly agree.

Table 16: Quality Scale Items

Item #	
QUAL11.	The group made high quality decisions.
QUAL12.	The group reached the best possible solutions.
QUAL13.	The group worked well together.
QUAL14.	Do you agree with the decisions the video group reached?
QUAL15.	The group identified the important issues.
QUAL16.	The group weighed the issues carefully.
QUAL17.	The group could have done a much better job. (reverse scored)
QUAL18.	Less than half of the discussion was useful. (reverse scored)
QUAL19.	A different group would have done a better job. (reverse scored)
QUAL22.	A different leader would have done a better job. (reverse scored)

Item Means and Standard Deviations.

Means and standard deviations of the quality measure by condition are included for reference in Table 17 below.

Table 17

Means, Standard Deviations, and N's for the Quality Dependent Variable

Dependent Variable: QUALITY

leader label	task condition	Mean	Std. Deviation	N
effective	uninvolved	3.1625	.4968	24
	involved	3.0091	.6824	22
	Total	3.0891	.5911	46
ineffective	uninvolved	2.9824	.5736	17
	involved	3.0684	.5100	19
	Total	3.0278	.5348	36
control	uninvolved	2.9889	.5645	18
	involved	2.7053	.6240	19
	Total	2.8432	.6049	37
Total	uninvolved	3.0576	.5383	59
	involved	2.9317	.6234	60
	Total	2.9941	.5837	119

Reliability. Alpha reliability was .8025

Determinants of Outcome Quality.

The separate aspects of performance evaluated by the quality scale items were also considered in terms of their influence in determining overall quality score. Stepwise multiple regression analyses indicated that arguably the most generally-phrased item, "the group could have done a much better job", explained 52% of the variance in overall quality scores and was most predictive of overall score. The second most predictive item was, "the group reached the best possible decision" (R^2 change = .179, F change = 69.567, $p<.000$), the third, "a different leader would have done a better job" (R^2 change =

.061, F change = 29.680, p<.000), and the fourth, "less than half the discussion was useful" (R^2 change = .051, F change = 31.143, p<.000). These results are included in Table 18 below.

Table 18

Regression of Quality Items on Overall Quality

					Change Statistics		
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Sig. F Change
1	.723[a]	.523	.519	.4692	.523	128.289	.000
2	.838[b]	.702	.697	.3726	.179	69.567	.000
3	.873[c]	.763	.757	.3336	.061	29.680	.000
4	.902[d]	.814	.807	.2969	.051	31.143	.000
5	.926[e]	.857	.851	.2613	.043	34.202	.000
6	.939[f]	.882	.876	.2387	.025	23.451	.000
7	.953[g]	.909	.903	.2107	.027	32.769	.000
8	.959[h]	.919	.913	.1996	.010	13.590	.000
9	.965[i]	.931	.926	.1846	.012	19.672	.000
10	.970[j]	.940	.934	.1732	.009	15.817	.000

a. Predictors: (Constant), QUAL17

b. Predictors: (Constant), QUAL17, QUAL12

c. Predictors: (Constant), QUAL17, QUAL12, QUAL22

d. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18

e. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18, QUAL16

f. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18, QUAL16, QUAL14

g. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18, QUAL16, QUAL14, QUAL13

h. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18, QUAL16, QUAL14, QUAL13, QUAL19

i. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18, QUAL16, QUAL14, QUAL13, QUAL19, QUAL11

j. Predictors: (Constant), QUAL17, QUAL12, QUAL22, QUAL18, QUAL16, QUAL14, QUAL13, QUAL19, QUAL11, QUAL15

Interestingly, the item, "did you agree with the decisions the video group reached" explained only 2.5% of the variance in responses (R^2 change = .025, F change = 23.451,

p<.000). This may have been the case because the decision of the group, to *not* recommend the use of pass fail grading for *all* college courses, may have appeared to subjects as a generally more logical choice than the opposite recommendation (the mean agreement with the decision was 3.70, with a standard deviation of .97; as such, the quality scale item with the highest mean).

ANOVA Results.

The main effect of task condition and leader label was not significant, nor was the interaction between task condition and leader label, as indicated in Table 19 below. Subjects were not influenced by leader labels or level of task involvement in their ratings of the quality of the group, its process, or its outcomes.

Table 19

ANOVA on Quality between Task and Leader Label Conditions

Dependent Variable: QUALITY

Source		Type II Sum of Squares	df	Mean Square	F	Sig.
TASK	Hypothesis	.439	1	.439	1.370	.367
	Error	.615	1.921	.320[a]		
L_LABEL	Hypothesis	1.265	2	.633	1.973	.337
	Error	.639	1.992	.321[b]		
TASK * L_LABEL	Hypothesis	.641	2	.321	.958	.387
	Error	37.827	113	.335[c]		

a. 1.019 MS(TASK * L_LABEL) - 1.943E-02 MS(Error)

b. 1.002 MS(TASK * L_LABEL) - 1.876E-03 MS(Error)

c. MS(Error)

Quality Scale Item Level Analysis on Task Involved vs. Uninvolved Subjects.

Separate t-tests were calculated on each quality item across the 2 task conditions. Significant differences were noted between groups on 2 of the 10 items. As shown in

Table 20, uninvolved subjects agreed significantly more strongly that, "The group weighed the issues carefully," and "The group could have done a better job" (reverse scored).

Table 20

Significant Item Level t-tests on Quality Scale across Task Involved and Task Uninvolved Conditions

	t-test for Equality of Means				
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
QUAL16	2.179	123	.031	.40	.18
	2.179	122.517	.031	.40	.18
QUAL17	2.356	123	.020	.44	.19
	2.355	122.740	.020	.44	.19

Additional analyses were conducted between subjects who rated overall quality higher vs. lower. Subjects' overall quality assessments on the quality scale were split by the scale midpoint. Sixty five (65) subjects' average quality score was equal to or greater than 3.00, and 54 subjects' average quality score fell below 3.00.

T-tests between the higher and lower quality groups were then conducted on the GLI and LBDQ dependent measures. Subjects whose overall quality assessment was higher rated the leader significantly higher on specific leader behaviors (LBDQ) and on general leader impression (GLI), as shown in Table 21. Interestingly, while leader label did not lead to a main effect of LBDQ (although it did for GLI), subjects' own assessments of group performance quality did correspond with significantly higher or lower ratings of leader behavior. This suggests that subjects are able to rate outcome quality independently of a provided leader label, if allowed the opportunity, and also that

their own quality assessments were more influential in their ratings of leader behavior than an experimenter-provided label. This finding indicate that perceived quality has a moderating effect on ILT.

Table 21

T Test on LBDQ and GLI by Higher and Lower Quality Assessment Groups

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
LBDQTOT	Equal variances assumed	.011	.916	2.492	77	.015	.1795	7.203E-02
	Equal variances not assumed			2.524	74.255	.014	.1795	7.110E-02
GENLDR	Equal variances assumed	.874	.352	2.572	117	.011	.3795	.1475
	Equal variances not assumed			2.596	116.088	.011	.3795	.1462

Differences between these higher and lower quality groups on level of task involvement was also considered. There were no significant differences between higher and lower quality groups on level of overall task involvement, nor did any item-level task involvement differences emerge.

Summary of H3 Findings.

The third hypothesis addressed whether subjects' quality (performance) evaluations would be less influenced by leader labels if they were more involved in the task situation. The interaction which would have supported this hypothesis was not significant.

It was a possibility, given the strong pattern of results on the performance cue effect (PCE), that leader label would predispose subjects to reach conclusions about the overall quality of the group, with their evaluations in the same direction as the leader label they had been given. This was not the case.

The PCE has been interpreted as part of a cognitive schema in which perceivers passively and automatically view effective group performance and an effective leader as going, inseparably, hand in hand, with the reverse also the case. But, the results here indicate that subject evaluations of the quality of the group's work were not significantly impacted by leader label. The pattern of results found here suggests that subjects can and will separate a leader label from an assessment of outcome quality, if they are allowed to make their own determination of the quality of the group's outcome, and that their own assessment of outcome quality is more influential in their ratings of specific leader behaviors than an experimenter-provided label. It also suggests a higher-level of information processing than implied by the "snap" categorization process through which ILT is thought to have its influence.

This is an interesting addition to the existing body of literature on ILT, specifically the PCE: perceived outcome quality may moderate the impact of ILT.

Test of H4:

The fourth and final hypothesis holds that task involved subjects will display greater accuracy in memory for factual details. Support for this hypothesis would include a significant main effect of task involvement using a test of factual memory as the dependent variable, as illustrated below.

LEADER LABEL

		effective	*ineffective*	*control*
TASK	***task uninvolved***	1	3	5
INVOLVEMENT	***task involved***	2	4	6

DV: Factual Memory

Planned comparisons of cell means:
2 > 1
4 > 3
6 > 5

Factual Memory Scale. As described previously, the behaviors of the leader on the videotape was scripted so that the leader displayed 5 types of prototypical leader behavior and 5 types of antiprototypical leader behavior. The video group leader was specifically coached not to demonstrate other examples of prototypical and antiprototypical leader behavior.

The behaviors demonstrated and not demonstrated are listed in Table 22 below, categorized as prototypic and antiprototypical.

Table 22: Behaviors Demonstrated/Not Demonstrated By Video Group Leader

Prototypical Leader Behaviors	Present/ Nonpresent
1. emphasize the deadline	present
2. give credit to people for their ideas	present
3. listen attentively to others	present
4. emphasize the group's goal	present
5. summarize important points of the discussion	present
6. coordinate the discussion	not present
7. provide useful information	not present
8. seek suggestions from the group	not present
9. seek information from the group	not present
10. propose good ideas	not present

Antiprototypical Leader Behaviors	Present/ Nonpresent
1. act like he knows things when he isn't sure	present
2. refuse to explain his thinking	present
3. say things that aren't useful	present
4. put people's ideas down	present
5. want his own way on issues	present
6. seem confused by the issue	not present
7. propose bad ideas	not present
8. let the discussion wander	not present
9. fail to tie things together	not present
10. let the group members decide what to do	not present

These behaviors were then put into a 20 item measure with a 5-point frequency scale, from very infrequently to very frequently (Table 23). Items were scored so that the higher a subject's score, the more accurate his or her memory for what the leader actually did on the videotape.

Table 23: Factual Memory Scale Items

Item #	*How frequently did the leader...*
FMEM33	emphasize the group's goal
FMEM34	propose bad ideas
FMEM35	provide useful information
FMEM36	seek suggestions from the group
FMEM37	put people's ideas down
FMEM38	coordinate the discussion
FMEM39	seem confused by the issue
FMEM40	seek information from the group
FMEM41	refuse to explain his thinking
FMEM42	propose good ideas
FMEM43	emphasize the deadline
FMEM44	want his own way on issues
FMEM45	summarize the important points of the discussion
FMEM46	fail to tie things together

FMEM47	give credit to people for their ideas
FMEM48	act like he knew things when he wasn't really sure
FMEM49	let the discussion wander
FMEM50	say things that weren't useful
FMEM51	let other group members decide what to do
FMEM52	listen attentively to others

Reliability. The alpha reliability for the scale was calculated across 140 respondents at .160. Alpha reliabilities were recalculated on all present behaviors (r=.32) and then on all nonpresent behaviors (r=.39), all prototypical behaviors (r=.13), and all antiprototypical behaviors (r= -.09).

It is unfortunate but likely that the items on this scale were phrased too generally for subjects to respond to accurately, and/or that the specific behaviors demonstrated by the leader were not clearly discernable to the subjects. Because of the seriously questionable reliability of the scale, no further analyses will be reported here.

Differentiation in 'Assigning' Outcome Causality in Task Involved and Uninvolved Subjects.

As described in the literature review of ILT earlier in this document (beginning on page 29), there are two interpretations regarding the cognitive processes which are responsible for leader perceptions. Although both involve ILT, one is rooted in attribution theory, and the other is based on the leadership categorization theory.

The attributional interpretation holds that 'leader' is a label applied to others on the basis of a causal analysis. This interpretation assumes a higher degree of information

processing, a careful weighing of multiple pieces of information, and a specific quasi-scientific attributional analysis (Lord & Smith, 1983).

The categorization theory interpretation is that salient features of a potential leader initiate a limited search for a category prototype. This process involves much less information processing. If a person is categorized as a leader, then a leadership prototype is used to make judgments about the person. Research explicitly comparing these models clearly supports the 'snap judgement' or categorization theory of leader perceptions (cf. Cronshaw and Lord,1987).

However, in the research described here (H3), the results strongly suggest that subjects can separate a leader label from an assessment of a group's performance, if they are allowed to make their own determination of the quality of the group's outcome, and that their own quality assessments are more influential in ratings of leader behavior than experimenter provided labels. This finding is also suggestive of a greater use of information and a higher level of information processing than implied by the categorization interpretation of leadership perception. If self-generating a performance evaluation, rather than being handed one, appears to moderate the impact of ILT on general leader perceptions, the question then arises regarding what, if any, other factors have a moderating influence.

Two additional items were included in subject questionnaires asking participants where the responsibility fell for the outcomes of the video group interaction. The 2 items read simply:

QUAL 20 The leader is responsible for the outcome.

QUAL 21 The group is responsible for the outcome.

Subjects appeared inclined to hold one or the other more responsible, as the items, "the group was responsible for the outcome" and "the leader was responsible for the outcome" were significantly negatively correlated ($r = -.533$, $p<.000$).

Involved vs. uninvolved subjects differed regarding where they attributed responsibility for the outcome of the group interaction. As shown in Table 24, involved subjects agreed significantly more strongly with the statement, "The leader is responsible for the outcome" ($t=-3.309$, $p<.001$). Uninvolved subjects agreement with the statement, "The group is responsible for the outcome," approached significance when compared to involved subjects ($t=1.757$, $p<.081$).

Table 24

T-Tests between Task Conditions on Causal Attribution Items

		Levene's Test for Equality of Variances		t-test for Equality of Means				
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
QUAL20	Equal variances assumed	.980	.324	-3.309	122	.001	-.61	.19
	Equal variances not assumed			-3.309	121.420	.001	-.61	.19
QUAL21	Equal variances assumed	.035	.852	1.757	124	.081	.33	.19
	Equal variances not assumed			1.757	123.997	.081	.33	.19

Additional differences emerged in separate stepwise multiple regressions between task involved and uninvolved participants (Table 25 and 26 respectively), regressing quality items on overall quality score. The item, "the group could have done a much

better job" was most predictive of overall quality for both groups. Then, for task involved subjects, the next most predictive was, "do you agree with the decisions the video group reached" (R square change = .185, F change = 41.253, $p<.001$), followed by, "the group made high quality decisions" (R square change =.080, F change = 25.557, $p<.000$).

For task uninvolved subjects, the second most predictive item was, "the group worked well together" (R square change = .157, F change = 26.505, $p<.001$), and the third, "the group reached the best possible solutions" (R square change = .087, F change = 19.697, $p<.001$).

The item, "the group worked well together" was far more influential in determining uninvolved participants' overall quality score, contributing an additional 16% of explanatory variance. For task involved participants, this item did not contribute any significant explained variance to overall quality scores.

Table 25

Stepwise Multiple Regression of Quality Items on Overall Quality for Task Involved Subjects

	R				Change Statistics				
Model	task condition = involved (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.751[a]	.565	.557	.4906	.565	73.946	1	57	.000
2	.866[b]	.749	.740	.3756	.185	41.253	1	56	.000
3	.910[c]	.829	.820	.3131	.080	25.557	1	55	.000
4	.927[d]	.860	.850	.2858	.031	12.006	1	54	.001
5	.942[e]	.887	.876	.2593	.027	12.612	1	53	.001
6	.952[f]	.907	.896	.2377	.020	11.055	1	52	.002
7	.963[g]	.927	.917	.2128	.020	13.883	1	51	.000
8	.970[h]	.941	.931	.1935	.014	11.717	1	50	.001

a. Predictors: (Constant), QUAL17

b. Predictors: (Constant), QUAL17, QUAL14

c. Predictors: (Constant), QUAL17, QUAL14, QUAL11

d. Predictors: (Constant), QUAL17, QUAL14, QUAL11, QUAL19

e. Predictors: (Constant), QUAL17, QUAL14, QUAL11, QUAL19, QUAL16

f. Predictors: (Constant), QUAL17, QUAL14, QUAL11, QUAL19, QUAL16, QUAL22

g. Predictors: (Constant), QUAL17, QUAL14, QUAL11, QUAL19, QUAL16, QUAL22, QUAL12

h. Predictors: (Constant), QUAL17, QUAL14, QUAL11, QUAL19, QUAL16, QUAL22, QUAL12, QUAL18

Table 26

Stepwise Multiple Regression of Quality Items on Overall Quality for Task Uninvolved Subjects

Model	R: task condition = uninvolved (Selected)	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics: R Square Change	F Change	df1	df2	Sig. F Change
1	.720[a]	.518	.510	.4360	.518	60.256	1	56	.000
2	.822[b]	.675	.663	.3614	.157	26.505	1	55	.000
3	.873[c]	.762	.749	.3122	.087	19.697	1	54	.000
4	.903[d]	.815	.801	.2779	.053	15.183	1	53	.000
5	.922[e]	.850	.836	.2525	.035	12.167	1	52	.001
6	.942[f]	.887	.874	.2209	.037	16.935	1	51	.000
7	.951[g]	.904	.890	.2064	.016	8.422	1	50	.006
8	.958[h]	.918	.904	.1928	.014	8.289	1	49	.006
9	.965[i]	.931	.918	.1788	.013	8.998	1	48	.004
10	.970[j]	.940	.927	.1680	.009	7.377	1	47	.009

a. Predictors: (Constant), QUAL17

b. Predictors: (Constant), QUAL17, QUAL13

c. Predictors: (Constant), QUAL17, QUAL13, QUAL12

d. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22

e. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22, QUAL14

f. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22, QUAL14, QUAL15

g. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22, QUAL14, QUAL15, QUAL18

h. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22, QUAL14, QUAL15, QUAL18, QUAL11

i. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22, QUAL14, QUAL15, QUAL18, QUAL11, QU

j. Predictors: (Constant), QUAL17, QUAL13, QUAL12, QUAL22, QUAL14, QUAL15, QUAL18, QUAL11, QU QUAL16

This pattern of findings suggests that uninvolved participants place more emphasis on the role of the group and how well they worked together in achieving an outcome, whereas involved participants seem to perceive the leader as more causally potent in determining the outcome. It suggests that some aspect of involvement promotes the use

of certain information over other information, and that there is some level of differentiation in leader perceptions between involved and uninvolved individuals.

While provocative, it must also be noted that one possible explanation for the pattern of responses found between involved and uninvolved participants is the greater salience of the video leader to involved subjects, who had just completed the same task in leaderless group discussions. In the scenario they observed, the leader was a new entrant into the discussion. Visual salience of the leader has been shown to be related to perceptions of causality (Phillips & Lord, 1981).

Outcome Causality & Leader Labels

Analyses also revealed differences between leader label conditions on the causal attribution items as shown in Tables 27 and 28. Control (no label) subjects saw the leader as significantly more responsible than ineffective label subjects. This is not unreasonable, and again, the perceptual impact of a negative leader label appears to have more influence, as effective leader label subjects did not perceive the leader as more causally responsible than control or ineffective label subjects. No differences were found between leader label conditions on the extent to which the group was perceived as responsible for the outcome.

Table27

ANOVAs on Causal Attribution Items Between Leader Label Conditions

		Sum of Squares	df	Mean Square	F	Sig.
QUAL20	Between Groups	7.860	2	3.930	3.561	.031
	Within Groups	133.527	121	1.104		
	Total	141.387	123			
QUAL21	Between Groups	.676	2	.338	.290	.749
	Within Groups	143.363	123	1.166		
	Total	144.040	125			

Table 28

Post Hoc Comparisons Between Leader Label Conditions on Causal Attribution Items

Tukey HSD

Dependent Variable	(I) leader label	(J) leader label	Mean Difference (I-J)	Std. Error	Sig.
QUAL20	effective	ineffective	.21	.23	.619
		control	-.41	.23	.172
	ineffective	effective	-.21	.23	.619
		control	-.63*	.24	.023
	control	effective	.41	.23	.172
		ineffective	.63*	.24	.023
QUAL21	effective	ineffective	.18	.23	.727
		control	7.15E-02	.23	.950
	ineffective	effective	-.18	.23	.727
		control	-.11	.24	.902
	control	effective	-7.15E-02	.23	.950
		ineffective	.11	.24	.902

*. The mean difference is significant at the .05 level.

Finally, it is also interesting to note that, "the leader was responsible for the outcome" was not significantly correlated with overall general leader impression ($r = -.109$, $p < .227$), but, "the group was responsible for the outcome" was significantly, positively, correlated with GLI ($r = .232$, $p < .009$).

These additional analyses on outcome causality are interesting, and suggest that there are, in fact, factors that moderate the perceptual influence of ILT; in addition to self-generation vs. receipt of a group performance evaluation, there appears to be some moderating effect of some aspect of task involvement, as, when asked, subjects appear to attribute outcome causality differently, and related to their level of involvement with the task.

Chapter 5

Discussion

This exploratory research had as its goal greater illumination of the moderating influence of situational, affective, cognitive, and behavioral variables on ILT, in an attempt to better understand how ILT operates in organizational life. The biasing effects of ILT have been generalized and discussed in terms of their pervasiveness and implications for leader selection, promotion decisions, assessment centers, leadership training, succession planning, behavioral measurements such at 360° feedback and performance assessments (cf., Lord & Mayer, 91), as well as to global and societal needs for leadership and the meaning of leadership. However, we do not yet understand how ILT may operate in these different situations, to what extent, and what factors may moderate its influence.

The 4 hypotheses included in this research were based on the reasoning that task-involved subjects, because of their engagement with the task at hand, would be more accurate and less extreme in their judgements about leaders – that is, that task involvement moderates the impact of ILT. Understanding if this was the case would allow for both additional research and practical application. This type of research is needed in order to better understand how ILT operates across the core organizational processes listed above. Greater understanding of the moderating influences would enable targeted modifications to these processes, to enhance the accuracy and usefulness of the outcomes. This is critical for those of us who believe that a leader is more than just a perceptual construct, and to the cadre of practitioners who have organizational responsibility for developing the

mechanisms through which leaders are identified and groomed, and evaluated and rewarded.

The experimental manipulation for task involvement was meant to create an affective, cognitive, and behavioral engagement with the issue the video group was discussing: pass/fail grading for all college courses. The results of the first manipulation check indicated that the experimental manipulations did indeed cause a distinction in self-reports of level of task involvement, as subjects in the task involved conditions reported a significantly higher level of involvement ($t = -3.456$, $p < .001$). However, subjects who interacted together in a 'mock' task, sentence unscrambling, did not differ significantly from involved or uninvolved subjects in their level of task involvement, with their average involvement score falling somewhere in the middle.

The first hypothesis posited that behaviorally, cognitively, and affectively task-involved subjects would be less susceptible to the biasing influence of leader labels in summary judgements of overall leadership effectiveness. While subjects' ILTs would influence summary evaluations, it was thought that this effect would be significantly lessened by actual involvement with the task on which they would later rate a leader. This hypothesis was not supported. Instead, the pattern of results indicated that leader label (effective or ineffective) did impact subjects' general leader impressions, regardless of whether they actually participated in the task or perceived themselves as task involved. In addition, it was also noted that the ineffective leader label was significantly more influential in determining overall leader impressions than was the effective label.

The second hypothesis addressed the relative influence of leader labels on subjects' ratings of specific leader behaviors, as opposed to general impressions of the effectiveness of the leader as in the first hypothesis. It was posited, similar to the first hypothesis, that task-involved subjects would be less influenced by leader labels, and that this would be demonstrated by significant differences in the label-induced extremity with which task involved and uninvolved subjects would rate leader behavior. A main effect of leader label was expected, given the existing ILT research on the impact of a leader label in LBDQ ratings. The hypothesis would have been supported by a significant task condition x leader label interaction. However, quite surprisingly, a main effect of leader label was not found, although 14 of the 98 item-level LBDQ analyses found significant differences in the expected direction. The interaction which would have supported the hypothesis was also not significant.

The third hypothesis tested whether task involved subjects would be less influenced by leader labels in evaluating group performance. In this research, unlike other tests of the Performance Cue Effect (PCE), subjects generated their own evaluation of the quality of the leader plus group interaction. This hypothesis would have been supported with a finding that task involved subjects' evaluations were significantly different from their task uninvolved counterparts, with task uninvolved subjects making more extreme quality evaluations in the same direction as the leader label (leader label effective, significantly higher evaluations of quality than task involved subjects). This hypothesis, as originally stated, was also not supported. Subject evaluations of the quality of groups' work was not significantly impacted by task condition – but, notably, also not by leader

label prompt. Subjects own perceptions of performance did have a moderating influence, in that their own assessments of quality did lead to significantly different evaluations of leader behavior. This latter finding, in and of itself, is interesting and extends our knowledge of the PCE.

The fourth hypothesis posited that task-involved subjects would display greater accuracy in recollecting factual details of the leader's behavior than would task uninvolved subjects. Unfortunately, the level of reliability in the factual memory measure was unacceptable.

Additional analyses on causal attribution for outcomes suggests that task uninvolved participants place more emphasis on the role of the group and how well they worked together in achieving an outcome, whereas task involved participants seem to perceive the leader as more causally potent in determining the outcome. It suggests that some aspect of involvement promotes the use of certain information over other information, and that there is some level of differentiation in leader perceptions, broadly defined, between involved and uninvolved individuals.

While the experimental hypotheses are largely not supported, it is helpful to review these research findings with more context, to better understand the pattern of results which did emerge and the lack of support, in the main, for the experimental hypotheses. This discussion includes an implication of the findings for applied organizational settings and suggestions for future research.

From this research it would appear that task involvement, in the main, does not have the hypothesized moderating effect on the extremity of leader evaluations. There are

several reasons why this may be the case, related to the conceptualization of task involvement, the manipulation and measurement of task involvement, and certainly to the actuality that 'task involvement' does not moderate the influence of implicit leadership theory on leader perceptions. The conceptualization and measurement of task involvement was discussed in Chapter 4, where it was noted that the 'task involvement' construct used here was based on work in the realm of political psychology.

In the area of political psychology 'involvement' has been defined as a tri-dimensional construct, consisting, conceptually, of 3 components: 1) 'cognitive engagement', or interest and attentiveness, 2) 'affective response', or an emotional reaction, and 3) 'behavioral participation', or active involvement (Fiske & Kinder, 1981).

It was also noted in Chapter 4 that the experimental manipulation of considering pass/fail grading for all college courses combined with the "one point in time" and other artificiality aspects of the experimental situation may not have produced a level of task involvement akin to that of political involvement. The lack of significant differences between task involved and uninvolved subjects on the personal interest and attentiveness items of the measure lend support to the contention that a true creation of the entirety of 'involvement' was not fully achieved through the experimental manipulation. Perhaps if this aspect of involvement had been stimulated the pattern of results would differ. More controversial topics, without an as-clear-cut 'right' answer, such as 'academic freedom of speech' or 'tolerance of apparent racial statements in university professors' may have produced a stronger level of involvement. Considering their potentially inflammatory nature, ethical considerations prevented their use for this research.

There were some interesting differences associated with involvement and this research which deserve further comment and exploration in future research. In terms of causal attribution for outcomes, the findings here suggest that task uninvolved participants place more emphasis on the role of the group and how well they worked together in achieving an outcome, whereas task involved participants seem to perceive the leader as more causally potent in determining the outcome. This is also somewhat contrary to what one might expect in the political realm, where one might expect the politically uninvolved individual to focus on a "leader", and blame or credit the "leader", while the involved individual would be motivated to take into account other factors of the situation and make less extreme or one-sided attributions about a leader.

Something about 'involvement' may predispose people to focus on different things when assigning responsibility – at least when asked. This may be similar to the 'actor-observer bias' noted in attribution theory (cf. Kelly, 1967), usually summarized as the situation being salient to actors, whereas the actors are salient to observers, and attributions then follow suit – situational vs. dispositional, respectively.

Task involved individuals may have identified more with the participants on the videotape – identified more as actors – and perceived the leader, as an aspect of the situation, as more causally responsible, especially when prompted to 'think about it' by being specifically asked. Task uninvolved participants, without the experience of working on the same task, were perhaps more like observers, and attributed responsibility to all the actors they viewed – the leader *and* the video group.

While perhaps not adequately supported through the research presented here, there still do appear to be moderating differences associated with "perspective" – for lack of a better phrase -- whether this is defined as active vs. passive, actor vs. observer, involved vs. uninvolved, or some other construct or set of constructs which may be independent or a continuum. The finding that the PCE may be weakened when subjects are more actively involved in the situation, through their own generation of an evaluation of a group's performance quality, can be viewed as an illustrative example that moderating factors along these lines do operate and are not yet clearly understood in the area of ILT.

A more direct test of this PCE finding, contrasting receipt of an evaluation with self-generated evaluations, is certainly in order.

Other tests of the PCE, in applied settings yielding findings more applicable to organizational effectiveness, would also be valuable. For example, within organizations and again across industries, certain functions or markets readily lend themselves to quantitative performance data, as is the case is sales and manufacturing, while others, staff functions or consulting organizations in areas such as human resources, advertising, and finance, do not lend themselves as readily to clearly derived and interpretable, quantitative, performance measures. As such, one might profitably research the 'leader label + performance cue effect' across these different situations. Where is the leader label + performance cue effect stronger – where hard performance data exists, or, where it doesn't? In which of these scenarios might 'fitting' the prevailing ILT be more predictive of organizational success?

The notion of 'perspective' differences remains an important area that deserves further attention. There are certainly 'perspective' differences (actor vs. observer, active vs. passive, involved vs. uninvolved) associated with leadership perceptions in varying organizational circumstances. These perspective differences can certainly, and differentially, operative in organizational leadership processes such as 360° feedback and succession planning. For example, the leader of a high-performing work group might be regarded as a 'strong leader' in a succession planning situation by a member of the organization who is hierarchically, geographically, and organizationally removed from leader in question. However, those closer to the situation, perhaps for example the direct reports of this leader, might have a clearer understanding of that leader's causal role or lack thereof in their strong performance. In reality, it is not an unknown occurrence for a high performing team to be led by a not-so-strong leader.

It also appears quite possible that there is a relationship between 'perspective' (actor vs. observer, active vs. passive, involved vs. uninvolved) and amount and type of information used in person perception. Disinterested, inactive, uninvolved observers, or, perhaps similarly, extremely busy high-level organizational leaders with minimal time to think deeply about many things, may not be motivated, have easy access to, or simply be able to gather much information. It may be in those situations that highly generalized, 'snap' impressions are more influential in filling in information gaps, akin to categorization theory and low-load information processing. But, those whose perspective is closer to the situation, who 'care', and/or have access to other data to inform their judgements about leaders would seem more likely to use more specific behavioral data.

While this seems commonsensical, only two ILT studies have evaluated the impact of 'information impoverishment', and both concluded that ILT cannot be interpreted as a result of simple lack of information (Lord, et al.; Rush and Beauvais, 1981; for fuller explanation see page 32 of this document). Maybe so, but these studies assumed no relationship between the amount and type of information used to make leader evaluations, and motivational factors on the part of the perceiver. No consideration is given to any notion of 'perspective' and attendant motivation to gather, analyze, and use additional information. These 2 studies are too rudimentary to help us understand how, when, why, and to what extent individuals 'fill in the ILT blanks' in the absence of information.

The research on ILT would benefit from meeting up and being integrated with the continuing work in social psychology on impression formation and the use of schema, stereotypes, and prototypes in person perception. If task involvement is not a moderating construct, other branches of research and thinking could be used to inform further experimentation on the questions raised above.

For example, in the area of 'social psychology', there are 2 general models of impression formation: 1) stereotype- or category-based (Fiske & Neuberg, 1990) akin to the 'snap' categorization process which ILT researchers believe ILT has its perceptual influence, and 2) attribute-based (Fiske & Neuberg, 1989). The attribute-based model holds that impressions are formed through an attribute-by-attribute consideration, which consumes considerable cognitive resources.

In social psychological work on impression formation, it is generally accepted that both category-based and attribute-based models are used (Brewer, 1998). It is also

generally recognized in social psychology that stereotyping is inversely related to allocation of attention resources (cf. Reynolds & Oakes, 2000). Similarly, Fiske and Neuberg (1990) argue that stereotypic or category-based impressions occur when perceivers only have limited attentional resources. Neuberg (1990) holds that category-based vs. attributed-based are ends of a single continuum, and that movement from the category end of the continuum to the attribute end is only possible through increased attention.

Categorization and attribute processing are also thought to result in different impressions – stereotypic and individuated, respectively (Reynolds & Oakes, 2000). The use of stereotypic impressions as a cognitive efficiency in situations of mental overload is supported by a growing body of research (e.g., Bodenhausen, 1990; Macrae, Hewstone, & Griffiths, 1993; Pratto & Bargh, 1991).

Motivational variables have been considered as well, in terms of how they contribute to the allocation of attentional resources, in order to understand their role in determining whether attribute- or category-based impression formation is used. Brewer (1988) argues that when a perceiver feels involved with an individual, that is, closely related or outcome interdependent, they are motivated to devote attentional resources to attribute-based processing, resulting in more individuated and less stereotypic impressions.

Could 'perspective', and attendant motivational variables and attentional resources operate in a similar manner with ILT's? There is every logical reason to believe that it does, and no compelling research to suggest that it does not. If this is plausible, then the same questions which apply in social psychological work on impression formation apply to

ILT research as well, including: what determines whether one or the other model will operate? That is, in other words, the original and still unanswered question of this research: how influential are generalized leader impressions formed in organizations? What factors moderate the impact of ILT in 'real life'?

Research on implicit leadership theory has been extended and continues down interesting and profitable lines of inquiry, largely focusing on 2 areas: work on cross-cultural leadership prototypes (as exemplified by the ambitious GLOBE project - Global Leadership and Organizational Behavior Effectiveness Research Program, cf., Den Hartog, House, Hanges, Ruiz-Quintalinna, Dorfman, Peter; 1999) their content (cf.: Brodbeck,, Frese, Akerblom, Audia, Bakacsi, Bendova, Bodega, Bodur, Booth, Brenk, Castel, Hartog, Donnelly-Cox, Gratchev, Holmberg, Jarmuz, Jesuino, Jorbenadse, Kabasakal, et al., 2000) their relation to underlying cultural elements and associated variability between cultures (Smith, Dugan, & Trompenaars, 1996); and the transformational vs. transactional components of ILT's and their universality (cf., Yoen Choi, Mai-Dalton, 1999).

While these are topical, compelling, and useful areas of investigation, as some point the work on ILT needs to define more sophisticated situational boundaries around how this basic perceptual principle is enacted and has its influence -- in organizational settings, in the political realm, and in a global economy. The results of this research suggest that it remains an oversimplification to regard 'leader perceptions' as essentially the result of categorization, prototype matching, and low-load cognitive-processing impression formation from which all other judgements then flow.

FIGURE 1

Rosch's Model of Object Perception

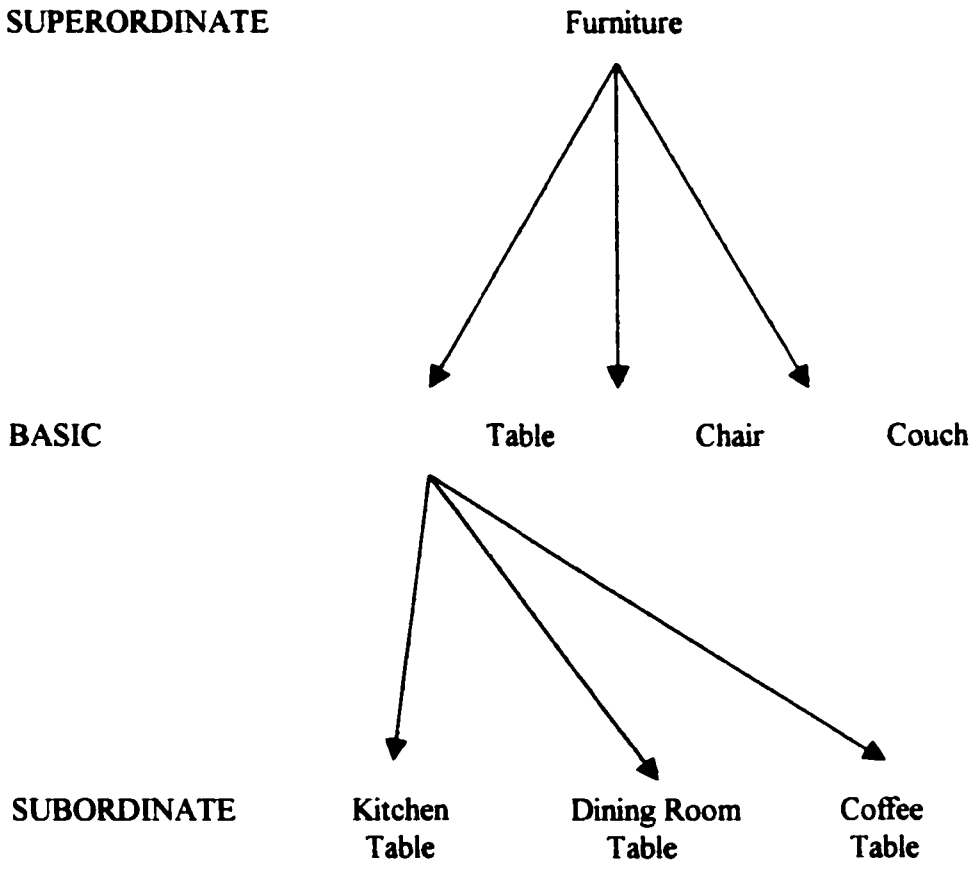

FIGURE 2

Categorization Model of Leader Perception

SUPERORDINATE

leader/
nonleader

BASIC

world political/ politician	national political/ diplomat	military/ soldier	business/ business person	education/ teacher
sports/ athlete	labor/ union member	finance/ banker	media/ reporter	minority/ minority
rights supporter				

SUBORDINATE

Kennedy-type Reagan-type

Source: Lord, Foti, & Phillips (1982)

APPENDIX A

Materials Provided to Videotaped Group Including Leader Behavioral Protocols

Instructions for Videotape Group Members

You will be participating in a brief group exercise, and you will be videotaped. Use your own first names.

In this exercise, you will be in the role of a Director at an undergraduate college located in the United States. Your responsibilities as a Director in this college include working with others to establish policies for the college, on issues such as standards for graduation and criteria for grading.

An emergency meeting has been convened. The purpose of the meeting is to provide a recommendation on whether the college should discontinue the use of letter grades (e.g., 'A', 'B', 'C') and instead use a pass/fail grading system for **all** college courses. Two of your colleagues, who are also Directors at the college, as well as your boss, the Vice President for Academic Services, will be at the meeting.

Your boss will make a statement that he knows of other schools that have used pass/fail grading systems that have not been successful. Ask him (or let one of your colleagues ask, no need to ask more than once) which schools, when they used the system, why they went with p/f grading. He will not have a good answer, but don't push the point too hard.

The group meeting will last for exactly 12 minutes. At the end of the meeting, your boss, the VP for Academic Affairs, will go and meet with the President and the Provost of the college to provide the recommendation on pass/fail grading.

As a group, you should come out **against** the use of PASS/FAIL grading. However, strive to have a balanced, two-sided discussion on the pros and cons of the issue.

Please refer to the 'Things to Consider in Pass/Fail Grading' attachment, for some pros and cons of the issue.

NOTES FOR VIDEO GROUP MEMBERS: THINGS TO CONSIDER IN PASS/FAIL GRADING

As a group, you should come out against the use of PASS/FAIL grading. However, have a rich, two-sided discussion on the pros and cons of the issue.

PROS of PASS/FAIL GRADING	CONS of PASS/FAIL GRADING
♦ greater attention to actual course content, facilitates greater learning and not the race for grades ♦ our students are not typical college students. They have jobs and children and may be returning to school -- we create a difficult and stressful environment by using grades instead of PASS/FAIL ♦ would ultimately be fairer to students, because not all faculty have the same standards -- we have hard graders and easy graders ♦ grades take the emphasis away from true learning, true immersion in the subject matter ♦ grades undermine and diminish the sense of accomplishment that comes from learning -- the sense of accomplishment comes, instead, from grades ♦ we have lost sight of what we are really all about as educators -- not grades as an end, but how learning enriches people's lives both personally and professionally. Using P/F grading might be a way to get back to that	♦ how would someone's grade point average be reflected if they wanted to gain admittance to graduate school? we would be doing a big disservice to our students interested in moving on the graduate school -- they couldn't be competitive ♦ how would academic standards be maintained -- grades are used to differentiate performance and provide calibrated standards ♦ what about someone who transfers to another school? many of our students do one or two years and then transfer. Almost all colleges use traditional grading. Wouldn't we be putting our students at a disadvantage? ♦ our students who excel and work very hard appreciate the rewards they receive in the form of high grades and grade point average. Wouldn't we be dis-incenting our best students? ♦ it might be that the poorer students would like P/F grading -- are these the students we want to attract to our college?

VIDEOTAPE PROTOCOLS

1. BEHAVIORS DEMONSTRATED/NOT DEMONSTRATED BY VIDEO GROUP LEADER

PROTOTYPICAL LEADER BEHAVIORS	PRESENT/ NONPRESENT	ANTIPROTOTYPICAL LEADER BEHAVIORS	PRESENT/ NONPRESENT
1. emphasize the deadline	present	1. act like he knows things when he isn't sure	present
2. give credit to people for their ideas	present	2. refuse to explain his thinking	present
3. listen attentively to others	present	3. say things that aren't useful	present
4. emphasize the group's goal	present	4. put people's ideas down	present
5. summarize important points of the discussion	present	5. want his own way on issues	present
6. coordinate the discussion	not present	6. seem confused by the issue	not present
7. provide useful information	not present	7. propose bad ideas	not present
8. seek suggestions from the group	not present	8. let the discussion wander	not present
9. seek information from the group	not present	9. fail to tie things together	not present
10. propose good ideas	not present	10. let the group members decide what to do	not present

2. BEHAVIORAL EXAMPLES **PROTOTYPICAL** LEADER BEHAVIORS

PRESENT	**Behaviors: *DO/SAY***
1. emphasize the deadline	♦ The issue is very important, and we need to make sure our voices are heard. To do that, we need to make sure we have a recommendations at the end of our meeting today. ♦ We have 5 minutes (etc.) left
2. give credit to people for their ideas	♦ That is a good point. ♦ That is a valuable contribution. ♦ Good thought.
3. listen attentively to others	♦ Do not interrupt ♦ maintain eye contact ♦ Nod ♦ Repeat back, "so what I hear you saying..."
4. emphasize the group's goal	♦ We need to make a recommendation on whether or not our college should use a PASS/FAIL grading system, for all courses at the undergraduate level, and provide our reasons for the position we take ♦ Let's not forget that we are here to make a clear recommendation on this issue
5. summarize important points of the discussion	♦ At 6 minutes and again at 12 minutes (the end), summarize what the status is: who has said what, and what they are in agreement and disagreement on, and the overall recommendation (NO P/F system)
NONPRESENT	**Behaviors: *DO NOT DO/DO NOT SAY***
1. coordinate the discussion	♦ ask to hear from different individuals ♦ say, "so what do you think?"
2. provide useful information	♦ talk about any other colleges that specifically use P/F grading ♦ give any pros or cons for either approach
3. seek suggestions from the group	♦ ask anyone their thoughts or ideas
4. seek information from the group	♦ ask anyone any questions
5. propose good ideas	♦ propose any ideas, suggestions, or solutions other than not to go forward with P/F grading

3. BEHAVIORAL EXAMPLES **ANTIPROTOTYPICAL** LEADER BEHAVIORS

PRESENT	**Behaviors: *DO/SAY***
1. act like he knows things when he isn't sure	♦ Say with confidence, "This has been tried at other schools and has never worked well" -- BUT, when asked by another group member for specific information about the schools (which when, why, etc.), answer, "Well I could be wrong but I don't think so".
2. refuse to explain his thinking	♦ I do believe it cannot work well, period.
3. say things that aren't useful	♦
4. put people's ideas down	♦ That is not a good point ♦ That is not helpful ♦ I am sure you are wrong ♦ Where did you get that idea?
5. want his own way on issues	♦ (Near the end of the discussion) I really do not think we can have a P/F grading system -- I am not willing to go to the President and Provost with the suggestion that we should use one.
NONPRESENT	**Behaviors: *DO NOT DO/DO NOT SAY***
1. seem confused by the issue	♦ OH, so ALL courses would be P/F, it wouldn't just be an OPTION that students would have for each and every class they take?
2. propose bad ideas	♦ don't propose any ideas or compromise positions
3. let the discussion wander	♦ (you are reminding members of the task and the deadline)
4. fail to tie things together	♦ (you are summarizing)
5. let the group members decide what to do	♦ (you are firm in your conviction that P/F grading cannot work and will not change your mind on this)

BEHAVIORS FOR VIDEOTAPE LEADER: *WHAT TO DO/SAY*

PRESENT	Behaviors: *DO/SAY*
1. emphasize the deadline	♦ The issue is very important, and we need to make sure our voices are heard. To do that, we need to make sure we have a recommendations at the end of our meeting today. ♦ We have 5 minutes (etc.) left
2. give credit to people for their ideas	♦ That is a good point. ♦ That is a valuable contribution. ♦ Good thought.
3. listen attentively to others	♦ Do not interrupt ♦ Maintain eye contact, nod affirmatively ♦ Repeat back, "so what I hear you saying..."
4. emphasize the group's goal	♦ We need to make a recommendation on whether or not our college should use a PASS/FAIL grading system, for all courses at the undergraduate level, and provide our reasons for the position we take ♦ Let's not forget that we are here to make a clear recommendation on this issue
5. summarize important points of the discussion	♦ At 6 minutes and again at 12 minutes (the end), summarize what the status is: who has said what, and what they are in agreement and disagreement on, and the overall recommendation (NO P/F system)
6. act like you knows things when you aren't sure (in this one instance)	♦ Say with confidence, "This has been tried at other schools and has never worked well" -- BUT, when asked by another group member for specific information about the schools (which, when, why, etc.), answer, "Well I could be wrong but I don't think so".
7. refuse to explain his thinking	♦ I believe it cannot work well, period.
8. say things that aren't useful	
9. put people's ideas down	♦ That is not a good point; That is not helpful ♦ I am sure you are wrong ♦ Now, where did you get that idea?
10. want your own way on the issue	♦ (Near the end of the discussion) I really do not think we can have a P/F grading system -- and I am not willing to go to the President and Provost with the suggestion that we should use one.

NOTES FOR VIDEOTAPE LEADER: *WHAT NOT TO DO/SAY*

NONPRESENT	Behaviors: ***DO NOT DO/DO NOT SAY***
1. coordinate the discussion	♦ ask to hear from different individuals ♦ say, "so what do you think?"
2. provide useful information	♦ talk about any other colleges that specifically use P/F grading ♦ give any pros or cons for either approach
3. seek suggestions from the group	♦ ask anyone their thoughts or ideas
4. seek information from the group	♦ ask anyone any questions
5. propose good ideas	♦ propose any ideas, suggestions, or solutions other than not to go forward with P/F grading
6. seem confused by the issue	♦ OH, so ALL courses would be P/F, it wouldn't just be an OPTION that students would have for each and every class they take?
7. propose bad ideas	♦ don't propose any ideas or compromise positions
8. let the discussion wander	♦ (you are reminding members of the task and the deadline)
9. fail to tie things together	♦ (you are summarizing)
10. let the group members decide what to do	♦ (you are firm in your conviction that P/F grading cannot work and will not change your mind on this)

APPENDIX B

Significant, Published ILT Studies using Observation of a Group Interacting with a Leader
and the Task Observed by Subjects

APPENDIX B

Significant, Published ILT Studies using Observation of a Group Interacting with a Leader and the Task Observed by Subjects

STUDY	IV	TASK
Cronshaw & Lord, 1987	leader behavior member behavior	discuss finances of a fictitious company
Larson, 1982	performance cues	alleviate absenteeism and turnover in a fictitious company
Larson, Lingle,	performance cues	same as Larson, 1982 & Scerbo, 1984
Lord, Binning, Rush, & Thomas, 1977	performance cues leader behavior	unscramble sentences
Lord, Foti, & Phillips, 1982	performance cues leader behavior time of rating (immediate, delayed)	unscramble sentences
Maurer & Lord, 1991	cognitive demand leader behavior	task not described
Mitchell, Larson, & Green, 1977	performance cues	same as Larson, 1982
Phillips, 1984	leader label	task not described
Phillips & Lord, 1981	performance cues leader salience	solve a numerical puzzle
Phillips & Lord, 1982	performance cues leader behavior	solve a numerical puzzle

APPENDIX B

Significant, Published ILT Studies using Observation of a Group Interacting with a Leader and the Task Observed by Subjects (cont.)

STUDY	IV	TASK
Rush & Beauvais, 1981	performance cues	unscramble sentences
Rush, Phillips, & Lord, 1981	performance cues leader behavior time of rating (immediate, delayed)	scramble sentences

Appendix C: Question Packet (Dependent Measures)

Please answer the questions on this and the following pages. Do not include your name. Completing the packet should take about 20 minutes. When you have finished, please bring your completed question packet to the experimenter at the front of the room. Thank you for your cooperation.

Participant Information

1. What is your year in school?
   - ☐ Freshman
   - ☐ Sophomore
   - ☐ Junior
   - ☐ Senior

2. Are you currently employed?
   - ☐ Yes
   - ☐ No

3. What is your gender?
   - ☐ Male
   - ☐ Female

4. What is your age? ☐

5. What is your race? ☐

Please answer the following questions about the leader of the videotaped group.

6. What amount of leadership did the person demonstrate?
   - 5 ☐ very high
   - 4 ☐ high
   - 3 ☐ neither low nor high
   - 2 ☐ low
   - 1 ☐ very low

7. How typical is this person of a leader?
   - 5 ☐ very typical
   - 4 ☐ typical
   - 3 ☐ neither typical nor atypical
   - 2 ☐ atypical
   - 1 ☐ very atypical

8. How willing would you be to choose this person as a formal leader?
   - 5 ☐ very willing
   - 4 ☐ willing
   - 3 ☐ neither willing nor unwilling
   - 2 ☐ unwilling
   - 1 ☐ very unwilling

9. How frequently did the person engage in leadership behavior?
   - 5 ☐ very frequently
   - 4 ☐ frequently
   - 3 ☐ neither frequently nor infrequently
   - 2 ☐ infrequently
   - 1 ☐ very infrequently

10. To what extent did the person fit your image of a leader?
    - 5 ☐ a great extent
    - 4 ☐ some extent
    - 3 ☐ neither did nor did not
    - 2 ☐ not very much
    - 1 ☐ not at all

Please answer the following questions about the videotape you saw.

	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
11. The group made high quality decisions.	1	2	3	4	5
12. The group reached the best possible solutions.	1	2	3	4	5
13. The group worked well together.	1	2	3	4	5
14. Do you agree with the decisions the video group reached?	1	2	3	4	5
15. The group identified the important issues.	1	2	3	4	5
16. The group weighed the issues carefully.	1	2	3	4	5
17. The group could have done a much better job.	1	2	3	4	5
18. Less than half of the discussion was useful.	1	2	3	4	5
19. A different group would have done a better job.	1	2	3	4	5
20. The leader was responsible for the outcome.	1	2	3	4	5
21. The group was responsible for the outcome.	1	2	3	4	5
22. A different leader would have done a better job.	1	2	3	4	5

Please answer the following questions about pass/fail grading.

	strongly disagree	disagree	neither agree nor disagree	agree	strongly agree
23. I was interested in the decision the video group reached.	1	2	3	4	5
24. The issue is personally important to me.	1	2	3	4	5
25. This issue should be important to all students.	1	2	3	4	5
26. The topic should be discussed in greater detail.	1	2	3	4	5
27. I would participate in further discussion on the topic.	1	2	3	4	5
28. I would like to voice my opinion on this issue.	1	2	3	4	5
29. Watching the group's discussion was interesting.	1	2	3	4	5
30. This is, in reality, a really big issue.	1	2	3	4	5
31. All students should all discuss this issue.	1	2	3	4	5
32. This issue will affect me personally.	1	2	3	4	5

Please answer the following questions about the leader on the videotape.

How frequently did the leader...	very infrequently	infrequently	neither frequently nor infrequently	frequently	very frequently
33. emphasize the group's goal	1	2	3	4	5
34. propose bad ideas	1	2	3	4	5
35. provide useful information	1	2	3	4	5
36. seek suggestions from the group	1	2	3	4	5
37. put people's ideas down	1	2	3	4	5
38. coordinate the discussion	1	2	3	4	5
39. seem confused by the issue	1	2	3	4	5
40. seek information from the group	1	2	3	4	5

How frequently did the leader...	very infrequently	infrequently	neither frequently nor infrequently	frequently	very frequently
41. refuse to explain his thinking	1	2	3	4	5
42. propose good ideas	1	2	3	4	5
43. emphasize the deadline	1	2	3	4	5
44. want his own way on issues	1	2	3	4	5
45. summarize the important points of the discussion	1	2	3	4	5
46. fail to tie things together	1	2	3	4	5
47. give credit to people for their ideas	1	2	3	4	5
48. act like he knew things when he wasn't really sure	1	2	3	4	5
49. let the discussion wander	1	2	3	4	5
50. say things that weren't useful	1	2	3	4	5
51. let other group members decide what to do	1	2	3	4	5
52. listen attentively to others	1	2	3	4	5

Please answer the following questions about the leader on the videotape.

How frequently does the leader...	never	seldom	occasionally	often	always
53. Acts as the spokesperson of the group	1	2	3	4	5
54. Waits patiently for the results of a decision	1	2	3	4	5
55. Makes pep talks to stimulate the group	1	2	3	4	5
56. Lets group members know what is expected of them	1	2	3	4	5
57. Is hesitant about taking initiative in the group	1	2	3	4	5
58. Is friendly and approachable	1	2	3	4	5
59. Encourages overtime work	1	2	3	4	5
60. Makes accurate decisions	1	2	3	4	5
61. Gets along with the people above him	1	2	3	4	5
62. Publicizes the activities of the group	1	2	3	4	5
63. Becomes anxious when he cannot find what is coming next	1	2	3	4	5
64. His arguments are convincing	1	2	3	4	5
65. Encourages the use of uniform procedures	1	2	3	4	5
66. Permits the members to use their own judgment in solving problems	1	2	3	4	5
67. Fails to take the necessary action	1	2	3	4	5
68. Does little things to make it pleasant to be a member of the group	1	2	3	4	5
69. Stresses being ahead of competing groups	1	2	3	4	5
70. Keeps the group working as a team	1	2	3	4	5
71. Keeps the group in good standing with higher authority	1	2	3	4	5
72. Speaks as the representative of the group	1	2	3	4	5
73. Accepts defeat in stride	1	2	3	4	5
74. Argues persuasively for his point of view	1	2	3	4	5
75. Tries out his ideas on the group	1	2	3	4	5
76. Encourages initiative in group members	1	2	3	4	5

How frequently does the leader...	never	seldom	occasion-ally	often	always
77. Lets other persons take away his leadership in the group	1	2	3	4	5
78. Puts suggestions made by the group members into operation	1	2	3	4	5
79. Needles members for greater effort	1	2	3	4	5
80. Seems able to predict what is coming next	1	2	3	4	5
81. Is working hard for a promotion	1	2	3	4	5
82. Speaks for the group when visitors are present	1	2	3	4	5
83. Accepts delays without becoming upset	1	2	3	4	5
84. Is a very persuasive talker	1	2	3	4	5
85. Makes his attitudes clear to the group	1	2	3	4	5
86. Lets the members of the group do what they thought best	1	2	3	4	5
87. Lets some members take advantage of him	1	2	3	4	5
88. Treats all group members as his equals	1	2	3	4	5
89. Keeps the work moving at a rapid pace	1	2	3	4	5
90. Settles conflicts when they occurred in the group	1	2	3	4	5
91. His superiors act favorably on most of his suggestions	1	2	3	4	5
92. Represents the group at outside meetings	1	2	3	4	5
93. Becomes anxious waiting for new developments	1	2	3	4	5
94. Is very skillful in an argument	1	2	3	4	5
95. Decides what shall be done and how it shall be done	1	2	3	4	5
96. Assigns a task, then lets the members handle it	1	2	3	4	5
97. Is the leader of the group in name only	1	2	3	4	5
98. Gives advance notice of the changes	1	2	3	4	5
99. Pushes for increased production	1	2	3	4	5
100. Things turn out as he predicts	1	2	3	4	5
101. Enjoys the privileges of his position	1	2	3	4	5
102. Handles complex problems efficiently	1	2	3	4	5
103. Is able to tolerate postponement and uncertainty	1	2	3	4	5
104. Is not a very convincing talker	1	2	3	4	5
105. Assigns group members to particular tasks	1	2	3	4	5
106. Turns the members loose on a job and lets them go to it	1	2	3	4	5
107. Backs down when he ought to stand firm	1	2	3	4	5
108. Keeps to himself	1	2	3	4	5
109. Asks the members to work harder	1	2	3	4	5
110. Is accurate in predicting the trend of events	1	2	3	4	5
111. Gets his superiors to act for the welfare of group members	1	2	3	4	5
112. Gets swamped by details	1	2	3	4	5
113. Can wait just so long, then blows up	1	2	3	4	5
114. Speaks from a strong inner conviction	1	2	3	4	5
115. Makes sure his part in the group is understood by the group members	1	2	3	4	5
116. Is reluctant to allow the members any freedom of action	1	2	3	4	5
117. Lets some members have authority he should keep	1	2	3	4	5
118. Looks out for the personal welfare of group members	1	2	3	4	5

How frequently does the leader...	never	seldom	occasion-ally	often	always
119. Permits the members to take liberty in their work	1	2	3	4	5
120. Sees to it that the work of the group is coordinated	1	2	3	4	5
121. His word carries weight with superiors	1	2	3	4	5
122. Gets things all tangled up	1	2	3	4	5
123. Remains calm when uncertain about upcoming events	1	2	3	4	5
124. Is an inspiring talker	1	2	3	4	5
125. Schedules the work to be done	1	2	3	4	5
126. Allows the group a higher degree of initiative	1	2	3	4	5
127. Takes full charge when emergencies arise	1	2	3	4	5
128. Is willing to make changes	1	2	3	4	5
129. Drives hard when there is a job to be done	1	2	3	4	5
130. Helps group members settle their differences	1	2	3	4	5
131. Gets what he asks for from his superiors	1	2	3	4	5
132. Can reduce a madhouse to system and order	1	2	3	4	5
133. Is able to delay action until the proper time occurs	1	2	3	4	5
134. Persuades others that his ideas are to their advantage	1	2	3	4	5
135. Maintains definite standards of performance	1	2	3	4	5
136. Trusts members to exercise good judgment	1	2	3	4	5
137. Overcomes attempts to challenge his leadership	1	2	3	4	5
138. Refuses to explain his actions	1	2	3	4	5
139. Urges the group to beat its previous record	1	2	3	4	5
140. Anticipates problems and plans for them	1	2	3	4	5
141. Is working his way to the top	1	2	3	4	5
142. Gets confused when too many demands are made of him	1	2	3	4	5
143. Worries about the outcome of any new procedure	1	2	3	4	5
144. Can inspire enthusiasm for a project	1	2	3	4	5
145. Asks that group members follow standard rules and regulations	1	2	3	4	5
146. Permits the group to set its own pace	1	2	3	4	5
147. Is easily recognized as the leader of the group	1	2	3	4	5
148. Keeps the group working to capacity	1	2	3	4	5
149. Maintains a closely-knit group	1	2	3	4	5
150. Maintains cordial relationships with superiors	1	2	3	4	5

Appendix D: Subject Instructions

Instructions for Group Members

As you have heard, you will be participating in a group discussion. Use your own first names. You may have heard that many colleges and universities are questioning the advantages of continuing the use of traditional letter or numerical grading for undergraduate courses. A lot of interesting debate has been generated.

The purpose of this meeting is to have a discussion as a group on whether colleges should *really* think about discontinuing the use of letter or numerical grades, and instead use a pass/fail grading system for *all* courses as a way to truly get back to the original intent of higher education -- the imparting of wisdom to enhance the functioning of society as a whole.

Here's a few things to think about. Don't feel at all limited by this -- discuss what you personally see as the pros and cons of pass/fail grading. You have 15 minutes for your group discussion.

PROS of PASS/FAIL GRADING

- greater attention to actual course content, facilitates greater learning and not the race for grades
- would be fairer to students as faculty have different standards -- hard graders and easy graders
- grades take the emphasis away from true learning, true immersion in the subject matter; creates a difficult and stressful environment
- grades undermine the sense of accomplishment that comes from learning -- the sense of accomplishment comes, instead, from grades
- we have lost sight of what we really are all about in higher education -- not grades as an end, but how learning enriches people's lives. Using P/F grading might be a way to get back to that

CONS of PASS/FAIL GRADING

- how would someone's grade point average be reflected if they wanted to gain admittance to graduate school?
- how would academic standards be maintained -- grades are used to differentiate performance and provide calibrated standards
- what about someone who transfers to another school?
- students who really excel and work very hard appreciate the rewards they receive in the form of high grades and grade point average. Wouldn't we be dis-incenting the best students?
- it might be that the poorer students would like P/F grading -- are these the students we want to attract to our college?

Participant Instructions for Watching the Videotaped Group

You are about to watch a group of people who work at a college in the United States discuss the issue of pass-fail grading for all college courses -- instead of just for a few courses. The leader is the Vice President for Academic Services, and is the man wearing glasses. The other people are Directors at the college and he is their boss.

This leader has been quite effective in other circumstances such as the one you will now see.

After you watch this tape, you will be asked to answer questions about what you saw.

These days, no college seriously considers moving to pass/fail grading for all courses. The topic the group is discussing is not important here.

This experiment is about how people work together in groups.

CI LLE TU

Participant Instructions for Watching the Videotaped Group

You are about to watch a group of people who work at a college in the United States discuss the issue of pass-fail grading for all college courses -- instead of just for a few courses. The leader is the Vice President for Academic Services, and is the man wearing glasses. The other people are Directors at the college and he is their boss.

This leader has been quite effective in other circumstances such as the one you will now see.

After you watch this tape, you will be asked to answer questions about what you saw.

As you know, many colleges and universities are challenging the value of traditional letter or numerical grading and the environment it creates for students and for learning. A quite lively debate has ensued.

This experiment is about two topics: how people work together in groups and the issue of pass/fail grading.

C2 LLE TI

Participant Instructions for Watching the Videotaped Group

You are about to watch a group of people who work at a college in the United States discuss the issue of pass-fail grading for all college courses -- instead of just for a few courses. The leader is the Vice President for Academic Services, and is the man wearing glasses. The other people are Directors at the college and he is their boss.

This leader has been quite ineffective in other circumstances such as the one you will now see.

After you watch this tape, you will be asked to answer questions about what you saw.

These days, no college seriously considers moving to pass/fail grading for all courses. The topic the group is discussing is not important here.

This experiment is about how people work together in groups.

C3 LLI TU

Participant Instructions for Watching the Videotaped Group

You are about to watch a group of people who work at a college in the United States discuss the issue of pass-fail grading for all college courses -- instead of just for a few courses. The leader is the Vice President for Academic Services, and is the man wearing glasses. The other people are Directors at the college and he is their boss.

This leader has been quite ineffective in other circumstances such as the one you will now see.

After you watch this tape, you will be asked to answer questions about what you saw.

As you know, many colleges and universities are challenging the value of traditional letter or numerical grading and the environment it creates for students and for learning. A quite lively debate has ensued.

This experiment is about two topics: how people work together in groups and the issue of pass/fail grading.

Participant Instructions for Watching the Videotaped Group

You are about to watch a group of people who work at a college in the United States discuss the issue of pass-fail grading for all college courses -- instead of just a few for upperclassmen. The leader is the Vice President for Academic Services, and is the man wearing glasses. The other people are Directors at the college and he is their boss.

After you watch this tape, you will be asked to answer questions about what you saw.

These days, no college seriously considers moving to pass/fail grading for all courses. The topic the group is discussing is not important here.

This experiment is about how people work together in groups.

C5 LLC TU

Participant Instructions for Watching the Videotaped Group

You are about to watch a group of people who work at a college in the United States discuss the issue of pass-fail grading for all college courses -- instead of just a few for upperclassmen. The leader is the Vice President for Academic Services, and is the man wearing glasses. The other people are Directors at the college and he is their boss.

After you watch this tape, you will be asked to answer questions about what you saw.

As you know, many colleges and universities are challenging the value of traditional letter or numerical grading and the environment it creates for students and for learning. A quite lively debate has ensued.

This experiment is about two topics: how people work together in groups and the issue of pass/fail grading.

Instructions for Group Members

(MANIPULATION CHECK)

You will be participating in a group task.

Each of the packets on the table in front of you contains index cards on which one word is written.

Your task is to unscramble the individual words to form a reasonable sentence.

You have 15 minutes to work in a group. The experimenter will tell you when to begin and when to end.

Appendix E: Experimenter Instructions

Experimenter Instructions
Conditions 1, 3, and 5

1. Get subjects seated

2. Pass out PARTICIPANT INSTRUCTIONS FOR WATCHING THE VIDEOTAPED GROUP

3. Read the instructions out loud, while participants follow along.

4. Start the tape.

5. Stop the tape.

6. Pass out DV measures.

7. Collect DV measures.

8. Give each subject a DEBRIEF SHEET.

9. Pay the subject $5.

10. **LABEL THE DV MEASURE with the CONDITION NUMBER.**

Experimenter Instructions
Conditions 2, 4, and 6

1. Get subjects seated in groups of 3 to 5 persons.
2. Pass out INSTRUCTIONS FOR GROUP MEMBERS
3. Read the instructions out loud, while participants follow along.
4. Start the 15 minute time period for the group discussion.
5. Call time and end the 15 minute group discussion.
6. Get subjects situated to watch the videotape
7. Start the tape.
8. Stop the tape.
9. Pass out DV measures.
10. Collect DV measures.
11. Give each subject a DEBRIEF SHEET
12. Pay the subject $7
13. **LABEL THE DV MEASURE with the CONDITION NUMBER.**

Appendix F: Subject Consent Form

Group Study

A Ph.D. student in Industrial/Organizational Psychology at the Graduate School and University Center of the City University of New York is asking you to take part in a study of group behavior.

The researcher wants to know how people work together to get jobs done.

If you choose to take part, the experimenter will ask you to either talk with a group of people and then watch a videotape of a group, or, to just watch the videotape. You will earn $5 for participating for 35 minutes, or $7 for participating for 55 minutes.

After your participation or watching, the experimenter will give you a questionnaire to complete. The questions are not of a personal or private nature.

Your responses to all of the questions will remain confidential.

You will not be asked to put your name on your questionnaire answer sheet.

Taking part is voluntary.

If you choose not to take part, there will be no penalty. You may choose to stop at any time. You will still receive full payment for participating.

If you have any questions about the study, please ask the experimenter or contact Helen Halewski at (716) 216 9652.

Consent Statement: I have read and understood the information above. The experimenter answered all the questions I had to my satisfaction. They gave me a copy of this form. I consent to take part in the Group Study.

Signature:_____Date:

Witness:_____ Date:

Appendix G: Subject Debrief Sheet

Thank you very much for taking the time to participate. This research is being conducted by Helen Halewski, a Nazareth Alumnus, for her Ph.D. dissertation in Organizational Psychology.

This research is not about pass/fail grading or about how well people work together in groups. This research is about how people perceive leaders and leader behaviors.

Studies have found that labeling a leader as ineffective or effective has a profound effect on what you "remember" seeing a leader do or say. Simply put, the label "effective or ineffective leader" has an effect similar to a stereotype, in that we remember stereotype-consistent behavior, and tend to ignore or not to remember stereotype-inconsistent behavior. This is a fairly well-documented research finding.

This research, however, is intended to extend and better understand the factors that influence the leader stereotype. Specifically, this study addresses if your *engagement* in the issue that the leader and his/her team discuss has an effect on how precisely you remember what a leader actually said or did. The hypothesis is that the more engaged you are in an issue, the less likely you will be to use stereotypic memory of the leader and his behavior.

If you have any questions or would like to discuss this research further, please do not hesitate to contact Helen Halewski (716 265 9665 or helen.halewski@aexp.com).

Thanks again for your participation.

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