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I am submitting herewith a thesis written by Douglas B. Kamp entitled "Task-Goal Attributes, Job Performance, and Job Satisfaction." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Organizational Psychology.

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TASK-GOAL ATTRIBUTES, JOB PERFORMANCE, AND JOB SATISFACTION

A Thesis

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DEDICATION

This thesis is dedicated to my wife, Madeline H. Kamp, whose patience and unselfish devotion is most gratefully appreciated. For the support she has provided, for the untiring effort she has given, and for the assistance so willingly offered, this small token of thanks is given.

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ABSTRACT

The relationships between five task-goal attributes, individual and situational differences, job satisfaction, and job performance were investigated among 61 supervisory and managerial personnel in six administrative departments of a large southern university. Participants completed a 77 item questionnaire designed to measure characteristics about themselves, their job, and the goal setting program. Performance measures for each participant were obtained from their immediate supervisor. Participation in goal setting, feedback on goal progress, acceptance of task-goals, and specificity of task-goals were significantly correlated with job satisfaction. Participation in goal setting was significantly associated with overall job performance. Specificity of task-goals was significantly associated with self-rated job performance. Difficulty of task-goals was uncorrelated to either of the criteria measures. Further, strong support for the potential moderating factors was not found: only 11 of 135 tests for moderating effects were significant. Relatively strong findings were found however, for the moderating effect of the individual's length of service and need for autonomy. The findings are discussed within the context of earlier studies and implications for goal setting procedures are drawn.

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CHAPTER I

INTRODUCTION

The present study investigated the relationship between the use of goal setting (Management by Objectives) and job performance and job satisfaction, accounting for several characteristics of the situation and the person. To date, the research in this area indicates that goal setting can and does have a significant impact on both performance and satisfaction; that is, the setting of goals toward which the individual works, should be beneficial to both how well one can perform and how satisfied one is with one's job. Few studies though have examined the full impact of goal setting on both performance and satisfaction.

Further, the effectiveness of goal setting once removed from the laboratory setting appears to depend in certain instances on conditions of the situation in which it occurs. Research on the application of goal setting programs and procedures in industry has shown the necessity of taking into account such factors when investigating this phenomena. In a review of the research on goal setting programs, Steers and Porter (1974) identified three important considerations in determining the effectiveness of goals on performance: nature of the task-goal; situational-environmental variables; and individual difference variables. In addition, Lathan and Yukl (1975) suggest in their review of goal setting programs that such "limiting

conditions" as complexity of the job, managerial support and involvement, the nature of the interrelations among jobs, and accurate performance measures will, in part, determine the feasibility of goal setting programs and their effectiveness in achieving their objectives. The purpose of the present study was to investigate the practical feasibility of the goal setting phenomena in light of several of these factors: sex of the employee; characteristics of the task; individual differences in need strengths; and individual differences in length of service.

Research on Goal Setting and Performance

The term "goal setting" refers to the establishment of clear and specific goals toward which the individual works. In the job context, explicit goals are used to translate objectives of the task into specific, manageable, and measurable goals. Such a strategy, when applied throughout management of an organization is often identified as Management-By-Objectives (MBO), an approach credited to Drucker (1954) and McGregor (1960). With this approach, organizational goals are established and delineated through the company culminating in individual task goals for each member of the organization. Such specific, individual goals represent the basic elements of the system, which are formalized to accomplish the overall organizational goals with increased efficiency. The basic premise of such a system is that the setting of specific goals has the motivational consequences of increasing effort by providing individuals with clear targets toward which to direct their efforts (Steers and Porter, 1974).

When the research on goal setting is considered in total, the evidence seems fairly consistent that the use of specific and clear goals leads to improved performance. However, knowing this does not help to explain when, why, or how performance may be improved by the process of setting goals. A major treatise on the theoretical basis of goal setting was offered by Locke (1968). Locke's theory of goal setting deals with the relationship between a person's conscious goals and task performance. The theory is based primarily on the premise that an individual's conscious intentions regulate his actions. That is, one of the most important factors determining individual efficiency on a task is the conscious intentions or goals one has towards that task. Once goals are internalized and accepted, goals that are hard or difficult for the individual will result in higher levels of performance relative to easy goals. And specific, hard goals will result in higher levels of performance than no goals or generalized goals of "do your best." Further, the theory states how a person's goals mediate external incentives on task performance.

Locke's theory is based on a series of well-controlled laboratory experiments. The experiments were conducted with relatively simple tasks (e.g. adding numbers) over short periods of time. In these experiments, the specificity and difficulty of the goals were manipulated and the task performance consequences observed. Goal commitment or the acceptance of the goals was not directly investigated, but assumed to occur since it is necessary that the individual consciously intend to work toward that goal for goal setting to be

effective. Locke cites a number of laboratory studies in support of his theory. However, little research was cited in which the theory was tested in practical, applied settings. Most such endeavors have been conducted since his theoretical article was publlished.

Latham and Yukl (1975) presented a rather extensive review of studies which investigated Locke's theory of goal setting in organizations. The review included some 27 published and unpublished reports of field studies evaluating the feasibility of goal setting in improving job performance. Several laboratory studies were also cited when relevant for evaluating the theory. Only the major findings will be highlighted here. The reader is directed to that review for a more detailed account. To the extent that goals are specified clearly, improvement in performance was noted in ten of eleven laboratory studies cited. In studies where goal setting and particularly goal specificity was investigated in field settings, fairly strong but less consistent findings emerged. An important conclusion reached was that in settings such as Management-By-Objectives, the impact of goal specificity is often moderated by situational conditions. To the extent that goals are accepted, goal difficulty may also lead to improved performance. This was the general conclusion in six of seven field studies cited, although few field experiments could be found which attempted to manipulate goal difficulty. Most were correlational studies and casuality could not be confirmed.

Dimensions of Goal Setting

Locke's theoretical formulation has received fairly consistent support from both laboratory and field studies, and has offered a direction and a relatively testable approach to the goal setting phenomena. However, several shortcomings in Locke's theory have received recent attention. Perhaps the greatest deficiency is the failure to specify the determinants of goal acceptance and goal commitment. Further, Locke's theory may be over simplifying the nature of goal setting in the actual work situation. Goal setting may take on added complexity in practical situations beyond the specificity-difficulty factors.

In an effort to obtain a more complete picture, the role of goal setting has been studied through the various attributes of the goal setting system and how they relate to job performance. It has been pointed out that the nature of goal setting may be a function of several independent and autonomous dimensions. Steers (1973), using factor analysis, identified five: goal specificity; participation in goal setting; feedback on goal progress; peer competition for goal attainment; and goal difficulty. Steers and Porter (1974) reviewed these attributes and summarized the findings concerning the relationship of each of these attributes with regard to performance. In addition to the five attributes identified by Steers (1973), Steers and Porter (1974) also included "goal acceptance" as a sixth dimension of potential importance. Their findings suggested that all six characteristics may be important attributes of goal setting procedures.

Goal specificity, defined as the degree to which goals are made clear, explicit, and measurable, is an integral part of most all goal setting approaches. Perhaps more than any other characteristic of the goal setting process, specificity has been shown consistently to be a major factor in the effectiveness of goal setting programs (Steers and Porter, 1974). However, contrary evidence does exist showing goal specificity to be unrelated to job performance (Carroll and Tosi, 1970). And as already mentioned, the effectiveness of setting specific goals may depend on the particular situation in which they are used. For example, it is likely that in certain types of jobs (e.g. management) setting specific, quantifiable goals may simply not be feasible or beneficial to the individual or to the organization.

Participation in goal setting refers to a participation in the decision process around goals, by allowing subordinates to participate in determining their own task goals. In terms of the relation of this variable to performance, results have not been altogether consistent. In their review, Steers and Porter (1974) pointed out that in certain situations participation in setting goals was more important to improved performance, while in other situations simply the act of setting goals appeared to be more important for improved performance. The conclusion was reached that in certain situations participation can be an asset to goal setting, but that this depended on certain situational and personality factors, such as whether the individual had a past history of participating in decision making and/or the individual's need strengths.

Feedback on goal progress effects performance according to Locke (1968), only to the extent to which subjects set higher goals in response

to this feedback. According to Locke (1968), feedback acts as a directive of behavior as well as an incentive toward greater effort. When feedback on goal progress has been investigated in laboratory settings, results have shown that the amount and accuracy of feedback will affect future goal levels, which in turn should affect subsequent performance (Cummings, Schwab, and Rosen, 1971). When investigated in field settings however, studies have not found a strong direct relationship to exist between feedback and performance (Steers, 1973). However, it would be expected that something more complex than a simple relationship would exist between feedback and performance. Since feedback acts back upon the individual, improved performance subsequently would depend on certain characteristics of the individual.

Peer competition for goal attainment suggests that individuals will strive harder to achieve their task-goals when a competitive atmosphere among fellow workers exists. However, contradictory findings concerning the effects of competition on performance are summarized by Steers and Porter (1974). It appears from available research that when peer competition as a goal attribute is considered, few consistent results have emerged (Steers, 1973, 1975). One possible reason is that competitive attritudes are primarily responsible for more rapid, but less accurate task performance-quantity at the price of quality (Dashiell, 1930). In terms of management positions, where speed as well as accuracy are important, peer competition for goal attainment may result in little consistent improvement in job performance.

Goal difficulty has been the most heavily researched area in the goal setting literature. Numerous studies were cited by Locke (1968)

wherein 12 of 15 supported the contention that a strong linear relationship exists between difficulty and performance, assuming the goals are accepted. The review by Latham and Yukl (1975) further supported this goal difficulty-performance relation in field settings, although the results here were less consistent. It is probably true that up to a point, where goals are perceived as challenging but not impossible (assuming impossible goals are not accepted) the difficulty of a goal will enhance performance on the task. However, if the goal is perceived as impossible, adverse effects on performance may be noted. The key here appears to be how the individual perceives the goal (e.g. perceived instrumentality of goal attainment) as to the effect it has on subsequent performance.

Goal acceptance represents the degree to which the individual agrees with and accepts the goals and intends to work towards that goal. The term refers to a commitment to or internalization of the goal over and above mere compliance. There has been little research on goal acceptance and what has been done has been somewhat sketchy in demonstrating the impact of goal acceptance on performance. However, considerable support for the importance of goal acceptance was corroborated by Locke through followup interviews of the participants (Locke, 1968). Recognized is the fact that goal acceptance is basic for a motivational force in the individual to perform that task. The findings have suggested that the mere assignment of goals should not necessarily lead to improved performance unless the goals are accepted.

.Considering the research done with each of these six goal setting characteristics suggests that goal setting in practice is a function of at least several of these factors. The specificity of goals has been shown to be strongly and fairly consistently related to job performance. Although less thoroughly researched, the acceptance of task goals has also been shown to be an important attribute of goal setting. The findings with the remaining task-goal attributes, with the exception of peer competition for goal attainment, have also indicated in many cases for a strong relationship to exist with performance. However, in most cases of field research, there has appeared not to be a direct relationship to performance, but rather to depend on certain important situational and individual difference factors. Peer competition though appeared to be of questionable importance to job performance in many situations.

Although the importance of each of these goal attributes to performance can be identified by the numerous studies investigating goal setting, the relative importance of each cannot be obtained by such independent studies. If goal setting is in fact attributable to these dimensions, then the effectiveness of goal setting programs in work settings, such as Management-By-Objectives, may be more completely investigated by discovering those task-goal attributes more closely associated with job performance. Once done, the explanation for such findings must further be defined in light of current theoretical approaches, such as Expectancy Theory. However, few attempts have been made to investigate goal setting by studying attributes of the

goal setting program. Most fail to consider more than one or two conditions in their design and are thus unable to make a comparative analysis of the attributes. Carroll and Tosi (1973) note that in the designing and implementing of Management-By-Objectives type programs, this approach has been the exception rather than the rule. Further, this trend in research appears to be the objective of only a few investigations (Steers 1973, 1975; Arvey and Dewhirst,[in press]; Carroll and Tosi, 1970). The present study proposed to identify how the particular attributes that characterize an employee's task-goals affect an individual's performance.

Research on Goal Setting and Job Satisfaction

Up to this point, only research on the effectiveness of goal setting in improving job performance has been discussed. However, some work has investigated the effects of goal setting on worker attitudes. Although the work so far has been fragmentary, the results have offered some strong implications for an association between goal setting and attitudinal reactions. Goal specificity has been found to be positively related to increases in goal commitment, work group cohesiveness, and interest in the task (Raven and Rietsema, 1957), but also to feelings of excessive requirements of the program (Raia, 1965; Tosi and Carroll, 1968). Participation has been found to be weakly related to improved supervisory-subordinate relations (French et al, 1966), but in other cases unrelated (Carroll and Tosi, 1970). And, goal difficulty has been found to be positively related to satisfaction with supervisor (Carroll and Tosi, 1970).

Research on the effects of goal setting on job satisfaction in general has received little more attention. Recent literature has begun to investigate the effects of goal setting on satisfaction, but with somewhat mixed results. Umstot, Bell, and Mitchell (1976) investigated the joint effects of characteristics of the task and goal setting on both performance and job satisfaction. The results indicated that job enrichment had a substantial impact on job satisfaction, but little effect on production. On the other hand, goal setting had a major impact on production and a lesser effect on job satisfaction. While Steers (1975b) in an investigation of female supervisors, found relationships to exist for four of the five task-goal attributes with job satisfaction and three of the five attributes with job involvement. Arvey and Dewhirst [In Press] studied the goal attributes of clarity and planning, subordinate freedom, feedback and evaluation, and participation in an Management-By-Objectives program involving scientists and engineers. Results showed all four goal characteristics to be significantly related to job satisfaction.

To assess the full impact of Management-By-Objectives type programs, it appears necessary to investigate the effects of goal setting on employee attitudes and performance. Job satisfaction as well as job performance has been shown to be positively associated with goal setting techniques. In fact, in studies where comparisions could be made between the effects of goal setting on both criteria, results have shown in many cases for goal setting to be more strongly associated with job satisfaction. In his study of the relationships between the task-goal attributes and job performance, Steers (1975) found a

lack of any consistent direct relationships. However, Steers (1975b) in his investigation of the relationships between the task-goal attributes and job satisfaction found consistent and strong associations with satisfaction to exist for all the goal attributes except peer competition. Carroll and Tosi (1970) found similar results in their investigation of Work Planning and Review Program (a Management-By-Objectives approach). Strong correlations were shown between certain of the task-goal characteristics and attitude toward the program, while none of the goal characteristics were significantly related to perceived increase in goal effort or to success in goal achievement. In general, it seems that the nature of goal setting, when defined by task-goal characteristics, has a more consistent and direct relationship to employee satisfaction measures than to performance or effort measures. These findings are not consistent with the numerous studies showing a strong relationship to exist between goal setting and performance measures (Latham and Yukl, 1975). They do however support the speculation that goal setting can have a significant impact on job satisfaction as well as job performance (Umstot, Bell, and Mitchell, 1976; Carroll and Tosi, 1970). Further research is needed however, whereby the effects of the goal setting attributes on both criteria can be measured and compared, and firmer conclusions can be drawn. The present study sought to provide further insight into this area.

Individual and Situational Differences

One may not assume that variations in the nature of the task-goals would account solely for variations in job performance and job satisfaction. Sufficient evidence exists to suggest that other important

factors must be taken into account to fully understand and qualify the way in which performance and satisfaction are determined. Not only have some of these factors been found to be somewhat effective predictors of performance and satisfaction by themselves, but they may also represent important modifiers of the effects of certain task-goal attributes on performance and satisfaction. Although the list of those variables investigated is lengthy, those which have been included in this study either because of inconsistent findings or because they have remained largely untested are: sex of the employee; length of service with the company and on the present job; the individual's need strengths; and characteristics of the task.

Sex. For example, it has remained largely untested as to whether both males and females respond in a similar manner to goal setting techniques. With the increasing rise of women in management, such an investigation would prove timely. Studies dealing with the effects of goal setting on both performance and satisfaction have been conducted with both males and females (Latham and Yukl, 1975). The evidence in general has suggested that with both criteria the goal setting phenomena applies equally well to both sexes. However, possible conflicting evidence does exist when note is taken of the two Steers studies (Steers, 1975, 1975b). In both cases, the samples consisted of all female supervisors, with the results showing a lack of any consistent, direct relationships to exist between the task-goal attributes and job performance, but for strong associations to exist between the goal characteristics and job satisfaction, con-

trary to other findings. Any differences that may be due to sex are only speculative at this point; no study could be found where a comparative analysis between males and females was made under task-goal conditions.

Individual differences. Recently, research on employee attitudes and performance has shown an increasing tendency to include more measures of individual differences in their designs. This has been particularly evident with respect to individual differences in need strengths in relation to performance and satisfaction criteria (Hackman and Lawler, 1971). As posited by Murray's theory (McCelland and all, 1953; Atkinson, 1958), motivated behavior is a function of the individual's various need strengths. Although need for achievement has received the most attention, need for affiliation, need for autonomy, and need for dominance have also been found to be important determinants of attitude and behavior.

This trend towards inclusion of need strengths has also occurred in goal setting research in attempts to obtain further insight into the goal setting phenomena. Steers (1975) has suggested that an individual's need for achievement may be a strong moderating force for the relationship of task-goals to performance. His study with female, first level supervisors showed only moderate support for this need strength variable. When investigating the relationships of the task-goal attributes to employee attitudes, Steers (1975b) found when using need strength measures of need for achievement, need for affiliation, and need for autonomy, that sixteen of

twenty-two relationships did show significance for only one or the other (high or low) of the levels of need strength measures, but also points out that only in certain cases were the correlations for the two need strength levels significantly different from each other. While Arvey and Dewhirst (In Press) found when using satisfaction as a criteria, no significant moderating effects by any of the same three need strength variables. Carroll and Tosi (1970), employing a variety of types of moderator variables, found that only when these variables were considered did a significant relationship of goal characteristics with performance emerge. It is speculated that need strength measures do moderate goal setting effects, but as shown the evidence has not been consistent. Further, a pattern seems to be emerging which suggests that goal setting has a more general and direct effect on employee attitudes, while the effects of goal setting on performance are more dependent on the particular characteristics of the individual, such as his need strengths.

Length of service may play an important role in the goal setting process. The fact that this variable does not lend itself to lab studies coupled with the fact that field studies with this variable have shown conflicting results, leaves the importance of this variable inconclusive. Length of service (los) has been measured both in terms of time on the job and time with the company. In the two studies already cited, Steers found an overall lack of support for this variable. In a study of the impact of Management-By-Objectives on a university location (Shetty and Carlisle, 1974), found a significant relationship between los and perceived success of the

program. More specifically, professors with fewer years service perceived Management-By-Objectives more positively. However, here los seemed to be confounded with rank and tenure. Probably the most convincing evidence has come from a study by Dachler and Mobley (1973). In a study which tested a model of motivation combining expectancy and goal theory, they found stated goals to be strongly related to performance, and also for employee tenure to be a strong moderating effect in the goal setting-performance relationship. While a significant correlation of goal setting with performance was reported for long tenure employees, no significant correlation was reported for short tenure employees. While conclusive results were found in only one of the two plants studied, results were as predicted by the model and supportive of the length of service variable.

Nature of the task. Research has shown that nature of the task can be an important situational determinant of the goal setting process. Raia (1965) noted in his report on Goal Setting and Self-control that a major problem can be the use of goals only in easily obtained, objective areas, disregarding more subjective areas of job responsibility. This same concern was noted by Ivancevich (1974) in which a major problem mentioned with Management-By-Objectives was the difficulty of stating quantative goals for all aspects of the job. Here the question becomes one of whether goal setting may be feasible in all types of jobs, particularly those where there is a relative lack of structure or a greater degree of complexity.

For example, for jobs that require a variety of skills or have a wide range of often-overlapping responsibilities, then setting specific and clear goals may not be possible. The content of the job may further determine which other aspects of the goal setting process are relatively more of less effective.

The nature of the task may influence goal setting in still another way. Hackman and Lawler (1971), and Hackman and Oldman (1975, 1976) have generated considerable research on the overall potential of a job to prompt internal work motivation in the worker. Briefly, their theory states that the extent to which five dimensions (skill variety, task identity, task significance, autonomy, and feedback) are present in the task will ultimately determine the motivating potential of that task and subsequently determine such personal and work outcomes as high performance, high satisfaction, low turnover, etc. Their basic theoretical formulation yields a Motivating Potential Score, (an overall indication of motivation), developed by combining the five "core dimensions". From this view then, certain characteristics of the task itself are seen as motivators of work behavior. The question posited here is thus to what extent will setting goals increase subsequent motivation in terms of performance and satisfaction beyond that of the task itself. Further, it what way will the characteristics of the task and the goal setting process interact to effect behavior and attitudes. Umstot, Bell, and Mitchell (1976) investigated these questions in a recent lab study. They noted that job enrichment has a substantial impact on job satis-

faction, while goal setting had a major impact on productivity. The results also suggested that goal setting and job content are not exclusive factors and may interact to affect job satisfaction or even performance. Further research is needed in this area, looking at the task-goal attributes to determine particularly which goal characteristics may be more effective with certain types of jobs or characteristics of the job.

Objectives of the Present Study

The present study focused on the nature of the goal setting process and its impact on employee attitudes and behavior. The objectives of the research were to provide further insight into several questions presently existing in the literature.

1. An initial question to be answered is how goal setting may jointly have an impact on job performance and job satisfaction.

The objective was to investigate and compare the effects of goal setting on job performance and job satisfaction. In order to obtain further clarification of the nature of the goal setting process, goal setting was characterized as consisting of the task-goal attributes of participation, feedback on goal progress, acceptance of goals, specificity of goals, and goal difficulty. Each of the goal characteristics was analyzed for its relationship to both job performance and job satisfaction. These factors were looked at in terms of how they related both independently and in combination to each criteria.

2. A second question existing in the literature is which, if any, of several personality and situational factors may moderate the goal setting-criteria relationship.

One objective was to make a comparative analysis of male and female employees on the effectiveness of the goal characteristics on job performance and satisfaction.

A goal of this research was to further evaluate need for achievement, need for affiliation, need for autonomy, and need for dominance as potential moderating effects on both performance and satisfaction criteria.

An objective was to investigate the individual's length of service with the company and on the present job as potential intervening factors.

A final objective of this research was to explore two aspects of the job itself as contingent factors in goal setting effectiveness. Task complexity, as defined by the variety of skills necessary to perform that task, was investigated as a factor which may determine the impact of the goal setting process. And lastly, the motivating potential of the job was studied as a further situational moderating variable. Specifically, what needs to be determined is what does goal setting add towards improved satisfaction and performance beyond that of the task itself, and in what way may goal setting and the motivational potential of the task interact in effecting the performance and satisfaction criteria.

CHAPTER II

METHOD

Overview

The present study was conducted in the administrative offices of The University of Tennessee at Knoxville in several departments that have been utilizing a Management-By-Objectives (MBO) program for about five years. The MBO program has given each department responsibility for the details of its own operation, so that the use of MBO varied from department to department. Based on interviews with top and middle management, only those departments in the University considered most active in maintaining the Management-By-Objectives program were included.

The Management-By-Objectives approach in these departments was closely associated with and represented an integral part of the performance appraisal system. The managers were required as a part of the MBO program, to list both job performance and personal development objectives. This was done yearly with their immediate supervisor during performance review sessions. The employees were then appraised in terms of their success in attaining or meeting the annual pre-determined objectives.

Participants

Participants in the study were 61 managerial and supervisory personnel employed within the Business and Finance and the Student Affairs offices. The sample was distributed primarily between six

separate departments within these offices, with an average of eight personnel from each department. Within each department, involvement in the study included the Director or Dean down through first line supervisors. The study also was extended to include a Vice Chancellor and other top management above the department level. The resulting sample consisted of personnel from all levels of the organization. This effort to include all hierarchical levels of the administrative offices was made so that a representative sample could be obtained which would allow for the impact of Management-By-Objectives throughout the organization to be investigated.

All managerial and supervisory personnel within each department were asked to participate in the investigation. However, four were unable to participate on the day of the study and were excluded. The remaining 61 participants completed usable questionnaires and constituted the final sample. Included in this sample were 43 male and 18 female employees of supervisory level or above. The mean length of service with the University was about 100 months and the mean length of service on the present job was about 57 months.

Measures

The measures included in this study were designed to measure the following variables: characteristics of the individual's task goals; characteristics of the job; the individual's satisfaction with the job; the individual's job performance (self-rated); the individual's job performance as rated by the superior; the individual's need strengths; the individual's sex; length of service with the University; and length

of service in the present job. These variables were measured by two separate questionnaires, a 77 item, self-report questionnaire and a performance measure completed by their superior (see appendix).

Questionnaire. The self-report questionnaire contained five separate sections, each consisting of items pertaining to a specific area of interest. Also included in this questionnaire was a final section asking for various demographic information. Each questionnaire began with a brief explanation of the study and instructions on completing the questionnaire. Brief instructions were also given at the beginning of each section for answering those items. For all items except those in Section Four (job satisfaction), answers were to be marked on a seven point scale. Responses to items in Section Four were to be marked on a five point scale. The study was explained to the participants as an investigation of workers' reactions to the use of goal setting. It was stressed that the individual's responses would remain strictly confidential and no one but the researcher would see anyone's completed questionnaire. Participants were also informed that a separate performance measure would be completed by their supervisor, but this as well would remain confidential.

Job characteristics. Sections I and II of the questionnaire contained a total of 21 items designed to measure seven dimensions of the individual's job. These two sections were reproductions of Sections I and II of the Job Diagnostic Inventory (Hackman and Oldham, 1974). Those job dimensions measured were: skill variety; task identity; autonomy; feedback from the job; dealing with others; task significance;

and feedback from other agents. Each of the job dimensions were computed by summing and averaging the three items for that dimension. Five of these seven dimensions were transformed into a total Motivating Potential Score for the job, as described by Hackman and Oldham (1975). Further, the job dimension of skill variety was used as a second characteristic of the task to measure the complexity of the task in terms of the skills required.

Individual need strengths. Section III of the questionnaire contained a total of 20 items designed to measure various need strengths of the individual. A total of five items were used to measure each of the following four need strengths: need for achievement; need for autonomy; need for affiliation; and need for dominance. Each cluster of five items was summed and averaged to produce the four need strength scores. These 20 items represent the Manifest Need Questionnaire (Steers and Braunstein, 1976). The questionnaire is a behaviorally based measure of need strengths developed largely on the theory of motivation posited by Murray (1938) and further developed by McClelland (1953) and Atkinson (1958). According to this earlier research, behavior is at one time or another a function of any one of several motives, with some being more powerful than others for each individual. Measurement of these motives was through projective techniques such as the Thermatic-Apperception-Test. The present questionnaire was developed to measure those needs found to be more important to work attitudes and behavior. The aim of the questionnaire however, was to represent a measure of such motives based on the manner in which the subject behaves in order to satisfy those needs.

Job satisfaction. Section IV of the questionnaire contained 20 items designed to measure the individual's satisfaction with his/her job. These 20 items constitute the Minnesota Satisfaction Questionnaire, short test (Weiss, Dawis, England, and Lofquist, 1967). This questionnaire was of initial interest to this study in that it yields an intrinsic, extrinsic, and general satisfaction score. However, subsequent analysis of this measure in this study showed these three dimensions were quite high, with general satisfaction correlating .91 and .87 with the intrinsic and extrinsic dimensions, respectively. The correlation between the extrinsic and intrinsic dimensions was .63. It was thus decided to use only the measure of general job satisfaction in the present study. Computation of this variable was done by summing all items and obtaining an average score.

Task-goal attributes. Section V of the questionnaire provided a measure of five separate and relatively independent dimensions of task goals. Fourteen of sixteen items designed to measure the goal characteristics of specificity, difficulty, participation, and feedback were selected from the Task-Goal attribute Questionnaire (Steers, 1975b). Since peer competition for goal attainment was not investigated as a task-goal attribute, the two items designed to measure that characteristic were deleted. Further, two items were constructed to measure the goal characteristic of goal commitment and acceptance. These two items read as follows: "I think of the work objectives toward which I am working as my <u>own</u> goals;" and "I consciously intend to work hard and

complete all my work objectives." Items measuring a particular goal characteristic were summed and averaged for a composite score. Intercorrelations between the five task-goal attributes were computed in order to determine the relative independence of these dimensions. Table I summarizes the intercorrelation found between these five goal characteristics. Results showed these five dimensions were relatively autonomous and independent with correlations not exceeding .47. It should be noted however that participation in goal setting did correlate significantly at a .05 level with all other task-goal attributes.

Biographical information. A final section of the questionnaire asked the participants to indicate several areas of interest. Individuals were to indicate their sex, their length of service with the university, their length of service in the present job, and a final area concerning with how they would rate their overall performance for the last six months.

Performance rating form. The second measuring instrument used in this study consisted of an overall performance rating completed by the participant's superior. As with the self-rated performance measure, appraisal of performance consisted of rating the subordinate's overall performance over the last six months. The response scales for both measures were identical. It consisted of a nine point scale, each anchored by a number, with every other blank anchored by a behavioral description. As with the questionnaire, individuals were not identified on the performance form. The two performance

TABLE I

INTERCORRELATIONS AMONG TASK-GOAL ATTRIBUTES AND MOTIVATING POTENTIAL SCORE

	Participation	Feedback	Acceptance	Specificity	Difficulty	MPS
Participation	---	.41***	.48***	.48***	.21*	.51***
Feedback		---	.07	.24*	.15	.38***
Acceptance			---	.42***	.09	.32**
Specificity				---	.13	.43***
Difficulty					---	.10
MPS						---

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

measures were based on an overall performance summary rating scale used in the administrative and professional performance appraisal form by the University. The behavioral anchors consisted of a single summary adjective followed by two sentences describing the behavior found at that level of performance.

The correlation between these two performance measures was found to be relatively low. The association between self-rated performance and performance as rated by the immediate superior was .16. The reason for this particularly low correlation however can be attributed in part to three extreme cases. When these cases were deleted, the correlation went to .33 ($p<.004$). The fact that this correlation is still relatively low suggests that the two measures are independent and measuring different perceptions of job performance. Both measures were included so that the impact of goal setting on performance could be analyzed from both perspectives. It should also be noted that job satisfaction correlated low with both self-rated performance ($r= .11$) and with overall performance ($r= .17$).

Table II provides the number of items used, the mean, the standard deviation, the reliability for each of the variables used in the present study.

Procedure

The study was carried out independently at each department so that the procedure followed below was replicated at each of six locations. In obtaining participation in the study, those departments identified as using goal setting were contacted through the appropriate

TABLE II

MEANS AND STANDARD DEVIATIONS OF RESEARCH VARIABLES

	NUMBER OF ITEMS	MEAN	STANDARD DEVIATIONS	COEFFICIENT ALPHA
Task Characteristics				
Skill Variety	3	6.13	.96	.59
Motivating Potential Score	15	224.79	57.85	.68
Need Strengths				
Need for Achievement	5	5.69	.56	.61
Need for Affiliation	5	4.20	.52	.35
Need for Autonomy	5	3.41	.56	.28
Need for Dominance	5	5.08	.79	.55
Job Satisfaction	20	4.10	.45	.88
Task-Goal Attributes				
Participation	4	5.89	.95	.73
Feedback	3	4.65	1.46	.85
Acceptance	2	6.29	.74	.00
Specificity	3	6.06	.92	.71
Difficulty	4	5.12	1.05	.61
Job Performance				
Self-Rated Performance	1	7.30	1.17	
Supervisory-Rated Performance	1	6.97	1.45	
Length of Service (Months)				
With the Company		100.51	92.72	
On the Present Job		57.66	74.00	
Sex				
Male		N = 43		
Female		N = 18		

Dean or Director. At this time the extent of their involvement in goal setting procedures was discussed. The purpose and intentions of the study were explained at this time, as well as what was required on the part of the participants. If those contacted agreed to take part, a final meeting was arranged where the study could be explained to the department's employees and where the questionnaire could be administered. Involvement in the study was arranged by the Dean or Director to take place at the beginning of a normally scheduled meeting. Participants were informed of the study prior to the meeting through the advance notice of the meeting's agenda. Other than the department head, no one knew the purpose of the study prior to the meeting. Participation in the study was voluntary, and all agreed to take part.

It was necessary that the procedure used in the study allow for confidentiality of both the questionnaire and performance measure. It was also necessary that the two measures be matched for each person at a later date. To do this, the Director or Dean of the department was given both the questionnaire and performance forms the day prior to the study. The department head then identified each person participating in the department with a confidential number, known only to the director. This number was placed on both forms and each person's performance rating was completed. At the time of the survey, the department head placed the completed performance measures in a sealed box provided in the meeting room. He then distributed each questionnaire to the appropriate person identified by that number. During this

procedure and throughout the completion of the questionnaire, the researcher remained outside the room so that at no time was he aware of anyone's number. Also, once having administered the questionnaire, the Dean or Director left the room. His participation in the study was at a later date. In one department however, the Director did complete the questionnaire at the same time as the others, but because of the arrangement of the room, this should not have been a factor. The remaining participants, from department head to top management, participated in the study in a separate meeting. The procedure for this administration was the same as previously described.

The questionnaires were completed during the meeting taking no longer on the average than 15 to 20 minutes. There were however no time limits involved with the study and individuals were allowed as much time as needed. When through, each participant placed his/her questionnaire in the sealed box.

Data Analysis

Analysis of the data collected in the present study occurred in two phases. In phase one, correlations were calculated between the five task-goal attributes and the measures of job performance and job satisfaction. Further, multiple regression was performed on each of the criteria variables so that the relative contribution, in terms of the variance accounted for, of each of the task-goal attributes could be specified. In phase two, analysis consisted of identifying potential moderating variables. Investigations of each of the hypothesized

moderating factors was done by dividing the sample at the median into high and low groups on that factor. The important question in terms of significant moderating effects when the sample is divided into subgroups on that factor is whether coefficients are significantly different between groups. As a test for significant moderating effects, the correlations were transformed to Fischer Z scores and tests of differences between the correlation coefficient of the respective high and low subgroups were calculated (Hays, 1973).

For the task characteristic of MPS, it was also desired to determine what goal setting would add beyond the task itself towards increased job performance and satisfaction. To obtain these results, hierarchical regression was performed, with inclusion of MPS first followed by the task-goal attributes on all three of the criteria measures.

CHAPTER III

RESULTS

Relationships of Goal Setting to Performance and Satisfaction

The results of the initial analysis concerning the relations between each of the task-goal attributes and the job satisfaction and job performance measures are summarized in Table III. Pearson correlation coefficients were computed between subject's scores for each of the five goal characteristics and the criteria measures. As can be seen in Table III, with the exception of goal difficulty, all task-goal attributes were significantly related beyond the .01 level to job satisfaction. In fact, these correlations either approach or are at the .001 level of significance, and suggest rather convincingly that a strong association exists between job satisfaction and at least four of the five task-goal attributes. For the attribute of goal difficulty, there appeared to be little direct relationship between how difficult the goal was and the amount of satisfaction obtained in the job. Table IV summarizes the results of regressing the goal attributes on both criteria. Treating the five task-goal attributes as the independent variables and job satisfaction as the dependent variable, a multiple correlation coefficient was computed. This resulted in a coefficient of .78 with the five goal characteristics accounting for some 61 percent of the variance in job satisfaction. Participation in goal setting correlated most strongly with satisfaction and alone accounted for 47 percent of the variance.

TABLE III

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES
AND JOB SATISFACTION
AND JOB PERFORMANCE

	Job Satisfaction	Self-Rated Job Performance	Supervisor-Rated Job Performance
Participation	.69***	.13	.34**
Feedback	.46***	.08	.12
Acceptance	.37**	-.01	.13
Specificity	.54***	.43***	.12
Difficulty	-.06	.13	.03

**Significant at the .01 level.

***Significant at the .001 level.

TABLE IV

REGRESSION OF GOAL CHARACTERISTICS ON JOB SATISFACTION AND JOB PERFORMANCE

Predictor Variable	Simple R	Multiple R	R Square	Change in R Square	F Value
Dependent Variable - JOB SATISFACTION					
Participation	.68	.68	.47	.47	50.69
Specificity	.53	.72	.52	.05	31.38
Difficulty	-.05	.76	.57	.05	24.84
Feedback	.45	.78	.61	.04	21.59
Acceptance	.37	.78	.61	.00	16.97
Dependent Variable - OVERALL JOB PERFORMANCE					
Participation	.34	.34	.12	.12	7.67
Difficulty	.03	.34	.12	.00	3.84
Dependent Variable - SELF-RATED JOB PERFORMANCE					
Specificity	.41	.41	.17	.17	11.96
Acceptance	.01	.46	.21	.04	7.46
Difficulty	.15	.47	.22	.01	5.21
Feedback	.01	.48	.23	.01	4.10
Participation	.08	.48	.23	.00	3.26

All F values significant at the .05 level.

With the exception of goal difficulty, then, variations on the job in employee's task-goal characteristics were consistently and positively related to variations in job satisfaction. Further, it appears that a major factor of goal setting in relation to job satisfaction was the amount of participation allowed for the employee in deciding his/her own task goals.

Table III also shows the results of the correlations between the five task-goal attributes and the two measures of job performance. In contrast to job satisfaction, the task-goal attributes showed a less consistent and direct relationship with job performance. Participation in goal setting and goal specificity were each significantly related beyond the .001 and .01 level, respectively, to one of the performance measures but not the other. These rather strong correlations suggest that how specific the goals were was important to how the individual felt he/she was able to perform in the job, and the amount of participation in goal setting was important to how the individual was rated in overall job performance. The remaining task-goal attributes showed nonsignificant relationships to either of the job measures. As shown in Table IV, treating the five task-goal attributes as the independent variables and self-rated performance as the dependent variable, a multiple correlation coefficient of .48 was computed accounting for 23 percent of the variance in performance. Of this, goal specificity accounted for 17 percent of this variance, with the remaining variables accounting for insignificant amounts of variance. Treating the five goal characteristics in the same manner

with supervisory-rated performance as the dependent variable resulted in a multiple correlation coefficient of .34, accounting for some 12 percent of the variance in performance. Here, participation in goal setting accounted for practically all of this variation in job performance. It appears that self-rated performance was strongly and positively related to the specificity of the task goals, but to no other goal characteristics. And, how well the employees perform according to their supervisor was strongly and positively related to the degree of participation in goal setting, but to no other task-goal attributes. These results closely agree with those found by Steers (1975), and further support the notion that goal setting as defined by the task-goal attributes appears to be rather weakly related to job performance in practical situations and may depend on certain characteristics of the individual and situation for improved predictability.

Impact of Individual and Situational Differences

It was a further intention of this research to investigate whether the associations between task-goal attributes and the criterion measures would be moderated by length of service, sex of the employee, need strengths, and characteristics of the task. This section presents results relevant to the relationships under question.

Table V presents the associations between the task-goal attributes and job satisfaction and the two measures of job performance, when the sample was divided into male and female employees. In both groups, the task-goal attributes, with the exception of goal difficulty, showed

TABLE V

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR MALE AND FEMALE EMPLOYEES

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Male	Female	Male	Female	Male	Female
Participation	.57***	.76***	.17	.09	.35*	.32
Feedback	.38**	.56**	-.03	.33	.01	.30
Acceptance	.26*	.48*	-.12	.24	.04	.25
Specificity	.42**	.78***	.45***	.40*	.15	.07
Difficulty	-.02	-.10	.05	.37	.13	-.18

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

strong, positive correlations with job satisfaction. The female subgroup tended to show stronger associations than did the male group. In fact, these correlations were consistently stronger across all four of the attributes. However, none of the differences in relationships between males and females reached significance; though goal specificity did approach significance at a .06 level. In terms of job performance, the goal characteristics showed a lack of consistent relationships to either of the performance measures for both males and females. In both groups, participation in goal setting and specificity of the goals were related significantly to one of the performance measures but not the other. The remaining variables showed nonsignificant relationships to performance in both groups. It should be noted however, that the female subgroup did show a tendency toward more consistent positive relationships between the goal attributes and performance than the male group, but as noted these differences were not significant between groups. Thus, little difference appeared to exist between males and females in terms of the relations between goal setting and both performance and job satisfaction.

Individual differences in length of service, both on the job and with the company, were investigated as moderators of the goal setting-criteria relationships. Table VI summarizes the results found when the sample was divided at the median into groups of short and long length of service with the University. Both groups showed significant relationships to exist between the goal characteristics and job satisfaction, but with some noted differences. Goal acceptance appeared

TABLE VI

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR SHORT AND LONG LENGTH OF SERVICE WITH THE UNIVERSITY EMPLOYEES

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance		
Task-Goal Attributes	Short Service	Long Service	Short Service	Long Service	Short Service	Long Service	
Participation	.70***	.68***	.08	.25	.46**	.24	
Feedback	.43**	.50**	.07	.13	.26	-.03	
Acceptance	.55***	.26	.01	.10	.56***	-.19	##
Specificity	.54***	.55***	.41*	.37*	.41*	-.17	#
Difficulty	-.38*	.25 #	.22	.20	.14	-.07	

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

#Correlations significantly different at the .05 level.

##Correlations significantly different at the .01 level.

to be significantly related to job satisfaction for the short length of service individuals but not strongly associated for longer length of service people, although the difference between groups was not significant. Also, a significant, negative relationship existed between goal difficulty and satisfaction for the short length of service people, while a positive relationship existed between goal difficulty and satisfaction for longer length of service people. This difference between these two correlations was significant at the .02 level. All other differences in correlations between groups were nonsignificant. Thus, in general, whether an employee had been with the company a relatively long or short period of time appeared to make little difference in the relationships of the goal attributes with job satisfaction. However, an exception to this was the fact that for shorter length of service individuals more difficult goals were associated with less satisfaction, but for the longer service group more difficult goals were associated with greater satisfaction. There also appeared to be few differences between the two groups in the associations between task-goal attributes and self-rated performance. In both groups, only goal specificity was found to be a significant factor in relation to job performance. This, however, was not the case with supervisory-rated performance. For short length of service employees, positive correlations were found for all goal attributes with the performance measure, with participation, specificity, and acceptance all significant at or beyond the .05 level. Individuals with longer length of service, however,

showed negative relationships between the goal attributes and performance for all attributes except participation. Significant differences in correlations between low and high groups were found on goal acceptance and goal specificity. Goal acceptance was shown to be strongly and positively related to supervisor-rated performance for shorter length of service people, while negatively related for longer length of service people. The difference between these correlations reached a significance level of .003. This difference also appeared to be true for goal specificity. Goal specificity was significantly and positively related to performance for short length of service people, while negatively related for the longer group. The difference here between correlations was found to be significant at the .03 level. Differences between groups on the remaining goal characteristics-performance relations were nonsignificant, but supported a general trend of differences between groups. It appeared that variation in task-goal attributes was positively (and significantly in three cases) related to variation in performance ratings for individuals who have been with the University relatively shorter lengths of time. While for individuals with longer lengths of service with the University, variation in goal setting attributes, with the exception of participation, was negatively related to variation in performance. Thus, relatively strong support was found for a moderating effect of length of service with the company. Length of service appeared to be an important factor in determining the association between goal setting attributes and job performance.

The results of subgrouping on length of service on the job are presented in Table VII. In terms of the relationships between task-goal attributes and job satisfaction, length of service on the job appeared to be an important moderating factor. With short length of service employees, all the task-goal attributes except goal difficulty were significantly related to job satisfaction at the .01 level and beyond. However, with longer length of service employees, only participation and feedback were significantly related to job satisfaction. Also, the associations between two of the goal attributes and satisfaction were significantly greater for the shorter service group than the longer service group. Goal acceptance was more strongly related to satisfaction for the short length of service group with the difference significant at a .05 level. The specificity of the goals also was found to be more strongly related to satisfaction for the shorter group, with the difference between these correlations being significant at the .04 level. And although the difference only approached significance, the difficulty of the task goals was found to be negatively related to job satisfaction for short length of service employees, but positively related for longer length of service individuals. Thus, job satisfaction appeared to be positively and more strongly related to the goal attributes for people of relatively shorter length of service on the job. However, dividing the sample in the same manner produced no significant differences between groups on the associations of goal attributes with either measure of job performance. However, it should be noted that only for longer length of service individuals did a

TABLE VII

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR SHORT AND LONG LENGTH OF SERVICE ON THE JOB EMPLOYEES

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Short Service	Long Service	Short Service	Long Service	Short Service	Long Service
Participation	.74***	.56***	-.06	.17	.28	.40*
Feedback	.48**	.40*	-.09	.19	.12	.11
Acceptance	.56***	.12 #	-.09	-.02	.23	.01
Specificity	.64***	.21 #	.20	.55***	.18	.00
Difficulty	-.26	.19	.07	.27	.04	.03

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

#Correlations significantly different at the .05 level.

significant correlation for any of the goal characteristics with the performance measures emerge. Here, participation was significantly related with self-rated performance for the longer length of service individuals only. Other than this noted exception, the relationships between the goal characteristics and performance measures appeared to be similar or the same for both long and short length of service individuals. Thus, it appeared to make little difference in the relations of the goal attributes with job performance as to the individual's length of service on the present job.

In Table VIII, the sample was divided at the median and individuals grouped into low and high need for achievement groups, and the correlations between task-goal attributes and job performance and job satisfaction were calculated for each group. In general there appeared to be stronger correlations of the goal characteristics with job satisfaction for the high need for achievement group versus that of the low need for achievement group. However, no significant differences in correlations between groups were detected. Goal acceptance though was not found to be strongly related to job satisfaction for low need achievers, while significantly related for the high need achievers. In general though, dividing individuals into low and high need for achievement groups made little difference in the associations of the task-goal attributes with job satisfaction. In terms of both self-rated and supervisory-rated performance, few consistent differences were found between low and high need achievers. For self-rated job performance, it was found that only goal specificity was significantly

TABLE VIII

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR LOW AND HIGH NEED FOR ACHIEVEMENT EMPLOYEES

	Job Satisfaction		Self-Rated Performance			Supervisor-Rated Performance	
Task-Goal Attributes	Low Nach	High Nach	Low Nach	High Nach		Low Nach	High Nach
Participation	.54***	.79***	.30	.10		.10	.53***
Feedback	.35*	.53***	.10	.00		-.04	.27
Acceptance	.21	.46**	.28	-.24	#	.18	.10
Specificity	.44**	.60***	.55***	.22		.14	.10
Difficulty	-.23	.07	.22	.05		.02	.04

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

#Correlations significantly different at the .05 level.

related to performance for low need achievers, while none of the goal characteristics were significantly related to performance for high need achievers. Goal acceptance was found to be positively related to performance for low need achievers, but negatively related to performance for high need achievers. While neither correlation was significant, they were found to differ significantly at the .05 level. Correlations of the task-goal attributes with supervisor-rated performance when calculated for low and high need for achievement groups, did not differ significantly between the two groups. Only the correlation between participation and performance was found to approach a significant difference between groups, with participation being significantly associated with supervisor-rated performance for only high need achievers. In general, results showed little supportive evidence for a moderating effect of need for achievement in terms of the relations of the task-goal attributes with either of the performance measures.

Table IX also summarizes the correlations between the task-goal attributes and the criteria measures for low and high need for affiliation individuals. In both groups, the relations between the goal characteristics and job satisfaction were found to be significant at least at the .05 level for all five attributes, with most exceeding a significance level of .01. Tests for significant differences in correlations between groups showed only goal difficulty in relation to satisfaction to differ significantly between low and high need for affiliation groups. Goal difficulty was found to be negatively related

TABLE IX

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR LOW AND HIGH NEED FOR AFFILIATION EMPLOYEES

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Low Naff	High Naff	Low Naff	High Naff	Low Naff	High Naff
Participation	.69***	.68***	.01	.18	.41*	.28*
Feedback	.64***	.27*	.03	.10	.16	.09
Acceptance	.41*	.42**	.03	.09	-.01	.34*
Specificity	.50**	.56***	.36*	.46**	.02	.19
Difficulty	-.46**	.30* ##	.36*	.01	-.14	.15

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

##Correlations significantly different at the .01 level.

to satisfaction for the low affiliation group while positively related for the high need group, with the difference being significant at the .004 level. No significant differences were found between the two groups in the relations of goal characteristics with the performance measures. However, it should be noted that how difficult the task goals were was positively and significantly related to measures of self-rated performance for the low need group, while unrelated for the high need group. Also, in terms of supervisor-rated performance, goal acceptance was positively and significantly related to performance for the high need for affiliation group only. These differences, as noted through, were not significant and offer little support for a moderating effect of need for affiliation.

Table X summarizes the associations found between the goal attributes and the criteria measures when the sample was divided at the median into groups of high and low need for autonomy. In terms of the goal attribute-satisfaction relationships, three of the five correlations were found to differ significantly between the two groups. For the relationship of goal feedback with satisfaction, in both groups there was a positive correlation, but with the high need group showing a significantly greater relationship at the .04 level of significance. In reverse, the relationship of goal acceptance with satisfaction was found to be greater for the low need for autonomy group than that of the high need group, differing at a .05 level of significance. For the association of goal difficulty with job satisfaction, a significant, positive correlation was found for low need for autonomy individuals

TABLE X

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR LOW AND HIGH NEED FOR AUTONOMY EMPLOYEES

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Low Nauto	High Nauto	Low Nauto	High Nauto	Low Nauto	High Nauto
Participation	.78***	.62***	.07	.17	.19	.57***
Feedback	.23	.67***#	-.12	.24	.01	.29
Acceptance	.62***	.20 #	.05	-.05	.16	.19
Specificity	.56***	.53***	.43**	.44**	.16	.16
Difficulty	.36*	-.35* ##	.16	.10	-.06	.09

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

#Correlations significantly different at the .05 level.

##Correlations significantly different at the .01 level.

while a significant, negative relation was found for the high need group. The difference between these two correlations was significant at the .006 level. In general, it appears that need for autonomy had a relatively strong moderating effect on the associations of the goal characteristics with job satisfaction. For both groups, participation in goal setting and goal specificity were strongly associated with satisfaction. But, it appeared that for low need for autonomy individuals, variation in job satisfaction was positively and significantly associated with variation of goal acceptance and goal difficulty, but unrelated to feedback on goal progress. For high need for autonomy employees however, it appeared that variation in satisfaction was strongly and positively related to variation in feedback, unrelated to variations in goal acceptance, and strongly and negatively related to variations in goal difficulty. In terms of job performance, no significant differences were found between the groups. Here, participation was unrelated to performance for the low need group, but significantly related for the high need group. But, in general, little support could be found for a moderating effect of need for autonomy in terms of the relationship of the goal attribute with job performance. However, it did appear that need for autonomy was a significant factor in the associations of the goal characteristics with job satisfaction.

Table XI summarizes the associations found between the attributes and the criteria measures, when the sample was divided at the median into groups of low and high need for dominance. Significant differences between groups were found on the association of two of the goal attributes

TABLE XI

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE FOR LOW AND HIGH NEED FOR DOMINANCE EMPLOYEES

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Low Ndom	High Ndom	Low Ndom	High Ndom	Low Ndom	High Ndom
Participation	.38*	.83***##	.20	.14	.22	.43
Feedback	.47**	.47**	.17	.10	-.01	.25
Acceptance	.18	.47**	.18	-.14	.16	.10
Specificity	.42**	.62***	.48**	.43*	.11	.13
Difficulty	-.56***	.21 ##	.10	.25	.08	.01

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

##Correlations significantly different at the .01 level.

with job satisfaction. In both groups, participation was significantly related to job satisfaction, but with the high need for dominance group showing a significantly greater relationship over that of the low need group differing at the .005 level. Also, goal difficulty was found to be significantly and negatively related to satisfaction for the low need group, while positively, although nonsignificantly, related to satisfaction for the high need group. The difference between these two correlations reached a .002 level of significance. The remaining correlations did not differ significantly between the two groups. But in terms of goal difficulty and participation in goal setting, individuals of low and high need for dominance differ strongly in subsequent variations of job satisfaction. The relations of the goal characteristics with job performance measures did not differ between groups. Correlations were highly similar in both groups, with few consistent differences.

In Tables XII and XIII, consideration was given for the moderating effects of the amount of skill variety in the job and the motivation potential of the job, respectively. On both variables, the sample was dichotomized into groups of high and low amounts of the job factors. As shown in Table XII, both the group of high and low skill variety in the job showed in many cases highly similar relationships between the goal characteristics and job satisfaction. None of the differences in correlations between the groups approached significance, suggesting that the skill variety required in the job had little effect on the associations between goal setting and job satisfaction. These results

TABLE XII

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE IN LOW AND HIGH SKILL VARIETY TASKS

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Low Skill	High Skill	Low Skill	High Skill	Low Skill	High Skill
Participation	.59***	.80***	.10	.11	.33*	.34
Feedback	.43**	.45*	.01	.01	.03	.18
Acceptance	.40**	.44*	.07	.01	.39**	-.02
Specificity	.53***	.53**	.35*	.53**	.14	.08
Difficulty	-.07	-.10	-.05	.33*	.10	-.11

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

None of the tests for differences between correlation coefficients reached significance.

TABLE XIII

CORRELATIONS BETWEEN TASK-GOAL ATTRIBUTES AND JOB SATISFACTION AND JOB PERFORMANCE IN LOW AND HIGH MOTIVATING POTENTIAL TASKS

	Job Satisfaction		Self-Rated Performance		Supervisor-Rated Performance	
Task-Goal Attributes	Low MPS	High MPS	Low MPS	High MPS	Low MPS	High MPS
Participation	.68***	.58***	.03	.20	.35	.29
Feedback	.40**	.36*	-.07	.10	.15	.01
Acceptance	.53***	.13	.07	-.13	.27	-.07
Specificity	.50**	.45*	.35*	.50**	.08	.10
Difficulty	-.03	-.19	.09	.15	.01	.04

*Significant at the .05 level.

**Significant at the .01 level.

***Significant at the .001 level.

None of the tests for differences between correlation coefficients reached significance.

also appeared to be true in terms of the relationships between the task-goal attributes and job performance measures. None of the tests for significant differences between groups on the correlations of the goal characteristics with either measure of performance were significant. In terms of self-rated performance though, it was noted that goal difficulty was negatively related to performance in low skill jobs, but significantly and positively related to performance in high skill jobs. And for supervisor-rated performance, a difference between groups was noted on goal acceptance being unrelated to performance in high skill jobs, but significantly related in low skill jobs. Thus, in terms of job performance as well, the amount of skill variety required in the job had little effect on the associations of the goal attributes.

The effect of the motivating potential of the task (MPS) was investigated for its influence on goal setting in two separate procedures. To begin with, it was desired to determine what goal setting would add to the task in terms of increased motivation and subsequent attitude and behavior change beyond that of the task itself. And second, it was desired to determine in what ways the motivating potential of the task may moderate the goal setting-criteria relationship. In the first analysis, hierarchical regression was performed with inclusion of MPS first followed by the goal attributes on all three criteria measures. Table XIV summarizes the results found. Treating job satisfaction as the dependent variable and MPS and the goal characteristics as the independent variables, multiple regression was performed. Results showed that

TABLE XIV

HIERARCHICAL REGRESSION OF MPS AND GOAL CHARACTERISTICS ON JOB SATISFACTION AND JOB PERFORMANCE

Predictor Variable	Simple R	Multiple R	R Square	Change in R Square	F Value
Dependent Variable - JOB SATISFACTION					
MPS	.36	.36	.13	.13	8.79*
Goal Attributes	---	.79	.62	.49	14.54*
Dependent Variable - OVERALL JOB PERFORMANCE					
MPS	.14	.14	.02	.02	1.21
Goal Attributes	---	.35	.12	.10	1.24
Dependent Variable - SELF-RATED JOB PERFORMANCE					
MPS	.09	.09	.01	.01	.47
Goal Attributes	---	.48	.23	.22	2.68*

*Significant at the .05 level.

when MPS was considered first, it accounted for some 13 percent of the variance. Inclusion of the remaining task-goal attributes accounted for an additional 49 percent of the variance in job satisfaction. Thus, it appeared that goal setting had a substantial impact beyond the task itself on variation in job satisfaction. Regressing MPS and goal attributes in the same manner on both measures of performance showed results similar to the above. In terms of self-rated performance, MPS accounted for less than 1 percent of the variance in performance, while inclusion of the goal characteristics accounted for an additional 22 percent of the variance. Further for supervisor-rated performance, regressing MPS first accounted for 2 percent of the variation in performance. Including the remainder of goal characteristics accounted for an additional 10 percent of the variance. Although neither MPS nor the goal attributes were particularly strong factors in predicting job performance, the goal attributes accounted for a relatively large amount of the variance beyond that of MPS.

The second interest of the study concerning the motivating potential of the task was to determine in what way MPS may moderate the task-goal relations with the criteria measures. In order to investigate this potential effect of MPS, the sample was dichotomized into high and low groups on MPS. Table XIII represents a summary of the findings on this analysis. The table shows that when individuals were split into low and high MPS, there were no significant differences in correlations between groups. Both groups perceived the relationships between the task-goal attributes and job satisfaction to be similar. Only

goal acceptance in relation to satisfaction approached a significant difference between groups, with acceptance being significantly related for the low group, but unrelated for the high group. It was also shown that in terms of both measures of job performance no differences in correlations existed between the groups and in total failed to support any hypothesized moderating effect of MPS.

CHAPTER IV

DISCUSSION

It appears clear that goal setting can, and does, have a lasting and significant impact on employee's attitudes. The present field study of goal setting, involving an MBO program, ongoing for the past five years, showed four of the five goal characteristics to be significantly correlated with job satisfaction. Further, goal setting alone accounted for some 61 percent of the variance in job satisfaction among the managerial personnel. Few consistent relationships existed between characteristics of the goal setting process and either overall job performance or self-rated performance. Participation was a significant factor for overall performance, and goal specificity was significantly associated with self-rated performance. No support was found for the hypothesized relationships between the remaining goal attributes and job performance. In relation to these measures, goal setting accounted for only 12 percent and 23 percent of the variance, respectively.

These results provide empirical support for Steers and Porter's (1974) speculation that goal setting can have a significant impact on employees' attitudes. Further, analysis of these results also provides possible insight into the manner in which goal setting may affect job satisfaction. In addition to the fact that four of the five goal characteristics correlated significantly with satisfaction, they also were significantly associated with the motivating potential of the task,

as shown in Table I (page 26). These findings support Tosi and Carroll's (1968) assertion that goals, in themselves, may make work more interesting. The results also support Umstot, Bell, and Mitchell's (1976) findings that subjects working on low interest (MPS) but high goal jobs still perceived their jobs as interesting and as satisfying. Regressing MPS and the goal characteristics on job satisfaction here, found goal setting to account for the majority of variance in satisfaction, beyond that of the task itself. Although not directly investigated, apparently the mere presence of goals may make the job more interesting and challenging, and thus, more satisfying.

Less clear are the results in terms of job performance and any interpretations of the findings must be made in light of the performance measures used. In both measures, only overall indications of performance were used, while research has shown that goal setting may be differentially effective in terms of the dimension of performance used (Ivancevich, 1976). Thus, for the initial analysis, it may be true that more consistent and supportive results of the goal setting-performance association would be found where more specific measures of job performance could be used and the effects of goal setting on each of the job performance dimensions analyzed. In addition to the question of relevance of the performance measures, is the fact that the reliability of these measures would be low since in both cases measurement was in terms of a single item. As such, it could not be expected that these measures would correlate very strongly with any other measures. Further, any comparisons made between the effects of goal setting on performance

and satisfaction must be understood in light of the differences in reliabilities of the two criteria measures. As noted in Table II (page 28), coefficient alpha for the job satisfaction measure was .88, and the satisfaction measure could be expected to correlate more strongly with goal setting than job performance, where reliability would be obviously low. Such conditions must be kept in mind when interpreting the results here and throughout the study.

Since subjects completed the satisfaction items and goal characteristics items in the same questionnaire, there was also the possibility of some halo effects being present, and accounting for the stronger associations of goal setting with satisfaction than performance. If the halo effects were present, satisfaction would be more strongly associated with self-rated performance than with supervisor-rated performance. However, satisfaction was correlated rather low with both self-rated performance (r=.11) and supervisor-rated performance (r=.17). Looking at the relationships among the criteria measures suggests then that these response tendencies may be minor.

In terms of both job satisfaction and job performance it appears important to investigate and study the nature of the task-goals through the specific characteristics of the goal setting process. Among these individual goal characteristics, certain attributes appeared to be more important to increases in job satisfaction and job performance than others. The individual's participation in setting his/her own personal and work objectives appeared to be a major factor in subsequent job satisfaction. These results support the findings of

Arvey and Dewhirt (In Press) where participation was also most significantly related to job satisfaction. Further, it appeared that participation was an important characteristic of the goal setting process in relation to overall job performance. The act of participation in determining task goals was the only goal characteristic significantly associated with performance and accounted for practically all 12 percent of the variance accounted for in how well the supervisor rated performance. These results are consistent with those found by Steers (1975) where only participation was significantly related to overall job performance. Thus, taken together, allowing employees to participate in determining their own task goals, led to increased job satisfaction and job performance here as well as in previous research. A possible explanation to the findings in the present study may be seen in a study done by Meyer, Kay, and French (1965). Results showed that when employees had a history of participation in decision making, the use of participation in goal setting had a beneficial impact. In this light, these findings with participation are fairly consistent since in the present MBO program, employees were actively involved in the setting of their own work objectives and had been for some time. Since causality cannot be determined, such conclusions are only speculative. It is also possible for example, that only high performers were allowed to participate in setting their own goals.

Further insight into the importance of participation in goal setting in the present study perhaps can be seen in Table I (page 26). Although most all other intercorrelations among the attributes are low, participation correlated significantly with all other task-goal

attributes. Supporters of participation have suggested that through an employee's participation in goal setting, both commitment to and understanding of task-goals will be increased. The fact that participation correlated most significantly with performance and satisfaction and accounted for the greatest amount of variance may be for this reason. Through participation in goal setting, acceptance of the task goals and the specificity and clarity of the task goals may have been insured and the effects of difficult goals and feedback on goal progress enhanced. That is, by the employee's participation in setting his own goals, insured was the fact that goals were clear and specific to the individual, that he would be committed to and accept the task goals, and work toward attaining more difficult goals, and would be assured of meaningful feedback on goal progress. Although these relationships are only speculative in the present study, it appears clear that allowing participation in goal setting was a major factor in goal setting for both improved job satisfaction and job performance.

Goal specificity was also found to be an important factor to not only job satisfaction, but self-rated performance as well. In terms of job satisfaction, to the extent goals were clear, specific, and definable, improvement in job satisfaction was noted. These results agree closely with Steers (1975b), who found goal specificity to be most strongly related to job satisfaction and job involvement. The research also has strongly supported the importance of goal specificity to job performance (Lathan and Yukl, 1975), although in the present study, goal specificity was not found to be significantly related to overall job performance,

only self-rated performance. However, Steers (1975) also found goal specificity to be unrelated to overall performance, but significantly related to effort towards goal attainment. Understanding of these findings with job performance may be seen in terms of Locke's goal theory (1968). Locke (1968) noted that using specific and clear goals provides the individual with clear targets toward which to direct their energies. That is, giving the worker clear and specific goals to work towards should allow him to know precisely what is expected in terms of effort. Perhaps then here, as with Steers, how the individual perceived his goal effort was a function of the expectations provided by clear and specific task-goals.

It is less clear however, as to why these expectations were not translated into overall job performance. Perhaps the fact that goal specificity added little towards overall performance may be seen in the lack of congruence between how the individual perceived his performance versus that of the immediate superior. The fact that the two measures correlated low at .16, suggests that performance on the job was, in fact, perceived as a function of different job behaviors for the two groups. That is, what the individual saw as effort necessary for goal attainment was not the same as that considered by the superior.

Feedback on goal progress and employee acceptance of task goals were each also significantly related to job satisfaction. However, neither goal characteristic was significantly associated with subsequent job performance. In terms of feedback, Steers (1975, 1975b) found the same results of feedback being significantly related to

satisfaction, but unrelated to performance. Here, and with Steers, possibly feedback on goal progress may act to clarify expectations in terms of goal requirements, in turn enhancing satisfaction with one's job. Duttagupta (1975) found feedback to be positively related to better perceived understandings of job requirements. However, no research could be found which attempted to clarify the goal feedback-satisfaction relationship. Although feedback on goal progress was unrelated to either performance measure, the initial results were not altogether surprising. The research on feedback in relation to performance has been conflicting, and it appears, particularly here, that individual differences may moderate any existing relationships with job performance. However, secondary analysis showed none of the hypothesized moderating variables to be an important intervening factor, and in no case were predictions improved by the moderating factors.

Acceptance of task goals has been viewed often as an implicit aspect of goal setting programs, though little research exists as to its ramifications in subsequent task performance or job satisfaction. Locke's theory suggested that task goals will affect behavior only to the extent which they are accepted by subjects in the form of personal aspiration levels. If this contention is correct, then goal acceptance would be expected to be as an effective predictor of performance as goal setting in general. However, here goal acceptance was unrelated to either measure of job performance. Further, if goal acceptance is also defined in terms of the congruence between external task goals

and personal aspirational level, a possible explanation to the present findings could be made in the assumption that task goals were not translated by the individual into an aspirational level toward that goal and subsequently, unassociated with job performance. However, the present study did not investigate these particular associations. The most likely explanation for the relatively low correlation of goal acceptance with either criteria is in terms of the low degree of reliability of the measure. This would account for a lack of any strong association and suggests that the nature of goal acceptance was not accounted for in the present study by the two questions included to measure this attribute. Thus, any firmer conclusions concerning goal acceptance must await further research, where the full nature of goal acceptance is more reliably accounted for. It can be speculated from these results however, that both goal acceptance and feedback on goal progress have a significant impact in terms of job satisfaction.

In terms of both job satisfaction and job performance, the difficulty of the task goals appeared to be unrelated to either criteria. One explanation for a lack of any linear relation between goal difficulty and job performance is the notion that the association is rather one of a bell shaped curve, with performance being optimum for tasks-goals of moderate difficulty. Post hoc analysis of this possibility however, did not support this hypothesized relationship; scattergrams showed no such relation to exist. Thus, in terms of initial analysis, the difficulty of the task-goals was not an important factor in

subsequent job performance or job satisfaction. Further research may further support this notion that in management positions where responsibilities are often conflicting, using difficult goals may be ineffective for improving particularly job performance, or even job satisfaction. In fact, much of the research supporting goal difficulty has been in terms of lab studies using single goals and simple performance measures (Lathan and Yukl, 1975). However, Hall (1972), noted that a manager's goals are often several in number and conflicting in nature, a problem here and elsewhere for securing accurate measures of either goal difficulty or job performance. The problem arises in field studies when single overall measures of performance and goal difficulty are used, where actually, improvement in one area or goal is often at the expense of another. Thus, possibly, the lack of association between goal difficulty and job performance may in part be due to the fact that improved performance from more difficult goals may be at the expense of the attainment of other goals, and in the total picture, cancel each other out.

This problem exists however, in most of the goal setting literature and may offer a plausible explanation for the lack of association found here and in many field studies between other goal characteristics and job performance. For example, acceptance of task-goals would, of course, be specific to each particular goal and any performance consequences would ultimately need to be measured in terms of attainment of that goal.

In light of both the lack of reliability in the performance measures as well as a questionable relevance to the goal setting

process, several cautious conclusions may be made. The results in general support the speculation that goal setting has a more significant impact on job satisfaction than on job performance. Also, both participation and goal specificity were supported as important factors in the goal setting process in terms of both performance and satisfaction consequences. For job satisfaction, feedback on goal progress and goal acceptance were also supported in the results as important characteristics of goal setting. However, these characteristics were not found to be strongly associated with job performance, and goal difficulty was not shown to be a major factor for subsequent improvement in either criteria.

Further insight, however, into these initial associations of goal setting with job performance and job satisfaction appeared to be gained when consideration was given to several of the moderating variables. It appeared that the effectiveness of goal setting was, in certain instances, dependent on specific personality and situational factors. Participation more than any of the other goal characteristics, appeared to be consistently related to both overall job performance and job satisfaction throughout the secondary analysis. Characteristics of the individual and of the situation appeared to make little significant difference in the impact of participation in goal setting. It was found though, that for high need for dominance individuals, variations in participation were associated with job satisfaction significantly more than low need for dominance, although in both groups, correlations were positive and significant. These findings would be

as expected, and indicate that for individuals who have a high need to dominate their environment, allowing these employees to participate in setting their own goals would greatly enhance job satisfaction.

Feedback on goal progress also appeared to show consistent relationships across characteristics of the situation and individual. Feedback was strongly associated to satisfaction throughout the moderating factors and as initially found, uncorrelated to either measure of job performance. It was initially expected that particularly for this goal attribute, accounting for differences in individuals would greatly enhance associations of goal feedback with job performance. However, at no time did differentiating individuals according to these characteristics improve prediction of job performance. At least with somewhat more certainty then, the importance of feedback on goal progress to job performance can be concluded here as questionable. It was found however, that for individuals of high need for autonomy, significantly greater positive reactions to goal setting were shown for feedback on goal progress than for individuals low on this need strength. Thus, for individuals high in need for autonomy, use of feedback on goal progress will greatly enhance the impact of goal setting on job satisfaction.

The importance of goal acceptance in relation to both job performance and job satisfaction however, was found to depend on several intervening factors, which in total help to explain the initial findings. It appears that only for individuals who had been with the University a relatively short time was the acceptance of task-

goals an important factor in improving job performance. Here, goal acceptance was significantly and positively related to job performance. While for individuals with longer length of service, commitment to and acceptance of task-goals was negatively associated with overall job performance. Perhaps here goal commitment may represent a restriction to job performance for the longer service employees. It should also be noted here that goal specificity was found to be similarly related to job performance for the short and long groups. These results tend to support Tosi and Carroll's (1968) findings that goal setting often results in feelings of undue constraint in the job. Here this appears to be true, but only for individuals who have been with the company a relatively long time. Length of service also appeared to influence the effects of goal acceptance in still another way. Only for individuals with relatively short time spent on the present job did goal acceptance appear to be a significant factor in enhancing job satisfaction. For the longer service group, goal acceptance appeared to be of no importance. Again, the same results were found in terms of goal specificity and again, the same conclusion may be reached. Namely, that while both goal acceptance and goal specificity were important factors for shorter service employees, they appear not to enhance satisfaction for the longer service group. In fact, looking at Table VI (page 39) and Table VII (page 43), it appears that in general, shorter service employees benefit more in terms of job performance and job satisfaction from goal setting than do longer service employees. Goal

acceptance further appeared to depend on the individual's need for achievement for effectiveness in improving self-rated performance. For individuals of low need to achieve, implications for improved performance were positive, while the high need group showed goal acceptance to be negatively associated with job performance, although neither correlation was significant. Also, the individual's need for autonomy was found to influence the effects of goal acceptance on job satisfaction. For only individuals low in need for autonomy in their jobs was goal acceptance strongly associated with improved satisfaction. It appears then, that significantly greater positive reactions to goal acceptance were seen for individuals of relatively shorter length of service on the job and with the University, for individuals of relatively low need for achievement, and individuals of low need for autonomy. And thus, it would seem vital that for MBO-type programs, the acceptance of task-goals be insured for those individuals identified who would most benefit from such goal setting programs.

As already noted, the effects of goal specificity in part were found to depend on the individual's length of service. Although in general, using specificity and clear goals was consistently associated with improved satisfaction and performance across characteristics of the individual and the situation and further support the initial findings of this goal attribute. However, only for employees with short service with the University did goal specificity have a positive association with job performance. It would be expected that

employees relatively new to the company would greatly benefit from the direction provided by clear and specific goals, while employees with longer service may find this restricting. Goal specificity also was found to be significantly and positively related to job satisfaction only for the employees who had been in their present jobs a relatively short time. As speculated, if goal setting affects job satisfaction in part by increasing interest and understanding of the task, the effectiveness of specific goals would be greatest for those relatively new to the task itself.

Greater insight into the impact of goal difficulty is also gained through investigation of the intervening variables. Although none of the potential intervening factors were found to moderate the effect of goal difficulty on job performance. Thus, it appears that in the present sample, the difficulty of the task-goals was of questionable importance for subsequent job performance. However, the association between goal difficulty and job satisfaction was found to be a function of several contingent factors. As before, with other goal characteristics, it again appears that the employee's length of service with the University should be considered in goal setting programs. While the difficulty of goals was unassociated with satisfaction for longer service employees, more difficult goals were found to be significantly associated with less satisfaction for shorter service personnel. It also appeared that the need strengths of the individual may play an important part in the effects of goal difficulty on satisfaction. Individuals low in need for affiliation

and need for dominance were found to show goal difficulty to be negatively related to job satisfaction, while individuals low in need for autonomy perceived the difficulty of goals to be positively related to job satisfaction. And thus in general, goal difficulty appears not to be directly related to job satisfaction, but to depend on at least four characteristics of the individual. Further, for the application of goal setting to industry, care should be taken in the assignment of difficult goals. It appeared from the present study that using difficult goals had no strong, positive impact on subsequent job performance and in certain cases resulted in negative reactions in terms of job satisfaction.

Looking at the results in general for each of the specified moderating variables, it appears that none of the intervening factors had a generalized impact to either job performance or satisfaction, but that different factors appeared to moderate different associations between the goal attributes and criteria measures. The effectiveness of goal setting on improving either job performance or job satisfaction however, appeared not to be dependent on the employee's sex or on characteristics of the employee's job. Both males and females responded similarly to the goal setting process, as expected, with females showing a slightly stronger association of the goal characteristics with job satisfaction. Characteristics of the task, particularly the amount of skill variety required in the job and the motivating potential of the task were further found to not be important factors in determining the effectiveness of

goal setting. In terms of skill variety, it may be predicted that the variety of skills required by the individual to do his job would determine to what extent goal setting would have a beneficial impact on job performance and job satisfaction. Support of this speculation was not found, but in total the results agree with similar findings by Frost and Mahoney (1976), who comparing repetitive and variable skill jobs, noted few differences in any of the associations between goal characteristics and job performance, and thus showing a lack of interaction between the two factors. The findings did indicate however, that interest in the task, more so than skill variety, appeared to account for the greater amount of variance. That is, the extent to which the task was interesting as perceived by the individual was a more powerful predictor of subsequent job performance than the extent to which the task required a variety of skills. This possibility may also have existed in the present study and accounted for the lack of support found for an interaction between skill variety and goal setting. However, the possibility that interest in the task may moderate the effects of goal setting on the criteria measures, was in fact investigated in the present study when the potential of the task to motivate the individual was considered, assuming intrinsic interest in the task is motivating. Investigation of this hypothesis however, showed no moderating effect on the goal setting-criteria relationship. Thus, at least in the present study, any predictions made that MPS would moderate

the effects of goal setting were not supported. Although these components have been shown to not interact, it is still quite possible that they are not independent in their effects on subsequent job performance or job satisfaction. In addition to the effects of goal setting on job performance and satisfaction, research has shown that MPS is a strong component for increased performance and satisfaction (Hackman and Oldham, 1976). And thus with the effects of both these components of the job having been shown to have an impact on employee reactions, it is possible that the effects of both the extrinsic influence of goal setting and the intrinsic impact of the task itself to be additive, not interactive, in their effect on employee reactions. Although firmer conclusions that these two components are additive cannot be found in the present study, indirect support is suggested by the fact that at least they are not shown to interact. It was further shown in the results that MPS is not independent of the effects of goal setting. As already noted, Tosi and Carroll (1968) have supported the speculation that goal setting may increase interest in the task. Here also it appears that goal setting had a significant, positive influence on the motivating potential of the task, as shown in Table I (page 26) where four of the five goal characteristics were significantly correlated with MPS. Thus, although it can only be speculated from the present study, it appears that goal setting does not interact with the motivating potential of the job, but that goal setting may have an impact on this characteristic of the task, as well as

characteristics of goal setting and MPS having an independent and additive effect on task performance and satisfaction.

Relatively strong support was found for a moderating effect of length of service on the job and with the University. It appeared that in both cases, individuals of short and long service react differently to certain goal setting characteristics. In particular, it was found that the impact of the acceptance of task-goals, the specificity of task-goals, and the difficulty of task-goals all were determined in part by the individual's length of service. In terms of job satisfaction, results were fairly consistent with a study by Shetty and Carlisle (1974). Their results showed more positive attitudes toward the MBO program for personnel employed a relatively short time. Here also, employees with shorter service on the job showed more positive associations for four of the five goal characteristics with job satisfaction, with two associations being significantly greater than the longer service group. Also in terms of job satisfaction, employees of shorter service with the University showed the difficulty of the task-goals to be negatively and significantly associated with job satisfaction. Length of service with the University also appeared to determine the effects of goal acceptance and goal specificity on overall job performance. Dachler and Mobley (1973) also found length of service to moderate the goal setting-performance relationship, with goal setting being significantly correlated with performance only for the longer service employees. Here however, four of the five goal attributes were negatively

associated with performance for the longer service group, while three of the five attributes were positively associated with performance for the shorter service group, with two of the associations differing significantly between groups. The results of the present study thus are not fully consistent with previous research and suggest that in total, goal setting procedures have a greater and more beneficial impact for employees of shorter service.

The results on moderating effects of need strength measures did not strongly support any hypothesized relationships, but in general are somewhat consistent with previous research. It appeared that the various need strengths did not have a generalized impact on the relations between variation in goal attributes and job performance and satisfaction, but that there did exist certain instances where the intervening effects of the need strengths were significant. In terms of job satisfaction, Steers (1975b) found similar results when investigating all the present need strengths except need for dominance. In the present study, need for affiliation, need for autonomy, and need for dominance all appeared to be important factors for consideration. This conclusion is particularly relevant for goal difficulty on which three of the need strengths showed a significant moderating effect. Further, the associations of participation in goal setting, feedback on goal progress, and goal acceptance with job satisfaction all were influenced by the individual's need strengths. However, final conclusions concerning the potential impact of the individual's need strengths on the goal setting-satisfaction relationships must await

further study. The research in general appears conflicting in nature as studies have also shown need strengths to have no significant impact on the goal setting-satisfaction association (Arvey and Dewhirst [In Press]). For job performance, it appeared that only need for achievement had a moderating effect for any of the goal characteristics. In the present study, acceptance of goals was found to be positively related to variations in self-rated performance for the low need group, while negatively related for the high need strength group, although neither correlation was significant. Need for achievement had no measurable impact on the remaining attribute-performance associations, which in total adds little support to the speculation made by Steers (1975) for a moderating effect to occur. Taking the present results on need strengths together, it appears that need strengths showed little impact on the associations of goal setting with job performance, while showing a somewhat stronger effect on the relations of goal setting with job satisfaction.

Before any final conclusions concerning the moderator variables can be drawn from the present results, several factors must be taken into consideration. Zedeck (1971) has noted that a crucial factor in the operation of moderators is what type of variable it is, discrete or continuous. Different techniques for investigating moderator variables treat the same variables differently. And thus, techniques more appropriate for discrete variables are different from those more appropriate for continuous variables. It would seem then that the assumptions made by one's moderator variables would have a major

bearing on the results found. It is likely that if some other approach to moderator research had been used in the present study, different results would have been found. Unfortunately, there is a lack of any systematic approach to the identification of moderators. Further, it was not practical in the present study to employ more than one technique, although such an approach would probably offer more conclusive results. Zedeck (1971) has also noted there are statistical limitations involved in moderator variable research. In the present study where moderators were investigated by subgrouping the sample on the intervening factor, two problems need to be brought out. The first problem concerns the number of subgroups that should be formed. The possibility exists for endless subgroups, particularly on those factors where there is a continuous distribution, such as demographic factors. It is often a matter of personal judgment as to the subgrouping strategy used, although how one does subgroup the sample may in fact determine the results found. Related to this, a second statistical problem is ending up with sample sizes too small on which to perform significance tests. The stability of the findings becomes questionable when sample sizes become too small. Schmidt (1977) noted that belief in the "law of small numbers" has led in the past to the false identification of moderator variables. He suggested that too much weight has been given to results found with small sample sizes, and that the actual number of true moderators that exist is quite small. Relatively small sample sizes exist in the present study, averaging about 30 subjects in each subgroup, which may question the stability of the present

findings. It appears from these problems and limitations, that firmer conclusions concerning the predicted moderator variables must await further research. It also appears that pertinent for moderator approaches, is the need for cross-validation of results.

In addition to these limitations, caution must be exercised, when interpreting the results of these moderating effects in general. A total of 135 separate moderating effects were tested for significant differences between subgroups. By chance alone, ($p < .05$), it would be expected that six or seven would be significant. Eleven such tests were in fact found to be significant, not many more than by chance alone.

CHAPTER V

SUMMARY AND CONCLUSION

It has been the intention of this research to investigate a goal setting procedure, Management-By-Objectives, for its practical feasibility as a managerial approach. It has been argued that the effectiveness of goal setting is determined to a large extent by the nature of the task-goals, and that the impact of these goal characteristics may be contingent on both the specific characteristics of the individual and the characteristics of the task situation in which goal setting occurs. How these factors interact and how goal setting subsequently had an impact on the individual was determined both in terms of job performance and job satisfaction.

From the present study, the nature of goal setting and its impact upon the employee appeared to be a function of at least four of the dimensions of the task-goals, with each of these relatively independent goal characteristics being effective to a greater or lesser degree in terms of improved performance and/or satisfaction. However, in few instances were the goal characteristics positively related to both job performance and job satisfaction, or consistently related to either measure across characteristics of the individual and situation. In particular, the results showed that allowing employees to participate in establishing their own goals was consistently related across both personality and task characteristics to improved job performance and job satisfaction. However, in certain cases the impact of participation

appeared to depend to a limited degree on such factors as the individual's need strengths. In addition, insuring that task-goals were clear, specific, and definable, led to both greater job satisfaction and greater perceived job performance, although it appeared that factors such as the individual's length of service with the University and on the present job often determined, in part, the impact of goal specificity. It further appeared that the benefits gained from maintaining meaningful feedback on goal progress, as well as insuring acceptance of task goals, were seen in improved job satisfaction, although not shown in terms of increases in job performance. These results were fairly consistent across the sample, but in certain instances, appeared dependent on such factors as the individual's need strengths, length of service with the University, and length of service on the job. And finally, the results showed that the difficulty of the task-goals had little impact on job performance under any of the conditions studied, although such factors as the individual's need strengths and length of service with the University did appear to determine the employee's reaction to difficult goals in terms of job satisfaction.

Thus, looking at the results in total shows that not all characteristics of goal setting have an equal impact on both performance and satisfaction, and that each goal attribute does not appear to be consistent in its association to these measures across all circumstances. Thus, the practical feasibility of goal setting procedures in applied settings, appears from the present results to, in fact, depend on a

knowledge of the specific impact of each of the goal characteristics and further, of the specific circumstances under which the impact of these task-goals attributes is either enhanced or negatively altered. An important key to the effective use of the goal setting process may thus be in knowing which task-goal attributes are more effective for improved performance and satisfaction. That is, knowing which characteristics of the goal setting process are most strongly associated with the success of goal setting, and under what circumstances goals are most effective would greatly enhance the effective use of such a program in an organization. Further, it appears important that management moniter such programs and be aware of the need to amend goal setting procedures to meet the specific circumstances. For example, from the present study, it would appear that an employee's length of service determined to a relatively large extent, the actual impact many of the characteristics of the goal setting process had upon the worker. Employees of relatively shorter service appeared to benefit most from goal setting where the goals were less difficult, highly specific, accepted by the worker, and for which the worker had participated in setting. And thus, it would be advantageous to implement goal setting procedures which have taken these factors into consideration for the newer employees. It seems in any case, that there is no one best way to establish and maintain a goal setting strategy, but that the successful application of any specific system depends on the particular needs and characteristics of the situation in which it is applied.

Consideration must be given to several factors present in the research before firmer conclusions can be drawn. First, it should be recognized that the results of this study were from a relatively small, nonrandom sample, selected from a relatively atypical type of organization. As such, generalization of these findings must be made cautiously and firmer conclusions must await replication of these findings.

Second, the results in terms of the associations between goal setting and job performance are most likely due to the lack of reliability in the performance measures. Further, the present research attempted to demonstrate significant associations measured in terms of an overall rating. Although here as in many cases such overall measures are the only feasible alternative, it seems reasonable to assume that few strong associations could be found under such circumstances. More realistically, applied research should attempt to talk in terms of the effects of the goal characteristics for each task-goal on more relevant and more reliable performance measures.

Thirdly, the moderating factors appeared not to have a generalized impact across all goal characteristics but for specific intervening factors to have an impact on certain associations. Although this was expected, the number of moderating effects found to be significant was little more than that expected by chance alone. Any findings with moderator variables must also be qualified within the current state of moderator techniques. Lack of a systematic approach to the identification of moderating factors as well as the statistical

limitations that exist seriously limit the impact of results. It appears that until the utility of moderator variable techniques is advanced, any findings will be less than conclusive.

It appears in any case that future research must begin to incorporate these and other factors in order to understand more fully the nature in which goal setting may have an impact on an organization. The list of those factors existing in the literature and used in this study as moderators, cannot nearly be concluded as complete. Several other factors not included in the present study which have received attention in the past need to be investigated further. One area in particular which has received some attention in previous studies, is the degree of managerial support and involvement given to goal setting programs. Ivancevich (1972) noted that the diluted effects of goal setting over time could, in part, have been due to a lack of strong support by upper management. Such could have been the case here, and in part accounted for the lack of strong associations between goal setting and job performance. Clearly the reinforcing effects of managerial support on the impact of goal setting seems warranted for further research.

Fourth, the list of task-goal attributes used in the present study cannot be concluded as finite, and further research is needed to determine more conclusively the nature of goal setting in practical settings. Most promising in this light is research where the effects of the goal attributes can be manipulated and tested under controlled conditions, whereby the impact of the goal characteristics both independently and

in combination can be more conclusively determined. Peer competition for goal attainment, for example, was not included in the present study as a goal characteristic, although under certain situations competition may play an important role in the job environment and be a factor to consider in goal setting procedures. Also, the role of goal acceptance or committance was not sufficiently tested in the present study to account for any strong associations, and further research is needed to more specifically define the nature of goal acceptance and clarify its importance to goal setting procedures.

Knowing that certain of the goal characteristics are consistently related to the criteria measures and further knowing what circumstances have an important bearing on these associations may prove to be desirable from a prescriptive standpoint, but by itself offers little towards increased understanding of the process by which goal setting works. It appears that what is lacking most in the present literature is a unifying framework from which testable hypotheses may be formulated. Any predictions made on the motivational aspects of each of the goal attributes can only be conjectural at this point. Clearly, future research needs to begin working from such a theoretical base. Most promising for this direction may be viewing the effects of goal setting within an expectancy/valence motivational framework. Such a framework for analysis offers a relatively comprehensive theory of motivation, in which important characteristics of the individual and the task situation may be incorporated. Only from such a theoretical basis may the nature of goal setting and its impact on the organization be more fully understood.

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APPENDIX

NUMBER_____

GOAL SETTING SURVEY

You are being asked to participate in a study designed to investigate workers' reaction to the use of goal setting. The study concerns measuring certain aspects of the goal setting procedure and how these factors affect the individual and his job. In the pages to follow you will find questions dealing with these areas.

This is a fact-finding survey; it is not a test. Even though some items may appear to be similar, they are not duplicate or "trick" questions. By each question there is space for you to mark your response in one of several categories. Please read the instructions at the beginning of each section before answering those questions. The questionnaire should take no longer than one half hour to complete. Please do not dwell on any one question too long.

Each person has been assigned a number, at the top of this page. The purpose of this number is so that the participant's responses can be later matched with the performance form completed by their director. This number has been assigned by and is known by only their director. Everything you say in this questionnaire will remain strictly confidential. No one will see your completed questionnaire. By this procedure, the confidentiality of both the performance form and this questionnaire can be guaranteed.

Naturally, you are not to identify yourself in any way. When you are through, place your questionnaire in the sealed box as you leave the room.

THANK YOU FOR YOUR COOPERATION.

In sections I and II of the questionnaire you are asked to describe certain aspects of your job. Please be as objective as possible in describing your job - regardless of how much you like or dislike your job.

SECTION ONE

Listed below are several questions concerning your present job. For each question, you are to circle the number which corresponds to the most accurate description of your job.

1. To what extent does your job require you to work closely with other people (either "clients" or people in related jobs in your own organization)?

1	2	3	4	5	6	7
Very little; dealing with other people is not at all necessary in doing the job.			Moderately; some dealing with others is necessary.			Very much; dealing with other people is absolutely essential and crucial part of doing the job.

2. How much autonomy is there in your job? That is, to what extent does your job permit you to decide on your own how to go about doing the work?

1	2	3	4	5	6	7
Very little; the job gives me almost no personal "say" about how and when the work is done.			Moderately accurate; many things are standardized and not under by control, but I can make some decisions about the work.			Very much; the job gives me almost complete responsibility for deciding how and when the work is done.

3. To what extent does your job involve doing a "whole" and identifiable piece of work? That is, is the job a complete piece of work that has an obvious beginning and end? Or is it only a small part of the overall piece of work, which is finished by other people or by automatic machines?

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

My job is only a tiny part of the overall piece of work; the results of my activities cannot be seen in the final product or service.

My job is a moderate-sized "chunk" of the overall piece of work; my own contribution can be seen in the final outcome.

My job involves doing the whole piece of work from start to finish; the results of my activities are easily seen in the final product or service.

4. How much variety is there in your job? That is, to what extent does the job require you to do many different things at work, using a variety of your skills and talents?

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

Very little; the job requires me to do the same routine things over and over again.

Moderate variety.

Very much; the job requires me to do many different things, using a number of different skills and talents.

5. In general, how significant or important is your job? That is, are the results of your work likely to significantly affect the lives or well-being of other people?

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

Not very significant; the outcomes of my work are not likely to have important effects on other people.

Moderately significant.

Highly significant; the outcomes of my work can affect other people in very important ways.

6. To what extent do managers or co-workers let you know how well you are doing on the job?

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

Very little; people almost never let me know how well I am doing.

Moderately; sometimes people may give me "feedback"; other times they may not.

Very much; managers or co-workers provide me with almost constant "feedback" about how well I am doing.

7. To what extent does doing the job itself provide you with information about your work performance? That is, does the actual work itself provide clues about how well you are doing--aside from any "feedback" co-workers or supervisors may provide?

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

Very little; the job itself is set up so I could work forever without finding out how well I am doing.

Moderately; sometimes doing the job provides "feedback" to me; sometimes it does not.

Very much; the job is set up so that I get constant "feedback" as I work about how well I am doing.

SECTION TWO

As in section I, listed below are a number of statements which could be used to describe your job. You are to indicate whether each statement is an accurate or inaccurate description of your job. Following each statement, place a mark in the column which best describes how accurate the statement is of your job.

	1 Very Inaccurate	2 Mostly Inaccurate	3 Slightly Inaccurate	4 Uncertain	5 Slightly Accurate	6 Mostly Accurate	7 Very Accurate
1. The job requires me to use a number of complex or high level skills.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
2. The job requires a lot of cooperative work with other people.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
3. The job is arranged so that I do not have the chance to do an entire piece of work from beginning to end.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
4. Just doing the work required by the job provides many chances for me to figure out how well I am doing.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Very Inaccurate	2 Mostly Inaccurate	3 Slightly Inaccurate	4 Uncertain	5 Slightly Accurate	6 Mostly Accurate	7 Very Accurate
5. The job is quite simple and repetitive.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
6. The job can be done adequately by a person working alone--without talking or checking with other people.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
7. The supervisors and co-workers on this job almost <u>never</u> give me any "feedback" about how well I am doing in my work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
8. This job is one where a lot of other people can be affected by how well the work gets done.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Very Inaccurate	2 Mostly Inaccurate	3 Slightly Inaccurate	4 Uncertain	5 Slightly Accurate	6 Mostly Accurate	7 Very Accurate
9. The job denies me any chance to use my personal initiative or judgment in carrying out the work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
10. Supervisors often let me know how well I am performing on the job.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
11. The job provides me the chance to completely finish the pieces of work I begin.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
12. The job itself provides very few clues about whether or not I am performing well.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
13. The job gives me considerable opportunity for independence and freedom in how I do the work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Very Inaccurate	2 Mostly Inaccurate	3 Slightly Inaccurate	4 Uncertain	5 Slightly Accurate	6 Mostly Accurate	7 Very Accurate
14. The job itself is <u>not</u> very significant or important in the broader scheme of things.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

SECTION THREE

Below are listed statements that describe various things people do or try to do on their jobs. You are to indicate how well that statement describes your own behavior when you are at work. As before, please a mark on the column which best describes your own actions. Please answer all questions frankly.

	1 Never	2 Almost Never	3 Seldom	4 Sometimes	5 Usually	6 Almost Always	7 Always
1. I do my best work when my job assignments are fairly difficult.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
2. When I have a choice, I try to work in a group instead of by myself.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
3. In my work assignments, I try to be my own boss.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
4. I seek an active role in the leadership of a group.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
5. I try very hard to improve on my past performance at work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
6. I pay a good deal of attention to the feelings of others at work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
7. I go my own way at work regardless of the opinions of others.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Never	2 Almost Never	3 Seldom	4 Sometimes	5 Usually	6 Almost Always	7 Always
8. I avoid trying to influence those around me to see things my way.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
9. I take moderate risks and stick my neck out to get ahead at work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
10. I prefer to do my own work and let others do theirs.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
11. I disregard rules and regulations that hamper my personal freedom.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
12. I find myself organizing and directing the activities of others.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
13. I try to avoid any added responsibilities on my job.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
14. I express my disagreement with others openly.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
15. I consider myself a "team player" at work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
16. I strive to gain more control over the events around me at work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Never	2 Almost Never	3 Seldom	4 Sometimes	5 Usually	6 Almost Always	7 Always
17. I try to perform better than my co-workers.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
18. I find myself talking to those around me about non-business related matters.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
19. I try my best to work alone on ajob.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
20. I strive to be "in command" when I am working in a group.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

SECTION FOUR

The following questions deal with how you feel about your job. For each statement five responses are available that indicate how satisfied or dissatisfied you are with that aspect of your job. Place a mark in the column that comes closest to how you feel about the work issue described by the statement.

	1 Very Dissatisfied	2 Dissatisfied	3 Neutral	4 Satisfied	5 Very Satisfied
1. Being able to keep busy all the time.	(___)	(___)	(___)	(___)	(___)
2. The chance to work alone on the job.	(___)	(___)	(___)	(___)	(___)
3. The chance to do different things from time to time.	(___)	(___)	(___)	(___)	(___)
4. The chance to be "somebody" in the community.	(___)	(___)	(___)	(___)	(___)
5. The way my boss handles his men.	(___)	(___)	(___)	(___)	(___)
6. The competence of my supervisor in making decision.	(___)	(___)	(___)	(___)	(___)
7. Being able to do things that don't go against my conscience.	(___)	(___)	(___)	(___)	(___)
8. The way my job provides for steady employment.	(___)	(___)	(___)	(___)	(___)

	1 Very Dissatisfied	2 Dissatisfied	3 Neutral	4 Satisfied	5 Very Satisfied
9. The chance to do things for other people.	(___)	(___)	(___)	(___)	(___)
10. The chance to tell people what to do.	(___)	(___)	(___)	(___)	(___)
11. The chance to do something that makes use of my abilities.	(___)	(___)	(___)	(___)	(___)
12. The way company policies are put into practice.	(___)	(___)	(___)	(___)	(___)
13. My pay and the amount of work I do.	(___)	(___)	(___)	(___)	(___)
14. The chance for advancement on the job.	(___)	(___)	(___)	(___)	(___)
15. The freedom to use my judgment.	(___)	(___)	(___)	(___)	(___)
16. The chance to try my own methods of doing the job.	(___)	(___)	(___)	(___)	(___)
17. The working conditions.	(___)	(___)	(___)	(___)	(___)
18. The way my co-workers get along with each other.	(___)	(___)	(___)	(___)	(___)
19. The praise I get for doing a good job.	(___)	(___)	(___)	(___)	(___)
20. The feeling of accomplishment I get from the job.	(___)	(___)	(___)	(___)	(___)

SECTION FIVE

Listed below is a set of statements which may or may not describe your own job objectives toward which you are presently working. Please read each statement carefully and then place a mark in the column which best describes your degree of agreement or disagreement with the statement.

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Neutral	5 Slightly Agree	6 Moderately Agree	7 Strongly Agree
1. I am allowed a high degree of influence in the determination of my work objectives.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
2. I should not have too much difficulty in reaching my work objectives; they appear to be fairly easy.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
3. I receive a considerable amount of feedback concerning my quantity of output on the job.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
4. I consciously intend to work hard and complete all my work objectives.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Neutral	5 Slightly Agree	6 Moderately Agree	7 Strongly Agree
5. My work objectives are clear and specific; I know exactly what my job is.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
6. My work objectives will require a great deal of effort from me to complete.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
7. I really have little voice in the formulation of my work objectives.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
8. I am provided with a great deal of feedback and guidance on the quality of my work.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
9. I think my work objectives are ambiguous and unclear.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
10. It will take a high degree of skill and know-how on my part to fully attain my work objectives.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Neutral	5 Slightly Agree	6 Moderately Agree	7 Strongly Agree
11. The setting of my work goals is pretty much under my own control.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
12. My boss seldom lets me know how well I am doing on my work toward my work objectives.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
13. I think of the objectices toward which I am working as my <u>own</u> goals for the tasks.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
14. I understand fully which of my work objectives are more important than others; I have a clear sense of priorities on these goals.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
15. My work objectives are quite difficult to attain.	(___)	(___)	(___)	(___)	(___)	(___)	(___)
16. My supervisor usually asks for my opinions and thoughts when determining my work objectives.	(___)	(___)	(___)	(___)	(___)	(___)	(___)

Biographical Background. Please indicate;

1. Sex: Male_____ Female_____

2. Length of service with the University _____.

3. Length of service in present job _____.

_____

The final area below is concerned with how you would rate your overall performance for the last six months. Please indicate your performance by placing a check in the blank below the number which best describes your performance.

1	2	3	4	5	6	7	8	9
(___)	(___)	(___)	(___)	(___)	(___)	(___)	(___)	(___)
Excellent: Far exceeds the requirements of the job. Very few employees have performed their job as effectively.		Highly satisfactory: Exceeds the requirements of the job. Have performed the job in a better than satisfactory and effective manner.		Satisfactory: Meets the requirements of the job. Have performed the job in a satisfactory and effective manner.		Adequate; Partially meets the requirements of the job. Have performed the job in a sufficient, barely satisfactory manner.		Unsatisfactory Have not met the requirements of the job. Have performed the job below desired standards.

NUMBER_____

For that person identified by the number above, please appraise his/her overall performance for the last six months. Do so by placing a check in the blank below the number which comes closest to this person's level of performance.

1	2	3	4	5	6	7	8	9
(___)	(___)	(___)	(___)	(___)	(___)	(___)	(___)	(___)

Excellent: Far exceeds the requirements of the job. Very few employees have performed their job as effectively.

Highly Satisfactory: Exceeds the requirements of the job. Has performed the job in a better than satisfactory and effective manner

Satisfactory: Meets the requirements of the job. Has performed the job in a satisfactory and effective manner.

Adequate: Partially meets the requirements of the job. Has performed the job in a sufficient, barely satisfactory manner.

Unsatisfactory: Has not met the requirements of the job. Has performed the job below desired standards.

VITA

Douglas Brian Kamp was born on February 6, 1951, in Canton, Ohio. He attended school in Shelby, North Carolina, and graduated from Shelby Senior High School in May, 1969. High school activities included sophomore and senior class officer and lettering in football and track. The following September, he entered Wofford College in Spartanburg, South Carolina. While in college, activities included President of Kappa Sigma Fraternity and a member of Psi Chi. He completed the requirements of the Psychology program and graduated with a B. S. degree in May, 1973.

In August, 1973, he was employed as a Personnel Counselor with the F. & R. Lazarus Company in Columbus, Ohio. In October, he was promoted to Personnel Manager of one of the branch locations.

In September, 1975, he entered the Graduate School of The University of Tennessee, Knoxville. He received his Master of Science degree with a major in Organizational Psychology in August, 1977.

Contributions to the Personnel and Psychological Professions have included assisting his father, a Management Consultant, in the administration of employee opinion surveys and in researching their statistical properties. He presented a paper to the Southeastern Psychological Association on "Behavioral Contrast" in 1973. He co-authored a paper entitled, "Crowding in Workspaces: Architectural Correlates of Satisfaction and Performance," presented to the American Psychological Association in August, 1977. He conducted research on the effects of

economic and job-related factors on recidivism among ex-offenders as a Graduate Research Assistant.

He is married to the former Madeline Carol Hughes of Shelby, North Carolina.