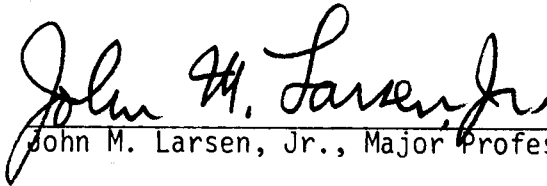
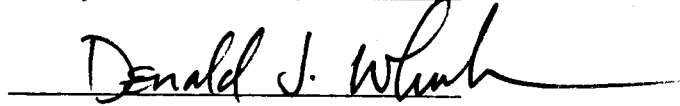


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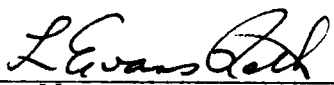
I am submitting herewith a thesis written by Frederick William Willoughby entitled "An Investigation of Path-Goal Theory: Subordinate Self-Esteem and Task Structure as Moderators." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Industrial and Organizational Psychology.


John M. Larsen, Jr., Major Professor

We have read this thesis and
recommend its acceptance:

Accepted for the Council:


Vice Chancellor
Graduate Studies and Research

AN INVESTIGATION OF PATH-GOAL THEORY: SUBORDINATE
SELF-ESTEEM AND TASK STRUCTURE AS MODERATORS

A Thesis

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ABSTRACT

Path-goal leadership theorists have proposed that effective leader behavior should complement the task structure inherent in the work situation. That is, under conditions of low task structure, leader initiating structure would facilitate subordinate motivation, performance and satisfaction. Conversely, in highly structured situations, leader consideration would facilitate subordinate motivation, performance and satisfaction. Research exploring these proposed relationships, however, has often revealed conflicting results. In an effort to improve upon predictability of path-goal relationships, it has been suggested that subordinate characteristics as well as environmental factors moderated the relationships between leader behavior and subordinate outcomes. Such suggestions indicated that self-esteem may have an important impact upon path-goal relationships. In an effort to resolve some of the mixed support for path-goal theory in the present study the extent to which subordinate self-esteem moderated the leader behavior and task structure interaction for subordinate satisfaction, role clarity and performance was investigated.

A review of the literature has suggested that the classroom setting could serve as a useful model for the study of leadership. All subjects who participated in the study were male and female undergraduate and graduate students enrolled at The University of Tennessee, Knoxville. A total of 317 students from fifteen sections of nine separate courses within the area of statistics, business, and management responded to a questionnaire which was administered during the regular class period.

The results of the present study did not support the hypothesis that task structure would negatively moderate initiating structure-subordinate outcome relationships for students with high self-esteem but not for students with low self-esteem. It was found that Self-Esteem positively moderated the Instrumental Leadership and Task Structure interaction for student Satisfaction. The Instrumental Leadership and Task Structure interaction was stronger under high levels of Self-Esteem than low levels of Self-Esteem. In addition, the results did not confirm the hypothesis that task structure would positively moderate consideration-subordinate outcome relationships for students with low self-esteem but not for students with high self-esteem. Task Structure was found to negatively moderate three Leader Behavior-subordinate outcome relationships. Task Structure negatively moderated Consideration-Satisfaction and Consideration-Role Clarity relationships. Also, Task Structure negatively moderated the relationship between Supportive Leadership and Satisfaction.

Results of the study did not generally support the effectiveness of Self-Esteem and Task Structure as moderating variables of path-goal relationships. Nonsupport for the hypotheses may have been attributable to the inability to account for leadership processes using path-goal theory and inadequate operationalizations in the present study of path-goal constructs. It was concluded that future research on path-goal theory should develop reliable and valid operational measurements of the theory's constructs. A statement can be made regarding the efficacy of path-goal theory only after the theory's constructs are reliably and validly measured.

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CHAPTER I

INTRODUCTION

House (1971) proposed a path-goal theory of leadership which outlined the effects a leader's behavior had on subordinate's motivation, satisfaction, and performance. House's theory was derived from both the path-goal hypothesis advanced by Georgopoulos, Mahoney, and Jones (1957), and research pertaining to the expectancy theory of motivation (Atkinson, 1958; Galbraith & Cummings, 1967; Graen, 1969; Lawler, 1968; Porter & Lawler, 1967; Vroom, 1964). According to Georgopoulos et al., an individual's productivity was a function of one's motivation to produce at a given level. Motivation depended upon the particular needs of the individual, as seen in the goals toward which he/she was moving, and this individual's perceptions regarding the usefulness of productivity behavior as essential to the attainment of these goals. Thus, a worker's productivity behavior was a function of path-goal perceptions, level of need, and level of freedom present in the work situation. Georgopoulos et al. reported that when pay was perceived as contingent upon good performance, workers who perceived high productivity as a path to goal attainment, tended to be high producers. In expectancy theory it is stipulated that an individual's motivation to engage in a specific behavior is a function of the person's expectancies that the behavior would result in a specific outcome (i.e., the path or perceived instrumentality of that behavior), and on the individual's perceptions of the personal satisfactions or valences the person would derive from

that outcome (i.e., the goal) (Hamner & Dachler, 1975). According to expectancy theory, a worker chooses a behavior on the basis of: (1) the valences the person perceives to be connected with the particular behavior, and (2) that individual's subjective estimate of the instrumentality of the particular behavior. In the present study an attempt was made to investigate House's (1971) path-goal theory of leadership while at the same time incorporating some of the recommendations proposed by Schriesheim and Von Glinow (1977) and Sheridan and Vredenburgh (1979).

Evans (1968), using the concept of path instrumentality, applied expectancy theory to the explanation of leader behavior. The supervisor's behavior, as perceived by the subordinate, affected the subordinate's performance and satisfaction through influence on perceived path-goal instrumentalities (Evans, 1970). However, Evans' theory differed from House's (1971) theory in that (1) Evans' predictors were not contingent on situational variables and (2) Evans in his theory did not attempt to account for conflicting findings (House, 1971).

House (1971) proposed that leader behavior would lead to increased performance to the extent that: (a) rewards under the control of the leader were positively valent to the subordinate, (b) rewards were contingent on performance, and (c) the contingency was clearly perceived by the subordinate. If path-goal relationships were classified through consistent decision making and dispersing of rewards, the leader's behavior would be motivational since it reduced the subordinate's role ambiguity. Rizzo, House, and Lirtzman (1970) also contended that role ambiguity resulted in increased motivation since ambiguity was negatively

valent and associated with low path instrumentality. Secondly, the leader served the motivational function of improving the opportunities for work satisfaction by showing consideration and support for the subordinates (House, 1971).

In path-goal theory, equally importantly, it is stipulated that the context of the work environment determines which leader behavior is more effective (House & Mitchell, 1974; Stinson & Johnson, 1975). As the work setting becomes more complex and ambiguous, subordinates experience a greater amount of psychological uncertainty (Hunt & Larson, 1974). Since the behavior of the leader should complement the work situation (House & Mitchell, 1974; Stinson & Johnson, 1975), the path-goal theory provides a prescriptive approach to leadership behavior rather than a description of a general supervisory style (House & Dessler, 1974).

Path-goal theory has been studied through the translation of two Ohio State leadership dimensions, Initiating Structure and Consideration (Fleishman, Harris, & Burt, 1955; Hemphill & Coons, 1957). Most commonly, these dimensions are measured by the Leader Behavior Description Questionnaire (LBDQ) (Halpin, 1957), the Supervisory Behavior Description Questionnaire (SBDQ) (Fleishman, 1957), and the LBDQ's updated version the LBDQ-XII (Stogdill, 1963). Factor analyses of the LBDQ (Fleishman, 1953a; Halpin & Winer, 1957) and the Leadership Opinion Questionnaire (LOQ) (Fleishman, 1953b) revealed that Initiating Structure and Consideration were two independent leader behaviors. Weissenberg and Kavanagh (1972) concluded that the two leadership dimensions were not

always empirically independent. When leaders described their attitudes about how they should behave (LOQ), Consideration and Initiating Structure were empirically independent. However, subordinates' perceptions of leader behavior (LBDQ) along the same two dimensions were not independent.

Fleishman and Harris (1962, pp. 43-44) have defined initiating structure and consideration as:

Initiating Structure includes behavior in which the supervisor organizes and defines group activities and his relation to the group. Thus, he defines the role he expects each member to assume, assigns tasks, plans ahead, establishes ways of getting things done, and pushes for production. This dimension seems to emphasize overt attempts to achieve organization goals. Consideration includes behavior indicating mutual trust, respect, and a certain warmth and rapport between the supervisor and his group. This does not mean that this dimension reflects a superficial "pat-on-the-back," "first name calling" kind of human relations behavior. This dimension appears to emphasize a deeper concern for group members' needs and includes such behavior as allowing subordinates more participation in decision making and encouraging more two-way communication.

General Path-Goal Hypotheses

House (1971) contended that the task structure of the subordinate's work situation would moderate the relationships between leader initiating structure and consideration and subordinate expectancies, performance, and satisfaction. For instance, under conditions of low task structure, a leader initiating structure would be expected to reduce psychological uncertainty within the subordinate and clarify the paths to successful work-goal attainment (Schriesheim & Von Glinow, 1977). Clarification by the leader would increase the subordinate's personal estimates that appropriate behavior would lead to accomplishment of the person's work goals. In contrast, under conditions of high task structure, a leader's

initiating structure would not be expected to lead to path clarification (House, 1971). Subordinates would be likely to resist leader attempts to implement more structure in a situation already possessing a high amount of structure. Therefore, initiating structure by the supervisor would be negatively related to subordinate satisfaction (Downey, Sheridan, & Slocum, 1976). House (1971), however, indicated that such leader behavior could result in increased subordinate performance by preventing work slowdowns.

The leader may also reveal consideration in work situations. Under conditions of high task structure, considerate leader behavior would be more effective than initiating structure behavior in producing subordinate satisfaction by alleviating the rigidity of the task (House, 1971). However, when the task structure was low, the task would be intrinsically satisfying. A leader demonstrating consideration in this case would be resisted by the subordinate since the psychological uncertainty concomitant with the situation would not be alleviated. Subordinate satisfaction and performance would be lower in these conditions of low task structure than high task structure.

Studies of Path-Goal Theory

Studies of House's path-goal theory have provided mixed results. Filley and House (1969) asserted that leaders who initiated structure were rated more highly by their own supervisors and had higher producing work groups than leaders who were low in initiating structure. Leaders who were considerate had more satisfied employees than initiating structure leaders. Also, Filley and House revealed that initiating

structure, under all conditions, produced dissatisfaction within skilled and semi-skilled workers. Fleishman and Harris (1962) pointed out that initiating structure led to more worker grievances and higher turnover than leader consideration. When leader consideration was used as a moderating variable, the relationship between leader structure and grievances and turnover varied. Only for low consideration leaders was the relationship between initiating structure and grievances and turnover positive.

Korman (1966) found that performance measures showed positive correlations with initiating structure and mixed correlations with consideration. Consideration correlated positively and initiating structure correlated negatively with measures of job satisfaction (e.g., the inverse of grievance rate, absenteeism, and turnover). House, Wigdor, and Shulz (1970) studying 192 nontechnical corporate office employees of a chemical manufacturing company noted significant positive relationships between leader initiating structure and six measures of satisfaction.

House (1971) replicated Fleishman and Harris' (1962) study using a sample of engineers, scientists, and technicians from three large research organizations. House reported that leader initiating structure was significantly positive in relationship to half the satisfaction measures in two of three companies and that significant positive correlations with satisfaction toward company management occurred in all three companies. House concluded that leader initiating structure clarified path-goal relationships for the higher occupational level

jobs which were ambiguously defined. Role ambiguity was reduced and the employee's perceptions that effort would lead to goal attainment were increased. House also accounted for the negative relationships between initiating structure and satisfaction found by Fleishman and Harris. House explained that path-goal relationships were more self-evident in routine tasks than in nonroutine tasks. A leader who initiated structure where the task was routine would be perceived by subordinates as manifesting control and not clarifying path-goal relationships.

Utilizing a sample of 199 office employees in a heavy equipment manufacturing company, House (1971) found results which supported a positive relationship between initiating structure and subordinate satisfaction; also, initiating structure was negatively related to subordinate role ambiguity. Variance in role ambiguity accounted for the positive relationship between leader initiating structure and subordinate satisfaction. It was equally important that job autonomy was shown to have a positive moderating effect on the relationship between leader initiating structure and subordinate job satisfaction. Conversely, for the previously reported sample of 192 nontechnical office workers (House et al., 1970), the correlation between initiating structure and quantity of subordinate performance was significantly higher for the low-autonomy group than for either the medium or high-autonomy groups. For the relationship between leader consideration and subordinate performance, job autonomy had a negative moderating influence. Job scope also had a negative moderating effect on the

relationships between leader consideration and subordinate satisfaction and performance.

Szilagyi and Sims (1974), using the SBDQ in a hospital setting, investigated the relationship between leader initiating structure and subordinate satisfaction. It was reported that as role ambiguity increased from lower to higher occupational levels, the relationship between leader initiating structure and subordinate satisfaction with work and supervision changed from negative to positive.

Also in a hospital setting, Sims and Szilagyi (1975) revealed a positive relationship between positive leader reward behavior and subordinate satisfaction across four classifications of occupational skills: administrative, professional, technical, and service. A negative relationship existed between punitive leader reward behavior and subordinate satisfaction with pay. For the administrative group (high role ambiguity group) a positive relationship between punitive leader reward behavior and satisfaction with supervision and promotions was reported, with a stronger relationship existing for the leaders who displayed positive leader reward behavior. Sims and Szilagyi explained that both positive and punitive leader reward behavior reduced role ambiguity and clarified paths to subordinate goals and were therefore satisfying to the subordinate. For low level employees (e.g., janitors), who perceived low role ambiguity on their jobs, nonsignificant relationships were reported between punitive leader reward behavior and satisfaction.

Stinson and Johnson (1975) used the LBDQ to investigate the relationships between leader initiating structure and consideration and

subordinate job satisfaction. Under conditions of high task structure, leader consideration was positively related to intrinsic job satisfaction, satisfaction with supervision, and overall job satisfaction. The correlations between leader consideration and all satisfaction variables were significantly more positive under high task structure conditions than under low task structure conditions. The path-goal prediction of a positive relationship between initiating structure and satisfaction under conditions of low task structure was not supported.

Schriesheim and Murphy (1976), investigating a social service organization reported that, under conditions of high role clarity, leader initiating structure was negatively correlated with subordinate performance. No significant moderator effects of role clarity were indicated for the relationships between leader consideration and subordinate satisfaction and performance.

Hamner and Dachler (1975) studied 483 nonsupervisory employees and 31 supervisors of a medium-sized manufacturing plant. They reported that leader behavior had a positive relationship with employee path-goal perceptions and with agreement of path-goal perceptions between supervisors and subordinates. Supervisor consideration and structure were positively related to worker perceptions of behavior-outcome contingencies. However, initiation of structure did not clarify path-goal instrumentalities. As the supervisor initiated more structure, the subordinates' instrumentality perceptions diverged markedly not only from the supervisor's instrumentality perceptions but also from those of fellow employees. When more consideration was revealed, the subordinates'

instrumentality perceptions were similar to supervisors' and fellow subordinates' perceptions. Hamner et al. suggested that consideration behavior communicated to subordinates the availability of rewards and the behavioral contingencies with which these rewards were distributed by the supervisor.

After Sheridan and Vredenburgh (1979) performed a moderated regression analysis, a significant interactive effect was found between task structure and initiating structure in predicting subordinate terminations. The interaction suggested that the head nurse's initiating structure had a significantly stronger effect on employee terminations where task structure was high. Also, path analysis revealed that head nurse's consideration had an inverse effect on her staff members' job related terminations and performance. It was concluded that exogenous variables such as subordinate job experience, job tension, and the size of the work group had mediated the direction of the relationship. Graen (1969) and Dachler and Mobley (1973) also suggested that the amount of work experience influenced the strength of perceived instrumentalities. Hamner and Dachler concluded that it was unclear what constructs of leadership "consideration" and "initiating structure" measured as well as what "path" and "goal" meant. Although Hamner and Dachler reached a somewhat pessimistic conclusion regarding the path-goal theory, they utilized the early form of the LBDQ to measure leader behavior.

Path-goal theory has also been investigated through longitudinal designs (e.g., Downey, Sheridan, & Slocum, 1976; Greene, 1975, 1979;

Keller & Szilagyi, 1978). Downey, Sheridan, and Slocum (1976) noticed that most studies took concurrent measurements of leader behavior and subordinate satisfaction and performance. The assumed meaning of such correlations was that the variation in satisfaction and performance was produced by the leader's behavior. However, due to the nature of the correlation coefficient, an equally strong case could be made that the variation in the leader's behavior was produced by the subordinate's satisfaction and performance. Although not able to prove causality, use of longitudinal analyses, where measurements of the same variables are taken at two different times, provides a better basis for inferring causality.

Greene (1979), utilizing a longitudinal approach with a three-month interval between measurements, examined House's (1971), House and Dessler's (1974), and House and Mitchell's (1974) conceptions of the path-goal theory of leadership. Greene replicated House and Dessler's study using 119 leader-subordinate dyads employed in the research and development divisions of an airplane manufacturer, an electronics firm, and a paper products manufacturer. The only exception was that subordinate expectancies were not included for investigation. It was shown that the lower the task structure, the higher the relationships between instrumental leader behavior and the dependent variables. Also, Greene noted that the lower the task structure, the lower the relationships between supportive leader behavior and the dependent variables. In general, regardless of task structure, managers and machine workers were more satisfied with their supervisors when a large amount of

consideration was demonstrated. Task structure negatively moderated the relationships between instrumental leader behavior and both intrinsic and extrinsic satisfaction but not performance. Task structure positively moderated the relationships between supportive leader behavior, intrinsic satisfaction and performance. Greene noted that his results were supportive of the theory with two exceptions: (1) the insignificant results pertaining to the relationship between supportive leader behavior and role clarity, and (2) strong implications that subordinate performance caused variance in leader behavior, regardless of task structure. It was suggested that if the first exception were replicated by another study that the relationship between supportive leader behavior and role clarity be deleted from the theory. Secondly, Greene indicated that instrumental leader behavior may have been relatively unimportant in influencing subordinate performance. Investigation of other moderator variables besides task structure was recommended. As a modification of the path-goal theory, Greene suggested that investigation should involve three dimensions of leader behavior (i.e., supportive, instrumental, and participative), subordinate satisfaction and performance, and potential moderators.

Keller and Szilagyi (1978), using 132 managerial, engineering, and supervisory employees, studied positive and punitive leader reward behavior and its longitudinal relationships with subordinate expectancies and satisfaction. Cross-lagged correlations suggested positive leader reward behavior was causally related to higher effort-to-performance expectancies, higher satisfaction with work, opportunities for promotion,

and overall satisfaction. Punitive leader reward behavior was apparently causally related to lower satisfaction with work, supervision, and overall satisfaction. Keller and Szilagyi reported that positive reward behavior was generally more effective in influencing and controlling organizational behavior than punishment. Due to the study's longitudinal nature, Keller and Szilagyi concluded that a leader could improve subordinate satisfaction and expectancies by administration of rewards on a contingent basis.

In addition, Downey, Sheridan, and Slocum (1976) studied the path-goal theory through a longitudinal analysis employing a sample of 68 managers and 68 production workers. Downey et al. used the SBDQ to investigate the theory. Dynamic corrected correlations revealed that leader initiating structure led to changes in subordinate job performance but not in subordinate expectancies, performance rewards, and job satisfaction. Task structure did not appear to moderate inversely the relationships between leader initiating structure and subordinate job attitudes, although it was indicated that employees were not satisfied with highly structured jobs. Dynamic correlations between leader consideration and job performance were not significant. Changes in the worker's perceived performance rewards and satisfaction with promotional opportunities were related positively to changes in the supervisor's consideration. However, task structure did not directly moderate the relationships between leader consideration and the criterion variables.

Greene (1975) investigated the direction of causation between leader initiating structure and consideration and subordinate performance and

satisfaction in a longitudinal study over three one-month intervals. Greene had 103 first line managers complete the LBDQ-XII. It was reported that consideration caused subordinate satisfaction. Subordinate performance produced changes in both leader consideration and structure. For instance, low subordinate performance caused leaders to utilize more structuring behavior whereas high subordinate performance led to more consideration. Also consideration moderated the initiating structure-performance relationship such that with highly considerate leaders, emphasis on initiating structure caused higher subordinate performance. Likewise, Greene suggested that in the future researchers investigate other moderator variables since it was noticed that the magnitude of the dynamic correlations was not strong enough to exclude other covarying variables.

Importance of Moderator Variables

House and Dessler (1974) and House and Mitchell (1974) suggested that both subordinate characteristics and environmental factors moderated the relationships between leader behavior and subordinate outcomes. Fleishman (1973, p. 37) agreed that

. . . what we need are theory and data to develop a conceptualization of a situational and personality variance as these might relate to the effective operation of consideration and structure and other dimensions of leadership.

Stogdill (1974), in a review of leadership, noticed that little research had tested the complex interactions between leadership style, subordinate personality, and situational demands. Many researchers (e.g., Downey, Sheridan, & Slocum, 1976; Greene, 1979) have concluded that in future

research on the path-goal theory additional moderator variables should be investigated. Fleishman (1973), Kerr, Schriesheim, Murphy, and Stogdill (1974), and Runyon (1973) agreed that more research on personality factors was merited.

House and Dessler (1974) pointed out that the subordinate's task, the formal authority system of the organization, and the primary work group could be classified as environmental moderators. Environmental factors could influence subordinate behavior in any of the following three ways: (1) as stimuli to motivate and direct the subordinate to perform task operations, (2) to constrain variability, and (3) as rewards for achieving desired performance. Leader behavior was motivational to the extent that it aided subordinates in coping with environmental uncertainties. However, House and Dessler also recognized that the influence of environmental factors was determined by the subordinate's personality characteristics. Hackman (1969) has observed that tasks assigned to an individual were subject to that individual's modification.

The subordinate's need for achievement and affiliation and the person's perceived ability relative to the task's demands were suggested as personality moderators of the path-goal theory (House & Dessler, 1974). With respect to the personality characteristics of the subordinate, leader behavior was motivational to the degree that subordinates viewed such behavior as an immediate source of satisfaction or instrumental to future satisfaction. Beer (1966), Dessler (1973), and Evans (1974) suggested that personality characteristics of subordinates could moderate the relationship between initiating structure and

performance. Dogmatism (or authoritarianism) and locus of control have been the most studied personality moderators.

Dessler (1973) disclosed that his results could only have been understood if the simultaneous interaction of task ambiguity and degree of subordinate authoritarianism was considered. High authoritarian subordinates expressed more satisfaction with directive leadership when the task was not ambiguous whereas open-minded individuals were more satisfied with nondirective leadership. However, where the task was ambiguous, directive leadership was preferred by both authoritarian and nonauthoritarian subordinates. House, Burrill, and Dessler (cited in House & Mitchell, 1974) supported Dessler's finding of an interaction between subordinate authoritarianism and task ambiguity in a second study of a manufacturing firm.

House (1974) contended that participative leadership was positively related to satisfaction when tasks were ambiguous and ego-involving. In this case, the subordinate's personality did not moderate the relationships. In contrast, where tasks were highly routine and thus nonego-involving, subordinate personality moderated the effect of participative leadership. As a result, House suggested that the task had a greater effect than subordinate personality on the relationships between leader participation and subordinate outcomes. Since personality characteristics had an effect only under certain situations, they possessed a less significant influence. Similar results were reported by Schuler (1974). Schuler measured the subordinate's personality, amount of participative leadership, task ambiguity, and job satisfaction

for 324 employees of an industrial manufacturing plant. In nonrepetitive ego-involving tasks, employees were more satisfied with a participative style of leadership than with a nonparticipative style, regardless of subordinate authoritarianism. Subordinate authoritarianism negatively moderated the relationship where tasks were repetitive and nonego-involving. Less dogmatic subordinates enjoyed participative leadership and more dogmatic individuals were satisfied with directive leadership.

Weed, Mitchell, and Moffitt (1976) studied 48 male college students and reported a significant three-way interaction between leader behavior, subordinate personality, and task ambiguity. The leadership style by subordinate personality interaction was only marginally significant. More variance was accounted for when the task situation was ambiguous. Weed et al. demonstrated that leaders who initiated structure produced better performance from high-dogmatism subordinates than from low-dogmatism subordinates. For the high ambiguity task, a leader who exhibited human relations behavior was compatible for low-dogmatism subordinates and not compatible for high-dogmatism subordinates. However, regardless of subordinate dogmatism, leaders high in both human relations and task orientation were liked best.

Runyon (1973) indicated that the subordinate's locus of control moderated the relationships between participative leader behavior and subordinate satisfaction. Runyon reported that subordinates with an internal locus of control were more satisfied with participative leadership than with directive leadership. Externals were more satisfied with directive leadership. Also, internals became more involved with their jobs as supervision more closely approximated

participative leadership. Finally, regardless of supervisory style, externals had very low job involvement.

In a supporting study, Mitchell, Smyser, and Weed (1975), likewise, suggested that internals were more satisfied with participative leadership style than directive leadership. Externals were more satisfied with directive leadership. Pryor and Distefano (1971) reported that externally-oriented subordinates perceived their supervisor as exhibiting less considerate behavior. Durand and Nord (1976) added that external subordinates perceived their supervisors as initiating more structure than did internal subordinates. Internals tended to perceive supervisors as both more structuring and more considerate (Evans, 1974).

Baker, Etzioni, Hansen, and Sontag (1973) even proposed that a subordinate's tolerance for structure could be viewed as a personality variable. Although blue and white-collar jobs possessed considerable differences in their demands for structured work behavior, the differences did not have a significant impact on the worker's affective responses to their jobs. Workers may have expressed dislike for their structured jobs but may not have reported general job dissatisfaction. Baker et al. revealed a positive correlation between age and worker orientation toward structured jobs, and a negative correlation between education and tolerance for structure. In the present study, a central interest was to study the moderator variables of task structure and self-esteem.

Task Structure

In regard to the effect of the moderator variable task structure on the relationship between leader behavior and subordinate outcomes, much research has been reported in an earlier section of this paper. Results pertaining to the influence of the task structure variable have been mixed. House (1974) suggested that the task had the dominant effect on the relationship between leader participation and subordinate responses whereas subordinate personality characteristics had an effect only under some task situations. Hill and Hughes (1974) and Lord (1976) revealed that task structure may also have direct influences on the leader's behavior. Downey, Sheridan, and Slocum (1975) and Sheridan and Vredenburg (1979), to the contrary, indicated that the subordinate's response to a particular style of leadership was less contingent upon the task situation than proposed by the path-goal theory. It was noticed that the two variables of leader behavior and task structure explained only a small portion of the variance in the subordinate's actual job performance. Downey et al. suggested that task structure did not clarify path-goal instrumentalities.

Sheridan and Vredenburg (1979) noted the importance of analyzing the direct and interactive effects of different situational variables within a single study rather than attempting to understand their effects through disparate studies. Downey, Sheridan, and Slocum (1976) even concluded that other moderator variables besides task structure should be investigated. Hyder (1978) suggested that within the classroom task demands may be a more useful moderator than task structure. Despite

their differing opinions, task structure was selected for investigation in the present study in an attempt to remain consistent in the exploration of House's (1971) and House and Dessler's (1974) proposed path-goal theory.

Self-Esteem

Coopersmith (1967) investigated the concept of self-esteem in white, middle-class, male children. These children ranging from ages 10 to 12 were selected since they possessed sufficient experience and ability to think abstractly; and had attended school long enough to have an idea of their relative competence. Also, a homogenous group of preadolescents was selected by Coopersmith in order to reduce sources of variability and allow intensive study of a few number of subjects. Although studying just children, Coopersmith assumed that his results applied to all individuals since self-esteem developed in a similar way for everyone within a particular culture and would not be subjected to any major modifications of later life. Coopersmith (1967) defined self-esteem as:

. . . the evaluation which the individual makes and maintains with regard to himself: it expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes himself to be capable, significant, successful, and worthy. (p. 4)

Coopersmith added that attitudes about self possessed affective loadings and had motivational consequences. Children with low self-esteem were more easily threatened and experienced greater difficulty in dealing with threats to their adequacy than high self-esteem children. Low self-esteem children in particular were vulnerable to unfavorable

opinions and more fearful of evoking anger. Conversely, children high in self-esteem were pointed out to approach tasks and other persons with the expectations that they would be received and successful. They also were better able than low self-esteem children in coping with threats. Children with high self-esteem were more expressive, happy, and relatively free of anxiety. Children with low self-esteem were less expressive, less happy, and relatively anxious.

Korman (1968, p. 485) defines self-esteem or self-evaluation as the "extent to which he sees himself as a competent, personal, need-fulfilling individual." Korman indicates that three independent types of self-esteem are possessed by all individuals. An individual may possess a chronic level of self-esteem which is a relatively persistent personality trait that occurs relatively consistently across various situations. Secondly, the individual may derive a self-perceived competence concerning a particular task. This is task-specific self-esteem. Thirdly, an individual is subjected to the expectations which other individuals have of him/her. This is socially influenced self-esteem. From an organizational point of view, Korman contended that an understanding of socially influenced self-esteem would be most useful.

In the present study all types of self-esteem are considered as important to the organization. It appears that each type can influence a subordinate's motivation to perform and enjoy the work. Porter and Lawler (1967) and Vroom (1964) suggested that task-specific self-esteem was related to beliefs about expectancies since self-perceived competence referred to perceived probabilities of effective performance. Greenhaus

and Badin (1974) also concluded that improvement in an organization's reward structure and increase in the subordinates' motivation to perform could result from elevated task-specific self-esteem. Korman (1976) pointed out that those people with high task-specific self-esteem performed significantly better on a difficult anagrams task than those persons with low task-specific self-esteem performed significantly better on a difficult anagrams task than those persons with low task-specific self-esteem. No differences were evident on the easy task. Chronic self-esteem, however, had a nonsignificant influence on task performance for both levels of task difficulty.

Coopersmith (1967) demonstrated that the gap between aspirations and fulfillment was smaller for high esteem children than for those who considered themselves unworthy. Smaller differences existed despite the significantly higher aspirations high self-esteem children set for themselves. Coopersmith noted that children with high self-esteem expected more of themselves and gained their own esteem by meeting higher goals rather than lowering their self-demands. Low self-esteem children established lesser standards and fell short of accomplishing them. Coopersmith concluded that the low self-esteem individual's approach led to decreased motivation and contributed to future failures.

Self-esteem, however, was not related to absolute level of aspiration (Coopersmith, 1967). Coopersmith asserted that people who held a more positive self-description did not necessarily select higher-level occupations than people with a negative self-description. Persons with low self-esteem were just as desirous of success as other people but were just less likely to expect that success will actually occur

(Rosenberg, 1962). High self-esteem children felt their behaviors could affect what happened to them whereas children with low self-esteem were unlikely to believe that their personal actions could have a favorable outcome (Coopersmith, 1967).

Korman (1970) indicated that high self-esteem persons were motivated to perform highly on a task in order to maintain their self-image of competence. Low self-esteem persons were not motivated to perform well since poor performance was consistent with their self-image of relative incompetence. Korman not only studied the direct effects of self-esteem on performance but also investigated self-esteem as a moderator of the relationship between performance and satisfaction (Korman, 1968). He hypothesized that performance should predict satisfaction only for high self-esteem persons, whereas satisfaction should predict performance only for low self-esteem persons.

Greenhaus and Badin (1974), in a test of Korman's hypotheses, revealed that performance influenced satisfaction only for high self-esteem subjects. Task-specific self-esteem was the only significant determinant of performance for both low and high self-esteem subjects. The relationship between socially influenced self-esteem and performance was significant for high self-esteem subjects but not for low self-esteem subjects.

Sigall and Gould (1977) contended that high self-esteem subjects exerted greater effort when the evaluator was demanding than when he was undemanding whereas low self-esteem subjects exerted greater effort when the evaluator was undemanding. Korman (1970) showed that

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high task-specific self-esteem persons placed higher values on nonhierarchical control systems which were consistent with their beliefs in the competence of people. Low self-esteem persons, according to Sigall and Gould, exerted effort only when the likelihood of success was perceived to be low. However for high self-esteem individuals, when success was viewed as generally easy to obtain, the implication was that almost anyone could have succeeded. Success, by itself, did not permit a self-enhancing viewpoint. What was important to the high self-esteem individual was to maintain maximum effort so that whatever occurred within a situation could be ascribed to themselves. When success was perceived as possible, low self-esteem people exerted effort. Only when the evaluator was difficult to please did the low self-esteem individual exert little effort. High self-esteem people worked harder when success appeared more difficult.

As way of explanation, Greenhaus (1971) and Korman (1970) suggested that the low self-esteem person utilized the leader's response as a guide to their own individual responses in a given situation. Coopersmith (1967) noticed that when dealing with threat, low self-esteem children were more likely to conform than high self-esteem children. Stotland and Hillner (1962) agreed that low self-esteem people were more susceptible to social influence than high self-esteem people especially if this influence was consistent with their own self-evaluations. Stotland and Hillner indicated that low self-esteem persons presented a lower evaluation of their performance after they learned that a person with whom they identified did poorly on a similar task. However, low self-esteem

persons did not adjust their self-evaluation when told that the same person did well on the task. The idea that people must maintain consistency between their self-evaluation and behavior was also supported by Cohen (1959). Cohen studied college students and reported that high self-esteem individuals were generally less responsive to stimuli which devaluated themselves than to stimuli which were self-enhancing. Low self-esteem persons were more responsive to failures. Persons with high self-esteem tended to evaluate an objective failure as a small failure and an objective success as a large success (Stotland, Thorley, Thomas, Cohen, & Zander, 1957).

Korman's (1970) and Stotland and Hillner's (1962) ideas were consistent with Coopersmith's findings that low self-esteem children were less interested in presenting a picture of self-competence than high self-esteem children. Task achievement to the low self-esteem person was reported to be irrelevant to that person's self-esteem. Gergen and Blauer (1967), however, indicated that conformity was essentially unrelated to self-esteem when task difficulty was high. Only when task difficulty was low or medium was conformity related to self-esteem. Gergen and Blauer, in addition, reported that the linear relationship between self-esteem and susceptibility to social influence was found among males but was not generally found among females.

Korman (1967a, 1969) suggested that one's self-esteem determined his/her vocational choice. Korman proposed that individuals with high self-esteem were more likely to have sought and accepted positions which were consistent with their own self-perception. On the other hand, low

self-esteem individuals were more accepting of occupations where they thought they would not be adequate and where they actually tended not to be adequate. This situation would further lower this individual's self-esteem. Korman (1967a) reported that high self-esteem individuals were more likely than low self-esteem individuals to choose those occupations which they perceived as requiring their high abilities. Where the occupation was perceived as requiring low abilities, the low self-esteem person was just as likely as the high self-esteem person to perceive him/herself as possessing adequate abilities. Korman (1969) noted that individuals who perceived themselves as need-fulfilling and adequate (i.e., possessed high self-esteem) chose vocational roles where they would have their needs fulfilled. Even when the low self-esteem person was provided with need-fulfillment, satisfaction did not necessarily result (Korman, 1967b). High self-esteem persons tended to look at their own needs and relevant attributes in determining their satisfaction with their occupational choice, whereas low self-esteem persons looked more toward external cues (Greenhaus, 1971).

Mothers of high self-esteem children rated their children as more effective in school than mothers of low or medium self-esteem children (Coopersmith, 1967). Children with low self-esteem were more likely to have a lower grade average. However, children with a medium level of self-esteem were more likely than high self-esteem children to report a higher grade average. Ability and academic performance, since they accounted for a relatively small percentage of variance, were not considered overwhelming influences on the development of self-esteem.

In fact, the correlation between subjective self-esteem and intelligence was .28, and between self-esteem and academic achievement it was .30.

Bachman and O'Malley (1977) concluded that educational success reduced in importance to the self-esteem of males as they progressed through high school and beyond. Respectful treatment by significant others was suggested as the major contributor to the development of a high self-esteem. Rosenberg (1963), to the contrary, lent support that whether the parent was very interested or fairly interested towards the child made very little difference in the child's self-esteem level. Students who reported only punitive parental responses tended to have a lower self-esteem than those who reported only supportive responses. However, the differences between children who received indifferent parental responses or punitive responses were not significant.

Summary of Research Findings

A positive relationship between leader initiating structure and subordinate satisfaction where subordinates were engaged in ambiguous or unstructured tasks has been reported in the literature (Dessler, 1973; Greene, 1979; House, 1971; House & Dessler, 1974; Sims & Szilagyi, 1975; Szilagyi & Sims, 1974). However, Dessler and Valenzi (1977), Downey, Sheridan, and Slocum (1975), and Stinson and Johnson (1975) failed to confirm this relationship. When subordinates were engaged in highly structured tasks, a negative relationship between leader initiating structure and satisfaction has been found (House & Dessler, 1974; Sims & Szilagyi, 1975; Szilagyi & Sims, 1974). The positive relationship hypothesized between leader initiating structure and

subordinate performance when subordinates were involved with unstructured tasks was supported by Downey, Sheridan, and Slocum (1976) and partially supported by Schriesheim and Murphy (1976). The same hypothesis did not receive support from Downey, Sheridan, and Slocum (1975), Greene (1975, 1979), and Szilagyi and Sims (1974). Research results have also demonstrated that leader consideration would have a positive relationship with subordinate performance, expectancies, and satisfaction when subordinates performed at highly structured tasks (Downey, Sheridan, & Slocum, 1975; House, 1971; House & Dessler, 1974; Johnson & Stinson, 1974; Sims & Szilagyi, 1975; Stinson & Johnson, 1975; Szilagyi & Sims, 1974). To the contrary, Downey, Sheridan, and Slocum (1976) reported that task structure did not directly moderate the relationships between leader consideration and subordinate motivation, performance, and satisfaction. Still, Fleishman (1973) asserted that results with leader Consideration were more consistently supportive of path-goal hypotheses than results based on Initiating Structure.

Accounting for Conflicting Findings

Schriesheim and Von Glinow (1977) demonstrated that studies using the LBDQ-XII were slightly more consistent with the theory's initiating structure hypotheses than studies using the LBDQ or SBDQ. Equally important, when viewing the theory's consideration hypotheses, the LBDQ-XII and LBDQ were more consistent than the SBDQ. Schriesheim and Von Glinow explained that many inconsistent and nonsupportive research findings were attributable to inadequate and different operational definitions of the path-goal theory's leader behavior constructs.

For example, Downey, Sheridan, and Slocum (1975), Johnson and Stinson (1974), and Szilagyi and Sims (1974) obtained results counter to the theory with respect to leader behavior relationships with role clarity and subordinate satisfaction. Johnson and Stinson proposed that their differences were due to sample differences. Their subjects possessed higher educational, occupational, and organizational positions. Results from Dessler and Valenzi (1977) did not support Johnson and Stinson's interpretation of the moderating effects of occupational level on the leader behavior relationships with satisfaction. Greene (1979) also noted that the discrepant results reported by Downey et al. and Szilagyi and Sims may have been due to their selection of instruments to assess leader behavior. Both studies used the SBDQ. Greene indicated that the SBDQ contained autocratic, punitive, and production-oriented leader behavior and would not have been expected to be related to subordinate satisfaction. Greene also indicated that the SBDQ, in comparison to the LBDQ-XII, provided a less accurate operational definition of the path-goal theory's leader behavior constructs.

House and Dessler (1974), Schriesheim and Bish (1974) and Schriesheim and Von Glinow (1977) asserted that the LBDQ, LBDQ-XII and SBDQ all measured very different kinds of leader behavior. The LBDQ and in particular the SBDQ contained punitive, autocratic, and punitive-oriented items (Schriesheim, House, & Kerr, 1976; Schriesheim & Kerr, 1974). Although the LBDQ-XII contained none of these items, it did include participative leader behaviors (Schriesheim & Kerr, 1974). Greene (1979) and Schriesheim and Von Glinow (1977) provided evidence that the most accurate measurements of the theory's constructs of

initiating structure and consideration were those studies which utilized House and Dessler's (1974) scale of leader behavior. House and Dessler labelled their leader dimensions "instrumental leadership" and "supportive leadership." Supportive leader behavior was "friendly, approachable, and considerate," whereas instrumental leader behavior was "directed at clarifying subordinate role expectations" (House & Dessler, 1974, pp. 39-40). Therefore, it may be that many conflicting results are attributable to inadequate measurements of the theory's leader behavior constructs. Schriesheim and Von Glinow suggested that both the LBDQ-XII and House and Dessler's scale be administered in studies so that both sets of results could be presented if they differed.

Another possibility for so many conflicting findings may be that an adequately comprehensive test of the path-goal theory has not been conducted. Sheridan and Vredenburgh (1979) indicated that a more comprehensive model of leadership was suggested since the proposed path-goal model explained only a small percentage of the variance in the dependent variables. Inclusion of relevant moderator variables may provide a significant contribution to the predictive power of the path-goal theory.

Implications for Research

A review of the literature of the path-goal theory indicates the importance of including moderator variables when investigating the theory's merits. The moderator variables may take the form of environmental variables or personality variables. House and Mitchell (1974) also proposed that the personality characteristics of subordinates

should be studied in conjunction with task structure to provide a more comprehensive analysis of the path-goal theory. In the present study task structure and self-esteem were viewed as moderator variables when investigating the utility of the path-goal theory.

In addition, research results have indicated that an individual's self-esteem has motivational consequences. For instance, it has been demonstrated that an individual's self-esteem influences him/her setting goals and the person's approach toward goals as well as influencing the relative degree of success that will result. Persons with different levels of self-esteem, when confronted with a certain type of leader behavior, may behave in ways consistent with their level of self-esteem. Consequently, it appears that the manner in which self-esteem moderates the leader behavior and task structure interaction for subordinate outcomes can provide an important exploration of the path-goal theory of leadership.

Hypotheses for Research

Hypothesis 1. Task structure will moderate the relationships between leader initiating structure and subordinate outcomes (viz., satisfaction, role clarity, and performance) only when subordinates possess a high self-esteem such that under conditions of high task structure and high subordinate self-esteem the relationships will be negative. Task structure will not moderate the relationships between leader initiating structure and subordinate outcomes when subordinates possess a low self-esteem.

According to the original path-goal hypothesis, in highly structured situations, leader initiating structure is expected to be perceived by the subordinate as overcontrolling and negatively related to subordinate expectancies, performance, and satisfaction. Conversely, when the task is unstructured, path-goal theory would predict that leader initiating structure would clarify the paths to attainment of goals and would increase subordinate expectancies, performance, and satisfaction. Where subordinates possess a high self-esteem, a leader's initiating structure in a highly structured situation would be perceived as overcontrolling and threatening to their self-esteem. In such a situation, high self-esteem subordinates must exert a great amount of effort to maintain their high self-evaluation. This situation, however, would be viewed as so restrictive that no amount of effort could be expended to make the situation more satisfying. Therefore, the dissatisfaction associated with redundant leader behavior would decrease subordinate outcomes. On the other hand, in unstructured situations, leader initiating structure would be viewed positively by high self-esteem subordinates. High self-esteem individuals would not perceive that this leader behavior would interfere with their high aspirations and ascription of success to their own self-competence. Thus, task structure will moderate the relationships between leader initiating structure and subordinate outcomes only when subordinates possess a high self-esteem such that under conditions of high task structure and high subordinate self-esteem the relationships will be negative.

Where subordinates possess a low self-esteem, a leader's initiating structure in a highly structured situation would indicate to the

subordinate that threat was present and that he/she should conform to the leader's direction. Subordinates with low self-esteem would perceive leader initiating structure as helpful rather than restrictive. Such a situation would lead to increased role clarity, satisfaction, and performance. When the task was unstructured, structuring behavior by the leader would also be viewed positively by low self-esteem individuals. Low self-esteem subordinates would perceive such leader behavior as indicating that goals are well within reach and capable of being obtained with a little effort. Therefore, task structure will not moderate the relationships between leader initiating structure and subordinate outcomes when subordinates possess a low self-esteem.

Hypothesis 2. Task structure will moderate the relationships between leader consideration and subordinates outcomes (viz., satisfaction, role clarity, and performance) only when subordinates possess a low self-esteem such that under conditions of low task structure and low subordinate self-esteem the relationships will be negative. Task structure will not moderate the relationships between leader consideration and subordinate outcomes when subordinates possess a high self-esteem.

Path-goal theorists have proposed that, under conditions of high task structure, leader consideration would be valued more highly by subordinates since such behavior would compensate for the dissatisfaction inherent in highly structured tasks. However, where the task is unstructured, work is presumed to be more intrinsically satisfying and leader consideration is not expected to be strongly related to subordinate satisfaction. In highly structured situations where subordinates possess

a low self-esteem, leader consideration would be perceived as providing support according to path-goal predictions. This leader behavior would be related to increased role clarity, satisfaction, and performance. Conversely, where the task is unstructured and subordinates possess a low self-esteem, leader consideration would not provide sufficient direction to the subordinates and indicate that goal attainment was well within their reach. The low self-esteem individual's negative perceptions of this situation would be expected to decrease subordinate outcomes. Thus, task structure will moderate the relationships between leader consideration and subordinate outcomes only when subordinates possess a low self-esteem such that under conditions of low task structure and low subordinate self-esteem the relationships will be negative.

In highly structured situations, subordinates with high self-esteem would perceive leader consideration as providing support. This leader behavior would be related to increased role clarity, satisfaction, and performance. Where the task is unstructured and when subordinates possess a high self-esteem, leader consideration would also be perceived as providing support. Leader consideration would not be perceived as interfering with the high self-esteem individual's aspirations and goal attainment. Therefore, task structure will not moderate the relationships between leader consideration and subordinate outcomes when subordinates possess a high self-esteem.

Research Setting

In this study, the path-goal theory of leadership was explored within the university classroom. Other investigations of the path-goal

theory have also been performed in the classroom (e.g., Dawson, Messe, & Phillips, 1972; Greenfield & Andrews, 1961; Hyder, 1978; Mandelbaum & Kipnis, 1973; Smith & Hudgins, 1966). Factor analytic studies have consistently revealed that two general dimensions accounted for a wide range of teacher behavior (Coffman, 1954; Gibb, 1955; McKeachie, 1961; Ryans, 1960). The first dimension consisted of the teacher's personal relationship with and attention to the social aspects of his/her students. The second referred to the teacher's emphasis on the content of the course and the teaching of tasks. According to Mandelbaum and Kipnis, these two general dimensions appeared related to the leadership dimensions of consideration and initiating structure.

Dawson, Messe, and Phillips (1972), in four sections (classes) of general psychology, manipulated consideration and initiating structure behavior of the instructor. To measure leader behavior they developed their own Instructor Behavior Description Questionnaire for which they borrowed items from the SBDQ. Classes taught with high consideration were higher on the three dependent measures of submission of bibliographies, examination scores, and research credits than were classes taught with low consideration. Students taught with high initiating structure performed higher on the length of annotated bibliography measure. An interaction between the effects of consideration and initiating structure existed for research credits. Dawson et al. noted that student performance was essentially unaffected by variations in instructor behavior. Performance, they suggested, was primarily determined by the degree of internal motivation. Consideration, however,

did influence student performance on the examination. Dawson et al. pointed out that students could make accurate assessments of their instructor's leader behaviors. Finally, although the leadership variables may not have been fully manipulated due to the constraints of the classroom situation, Dawson et al. concluded that teacher behavior could be investigated as leader behavior.

Greenfield and Andrews (1961) reported that a significant agreement existed among principals, students, and other teachers in their descriptions of a teacher's leader behaviors. Teachers who revealed a high degree of leadership tended to induce high achievement in their pupils. Initiating structure was more strongly related to pupil growth than consideration. Despite this fact, the two leadership dimensions accounted for only 20 percent of the variance in student growth. Other factors such as previous pupil learning, total school environment, socio-economic background, motivation, teacher experience, and teacher truancy were suggested as influences on student growth.

Mandelbaum and Kipnis (1973) had 378 students describe the behavior of their instructor using an adaptation of the SBDQ. They reported that instructor consideration was the main factor related to student evaluations of their instructors. Secondly, graduate students emphasized consideration less and initiating structure more than undergraduates. Also, consideration interacted with initiating structure so that for instructors high on consideration, high initiating structure did not influence the evaluations. For instructors low in consideration, high initiating structure scores were associated with poor evaluations. In

conclusion, the teacher perceived high in consideration was considered to be the superior teacher.

Hyder (1978) also suggested that the classroom setting may serve as an appropriate model for the study of leadership. Teacher leader style and the phenomena of expectancy effects in the classroom were indicated to have similar parallels to findings in business and industry. Hyder revealed that teacher consideration tended to be the leader behavior most highly related to student satisfaction and performance. Also, demands of the task were suggested to be a more important factor than task structure in affecting the relationship between teacher leader behavior and student satisfaction and performance.

CHAPTER II

METHOD

Subjects

Subjects participating in this study were graduate and undergraduate students enrolled at The University of Tennessee, Knoxville, during the first summer session of 1979. A total of 317 students from the fifteen sections of nine separate courses within the fields of management, business and statistics responded.

The data for the study were collected through questionnaires administered during the regular class period. It took about twenty minutes for each subject to complete the questionnaire. To control for possible order effects, the order of the pages of the questionnaire was reversed for every other subject. The participants in the study were told that the project's objective was the exploration of inter-relationships among personality and situational variables within the classroom. Also, the subjects were informed that participation was voluntary. So that the respondents would have adequate experience to evaluate both the course and the instructor, the study was conducted during the last two weeks of the quarter.

Measures

Leader Behavior. Copies of all scales used in the study are included in the Appendix. To measure leader behavior each student was asked to complete a modification of the Leader Behavior Description

Questionnaire-Form XII (LBDQ-XII) (Stogdill, 1963). Similar to Dawson, Messe and Phillips (1972) and Mandelbaum and Kipnis (1973), the terms "group" and "leader" in the items were changed to "class" and "instructor" respectively. The LBDQ-XII was selected as the instrument to use in investigating the path-goal theory since studies employing the instrument had provided more consistent measures of the theory's hypotheses (Schriesheim & Von Glinow, 1977). The Initiating Structure scale contains ten items and measures the degree to which a leader defines and structures his/her role and the role of his/her subordinates toward goal attainment (Downey, Sheridan, & Slocum, 1976). The Consideration scale indicates the extent to which the leader provides an environment of psychological support, friendliness and helpfulness (Downey et al., 1976).

According to Fleishman (1953b), when studying employees of a manufacturing plant, factor analysis revealed that Consideration and Initiating Structure were orthogonal to each other. Weissenberg and Kavanagh (1972) noted, however, that in 72 studies which computed the correlation between these two leadership dimensions that 51 percent reported a significant positive relationship between the two leadership dimensions, 10 percent reported significant negative correlations and 39 percent reported nonsignificant correlations. Schriesheim and Kerr (1974) suggested that high intercorrelations between the two leader behavior constructs indicated that leaders were unable to behave differentially on the two dimensions. Their suggestion was contrary to path-goal theory which stipulated that leaders were able to differentiate between the two types of leader behavior. In the present study,

the produce-moment correlation between the Initiating Structure and Consideration scales was $r = .34$ ($p < .001$). To be consistent with the literature where Consideration and Initiating Structure have been found significantly related, tests of the path-goal theory were made with partial correlations (Dessler & Valenzi, 1977; Downey, Sheridan, & Slocum, 1976; House & Dessler, 1974; Stinson & Johnson, 1975).

Schriesheim and Kerr (1974) reported that the LBDQ-XII has been experimentally validated with successful results and that it did not confound frequency of behavior with magnitude. Smith, Kendall and Hulin (1969) have shown that the Consideration scale was positively related to satisfaction with supervision as measured by the Job Description Index (JDI) (Smith et al., 1969), $r = .85$ ($p < .01$). Also, Initiating Structure was negatively related $r = .61$ ($p < .01$) with JDI supervision satisfaction.

The internal consistency reliability of the Initiating Structure and Consideration scales of the LBDQ-XII was assessed by means of coefficient alpha (Nunnally, 1967). For the Initiating Structure scale: $\alpha = .77$ ($p < .001$); and for the Consideration scale: $\alpha = .80$ ($p < .001$). The reliability estimates were well within the range of reliabilities of .70 to .80 reported in the test manual (Stogdill, 1963).

In addition, a second measure of leadership was utilized. House and Dessler (1974), noting that the LBDQ-XII contained items exogenous to the measurement of the path-goal theory, factored the LBDQ-XII into two subscales, Instrumental Leadership and Supportive Leadership.

Schriesheim and Von Glinow (1977) indicated that House and Dessler's scale provided a more accurate measurement of the path-goal theory's leader behavior construct. Schriesheim and Von Glinow suggested that results based on the LBDQ-XII and House and Dessler's scale be included in a study so that instances where they diverged could be shown. Consistent with this suggestion, the data were analyzed separately using both scales.

The Instrumental Leadership scale, composed of seven items, indicates the extent to which the leader directs and clarifies his/her subordinates' role expectations. The Supportive Leadership scale contains ten items and reflects the degree to which a leader is friendly, approachable, and considerate of the needs of his/her subordinates. The product-moment correlation between Instrumental Leadership and Supportive Leadership in the present study, was $r = .41$ ($p < .001$). Likewise, the relationship between each dimension of leadership and each dependent variable was analyzed with the effects of the other leadership dimension held constant. The internal consistency reliability for the Instrumental Leadership scale was $\alpha = .78$ ($p < .001$); and for the Supportive Leadership scale: $\alpha = .83$ ($p < .001$). These values of internal consistency were similar to the values reported by Greene (1979) and House and Dessler (1974).

The scales used to measure leadership are included in the questionnaire (see Appendix) under the heading "Description of Leader Behavior." Items composing the Initiating Structure scale are 1, 3, 5, 7, 9, 11, 13, 15, 17 and 19. Items 2, 4, 6, 8, 10, 12, 14, 16, 18 and 20 compose the Consideration scale. The Instrumental Leadership scale is

comprised of items 1, 9, 13, 15, 17, 19 and 21. Items numbered 2, 4, 6, 8, 10, 12, 14, 16, 22 and 23 constitute the Supportive Leadership scale. Students judged the frequency with which their instructors engaged in a particular behavior on a five-point scale ranging from Always (1) to Never (5). Items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, 14, 15, 16, 17, 19, 21, 22 and 23 were assigned values that were reverse of the weightings on this five-point scale because they were negatively stated items. The score on each leadership scale was then obtained by adding the values of its respective items.

Self-Esteem. Rosenberg's (1965) Self-Esteem Scale was utilized to measure each student's self-esteem. According to Rosenberg, self-esteem indicates the feelings of satisfaction or dissatisfaction a person has about him/herself. The scale consists of ten items which are answered on a four-point scale ranging from Strongly Agree (1) to Strongly Disagree (4). Items 24, 25, 27, 29 and 30 of the Self-Esteem Scale were assigned values opposite of the weightings on this four-point scale because they were stated negatively. The subject's Self-Esteem score was then determined by adding the values of the scale's ten items. Rosenberg randomly selected his standardization sample from junior and senior high school students. Robinson and Shaver (1973, p. 81) indicated that the Self-Esteem Scale probably measured the self-acceptance aspect of self-esteem more than other factors. In addition, Robinson and Shaver pointed out that the scale was designed with brevity and ease of administration in mind. The scale was selected for the present study because

of these two factors as well as the scale's high reliability and adequate validity.

Silber and Tippet (1965) reported that the Self-Esteem Scale correlated from .56 to .83 with other similar measures of self-esteem and clinical assessment. Broll (1973) reported correlations of .27 ($N = 643$) with the California Psychological Inventory (CPI) (Gough, 1957) self-acceptance scale and .45 ($N = 643$) and .66 ($N = 101$) with a one item esteem scale. Correlations with stability of ratings of others and stability of perceptual performance were near zero (Tippet & Silber, 1965). Silber and Tippet (1965) revealed that the scale contained a high proportion of method variance. A social desirability response set was suggested for this finding. Rosenberg (1965), however, demonstrated that positive self-esteem as measured by his scale was related to low shyness and depression, more assertiveness and more extracurricular activities. Many of these dependent measures were also self-reports (Robinson & Shaver, 1973).

Silber and Tippet (1965) indicated a test-retest correlation over two weeks of .85 for the Self-Esteem Scale. The internal consistency reliability of the Self-Esteem Scale for the present study was: $\alpha = .87$ ($p < .001$). Nunnally (1967) criticized the use of the Guttman format for scales with a small number of items and forced rectangular distribution of items as artificial and likely to indicate only an ordinal distinction among people. In the present study this was taken into consideration as was Robinson and Shaver's suggestion of scoring the scale as a simple additive scale. The scale used to

measure self-esteem is included in the questionnaire (see Appendix) under the heading "Self-Esteem."

Task Structure. This concept was measured by an adaptation of a scale factor analyzed by Shaw (1973). Shaw's instrument consisted of four items designed to measure four primary factors of task structure: goal clarity, goal-path multiplicity, decision verifiability and decision specificity. A fifth item which measured the overall structure of the course was added to Shaw's scale for use in the present study. Students judged to what degree each of the dimensions was descriptive of the structure of their coursework. Items 35, 36, 37 and 38 were weighted (reverse scored) so that a low score indicated a high degree of task structure. Task Structure was then determined by adding the values of the scale's five items. For the present sample, the internal consistency reliability of the Task Structure scale was: $\alpha = .49$ ($p < .001$). This was comparable to the internal consistency reliability of $\alpha = .53$ ($p < .01$) reported by Hyder (1978). The scale used to measure task structure is included in the questionnaire (see Appendix) under the heading "Task Structure."

Performance. The instrument used to measure this construct was developed by Hyder (1978). Consistent with House and Dessler's (1974) concept of performance, Hyder developed a measure indicating the frequency with which students engaged in specific activities directed toward the successful attainment of course goals. On a scale comprised of twenty items, students were asked to rate the frequency they engaged

in these activities on a five-point scale ranging from Never (1) to All the Time (5). Items 40, 42, 48, 52, 54, 57, 59 and 60 were assigned values that were reverse of the weightings on this five-point scale because they were negatively stated items. The subject's Performance score was then determined by adding the values of the scale's twenty items. For the present study, the internal consistency reliability of the Performance scale was: $\alpha = .76$ ($p < .001$). This was similar to the internal consistency reliability reported by Hyder: $\alpha = .76$ ($p < .01$). The scale used to measure performance is found in the questionnaire (see Appendix) under the heading "Performance."

Role Clarity. Role clarity was measured by a six item scale construct validated by Rizzo, House and Lirtzman (1970) against measures of organization practices, leader behavior and satisfaction. Role clarity indicates the degree to which students see their role demands as unambiguous and predictable. On a seven-point scale ranging from Completely Uncertain (1) to Completely Certain (7), students indicated their certainty about specified aspects of their course. The subject's score on Role Clarity was determined by adding the values of the scale's six items. For the present sample, the internal consistency reliability of the scale was: $\alpha = .84$ ($p < .001$). The reliability of this scale was similar to the internal consistency reported by Hyder: $\alpha = .84$ ($p < .01$), and Rizzo et al.: $\alpha = .80$ ($p < .05$). The scale used to measure role clarity is included in the questionnaire (see Appendix) under the heading "Role Clarity."

Satisfaction. A seven item scale was used to measure student satisfaction with the course. The items were selected from the Cafeteria Item Catalog (Derry, Selbert, Starry, Van Horn, & Wright, 1974). These items were designed to measure four major factors commonly associated with instructor evaluations: satisfaction with overall teaching skill, instructor-student rapport, course organization and amount of work required. In addition, an item indicating overall satisfaction with the course was included. All items were scaled from Very Satisfied (1) to Very Dissatisfied (5) to indicate how much students were satisfied with particular aspects of their course. Each item score was reversed for all items for purpose of computation. The subject's total Satisfaction score was then determined by totalling the values for the seven items. For the present sample, the internal consistency reliability of the Satisfaction scale was: $\alpha = .87$ ($p < .001$). This was similar to the alpha of .90 ($p < .01$) reported by Hyder. The scale used to measure satisfaction is found in the Appendix under the heading "Satisfaction."

CHAPTER III

RESULTS

An intercorrelation matrix of the variables used in the study is shown in Table 1. The significant relationships extended from a low of $r = .10$ ($p < .05$) to a high of $r = .94$ ($p < .001$). It may be noted that the correlation between the Initiating Structure and Instrumental Leadership scales was $r = .92$ ($p < .001$). The correlation between the Consideration and Supportive Leadership scales was $r = .94$ ($p < .001$). Although these scales were significantly related, the results were analyzed separately using both the LBDQ-XII scale and the House and Dessler scale. The number of subjects varied in the computation of the correlation coefficient. Students who did not complete all the items for any scale in the questionnaire were not considered in the correlational analysis for that particular measurement scale. From the total sample size of 317 subjects, the median number of subjects deleted per scale was: Mdn = 21 and Mean = 22.3. For all analyses, this procedure of accounting for incomplete data was used.

In order to obtain the moderated groups, the subject group was dichotomized at the median on the Task Structure and Self-Esteem scales. For the Task Structure scale (Mdn = 23.33), the range of scores for students in the low Task Structure group was (range: 11-23) and for the high group (range: 24-33). The subject group was also dichotomized on the Self-Esteem scale (Mdn = 34.57) into low (range: 10-34) and high (range: 35-40) groups. Other ways of subgrouping the subjects were

Table 1

Intercorrelation Matrix of Scales Used in the Study

	Initiating Structure	Consideration	Instrumental Leadership	Supportive Leadership	Self- Esteem	Task Structure	Performance	Role Clarity	Satisfaction
Initiating Structure		.34*** (265)	.92*** (282)	.42*** (267)	.10 (275)	.09 (276)	.29*** (270)	.51*** (274)	.34*** (279)
Consideration			.33*** (270)	.94*** (273)	.15** (269)	-.07 (271)	.12* (262)	.50*** (269)	.63*** (273)
Instrumental Leadership				.41*** (272)	.12* (283)	.16** (281)	.26*** (276)	.55*** (281)	.35*** (286)
Supportive Leadership					.14** (272)	-.09 (273)	.16** (264)	.53*** (270)	.67*** (273)
Self-Esteem						-.01 (287)	.18*** (286)	.15** (294)	.07 (298)
Task Structure							.01 (281)	.10* (289)	-.03 (292)
Performance								.29*** (291)	.21*** (292)
Role Clarity									.62*** (303)
Satisfaction									

Note: Numbers in parentheses indicate sample size. Sample size fluctuates due to missing data.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

not utilized since such categorizations would result in inappropriately small sample sizes.

In order to ascertain whether dichotimization at the median of scores on Task Structure and Self-Esteem provided a valid subgrouping, the sample means for these subgroupings were compared. A comparison between the two sample means of students categorized on the basis of Task Structure scores revealed that students in the "high Task Structure" group ($\bar{M} = 27.86$, $SD = 2.5$) perceived their tasks to be significantly more structured ($t = 80.69$, $p < .001$) than subjects in the "low Task Structure" group ($\bar{M} = 19.68$, $SD = 2.75$). Likewise, students classified in the "high Self-Esteem" category ($\bar{M} = 37.72$, $SD = 3.85$) possessed a significantly greater self-esteem ($t = 63.40$, $p < .001$) than subjects in the "low Self-Esteem" category ($\bar{M} = 30.18$, $SD = 3.85$).

Shown in Table 2 are the descriptive statistics of the dependent variables for the moderated groups. Two-tailed significance tests were computed between the sample means of the moderated groups. The t ratio for all dependent variables was not large enough to reject the hypothesis of no difference between population means.

Subgroup Analysis

Since the Initiating Structure and Consideration scales were significantly correlated ($r = .34$, $p < .001$), the hypotheses were tested using partial correlations. Partial correlations were also utilized in testing the hypotheses with the Instrumental and Supportive Leadership scales ($r = .41$, $pp < .001$). It was essential that the partial correlations between leader behavior and the dependent variables

Table 2
Means and Standard Deviations of Dependent Variables for Moderated Groups

Variables	Low Self-Esteem				High Self-Esteem			
	Degree of Task Structure				Degree of Task Structure			
	High ($\bar{n} = 56$)		Low ($\bar{n} = 63$)		High ($\bar{n} = 59$)		Low ($\bar{n} = 59$)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Satisfaction	27.55	4.52	25.94	5.54	27.54	4.48	27.29	6.26
Performance	71.86	9.67	71.41	8.02	76.42	8.72	75.12	9.39
Role Clarity	29.89	6.74	28.24	6.83	32.03	5.14	29.68	8.07

be both in the hypothesized direction as well as significantly different from zero. In order to test the hypotheses, two-tailed significance tests were computed between comparable correlations within each moderated group after appropriate r to z transformations were made. This subgroup analysis approach served to determine whether Task Structure moderated Leader Behavior—subordinate outcome relationships for groups high in Self-Esteem or groups low in Self-Esteem.

Test of Hypothesis 1

The hypothesis that task structure would moderate the relationships between leader initiating structure and subordinate outcomes only when subordinates possessed a high self-esteem such that under conditions of high task structure and high subordinate self-esteem the relationships would be negative was not supported (see Table 3). Contrary to what was predicted, under conditions of high Task Structure and high Self-Esteem, leader Initiating Structure was positively related with Satisfaction ($r = .29, p < .05$); Performance ($r = .26, p < .05$); and Role Clarity ($r = .54, p < .001$). These correlations, however, were not significantly different from the same relationships under conditions of low Task Structure and high Self-Esteem. Under conditions of low Task Structure and high Self-Esteem, hypothesized positive correlations between Initiating Structure and subordinate outcomes were not found.

Task Structure, in addition, did not moderate the relationships between Initiating Structure and the dependent variables when subordinates possessed a low Self-Esteem. This finding only provided evidence that did not reject the null hypothesis. Under conditions of high Task

Table 3
Correlations between Leader Initiating Structure and
Dependent Variables for Moderated Groups^a

Variables	High Self-Esteem			Low Self-Esteem		
	Degree of Task Structure			Degree of Task Structure		
	High	Low	zb	High	Low	zb
Satisfaction	.29* (56) ^c	-.01 (56)	1.59	.16 (53)	.26* (60)	-.54
Performance	.26* (56)	.24 (56)	.11	.29* (53)	.19 (60)	.55
Role Clarity	.54*** (56)	.25 (56)	1.74	.45*** (53)	.48*** (60)	-.20

aCoefficients are partial correlations holding Leader Consideration constant.

bz test for difference between correlation coefficients.

Numbers in parentheses indicate n on which the correlation is based.

$$*p < .05.$$

****p < .01.**

***p < .001.

Structure and low Self-Esteem, predicted positive correlations were found between Initiating Structure and Performance ($\underline{r} = .29, \underline{p} < .05$), and Initiating Structure and Role Clarity ($\underline{r} = .45, \underline{p} < .001$). Also, under conditions of low Task Structure and low Self-Esteem, hypothesized positive correlations were found between Initiating Structure and Satisfaction ($\underline{r} = .26, \underline{p} < .05$), and Initiating Structure and Role Clarity ($\underline{r} = .48, \underline{p} < .001$). In fact, the relationship between Initiating Structure and Role Clarity was significantly positive under conditions of low Self-Esteem regardless of Task Structure.

Test of Hypothesis 2

The hypothesis that task structure would moderate the relationships between leader consideration and subordinate outcomes only when subordinates possessed a low self-esteem such that under conditions of low task structure and low subordinate self-esteem the relationships would be negative was not supported (see Table 4). Contrary to the hypothesis, under conditions of low Task Structure and low Self-Esteem, leader Consideration was positively related with subordinate Satisfaction ($\underline{r} = .68, \underline{p} < .001$) and Role Clarity ($\underline{r} = .44, \underline{p} < .001$). As predicted, when Task Structure was high and Self-Esteem low, leader Consideration was positively correlated with Satisfaction ($\underline{r} = .42, \underline{p} < .001$) and Role Clarity ($\underline{r} = .33, \underline{p} < .05$). Under conditions of low Task Structure and low Self-Esteem, the relationship between Consideration and Satisfaction was significantly higher than the same relationship under conditions of high Task Structure and low Self-Esteem ($\underline{z} = -1.97$,

Table 4
Correlations between Leader Consideration and Dependent
Variables for Moderated Groups^a

Variables	High Self-Esteem		Low Self-Esteem	
	High	Low	High	Low
	Degree of Task Structure		Degree of Task Structure	
	<u>z_b</u>		<u>z_b</u>	
Satisfaction	.41** (56) ^c	.75*** (56)	-2.77**	.42*** (53)
Performance	-.05 (56)	.12 (56)	-.88	-.22 (60)
Role Clarity	.10 (56)	.63*** (56)	-3.3***	.33* (53)
				.68*** (60)
				1.26
				-.67

^aCoefficients are partial correlations holding leader Initiating Structure constant.

b_z test for difference between correlation coefficients.

^cNumbers in parentheses indicate n on which the correlation is based.

*p < .05.

**p < .01.

***p < .001.

$p < .05$). The difference between these correlations, however, was not in the predicted direction.

For the second part of this hypothesis, Task Structure did not moderate the relationships between Consideration and subordinate outcomes under conditions of high Self-Esteem. This finding only provided evidence which did not reject the null hypothesis. It must be noted, however, that a strict criterion was used for determining moderating effects. Under conditions of high Task Structure and high Self-Esteem, a positive correlation was found between Consideration and Satisfaction ($r = .41$, $p < .05$) as hypothesized. Also, under conditions of low Task Structure and high Self-Esteem, Consideration was positively correlated with Satisfaction ($r = .75$, $p < .001$) and Role Clarity ($r = .63$, $p < .001$). The relationship between Consideration and Satisfaction, under conditions of high Task Structure and high Self-Esteem, was significantly lower than the same relationship under conditions of low Task Structure and high Self-Esteem ($z = 2.77$, $p < .01$). In fact, it appeared that the relationship between Consideration and Satisfaction under conditions of high Task Structure was significantly lower than the same relationship under conditions of low Task Structure, regardless of Self-Esteem.

Retest of Hypothesis 1

The proposed hypotheses were again analyzed using House and Dessler's (1974) scale of Instrumental and Supportive Leadership. The first hypothesis again was not supported (see Table 5). Contrary to what was predicted, under conditions of high Task Structure and high

Table 5
Correlations between Instrumental Leadership and
Dependent Variables for Moderated Groups^a

Variables	High Self-Esteem			Low Self-Esteem		
	Degree of Task Structure			Degree of Task Structure		
	High	Low	<u>z</u> _b	High	Low	<u>z</u> _b
Satisfaction	.21 (56) ^c	-.21 (56)	2.2 ^d	.17 (53)	.23 (60)	-.32
Performance	.16 (56)	.15 (56)	.05	.17 (53)	.24 (60)	-.38
Role Clarity	.59*** (56)	.20 (56)	2.45*	.41*** (53)	.49*** (60)	-.52

^aCoefficients are partial correlations holding Supportive Leadership constant.

^bz test for difference between correlation coefficients.

^cNumbers in parentheses indicate n on which the correlation is based.

^dSince these correlations are not significantly different from zero, it may only be said that the direction of these relationships appears different.

*p < .05.

**p < .01.

***p < .001.

Self-Esteem, Instrumental Leadership was positively related with Role Clarity ($r = .59, p < .001$). This correlation was significantly different from the same relationship under conditions of low Task Structure and high Self-Esteem ($z = 2.45, p < .05$). For conditions of low Task Structure and high Self-Esteem, hypothesized positive correlations between Instrumental Leadership and subordinate outcomes were not found.

Similar to results with Initiating Structure, Task Structure did not moderate the relationships between Instrumental Leadership and subordinate outcomes when subordinates possessed a low Self-Esteem. Likewise, this finding only provided evidence that did not reject the null hypothesis. However, as predicted, under conditions of high Task Structure and low Self-Esteem, the correlation between Instrumental Leadership and Role Clarity was positive ($r = .41, p < .01$). Also, as hypothesized, under conditions of low Task Structure and low Self-Esteem, Instrumental Leadership was positively related with Role Clarity ($r = .49, p < .001$). Regardless of Task Structure, under conditions of low Self-Esteem, the relationship between Instrumental Leadership and Role Clarity was positive.

Retest of Hypothesis 2

Similar to the initial investigation with leader Consideration, the second hypothesis was not supported using the Supportive Leadership scale (see Table 6). Contrary to what was predicted, under conditions of low Task Structure and low Self-Esteem, Supportive Leadership was positively related with subordinate Satisfaction ($r = .68, p < .001$) and Role Clarity ($r = .39, p < .01$). Under conditions of high Task Structure

Table 6
Correlations between Supportive Leadership and Dependent
Variables for Moderated Groups^a

Variables	High Self-Esteem		Low Self-Esteem		$\bar{z}_b$
	Degree of Task Structure		Degree of Task Structure		
	High	Low	High	Low	
Satisfaction	.53*** (56) ^c	.75*** (56)	.56*** (53)	.68*** (60)	-1.01
Performance	.00 (56)	.13 (56)	.13 (53)	-.16 (60)	1.51
Role Clarity	.13 (56)	.55*** (56)	.47*** (53)	.39** (60)	.51

^aCoefficients are partial correlations holding Instrumental Leadership constant.

^bz test for difference between correlation coefficients.

^cNumbers in parentheses indicate n on which the correlation is based.

*p < .05.

**p < .01.

***p < .001.

and Low Self-Esteem, predicted positive correlations were found between Supportive Leadership and Satisfaction ($r = .56, p < .001$) and Role Clarity ($r = .47, p < .001$). The relationships between Supportive Leadership and Satisfaction and Supportive Leadership and Role Clarity, under conditions of low Self-Esteem, were positive regardless of Task Structure.

For the second part of the hypothesis, similar to Consideration, Task Structure did not moderate the relationships between Supportive Leadership and subordinate outcomes under conditions of high Self-Esteem. This finding only provided evidence which did not reject the null hypothesis. Once again, it must be noted that a strict criterion was used for determining moderating effects. Under conditions of high Task Structure and high Self-Esteem, a hypothesized positive correlation was found between Supportive Leadership and Satisfaction ($r = .53, p < .001$). Also, under conditions of Low Task Structure and high Self-Esteem, Supportive Leadership was positively correlated with Satisfaction ($r = .75, p < .001$) and Role Clarity ($r = .55, p < .001$). Similar to the findings with leader Consideration, the relationship between Supportive Leadership and Satisfaction, under conditions of high Task Structure and high Self-Esteem, was significantly lower than the same relationship under conditions of low Task Structure and high Self-Esteem ($z = 1.97, p < .05$).

Moderated Regression Analysis

Both hypotheses were again analyzed through the use of moderated regression techniques. Zedeck (1971) indicates that moderated regression

techniques involve a prediction equation for the total sample and do not require explicit subgroupings or differentiating of individuals. A moderated multiple regression approach has two advantages over the subgroup-based analytic technique (Cohen, J. & Cohen, P., 1975). A moderated regression analysis possesses greater statistical power due to its greater use of information that would otherwise be lost in subgroup analyses. Secondly, this technique provides information about the nature of both main and interaction effects.

A moderated regression equation contains a higher-order term. A test is made to determine whether this higher-order term contributes to prediction beyond that of the ordinary linear regression equation without the higher-order term. Zedeck contends that the comparative analysis of subgroup correlations often fails to consider the effect of the situational variable as an independent predictor of the criterion variable. For more information regarding the uses and problems with moderator variables, the reader is referred to Zedeck's article.

In order to test the hypotheses of the present study, the predictors were entered into the model in the following order: Leader Behavior (LB), holding the other dimension of leader behavior constant; Task Structure (TS); the LB X TS interaction term; student Self-Esteem (SE); and the LB X TS X SE three-way interaction term. Therefore, moderated regression analysis allowed a direct statistical test of the complete hypothesis. The step-wise regression controlled statistically for one dimension of Leader Behavior by entering it first into the equation. In the present study, step-wise analyses indicate (1) the degree of association between

Leader Behavior and subordinate outcomes; (2) whether Task Structure moderates the Leader Behavior-subordinate outcome relationships; and (3) whether Self-Esteem, in turn, moderates the Leader Behavior X Task Structure interaction for subordinate outcomes. The direction of moderating effects is indicated by the sign of Beta relative to the other Betas (see Wiggins, 1973, for detailed discussion).

Test of Hypothesis 1

The results of analyses pertinent to Hypothesis 1 are presented in Table 7. The hypothesis specified that Task Structure would negatively moderate Initiating Structure-subordinate outcome relationships under conditions of high Self-Esteem but not under conditions of low Self-Esteem. Results failed to confirm this hypothesis. The results of the step-wise regression indicated that Task Structure did not moderate Initiating Structure-subordinate outcome relationships under either high or low levels of Self-Esteem as was evident in the nonsignificant second-order (three-way) interaction between Leader Behavior X Task Structure X Self-Esteem for all criterion variables.

A significant relationship between Initiating Structure and outcomes, controlling for Consideration, was evident for Satisfaction ($F = 7.57$, $p < .001$); Role Clarity ($F = 48.52$, $p < .001$); and Performance ($F = 16.19$, $p < .001$). Results failed to indicate any significant first-order (two-way) interaction between Leader Behavior and Task Structure for any criterion variables.

Table 7

Moderated Regression Analysis of Leader Initiating Structure and the Dependent Outcome Variables Holding Leader Consideration Constant^a

Predictors	Step	Satisfaction			Role Clarity			Performance		
		β	b	ΔR^2	β	FC	ΔR^2	β	F	ΔR^2
Leader Behavior (LB) Controlling: Consideration	1,2	.145		.019	.380	48.52***	.126	.272	16.19***	.065
Task Structure (TS)	3	.027	.30	.001	.115	5.12**	.013	.009	.02	.000
LB X TS	4	-.540	1.28	.003	-.013	.00	.000	.359	.35	.001
Self Esteem (SE)	5	-.068	1.76	.004	.072	1.87	.005	.142	4.78***	.019
LBX TS X SE	6	-.593	1.93	.005	-.104	.06	.000	-.018	.00	.000

^an = 234. ^bBeta value at step entered. ^cSequential F.

*p < .05. **p < .01. ***p < .001.

Test of Hypothesis 2

The results of analyses for Hypothesis 2 are shown in Table 8. The hypothesis specified that Task Structure would positively moderate Consideration-subordinate outcome relationships under conditions of low Self-Esteem but not under conditions of high Self-Esteem. Results failed to confirm this hypothesis. The results of the step-wise regression indicated that Task Structure did not moderate Consideration-subordinate outcome relationships under either high or low levels of Self-Esteem.

A significant relationship between Consideration and outcomes, controlling for Initiating Structure, was evident for Satisfaction ($F = 126.12$, $p < .001$) and Role Clarity ($F = 50.50$, $p < .001$). Also, results indicated a significant first-order (two-way) interaction between Consideration and Task Structure for both Satisfaction ($F = 5.58$, $p < .001$) and Role Clarity ($F = 2.42$, $p < .05$). The direction of each first-order interaction suggested that the relationship between Consideration and both criterion variables was stronger under low levels of Task Structure (contrary to expectation) than high levels of Task Structure. The results also did not support the hypothesized negative moderating effect of Self-Esteem, as was seen in the nonsignificant second-order (three-way) interaction between Leader Behavior X Task Structure X Self-Esteem for all criterion variables.

Retest of Hypothesis 1

The first hypothesis was also investigated using House and Dessler's (1974) Instrumental Leadership scale. As with Initiating Structure, the hypothesis was not supported (see Table 9). However, in this case,

Table 8
Moderated Regression Analysis of Leader Consideration and the Dependent Outcome
Variables Holding Leader Initiating Structure Constant^a

Predictors	Step	Satisfaction			Role Clarity			Performance		
		β	FC	ΔR^2	β	FC	ΔR^2	β	FC	ΔR^2
Leader Behavior (LB) Controlling: Initiating Structure	1,2	.594	126.12***	.309	.388	50.50***	.132	.016	.06	.000
Task Structure (TS)	3	.027	.30	.001	.115	5.12**	.013	.009	.02	.000
LB X TS	4	-.934	5.58***	.013	-.632	2.42*	.006	-.241	.22	.001
Self Esteem (SE)	5	-.069	1.89	.005	.073	2.02	.005	.146	5.10***	.020
LB X TS X SE	6	.240	.27	.001	.641	1.87	.005	.721	1.51	.006

^a $n = 234$.

^bBeta value at step entered.

^cSequential F.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 9

Moderated Regression Analysis of Instrumental Leadership and the Dependent Outcome
Variables Holding Supportive Leadership Constant^a

Predictors	Step	Satisfaction		Role Clarity		Performance	
		β	Fc	ΔR^2	β	Fc	ΔR^2
Leading Behavior (LB)	1,2	.092	3.14*	.007	.396	53.60***	.129
Controlling: Supportive Leadership					.242	12.13***	.048
Task Structure (TS)	3	.035	.52	.001	.094	3.49*	.008
LB X TS	4	-.653	2.05	.005	-.165	.12	.000
Self Esteem (SE)	5	-.081	2.83*	.006	.059	1.37	.003
LB X TS X SE	6	-.700	3.05**	.007	-.060	.02	.000

^a $\eta^2 = .237$.

^bBeta value at step entered.

^cSequential F.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

results of the step-wise regression analysis indicated that the Instrumental Leadership X Task Structure interaction for Satisfaction was stronger under conditions of high Self-Esteem (as expected) than under conditions of low Self-Esteem. The hypothesis could not be confirmed because the hypothesized negative moderating effect of Task Structure on the Instrumental Leadership-Satisfaction relationship was not evident.

A significant relationship between Instrumental Leadership and outcomes, controlling for Supportive Leadership, was evident for Satisfaction ($F = 3.14, p < .05$); Role Clarity ($F = 53.66, p < .001$); and Performance ($F = 12.13, p < .001$). Results failed to indicate any significant interaction between Leader Behavior and Task Structure for any criterion variables. The results did show, however, that the second-order interaction between Instrumental Leadership X Task Structure X Self-Esteem accounted for a significant amount of variance in Satisfaction ($F = 3.05, p < .01$). It may be noted that the sign of the Beta for the moderating effect of Self-Esteem on the Instrumental Leadership X Task Structure interaction for Satisfaction, although negative (contrary to expectation), must be interpreted in relation to the sign of the Beta for the moderating effect of Task Structure on the Leader Behavior-Satisfaction relationship. As a consequence, it was determined that the interaction between Instrumental Leadership and Task Structure was stronger under high levels of Self-Esteem than low levels of Self-Esteem.

The second-order interaction between Instrumental Leadership X Task Structure X Self-Esteem was the only second-order interaction which

accounted for a statistically significant amount of variance in any of the criterion variables. This second-order interaction, however, explained only an additional .7 percent of variance in Satisfaction. Therefore, although this second-order interaction was statistically significant, it may be of limited practical significance.

Retest of Hypothesis 2

The second hypothesis was also investigated using House and Dessler's (1974) Supportive Leadership scale. As with Consideration, the hypothesis was not supported (see Table 10). The results of the step-wise regression analysis indicated that Task Structure did not moderate Supportive Leadership-subordinate outcome relationships under either high or low levels of Self-Esteem.

A significant relationship between Supportive Leadership and outcomes, controlling for Instrumental Leadership, was evident for Satisfaction ($F = 155.78, p < .001$) and Role Clarity ($F = 51.76, p < .001$). Results indicated a significant first-order (two-way) interaction between Leader Behavior and Task Structure for Satisfaction ($F = 4.03, p < .01$). The direction of this first-order interaction suggested that the relationship between Supportive Leadership and Satisfaction was stronger under low levels of Task Structure (contrary to expectation) than high levels of Task Structure. The results also did not support the hypothesized negative moderating effect of Self-Esteem, as was seen by the nonsignificant second-order (three-way) interaction between Leader Behavior X Task Structure X Self-Esteem for all subordinate outcomes.

Table 10
Moderated Regression Analysis of Supportive Leadership and the Dependent Outcome
Variables Holding Instrumental Leadership Constant^a

Predictors	Step	Satisfaction		Role Clarity		Performance	
		β	Δz	β	Δz	β	ΔR^2
Leader Behavior (LB) Controlling: Instrumental Leadership	1,2	.649	.346	.389	.124	.050	.002
Task Structure (TS)	3	.035	.001	.094	.008	.001	.000
LB X TS	4	-.692	.009	-.368	.003	-.211	.001
Self Esteem (SE)	5	-.086	.007	.058	.003	.133	4.28***.017
LB X TS X SE	6	.341	.001	.560	.004	.667	1.27 .005

^a $n = 237$.

^bBeta value at step entered.

^cSequential F.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

CHAPTER IV

DISCUSSION

The two hypotheses of the present study were analyzed through both moderated subgroup analysis and moderated regression analysis. When comparing results obtained by these two techniques, it must be noted that (1) each technique was based upon a different sample size; (2) subgroup analysis treated each moderator variable as a dichotomous variable, and (3) moderated regression analysis treated each moderator variable as a continuous variable. In general, both analyses should reveal a similar directionality of results. The techniques could differ, however, in the degree of statistical support of these results. Moderated regression was considered to be the primary statistical analysis of the present study, since this type of analysis provided a direct statistical test of each hypothesis by investigating the moderating effect of Self-Esteem upon the Leader Behavior X Task Structure interaction for subordinate outcomes.

Moderated subgroup analysis and moderated regression analysis provided similar support for all but one of the findings of the present study. Subgroup analysis revealed that the correlation between Consideration and Satisfaction was higher under conditions of Low Task Structure than under high Task Structure for high Self-Esteem. A similar relationship was found under conditions of low Self-Esteem. It could only be inferred that, regardless of Self-Esteem, the relationship between Consideration and Satisfaction was significantly higher under

conditions of low Task Structure than high Task Structure. Moderated regression analysis provided a statistical test of this inference. The analysis also revealed that Task Structure negatively moderated the Consideration-Satisfaction relationship and that the interaction was not moderated by Self-Esteem. In addition, both analyses revealed that Task Structure negatively moderated the Supportive Leadership-Satisfaction relationship and that the interaction was not moderated by Self-Esteem.

Subgroup analysis for low Self-Esteem students revealed that, under conditions of low Task Structure, the correlation between Consideration and Role Clarity was significantly positive. The comparable correlation under conditions of high Task Structure was also significantly positive, but the difference between these two correlations was not significant. For high Self-Esteem students, the correlation between Consideration and Role Clarity under conditions of low Task Structure was significantly positive whereas the comparable correlation under conditions of high Task Structure was nonsignificant. These two correlations were significantly different from each other. Once again, it could only be inferred that Task Structure negatively moderated the Consideration-Role Clarity relationship regardless of Self-Esteem. Moderated regression analysis statistically revealed that Task Structure negatively moderated the Consideration-Role Clarity relationship and that the interaction was not moderated by Self-Esteem.

The two techniques of data analysis did differ in support for the finding that Self-Esteem positively moderated the Instrumental Leadership X Task Structure interaction for Satisfaction. Moderated subgroup

analysis showed that the correlation between Instrumental Leadership and Satisfaction under both Task Structure conditions for high Self-Esteem students was not significant and that the same correlation under both Task Structure conditions for low Self-Esteem students was not significant. However, moderated regression analysis showed that the Instrumental Leadership X Task Structure interaction was stronger under high levels of Self-Esteem than low levels of Self-Esteem. In conclusion, one must be cautious in interpreting the results obtained by each statistical technique and recognize the advantages and limitations of each technique.

Under the path-goal theory of leadership it is stipulated that leader behavior should complement the amount of task structure inherent in the work situation (House & Mitchell, 1974; Stinson & Johnson, 1975). For instance, when task structure is low, the relationships between leader initiating structure and subordinate expectancies, satisfaction and performance are expected to be positive (House, 1971). Conversely, if task structure is high, leader initiating structure will be perceived overcontrolling and the same relationships are expected to be negative (House, 1971). Contrary to the path-goal theory based hypothesis, in the present study Task Structure did not moderate the relationships between leader Initiating Structure and subordinate Satisfaction, Role Clarity and Performance. This finding, however, was consistent with Downey, Sheridan and Slocum (1975), Greene (1975) and Szilagyi and Sims (1974). Likewise, Task Structure did not moderate the relationships between Instrumental Leadership and subordinate Satisfaction, Role Clarity and Performance.

Path-goal theorists also propose that, in a highly structured situation, subordinates will be dissatisfied with the restrictiveness of the task (House, 1971). Therefore, leader consideration should be demonstrated since such leader behavior will offset the dissatisfaction associated with highly structured tasks. Conversely, in unstructured situations, the tasks by themselves will be intrinsically satisfying and leader consideration will not be necessary. In the present study, contrary to the path-goal hypothesis, Task Structure negatively moderated the Consideration-Satisfaction relationship. This finding was contrary to previous research (Downey, Sheridan, & Slocum, 1975; House, 1971; House & Dessler, 1974; Johnson & Stinson, 1974; Sims & Szilagyi, 1975; Stinson & Johnson, 1975; Szilagyi & Sims, 1974). Likewise, Task Structure negatively moderated the relationship between Supportive Leadership and Satisfaction. Also, it was found that Task Structure negatively moderated the Consideration-Role Clarity relationship. These results suggested that students, regardless of their Self-Esteem, may have perceived Consideration and Supportive Leadership to have a functional component. Within an unstructured classroom setting, the environment created by teacher warmth and support may have been instrumental for student self-development, satisfaction, and clarification of role expectations. These findings, it must be noted, may not be generalizable beyond the classroom setting. However, Hamner and Dachler (1975), investigating an industrial setting, also reported that leader consideration clarified path-goal instrumentalities within unstructured situations whereas leader initiating structure did not provide a clarification function.

Research on path-goal theory has also suggested that the inclusion of subordinate characteristics and environmental factors as moderator variables could increase the predictability of leader behavior-subordinate outcome relationships (House & Dessler, 1974; House & Mitchell, 1974). In the present study, the second-order interaction of Instrumental Leadership X Task Structure X Self-Esteem accounted for a significant amount of variance in subordinate Satisfaction. In other words, the Instrumental Leadership X Task Structure interaction for Satisfaction was stronger under high levels of Self-Esteem than low levels of Self-Esteem. High Self-Esteem students, as opposed to low Self-Esteem students, within unstructured situations, may have perceived Instrumental Leadership as functional for increased Satisfaction with the task. Clarification by the teacher may have increased the high Self-Esteem individual's estimate that appropriate behavior would lead to Satisfaction. In general, for all Leader Behavior-subordinate outcome relationships, it appeared that the Low Self-Esteem student's perceptions of path-goal relationships were not moderated by Task Structure.

The results of the study, generally, did not support the moderating effect of Self-Esteem on the Leader Behavior X Task Structure interaction for any subordinate outcomes. Also, except for three cases, the results did not support the moderating effect of Task Structure on Leader Behavior-subordinate outcome relationships. Thus, in the current study, Task Structure and Self-Esteem did not appear to function as moderator variables. A moderator variable must be independent of both predictor

and criterion variables (Zedeck, 1971). However, in the present study, Task Structure was significantly related to Instrumental Leadership ($r = .16$, $p < .01$) and the criterion variable Role Clarity ($r = .10$, $p < .05$). On the other hand, Self-Esteem was significantly related to three of the four predictor variables and the criterion variables Performance ($r = .18$, $p < .01$) and Role Clarity ($r = .15$, $p < .01$).

Nonsupport for the hypotheses of the present study may be due to path-goal theory's actual inability to account for the leadership process. Leader behavior, as viewed by path-goal theorists and in this study, was considered to have a unidirectional influence on subordinate outcomes. Greene (1975) and Kerr and Jermier (1978), however, have suggested that leaders may be regarded as only one potential source of structuring and supporting behavior. Other organizational members could also have provided these behaviors. In addition, Kerr and Jermier indicated that the structure of the task provided a directing and clarifying function. Oldham (1976) reported that motivational strategies (e.g., personally rewarding, setting goals, designing feedback systems, placing personnel and designing job systems) were better predictors of subordinate effectiveness than initiating structure and consideration. Secondly, according to path-goal theory and the current study, task structure was considered to have a moderating influence on leader behavior-subordinate outcome relationships. Research findings have been mixed with regard to task structure's precise influence on leader behavior-outcome relationships. It has been suggested that task structure may actually function as an intervening variable rather than

a moderator variable (Sheridan & Vredenburg, 1979). That is, leader behavior may influence task structure which, in turn, may influence subordinate outcomes.

Failure to confirm the hypotheses of the present study may also have been attributable to inaccurate operationalizations of path-goal theory constructs. For example, task structure was measured by the students' perceptions of the structure inherent in their course as defined by Shaw's (1974) scale. The dimensions of Shaw's scale (e.g., decision verifiability and goal-path multiplicity) may not have appeared readily applicable to the classroom situation. Hyder (1978) suggested that, within the classroom, demands of the task may be a more important factor than task structure in moderating the relationships between leader behavior and subordinate outcomes. According to Hyder, task demands indicated the relative difficulty of the course and the amount of work required of students to complete the course. In subsequent research investigators should examine the utility of task demands as a moderator of path-goal relationships in the classroom. In addition, student performance was measured by a paper-pencil measure developed by Hyder (1978). This scale has not been construct validated and may not have provided an adequate measure of objective student performance. Finally, the concept of self-esteem should not be discarded from future consideration as a moderating variable of path-goal relationships. The scale used in this study to measure self-esteem assessed how favorably or unfavorably a person perceived him/herself. Korman's (1967) concept of task-specific self-esteem or the self-esteem a person derives from his/her performance on specific tasks may have demonstrated to be a more adequate

performance on specific tasks may have demonstrated to be a more adequate operationalization of the self-esteem concept for path-goal purposes.

In conclusion, the present study provides evidence that nonsupport of path-goal predictions may be attributable to inadequate operationalizations of the theory's constructs rather than an actual inability to use the theory to explain leadership processes. This suggests that in the future, researchers using path-goal theory should become concerned with developing reliable and valid operational measurements of the theory's constructs. It is more sensible to take such steps rather than to continue to investigate path-goal theory with possibly inadequate measures. A statement can be made regarding the efficacy of path-goal theory only after the theory's constructs are reliably and validly measured.

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APPENDIX

Descriptions of Leader Behavior

The following items may be used to describe the behavior of your instructor. Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable or undesirable. This is not a test of ability. It simply asks you to describe, as accurately as you can, the behavior of your instructor.

- a. READ each item carefully.
- b. THINK about how frequently the instructor engages in the behavior described.
- c. DECIDE whether he/she always, often, occasionally, seldom or never acts as described.
- d. DRAW A CIRCLE around one of the five letters following the item to show the answer you have selected.

A = Always B = Often C = Occasionally D = Seldom E = Never

- | | | | | | |
|--|---|---|---|---|---|
| 1. The instructor lets class members know what is expected of them | A | B | C | D | E |
| 2. The instructor is friendly and approachable . . | A | B | C | D | E |
| 3. The instructor encourages the use of uniform procedures | A | B | C | D | E |
| 4. The instructor does little things to make it pleasant to be a member of the class | A | B | C | D | E |
| 5. The instructor tries out his/her ideas in the class | A | B | C | D | E |
| 6. The instructor puts suggestions made by the class into operation | A | B | C | D | E |
| 7. The instructor makes his/her attitudes clear to the class | A | B | C | D | E |
| 8. The instructor treats all members of the class as his/her equals | A | B | C | D | E |
| 9. The instructor decides what shall be done and how it shall be done | A | B | C | D | E |
| 10. The instructor gives advance notice of change . | A | B | C | D | E |

- | | | | | | | |
|-----|--|---|---|---|---|---|
| 11. | The instructor assigns class members to particular tasks | A | B | C | D | E |
| 12. | The instructor keeps to him/herself | A | B | C | D | E |
| 13. | The instructor makes sure that his/her part in the class is understood by class members . . | A | B | C | D | E |
| 14. | The instructor looks out for the personal welfare of class members | A | B | C | D | E |
| 15. | The instructor schedules the work to be done | A | B | C | D | E |
| 16. | The instructor is willing to make changes . . . | A | B | C | D | E |
| 17. | The instructor maintains definite standards of performance | A | B | C | D | E |
| 18. | The instructor refuses to explain his/her actions | A | B | C | D | E |
| 19. | The instructor asks that class members follow standard rules and regulations | A | B | C | D | E |
| 20. | The instructor acts without consulting the class | A | B | C | D | E |
| 21. | The instructor explains the way my tasks should be carried out | A | B | C | D | E |
| 22. | The instructor helps me overcome problems which stop me from carrying out the task | A | B | C | D | E |
| 23. | The instructor helps me make working on my tasks more pleasant | A | B | C | D | E |

Self-Esteem

The following items may be used to describe how you feel about yourself. Each item describes a specific kind of feeling, but does not ask you to judge whether the feeling is desirable or undesirable. DRAW A CIRCLE around one of the five letters following the item to show the answer you have selected.

- 1 = Strongly agree
 2 = Agree
 3 = Disagree
 4 = Strongly disagree

24. I feel that I'm a person of worth, at least on an equal basis with others 1 2 3 4
25. I feel that I have a number of good qualities 1 2 3 4
26. All in all, I am inclined to feel that I am a failure . 1 2 3 4
27. I am able to do things as well as most other people . . 1 2 3 4
28. I feel I do not have much to be proud of 1 2 3 4
29. I take a positive attitude toward myself 1 2 3 4
30. On the whole, I am satisfied with myself 1 2 3 4
31. I wish I could have more respect for myself 1 2 3 4
32. I certainly feel useless at times 1 2 3 4
33. At times I think I am no good at all 1 2 3 4

Task Structure

34. Please indicate the degree to which the goal requirements of this course are clearly stated or known to you. Assume that the lower the scale number, the less clear the goals are.

1	2	3	4	5	6	7
Extremely unclear goals		Moderately unclear		Moderately clear		Very clear goals

35. How many different ways are there to accomplish the assignments of this course? Assume that the lower the scale number, the less paths there are to the accomplishment of your assignments.

1	2	3	4	5	6	7
Only one path			Moderate number of paths			Very many paths

36. To what extent is it possible for you or others evaluating your work to know whether it has been done "correctly" or not? Assume that the lower the scale number, the less ways there are to verify that your work has been done correctly.

1	2	3	4	5	6	7
Only one way			Moderate number of ways			Very many ways

37. To what degree is there generally more than one correct solution involved in the major assignments that generally make up your course? Assume that the lower the scale number, the fewer correct solutions there are.

1	2	3	4	5	6	7
Only one correct solution			Moderate number of solutions			Very many solutions

38. In general, how structured is this course?

1	2	3	4	5	6	7
Very structured		Moderately structured		Moderately unstructured		Very unstructured

Please indicate the relative frequency with which you have engaged in the following activities in this course by circling the number following the item to show the answer you have selected.

1	2	3	4	5
Never	Less than half the time	Half the time	More than $\frac{1}{2}$ the time	All the time
39. Completed assignments on time	1	2	3	4 5
40. Absent from class	1	2	3	4 5
41. Participated in class when given the opportunity .	1	2	3	4 5
42. Studied the wrong material for a test	1	2	3	4 5
43. Asked questions about things that you did not understand	1	2	3	4 5
44. Listened attentively in class	1	2	3	4 5
45. Reviewed your notes a short time after class . . .	1	2	3	4 5
46. Did extra work beyond what was requested	1	2	3	4 5
47. Well prepared for class	1	2	3	4 5
48. Talked to other students while your instructor was speaking	1	2	3	4 5
49. Helped other students with problems in the course .	1	2	3	4 5
50. Had a disciplined study schedule	1	2	3	4 5
51. Discussed course content with the teacher outside of class	1	2	3	4 5
52. Waited until the night before a test to study for the exam	1	2	3	4 5
53. Read ahead on course assignments	1	2	3	4 5
54. Late to class	1	2	3	4 5
55. Volunteered for extra assignments	1	2	3	4 5
56. Looked up outside material relevant to the course .	1	2	3	4 5
57. Fell asleep in class	1	2	3	4 5
58. Took notes on instructor's comments	1	2	3	4 5
59. Daydreamed in class	1	2	3	4 5
60. Worked on other course assignments during class . .	1	2	3	4 5

Role Clarity

Please indicate how certain you are about the following aspects of this course by circling the number that corresponds to the appropriate descriptor.

1	2	3	4	5	6	7
Completely uncertain		Moderately uncertain		Moderately certain		Completely certain

How certain are you of the following?

61. The goals and objectives of this course.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

62. You have divided your time properly.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

63. The material for which you will be held responsible.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

64. What is expected of you in this course by your instructor.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

65. What you should accomplish in this course.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

66. The amount of individual freedom you have in deciding how to accomplish the objectives of this course.

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Satisfaction

Please indicate how satisfied you are with each of the following aspects of this course by circling the number which corresponds to the descriptor that most appropriately describes your feelings.

A = Very satisfied
B = Satisfied
C = Neutral
D = Dissatisfied
E = Very dissatisfied

67. How satisfied are you with the way the teacher conducts the course?

A B C D E

68. How satisfied are you with the way in which the course is organized?

A B C D E

69. How satisfied are you with the rapport between students and the instructor?

A B C D E

70. How satisfied are you with the methods used to assess your achievement in this course?

A B C D E

71. How satisfied are you with the overall teaching skill of your instructor?

A B C D E

72. How satisfied are you with the amount of work that is required of you in this course?

A B C D E

73. All things considered, how satisfied are you with this course in general?

A B C D E

VITA

Frederick William Willoughby was born in Champaign, Illinois, on November 10, 1955. He attended elementary school in both the Panama Canal Zone and Huntsville, Alabama. He graduated from Grissom High School in Huntsville, Alabama, in May 1973. The following August he entered The University of Alabama at Tuscaloosa, and in August 1977 he received a Bachelor of Science degree in psychology.

One month later, he entered The University of Tennessee, Knoxville, and began work toward a doctorate in Industrial-Organizational Psychology. After two years, he decided to leave The University of Tennessee, Knoxville, and pursue his interest in counseling psychology at Texas Tech University. Currently, he is working there on the Doctor of Philosophy degree in Counseling Psychology. He received the Master of Science degree in Industrial-Organizational Psychology from The University of Tennessee, Knoxville, in August 1981.

The author is a student member of the American Psychological Association. He is also a second lieutenant in the United States Army.