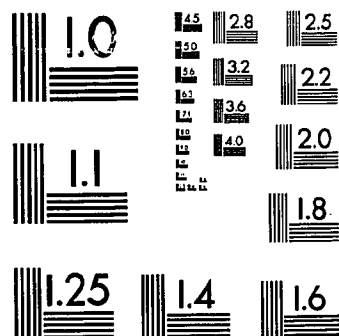
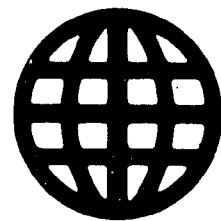


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A FIELD EXPERIMENT EXAMINING MODERATING EFFECTS OF LOCUS OF
CONTROL ON MANAGEMENT BY OBJECTIVES

City University of New York

PH.D. 1985

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A FIELD EXPERIMENT EXAMINING
MODERATING EFFECTS OF LOCUS OF CONTROL
ON MANAGEMENT BY OBJECTIVES

BY

MIGUEL F. CAIROL


A dissertation submitted to the Graduate
Faculty in Business in partial fulfillment
of the requirements for the degree of Doctor
of Philosophy, The City University of New York

1985

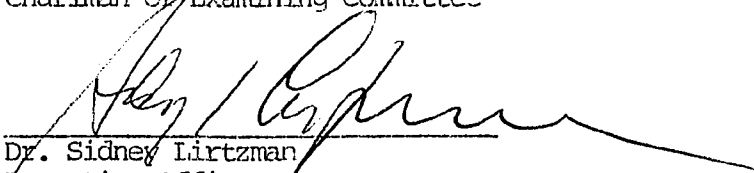
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This manuscript has been read and accepted for the Graduate Faculty in Business in satisfaction of the dissertation requirement for the degree of Doctor of Philosophy.

7/1/85
Date


Dr. Mahmoud Wahba
Chairman of Examining Committee

7/2/85
Date


Dr. Sidney Lirtzman
Executive Officer

Dr. Donald Vredenburgh
Dr. Lawrence Bridwell
Dr. Virginia Schein
Supervisory Committee

The City University of New York

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CHAPTER ONE

INTRODUCTION

The Management by Objectives (MBO) approach to management has been the subject of many journal articles and books during the past thirty-five years. Most of the work that has been done is descriptive of MBO applications in a variety of organizations. A number of studies of varying degrees of quality were found in the literature but they lack satisfactory research into the mechanisms by which MBO is purported to affect a number of important organizational variables as well as the participants in MBO programs.

Despite the many efforts, current research to date has offered no clear explanation of how MBO works to influence individual performance, motivation, job satisfaction, and powerlessness. Many tentative explanations have been advanced, but they have not been adequately tested or satisfactorily developed. Most MBO studies have failed to determine how individual variables interact to influence performance and how a person's personality characteristics may affect his assimilation of the MBO program and his effective participation in it. It is the purpose of this study to investigate, through a field quasi-experiment not only if certain personal characteristics influence the acceptance of MBO, but also how an MBO program influences the individuals that participate in it in terms of performance, motivation, job satisfaction, and alienation.

THE MBO PROCESS

Management by Objectives (from here on MBO), according to Peter Drucker (1954) who has been credited as its originator, involves the setting of specific performance objectives, establishing methods of assessing the performance and development of managers, and providing them with the proper challenges and stimuli to strive toward the attainment of their goals. Managers have to set multiple objectives and make adequate judgments about these objectives, how they are set, and how to measure progress toward their attainment. Above all, managers must concentrate on performance and results. Drucker indicated that the only necessary conditions in the MBO process are that objectives must be defined in terms of their contribution to the overall organizational objectives, and that the managers be given enough control to attain such objectives.

The MBO process described by Douglas McGregor (1957 and 1960) centered around each manager establishing short-term goals and plans for their achievement, after agreeing with his superior on his most important job responsibilities. This was to be followed by a process of self-appraisal and a discussion between the manager and his superior in which new short-term goals and plans would be set. This process was intended to increase the manager's understanding of his goals, and it cast the superior's role as that of a helper rather than a judge. McGregor proposed utilizing MBO to alleviate the failure of performance appraisal methods being used at the time.

Two decades later, Carrol and Tosi (1973) defined MBO as "...the

establishment and communication of organizational goals, the setting of individual objectives pursuant to the organizational goals, and the periodic and then final review of performance as it relates to the objectives." Latham and Yukl (1975) further specified that MBO is "...an approach to planning and performance appraisal that attempts to clarify employee role requirements, relate employee performance to organizational goals, improve manager-subordinate communications, facilitate objective evaluation of employee performance, and stimulate employee motivation."

Ivancevich, Donnelly, and Gibson (1975) refer to MBO as "...a philosophy of managing that focuses on initiating and stimulating better performance," pointing out that it is as Raia (1974) stated "...a 'proactive' rather than a 'reactive' style of managing," and "...a results-oriented approach that attempts to remove personal favoritism and gamesmanship from the appraisal of task performance." They add that "MBO is also intended to be a vehicle for encouraging personal development by providing employees with the opportunity to participate and become committed to objectives which they helped create."

The common factors that permeate the MBO process are mutual goal setting between employees and supervisors by some discussion method that leads to agreement on goals between them, the delegation of authority and access to necessary resources to attain objectives, and periodic assessment of progress being made toward goals with final assessment or appraisal conducted at the end of the agreed upon

period. At this point, the process is started again by setting new goals for the subsequent period.

According to McConkey (1975), MBO has undergone three major stages in its development: (1) The approach proposed by Drucker, which emphasized individual goal setting and performance assessment, and its adoption in history. (2) A micro approach that attempted to improve management effectiveness at the individual level through goals that managers could strive to reach and for which they would receive recognition for their achievements. (3) A macro approach that conceives of MBO as a total system and the organization as a total entity aiming at overall organizational effectiveness. The macro approach to MBO directs and balances individual managerial results toward the achievement of organizational objectives, thereby insuring the long-term future of the organization.

Doris R. Seward (1976) indicates that: "MBO is emerging today as a system designed to integrate key management processes and activities in a logical and consistent manner. Interdependency of MBO and ongoing organizational processes reinforce the concept of MBO as a "...way of life."

THE PRACTICE OF MBO

Although MBO has been widely accepted and put into practice in many types or organizations, it is not used in the same way or for the same purposes in all of them. Some use MBO as a method of evaluating managerial performance, others use it for planning, and still others

use it as an overall management system. Despite this lack of uniformity in use, and the lack of solid research and theory behind it, MBO has had fairly wide appeal in the United States and Europe.

In an informal survey, Odiorne (1972) found that MBO was used by 37.6 per cent of the 1971 Fortune 500 largest U.S. industrial corporations, 38 per cent of the 50 largest insurance companies, 34 percent of the 50 largest diversified financial companies, 30 per cent of the 50 largest banks and 30 percent of the 50 largest utilities.

The adoption of MBO has also spread to non-profit organizations and institutions in the public sector, such as Utah State University (Shetty and Carlisle, 1974), the City of Burbank, California (Seward, 1976), State of Colorado (Brown, 1975), the U.S. Forest Laboratory (McConkey, 1973) and the U.S. Department of Health, Education, and Welfare (Brady, 1973).

A number of researchers have observed that many companies they studied claim to have MBO programs in operation, but cannot determine the contributions of the programs to the effectiveness or performance of the organizations. This seems to suggest that the management of many companies have intuitively adopted MBO without making any attempts to evaluate its merits factually.

In a study of 900 organizations using MBO in the United States and the United Kingdom, Varney (1972) found that two-thirds of the

organizations were using MBO to appraise unit and individual performance. Their programs were working only moderately well, however. Varney (1972) reported that the programs in most of the companies "...did not come up to the high levels we had been led to believe by various experts who frequently give glowing testimony concerning organizational experiences with MBO. The study further indicated that there are many serious problems encountered by companies and organizations seeking to make MBO work."

In a second study conducted by Varney (1973) of 60 companies using MBO in the same countries, Varney (1973) confirmed the previous results. Varney found that 19 per cent of the participants indicated that their programs were successful to very successful, 65 per cent said they were working fairly well, and 16 per cent said that they were not working well or were unsuccessful. When asked to what extent they accomplished their objectives (in terms of percentage of goal achievement accomplished) over 65 per cent of the participants thought that they were doing well if they had accomplished 60 to 65 per cent of their chosen objectives. According to Varney, the major problems that prevented these companies from making MBO work were: (1) difficulty in creating workable plans which were followed by employees and subordinates, (2) establishment of good review and feedback systems, (3) lack of sound and complete measurement criteria, and (4) getting people in the organization to willingly accept the concepts of MBO.

Although a number of companies have experienced only moderate

success with their MBO programs, many managers believe that MBO can have a positive impact on the effective performance of their organizations. Nevertheless, there have been few attempts to research the concepts involved in MBO or to develop a sound theoretical basis for the process. MBO seems to have gained acceptance primarily on the basis of its practical feasibility and widespread appeal.

According to some of the less complimentary reports reviewed, there are a number of practical problems in implementing MBO, i.e. operational problems, measurement problems, human problems, and political problems. Should we conclude that MBO's problems are not soluble or that there are too many to make it worthwhile? I believe that we cannot yet answer this question. But a number of cautions are in order. The management of a company should not initiate an MBO program until they carefully consider the feasibility of such a program through a small scale experiment. Although after over twenty years of use we can hardly consider MBO a fad, it can certainly be a passing fancy. In fact, under these circumstances it can be a costly undertaking for the organization adopting it without evaluation.

What Accounts for the Continuing Acceptance and Apparent Success of MBO?

Should we conclude that the widespread adoption of MBO by all kinds of companies is a measure of success? This is a relatively hard question to answer, since in practice, MBO means so many different things to different people. According to Reif and Bassford

(1973), "...In talking with managers about management by objectives, it is disconcerting to discover how many versions (the authors regard them as misconceptions) there are of the concept. Quite often MBO is viewed as an objective setting process, and no more. At other times, it is considered an approach to performance appraisal."

Some practitioners regard MBO as essentially a management development tool. Others have construed MBO to be a tool that is useful in determining executive compensation. Still others consider the concept to be synonymous with manpower planning. Even in those organizations that follow all the advice of the consultants and honestly attempt to make it work at its inception, MBO has a tendency to deteriorate. In some organizations, managers believe that MBO works without having any substantive proof of how effective the system is. As Varney (1974) pointed out, we have been "...struck by the obvious inability of top executives and top managers to produce evidence that MBO is actually helping the operations and not hindering." What MBO may be doing is providing management with an intuitive orientation toward objectives that supposedly increases productivity and enhances the economic aspects of the firm but no real evidence exists. This usually happens in organizations that follow the advice of the many reports of MBO success stories and which get into MBO programs without a thorough evaluation of its implications for their organizations.

In those organizations where MBO comes via the personnel department or via organizational development, factual evidence as to

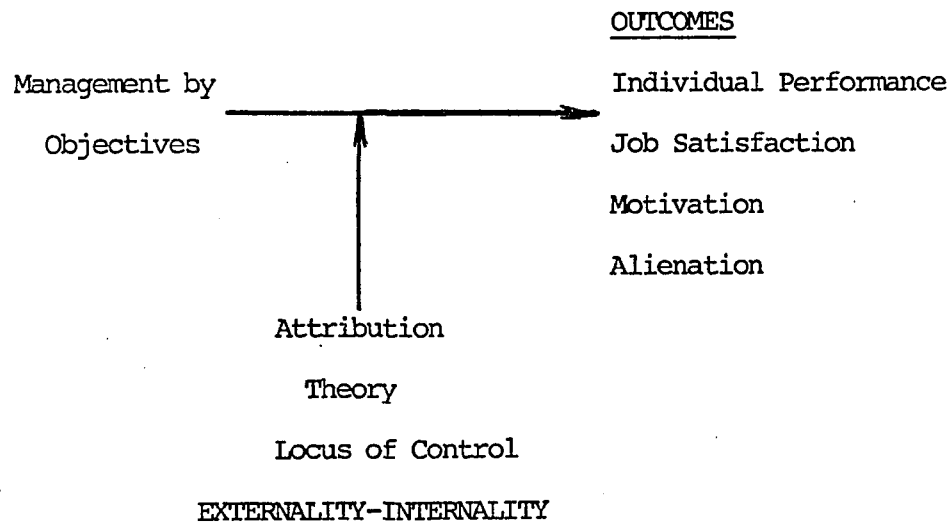
whether MBO helps in the areas of compensation, communication, motivation, participation, etc., is usually lacking but since according to reports in the literature, MBO is supposed to help in these areas it is assumed intuitively to be so and MBO is perceived to be working. In summary, MBO seems to have been accepted widely more on a basis of faith than on hard evidence.

PURPOSE OF THE STUDY

This study proposes to investigate how some purported expected outcomes from the adoption of an MBO program may be affected by the internal/external orientation of the participants in the program through their locus of control and how this orientation affects subsequent performance, job satisfaction, motivation, and alienation. Performance, motivation and job satisfaction have been chosen because they appear in study after study as the positive outcomes of MBO and as such they deserve attention in this new set of conditions. Alienation among workers is a very important phenomenon affecting all the relationships in organizations and since it has never been studied in connection with MBO its inclusion may expand our understanding of MBO. Since a response to MBO is not likely to affect all the participants in the program in the same manner, it is highly desirable to investigate how MBO may affect different types of individuals. This kind of investigation is a departure from those generally found in the MBO literature which have studied of the effect of MBO on group outcomes.

The research method used in this study is a quasi-experimental field study. An MBO intervention on an experimental group will be compared to a control group in two physically separate offices of a financial services organization. An attribution theory framework will be used to investigate the effects of the MBO intervention on the individuals who differ in terms of internal/external orientation and how this intervention affect certain expected outcomes of the MBO program. Locus of control, which is measured by how people make internal or external attributions, will be investigated to test its moderating effect on of the MBO intervention, and its subsequent effect on the expected outcomes of the MBO intervention.

The model to be used to guide this research appears below:



In theory, MBO programs are supposed to provide not only a clear understanding of what organizational goals and objectives are, but also motivate to the participants in the program to strive to attain mutually agreed upon objectives.

It has also been claimed that the MBO process increases job satisfaction of the participants in the program due to the added perceived control they have over their work environment through mutually agreed upon goal setting. This study will attempt to determine how such outcome variables as performance, job satisfaction, and motivation are related to the MBO process.

Among many potential benefits that may be obtained from effective management programs, the reduction of alienation among the members of the organization is a very plausible and desirable goal. Furthermore, on a long term basis, this factor may affect who stays and who leaves the organization and ultimately the efficiency and effectiveness of the organization. Decreased alienation has been chosen for this study as a possible outcome of the MBO intervention. This variable has never been reported in the literature as a potential MBO outcome.

Individual effects will be operationalized by means of the variable "locus of control", which is considered a relatively stable characteristic in people. It measures the tendency of individuals to ascribe their success in a task to internal causes (effort and

ability) and their failure to external causes (task difficulty and luck). It is theorized in this study that locus of control will have a moderating effect on the outcomes expected to be produced by the intervention.

MBO, although widely accepted and practiced in a variety of ways, has not been rigorously evaluated and tested. Empirical research has been sparse. The majority of the work reported in the literature dealt with MBO applications by practitioners in a variety of organizations. The empirical research reported in the literature, postfacto correlational studies using self-report measures of changes in attitudes and perceptions among the participants in MBO. Very few studies have used hard measures of performance to evaluate the relationship of the MBO program to the efficiency and effectiveness of the organization.

No quasi-experimental field research project of MBO using a control group has been reported in the literature. The present research will be of the above mentioned nature. Hard measures of performance will be utilized to evaluate the effects of MBO. The present study will attempt to further contribute to the understanding of MBO by testing its effects on individuals involved in it. No other study found in the review of the literature has considered the effect of MBO on alienation as an outcome of the MBO program. This study will test the above mentioned variable.

Many of the studies reported in the literature have dealt with simple relationships among variables purported to be affected by MBO. This poses a problem in the sense that the relationships which are likely to be developed from a complex human relationship or set of relationships resulting from the introduction of MBO in a work setting are very unlikely simple and unidimensional. This study will be among the very few reported in the literature that attempts to evaluate MBO in a multi-variate fashion.

It is essential that the steps taken in the training of the participants in the MBO process are taken very carefully to ensure that the intervention is applied properly. The problem of instituting a basic change in managerial approach, the introduction of MBO, will be approached by adhering very carefully to the steps outlined in the methodology section of this study. A particularly difficult problem is the translation of organizational objectives into individual objectives through the participative approach. Through training, coaching and supervision, this potential problem will be avoided.

CHAPTER TWO

REVIEW OF THE LITERATURE

All of the studies connected with MBO found in the literature to date are survey studies. This points to the need to test MBO by other methods. The samples used in these studies are managers at different organizational levels, a female sample (Steers, 1975) and faculty members of a university (Shetty and Carlisle, 1974). Most of the authors of the studies are people who have participated in MBO programs as consultants and/or as managers. Therefore, there is a massive amount of descriptive literature. Despite some of the methodological problems, which are not unlike those of many other field studies, a number of observations can be made from the review of the MBO literature.

The MBO literature has been divided into two areas for review purposes. The first part discusses the general findings relevant to the variables which are investigated in the present study, and the second part reviews methodological problems found in the existing research.

Relevant attribution theory studies were difficult to find because the majority of the work that has been done in this area deals with animal experiments or with experiments utilizing paid or volunteer college students. It is only very recently that organizational settings are beginning to be utilized. Nevertheless, several relevant studies were found and are reviewed in this chapter.

Participation in Setting Objectives

With regard to participation in setting objectives, evidence exists that MBO is not carried down to lower management levels (Raia, 1965 and 1966). Yukl and Latham (1975) report that the results of testing whether higher performance results from participation are mixed. On the other hand, Kerr (1976) and Byrd and Cowan (1974) recommend a group approach to improve participation under MBO. This will reduce the competitiveness and individuality that traditional MBO brings, with its resulting negative consequences on productivity and quality. The group approach will tend to play down status differentials that result in cautious and polite relationships between superior and subordinate under the traditional MBO scheme. This latter view of what should be done to improve MBO is innovative, but it does not seem to have generated widespread adoption or support.

MBO Effects on Performance

According to Raia (1966) productivity was increased over time through an MBO program. Goal-setting was found to be more important for performance improvement than for participation, and specific work goals were found to be very effective in dealing with performance problems. Production performance was found to increase for the individuals involved in MBO, Raia (1965).

French, Kay and Meyer (1966), and Carrol and Tosi (1968) indicated that managers felt MBO was an attempt to clarify performance evaluations of individuals and that MBO was a club to pressure for performance. Ivancevich (1973) found that MBO programs

which are followed by reinforcement procedures produce better and longer lasting performance improvements; Kirchoff (1973) indicates, as did French et al. (1968), that performance improvements can be attained without participation in goal setting. Steers (1975) found that goal specificity and performance correlated significantly for supervisors high in achievement needs. With the exception of the faculty of a university study (Shetty and Carlisle, 1974), the performance of the participants was found to increase with the adoption of MBO.

MBO Effects on Job Satisfaction

Need satisfaction increased when top management was involved with the MBO program and not when the personnel department implemented it. This was found in a study conducted by Ivancevich, Donnelly and Lyon (1970). In a follow-up study conducted by the same authors in 1972, it was determined that need satisfaction had vanished over time. They concluded that this resulted from lack of top management interest and failure to follow-up MBO with additional training and reinforcement. This led them to conclude that top management involvement plus following the installation of MBO with training and reinforcement results in more effective implementation of MBO.

Significant correlation between positive attitudes and job satisfaction was found by White (1973) with participation in decision-making and increased responsibility resulting from MBO. In general, it cannot be concluded whether MBO has positive effects on need satisfaction as a result of the alleged increase in communication;

increase in discussion pertinent to goals, objectives, and performance review; and the perceived increase in responsibility that allegedly goes with the adoption of MBO. There is also doubt as to the ability of MBO to have any lasting effects on need satisfaction. Apparently, top management involvement and continued training are necessary to sustain high levels of satisfaction over time.

MBO Effects on Attitudes and Motivation

Attitudes, other than job satisfaction and motivation, were found to be improved with MBO by Raia (1965). A follow-up study by the same author in 1966 concluded that MBO was a whip rather than a positive motivator. Participation in goal-setting resulted in improved positive attitudes and high achievement levels for those answering to French et al. (1966). But for participants in the study who were not accustomed to operating in a participative relationship, attitudes did not improve. Participation was indicated to be instrumental in improving the relations between managers and subordinates.

Carrol and Tosi (1968) found that MBO increased motivation, superior subordinate interaction, and feedback. The 1970 study by the same authors was supportive of French et al. (1966). Both indicated a positive relationship between degree of influence and effort for subordinates accustomed to operating in a participative relationship. Managers indicated that their superior's attitude (perceived by others) was favorable and better than their own toward MBO (White, 1973). The attitude of the superiors toward MBO was not

found to be actually greater. Different factors operating in different departments were attributed to the differences in attitudes.

In general, MBO was perceived to foster positive attitudes toward management, motivation, participation and involvement. On the other hand, the results were found to be limited to higher levels of the management hierarchy. One important idea was that in the MBO programs with participation, prior experiences and relationships among the managers determined the attitudes and the achievement levels set.

Human Problems of MBO Reported

Kerr (1976) has presented an analysis of some implicit and explicit claims that have been made about MBO and points out several shortcomings. The first assumption he examined is that joint goal-setting between unequal levels of management is possible. This presumes that a manager can go from "boss-judge" to "friend-helper" comfortably. In fact, Kerr states the assumption is naive. Research provides "abundant evidence that hierarchical status differences produce some very predictable effects upon interaction patterns, subordinate defensiveness, and quantity and quality of communications, and these effects 'stack the deck' against joint goal-setting by unequals."

The second assumption with which Kerr took issue is that MBO can be pushed effectively down to the lower levels of management. This also is contrary to the findings of a number of studies. Kerr's

point is that: "...even if we assume truly democratic, participative goal-setting at the very top of the firm (say, between the president and his divisional vice-president), their meetings must still ultimately produce firm, hard goals for the months ahead. The most collegial atmosphere in the world cannot keep these goals, once agreed upon, from being perceived as commitments by the parties concerned. These commitments must then serve as lower limits, as monkeys on the back of any vice-president who then seeks to establish democratic participative goal-setting with his own subordinates."

Another claim made is that simultaneous goal setting at all hierarchical levels results in real participation. This is the reverse of assumption two discussed above, but Kerr claims that: "Varying the goal-setting sequence can serve to alter the chain of events, but will seldom improve upon it."

Kerr believes that the only way to achieve low-level management participation is to have them initiate the process by communicating their objectives to their superiors who would set their objectives accordingly and continue up the chain of command. Kerr states: "This gain in low-level influence may be costly, however, since the firm's goals are essentially being set by those at the bottom of the hierarchy, who (usually) are less educated, trained, and experienced, and who may possess inadequate information." Technical drawbacks aside, this alternative is likely to be politically unacceptable to managers at the top.

The third assumption challenged by Kerr is that MBO can aid in

evaluating and rewarding performance. This results in situations that may lead to manipulation of information and risk avoidance behavior. It is very hard to know whether challenging goals are being rewarded and in many cases subordinates take advantage of this by building safety factors into their goals and target dates. It is very difficult to develop goals that will be of equal difficulty for all subordinates in order to evaluate and compensate them. It is very difficult to become aware of changing conditions that will render goals and objectives set unreasonably hard or easy. Under some circumstances even exceeding the objective may result in disapproval instead of praise (it may be construed as bad planning). The easy connection assumed between objective allocation of rewards and results achieved may not be so. Kerr added that "...no formula for comparing results achieved against agreed-upon goals" exists. Researchers have correctly cautioned that "...evaluations should rarely be based on whether or not the objectives are accomplished or on the sheer number accomplished," and have listed other factors that must be taken into account, including: proper allocation of time to given objectives, type and difficulty of objectives, creativity in overcoming obstacles, efficient use of resources, use of good management practices in accomplishing objectives, and avoidance of conflict-inducing or unethical practices." (Kerr quotes the research of Carrol and Tosi (1973) in this area).

Another assumption which Kerr (1976) took exception to is that objectives should be as specific as possible. This extremely quantitative orientation can turn into inefficiency and goal

displacement by placing emphasis on areas where goals have been stated quantitatively and excluding other areas. This will tend to de-emphasize such areas as innovation, creativity, and human relations. The assumption that MBO is useful in a dynamic environment must also be accepted with a certain degree of caution. Under conditions of uncertainty, the normal tendency is to resort to risk avoidance. The difficulty of goals is also subject to dynamic change. The meaning of this is that the systematic goal-setting, rewards and punishments assumed by MBO might become impossible.

Methodological Problems of MBO Research

Since 1965, when Raia conducted his first study, there were fourteen major empirical studies of MBO in the literature which conformed to a reasonable level of scientific rigor. Studies found which were of a descriptive, how to do it, and case study nature were excluded from this section of the literature review. Other problems found even among the fourteen studies selected were: a) the subjects selected were basically managers, the results cannot be generalized across organizational levels; b) the studies were conducted primarily in profit making organizations, and the results can not be generalized to include the public or non-profit sectors; (c) most of the studies were conducted by persons who had participated in MBO programs as consultants or managers. Many of the studies also lack a pre-measurement or a control group, and only a few used objective measures of performance to check against the questionnaire responses and interviews. All of the studies were of the field type and the samples came from management. There is a need for experimental and

quasi-experimental research. There is a need for studies using MBO at lower hierarchical levels also.

In the Raia (1965 and 1966) studies, the only measurements made were after measures. Using this approach, it is not possible (in the strictest sense) to attribute the performance improvements to the MBO programs. Utilizing before and after measures in the first study would have demonstrated that some changes took place after the onset of the MBO program. By using a control group and measuring the appropriate variables before and after the adoption of the MBO program, and by comparing the results against the experimental group, ambiguity as to the possible cause of the change being attributable to reasons and/or events other than the MBO intervention could be reduced. There is still the possibility of attributing the changes to the Hawthorne effect. To reduce this problem, a training placebo equally capable of producing the Hawthorne effect could have been administered to another group. This, combined with a random selection from the population of the experimental and control group, would reduce the chance for experimental error.

Raia's second study utilized a longitudinal approach in which he took measurements over a thirty-six month period. The problem with this study is that Raia did not take several measures over time prior to the adoption of the MBO program. Furthermore, Raia's study did not include a control group and objective measures of performance.

The Carrol and Tosi studies (1968, 1969, and 1971) were based on

the opinions of managers who utilized MBO. At best, the results reflected the attitudes of the participants and the conditions under which MBO operates. The approach provided measures of internal criteria which are directly linked to the MBO program. Utilization of external criteria, specifically, measures of actual changes in work behaviors, would have improved the quality of the above mentioned studies. An attempt to relate the internal criteria information which was obtained in their study to external performance and effectiveness data would have probably made considerable quality improvements to the Carrol and Tosi studies. Both types of criteria, in my opinion are needed to make meaningful conclusions from MBO studies.

The study by Ivancevich, Donnelly, and Lyon (1970) utilized a pre-test and a post-test of job satisfaction by the administration of a questionnaire prior to the adoption of MBO and a year thereafter. This study uses one of the best designs reviewed so far, because of its use of a longitudinal design. A control group would have made the above study stronger. The (1972) study by the same authors involved reviews of the same companies in the above study 18 to 20 months after the adoption of MBO. Participants in this study were not randomly selected and no control groups were used. As Ivancevich (1973) explained, the study utilized a longitudinal design. Two experimental plans and one control plan were studied. Unfortunately, many changes took place over the period of the study that caused a loosening of the control group. Other factors rather than the intervention may have caused the changes in the variables.

Research on the specific component aspects of MBO, as we have seen, has basically concentrated on attempting to test their effect on performance, motivation and satisfaction. The results have not been consistent and have failed to point out why these aspects are or are not related to performance, motivation and satisfaction. As Chacko, Stone, and Brief (1979) indicate: "...existing management literature has neither provided an adequate framework for explaining the dynamics of the goal-setting process, nor explained the inconsistencies in the literature concerning the effects of the aspects of goal-oriented programs."

Theoretical and Empirical Considerations of MBO and Attribution Theory

Attribution theory is basically concerned with how people perceive the causes of behavior as being caused by themselves, others, or by environmental factors. It deals with the process by which people attempt to identify the causal factors of their particular behaviors or outcomes. Attribution studies support the concept that individuals attempt to ascertain the personal and situational factors that caused their behaviors or outcomes.

MBO in general, is based on the proposition that management actions such as participation, feedback, and incentives influence performance behaviors and outcomes. MBO proponents also attempt to explain individual feelings and reactions to objectives. In other words, affective reactions and performance are seen as the result of cognitive evaluations. Nevertheless, MBO theories tend to focus on

the establishment of objectives and subsequent responses rather than on the mediating cognitions and evaluations. Therefore, the attribution framework may help us to better understand the links between the process of setting objectives and the desired outcomes generally believed to be produced by MBO such as performance, satisfaction, motivation, and alienation.

According to attribution theory, feedback of good performance should lead to internal attributions to a greater extent than negative performance feedback. According to Chacko et al. (1979) "...attribution theory would suggest that high participation or involvement in goal-setting would generate feelings of control and influence over the goals and outcomes, thereby decreasing the valence of accomplishing the goal. Using Kelley's formulation if a person accomplishes a goal which she chose, then success is ascribed to an external or non-personal cause. She is less likely to attribute her success to her ability or effort. On the other hand, if a person accomplishes a goal which was assigned to him, then he ascribes success to himself or internal factors. In fact, laboratory studies suggest that subjects who were successful in a goal or task they chose felt not only less successful and competent, but also less personally responsible than those who had no choice. Therefore, attribution theory would suggest that ascription of goal success or accomplishment to oneself or internal factors is lessened as involvement or participation in goal setting increases." The implications of these ideas for MBO are that while in the past high participation in the

setting of objectives has been viewed as a positive factor of MBO, it may be that over time this participative approach would tend to decrease the importance of goal attainment for individuals.

A factor that may be of some importance is the effect of causal attributions on the individual's reactions to the objective setting situation. As Weiner (1974) speculated, attributions to internal factors result in greater affect than attributions to external factors. Although this is a very interesting proposition and worthy of thorough research, it is beyond the scope of the present study.

The MBO Program presents a situation of high participation and involvement in the setting of objectives. This, in turn, generates perceptions of control over objectives and outcomes. There are conflicting reports in this area of attribution theory literature. Collins and Hoyt (1972) suggest that perceived choice may convey a sense of personal responsibility. Bem (1972) suggests that the greater the freedom of choice an actor perceives to have over his behavior, the more likely that responsibility will be attributed to himself. Jones and Harris (1967), Steiner (1970) and Snyder and Jones (1974) have shown that individuals who exercised personal choice are perceived by observers to be the cause of the observed outcome. Individuals whose behavior was coerced are not perceived by observers as the cause of the observed outcome. Kelley's views of attribution theory, which are contrary to those reported above, indicate that when a person chooses his or her own objectives, success is ascribed to external causes. Attribution of success to

ability or effort is less likely under choice conditions. Arkin, Gleason and Johnston (1976) reported that "...subjects in the high perceived choice condition did not attribute appreciably greater causality to themselves than did subjects in the low perceived choice conditions." This conflicting view in the reported research regarding the connection between participative goal-setting and attribution of performance to internal or external causes must be resolved in order to understand the real impact of MBO. The research relevant to participation in the setting of objectives under MBO has concentrated on the effect of participation in future performance and satisfaction.

While MBO offers a greater degree of personal involvement and some choice over goals and objectives, the goal setting session is marked by the superior's, who is subject to superordinate goals himself, trying to convey the organization's sense of goals and directions to the subordinate. In this sense, the clarification of goals and the sense of purpose that is conveyed to the subordinate is more important than participation and choice when it comes to attributions.

The findings of Collins and Hoyt (1972) and Bem (1972), that conditions of greater individual choice are more likely to cause internal attributions, seem more appropriate for MBO than the findings of Kelly's (1967), that choice conditions are more likely to cause external attributions.

Table 2.1

Perceived Determinants of
Performance Behavior

<u>Stability</u>	<u>Locus of Control</u>	
	<u>Internal</u>	<u>External</u>
Stable	Ability	Task Difficulty
Unstable	Effort	Luck

The above scheme describes causal explanations in an achievement oriented task. It offers four main elements for explaining and predicting outcomes. These elements are ability, effort, task difficulty and luck which are seen as representing outcomes of the two major dimensions of stability and locus of control. This explanation is particularly relevant to work organizations that must focus behavior on the performance of organizational members. People go to a great deal of effort to find the reasons for their performance outcomes. This finding was indicated by Feather and Simon (1974), Frieze and Weiner (1971), and Luginbuhl, Crowe and Cahan (1975). The attribution theory idea is that individuals evaluate achievement situations and try to understand personal and situational factors they perceive have caused their behavior or outcome. The situation described above fits the conditions created by an MBO program setting and deals with the reasons for the relationship between the setting of objectives and later individual reactions.

Combining the findings of attribution theory and MBO, we may expect that attributions of performance to internal factors will result in greater performance, motivation, and job satisfaction, and less alienation. When performance is attributed to external factors, lower performance, motivation, job satisfaction, identification with the organization and higher alienation may result from the MBO program. Given that individuals try to determine the reasons for their outcomes, studying individual perceptions of what causes their success and/or failure under MBO may help us to make some sense out of the many unsubstantiated claims that have been made about it.

CHAPTER THREE

HYPOTHESES

Bem (1972) found that the greater the freedom of choice an actor has over his behavior, the more likely that responsibility for outcomes will be attributed to himself. Similarly, Jones and Harris (1967), Steiner (1970), and Snyder and Jones (1974), have found that an individual who exercises personal choice is perceived by observers to be the cause of the outcome.

It has been indicated by a number of theorists that individuals are motivated to attempt to exercise control over their environment (Nuttin, 1973; de Charms, 1968; and Smith, 1968). External, socially accepted factors are used to give the degree of an individual's mastery of his task. External factors that indicate an individual's efficient and effective performance should result in intrinsic interest. Therefore, increased income (an external reward) can be expected to have intrinsic interest when if received, it is a function of the person's success.

Internal-external locus of control has been found to be highly related to academic performance by McGee and Crandall (1968).

Since MBO provides conditions under which greater individual choice is possible in setting performance objectives, and since MBO provides conditions under which individuals have greater control over their environment, the following hypothesis was tested:

Hypothesis I: There will be a statistically significant increase in performance in the MBO treatment group but not in the control group.

According to the findings of Rotter (1966) and Hersch and Scheibe (1967), the internal/external control dimension is relatively stable over time for events that are personally relevant. Since Chacko, Stone and Brief (1979) suggest that cognitions and perceptions of causality can be more important for internally oriented people than participation in goal setting, the following hypothesis was tested:

Hypothesis II: Locus of control moderates the MBO and performance relationship:

- a) For the MBO group, the performance increase will be greater for internals than externals.
- b) In the control group there will be no differences in performance between externals and internals.

Chaco, Stone and Brief (1979) suggest that an individual's cognitions and perceptions may have a greater impact on satisfaction than participation in goalsetting. Nuttin (1973), de Charms (1968) and Smith (1968) suggest that individuals experience satisfaction over activities they can perform competently. Similarly, Shaver (1975) indicates that the degree of originship over the task has

implications for self-satisfaction if the individual feels primarily responsible for the completion of the task.

Shaver (1975) indicated that: "Degree of originship has implications not only for interpersonal perception but also for self-satisfaction and persuability. If you believe that you are primarily responsible for the completion of a task, you will be more satisfied with the result than if you have been guided every step of the way."

Since Collins and Hoyt (1972) reported that the perceived choice in participative objective setting situations conveys a sense of personal responsibility for behavior and since MBO creates conditions of high originship over the task the following hypothesis was tested:

Hypothesis III: There will be a statistically significant increase in job satisfaction in the MBO treatment group but not in the control group.

To test the notion that internal orientation may be more important than MBO to predict job satisfaction, the following hypothesis was tested:

Hypothesis IV: Locus of control moderates the MBO and job satisfaction relationship:

- a) For the MBO group, the job satisfaction increase will be greater for internals than externals.

- b) In the control group, there will be no difference between externals and internals in job satisfaction.

As we have indicated above, a number of researchers suggest that people are motivated to increasingly try to exert greater and greater control over their environment. MBO through participative setting of objectives affords greater opportunities for environmental control and personal involvement. One of the variables that is purported to be affected by MBO is motivation. Carroll and Tosi (1973) reported increases in motivation through MBO. The following hypothesis was tested:

Hypothesis V: There will be a statistically significant increase in motivation in the MBO treatment group but not in the control group.

To evaluate whether individual characteristics of internality or externality affect the relationship between MBO and motivation, the following hypothesis was tested:

Hypothesis VI: Locus of control moderates the MBO and motivation relationship:

- a) For the MBO group, the motivation increase will be greater for internals than externals.
- b) In the control group, there will be no difference in motivation between externals and internals.

The introduction of a change in managerial approach has the potential of creating and/or reducing alienation among the individual organizational members affected by the change. If alienation takes place, this may account for some of the negative MBO outcomes reported in the literature. On the other hand, if the locus of control moderates the effect of MBO on alienation, the effect of MBO can be better understood. Since alienation effects of MBO can be of considerable theoretical value, the following hypotheses were tested:

Hypothesis VII: There will be a statistically significant decrease in alienation in the MBO treatment group but not in the control group.

Hypothesis VIII: Locus of control moderates the MBO and alienation relationship:

- a) For the MBO group, the alienation decrease will be greater for internals than externals.
- b) In the control group, there will be no differences in alienation between externals and internals.

CHAPTER FOURMETHODOLOGYFUNCTIONAL OVERVIEW OF THE EXPERIMENTAL DESIGN AND THE STATISTICAL MODEL

Both the design of the experiment on the model to be tested and the choice of the statistical analysis were considered simultaneously, and were structured to meet the following objectives:

1. Reliability of the questionnaires: Although the questionnaires used to measure the four response areas already discussed demonstrate statistical stability over time, the experiment was designed to account for the effect of natural evolution; that is, the dynamic effect of changes in responses over time when no external treatment is applied by the experimenter by using a control group. Even if the responses to the questionnaire change over time, we are not comparing the final responses between experimental and control group; what we are comparing is the amount of change in each group over the period of the intervention. Reliabilities of the instruments used in the study are reported in this chapter.
2. Isolation of the MBO effect: to meet the standards of scientific integrity, the treatment effect due to the administration of the MBO program had to be logically isolated from the dynamic effect of objective 1. This is accomplished by utilizing a separate experimental group.

3. Attribution of individual difference to the effect of internality-externality: The model had to account for the possible contamination of responses due to individual difference characteristics, within both the experimental and the control groups. This is accomplished by identifying individual difference characteristics in terms of the internality-externality orientation of each individual.

4. Assessment of the relevance of the effect of internality-externality: The model also had to assess whether response attributed to individual internality-externality effects dominated the group differences measured by the MBO treatment of objective 2.

The development of a single model meeting the above mentioned objectives is obtained by following these stages:

1. The reliability of the questionnaire was re-established by subsuming objective 1 under objective 2 by employing a bivariate model.
2. Both objectives 1 and 2 were simultaneously resolved by physically dividing the experimental population into a control group and an experimental group, with only the later being subjected to treatment via an MBO program. A bivariate, one way analysis of variance model was used to logically meet objectives 1 and 2. Since there is only one intervention, the proper statistical technique is t tests.

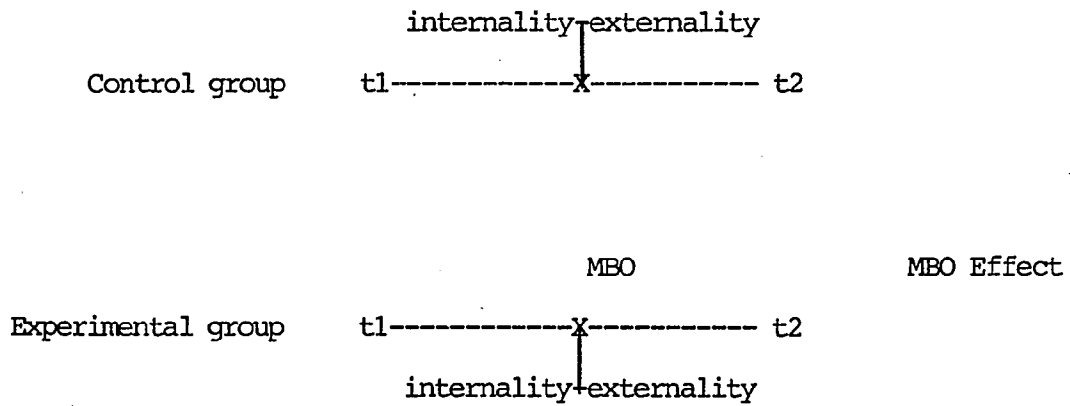
3. The locus for the internality-externality effect is the individual. Although individuals could be clustered into groups based on statistically measured criteria, any conclusions drawn from such clustering would be less reliable statistically than if no such clustering is imposed.

4. Finally, objective four is analyzed via t tests within and between the experimental group and the control group and a comparison of the variance between the groups. The within group comparisons test whether any change at all has taken place but does not specify the locus of such change. The between groups comparison tests whether there is any more change in one experimental group than another. This latter comparison specifies the locus of change more adequately.

Diagram 1 schematically portrays the final model. The moderating variable is the individual's internality-externality measure.

DIAGRAM 1

Model to be Tested



VARIABLE MEASUREMENT

The performance scores were obtained from the objective measures used in the organization. Increases in sales dollars during the period of study were used to measure performance. The internal-external control variable was measured by the I-E scale developed by Rotter (1954). This scale assumes that individuals identify the locus of causality for personality-relevant events either as external, or as a product of their own actions, capacities or traits, Hersch and Scheibe (1967). The I-E scale has been used extensively in the recent past. As the above authors indicate: "(a) The test-retest reliability of the 29 item I-E scale developed by Rotter is consistent and acceptable, varying between .49 and .83 for varying samples and intervening time periods. (b) Relationships to measures of intelligence have generally been nil. There is, however, some evidence that the relationship may be weakly negative, with internal scores higher in intelligence. (c) Relationships to a measure of maladjustment (Incomplete Sentence Blank) are perhaps curvilinear, perhaps nil, perhaps quite complex. (d) The I-E scale has been useful in some cases for behavioral predictions, such as discriminating between social action volunteers and nonvolunteers." This scale was chosen over an available shorter version because it is more complete and because it has been been studied to a greater extent.

The Smith, Kendall, and Hulin (JDI) scale was used to measure satisfaction with work, supervision, and co-workers. This is the most widely used measure of job satisfaction (defined as "The feeling a worker has for his job.") The JDI has been widely recognized as

the best measure of job satisfaction available today and was chosen for this reason.

The Patchen's (1965) Job Motivation Index was used. The development of the scale had as its purpose the measurement of the level of aroused motivation on the job, in terms of devotion of energy to job tasks. This is very suitable for the present research. The reliability of the scale was .80 at the individual level. Since the main concern of this research in the area of motivation is at the individual level, the .80 reliability of this scale at this level was a major factor in selecting it.

Middleton (1963) Alienation Scale was used to measure alienation. Alienation is defined as "low expectancies for control of events." Robinson and Shaver (1978) report a Seeman and Evans (1962) study in which a split-half reliability of .70 was obtained. Robinson and Shaver (1970) report: "The scale has been used in a variety of research studies and its internal consistency and validity seem well established. Items are in forced-choice format to prevent the operation of agreement response set."

A preliminary experiment was conducted to pretest the procedures and the instruments. The questionnaire was administered to a group of sixty students twice over a period of two weeks.

Research Design

The research method used was a quasi-experimental field study

intervention design. There was an experimental group and a control group for this field research project. With the aid of the upper management of the organization, these two groups were matched in terms of volume of work, age and education of the managers and subordinates, and organizational level. Random assignments to groups were not feasible but the group designated as the experimental group was done by random selection.

The pre-test consisted of the administration of the following scales to both groups: a) Standard Demographic Characteristics, b) Internality/Externality, c) Job Description Index, d) Alienation, e) Motivation. Once this was done, MBO was introduced into the experimental group. The post-test using the same scales took place four months after the pre-test. This time frame was chosen to reduce the chance of having contaminating variables creeping into the experiment.

Sample

The study was conducted in a large financial services company. The organization has five branches in the New York City area. The Management has accurate and detailed data about the individuals employed in the branches. The Management also collects performance data on a branch basis. Each branch is managed by a branch manager with an assistant branch manager. The five branches are in turn managed by a regional manager who reports to the corporate main office.

Demographics Table 1

Age	Means	Sala	Means
		ry	
Experi	45.3	Experi	16,595
mental		mental	
Control	49.4	Control	18,295

Educa	Means
tion	
Experi	2.750
mental	
Control	2.420

(over 2 years of college)

Demographic Table 2

Sex	%Male	%Female
Experi	83	17
mental		
Control	79	21

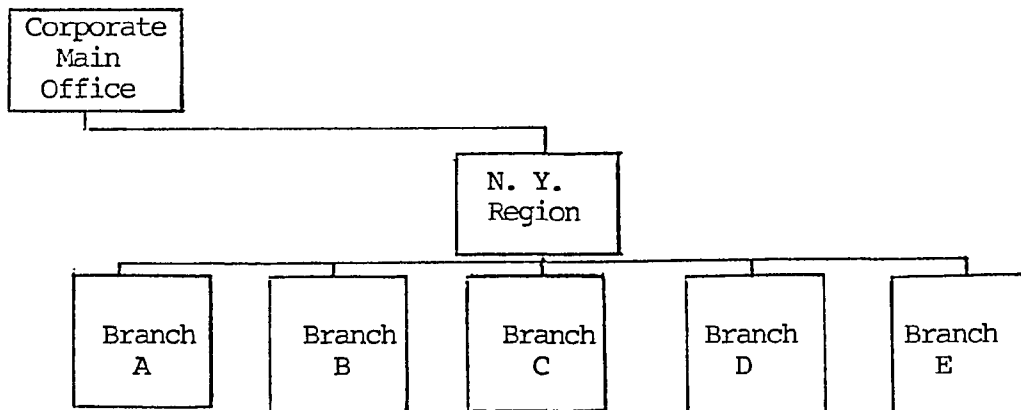
Race	%White	%Black	%Hisp.	%Asian
Experi	70.2	12.7	2.3	12.7
mental				
Control	67.4	10.9	4.5	14.4

Demographic Table 3

Years of Experience	Mean	Time under	Means	Yrs.
in Present Job		Present Mgr.		
Experimental	2.319	Experimental	1.57	
Control	2.532	Control	1.77	

Based on the information provided in the tables above, it is reasonable to conclude that the experimental and control groups are equivalent.

The original control group consisted of 56 subjects. Three subjects left the organization and nine questionnaires were unusable, reducing the final control group to 44 (88 observations). The original experimental group consisted of 65 subjects. Of these, four left the organization and fourteen questionnaires were unusable, reducing the experimental group to 47 (94 observations). Questionnaires were rendered unusable for the following reasons: parts were left unanswered, the second administration was not returned or returned blank, and subjects were not available.



Since, due to the nature of study, random assignment of subjects to the experimental or control groups was not possible because of the human and organizational disruptions that this would entail, a great effort was undertaken to make sure that the groups were equivalent by volume of work, age, education, and time in the organization. Once the matching was undertaken, the experimental treatment was assigned to the groups at random (by the toss of a coin).

Experimental Procedures

The intervention is defined as follows:

- a) Setting up a system in which organizational objectives are discussed and agreed upon by higher management. These objectives will provide a framework that will be used by subordinates to formulate their own objectives.

- b) A climate conducive to the acceptance and internalization of the MBO process must be developed. For this purpose, training sessions are undertaken in which management motivates the acceptance of the program and develops the skills to qualify and measure the objectives. Criteria for behaviors and performance standards, cost standards, quantity and quality standards are set.

- c) At this point, superiors and subordinates meet to negotiate what objectives will be adopted by the subordinates following the framework of objectives set in the above steps. Negotiations culminate with agreed upon objectives for subordinates.

- d) Once objectives have been set, regular performance appraisals are made. Supervisors meet with the subordinates to discuss actual performance and to renegotiate objectives if this is called for due to any environmental changes that may have occurred or to individual changes.

- e) An appraisal is made in which the progress of the program is discussed, adjustments are made, and new goals are set for the coming period.

A series of meetings were planned in which the participants in the MBO program were trained. At these meetings the following issues were discussed: detailed facts and descriptions of MBO; setting objectives and formulating plans by upper management; setting the structure and organization for MBO; developing individual objectives and plans; appraisals and reports on progress on a periodical basis as well as how and when to make adjustments; and final appraisal. The training included participation in goal setting and reinforcement of MBO.

At the onset, the emphasis was on getting the top manager to meet with the lower managers and plan the tentative direction in which they wanted the MBO group to move for the period. Specific performance expectations were set with the aid of financial and statistical officers.

At this point, each middle manager was asked to meet and discuss with his subordinates the levels of individual performance he wanted to set in terms of the guidelines set by upper management for the period.

Meetings took place with all participant superiors, on a one to one basis, to evaluate any problems and to make operational the

process of negotiating individual goals. These meetings aided in the process, and did not help quantify objectives or in any way interfere with the process. Each individual is expected to learn the process and to develop and quantify his own objectives. This must be part of the process of learning MBO.

Meetings then took place between the middle managers and their subordinates one to one, in my presence. I participated only to provide technical support without intervening in the process of bargaining between superior and subordinate to set objectives. Objectives were finalized for each individual, thusly. The reseacher continued to serve as a resource person.

At this point, the objectives set with the indiviudal participants were combined for comparison with the overall tentative objectives set above by higher management. The objectives were then modified and adopted as the objectives for the MBO group. Top management was then notified of this overall objective.

Reviews were made of all of the participants in the MBO program. Adjustments were made when the individual or environmental conditions required it. Individual and organizational goals were subject to review, but this process was not to be as thorough or cumbersome as annual reviews.

DATA ANALYSIS METHODOLOGY

Definitions

1. An experimental unit is an individual at a given time.

2. Classification of experimental units: The time dimension is classified as either before study or after study. Individuals are classified as members of the control group or members of the experimental group.

Each experimental unit is therefore cross-classified into four classes:

Before study control group member

Before study experimental group member

After study control group member

After study experimental group member

3. Response: Four responses, variables Y_1 to Y_4 , are measured for each experimental unit.

Y_1 : Performance

Y_2 : Job Satisfaction

Y_3 : Motivation

Y_4 : Alienation

4. Controlled effects: If the level of a response Y_j changes over the passage of time, with no external intervention, we shall refer to that change as the effect of natural evolution. If the level of a response Y_j changes over the passage of time beyond the amount attributable to natural evolution, when MBO is introduced, we shall define that change as the effect of MBO.

5. Uncontrolled effects: The effect of the locus of control is measured for each individual in the control and experimental groups to assess its moderator effect between the intervention and the outcome variables.

STATISTICAL ANALYSIS

The hypotheses were tested in the following manner: a "t" statistic analysis was conducted between groups and within groups when appropriate. The t test was chosen because only one treatment is applied in the study.

CHAPTER FIVE

ANALYSIS OF RESULTS

The first hypothesis was formulated to test whether there would be a statistically significant increase in performance in the experimental group as compared to the control group. The t-test, summarized in table 5.1, indicates that there was a significant increase in performance between the pre-test and post-test period for the experimental group. Although there was an increase in performance in the control group, the increase in mean performance for the experimental group was twice as large. The within group t tests are significant for the experimental group and not significant for the control group. Hypothesis I is therefore supported. These results are consonant with prior MBO studies.

Table 5.1
HYPOTHESIS I
PERFORMANCE

GROUP	MEANS PRE- TEST	MEANS POST TEST	OBSERVA- TIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²	COMPUTED t WITHIN GROUP
EXPERI- MENTAL	12.5957	17.7021	94	5.1064	44.143	3.7259
CONTROL	14.5227	16.6364	88	2.1137	27.827	1.6710
Second Difference of Means				2.9927		

$$t = (DE - DC) / \sqrt{Se^2/ne + Sc^2/nc}$$

Degrees of Freedom = ne + nc - 2

Within Groups t Tests

Between Groups t Test

Experimental Group Control Group

t Statistic = 3.3534

t Stat.= 3.7259

t Stat.=1.6710

Degrees of Freedom: 89

D. of F. :46

D. of F. : 43

Significance Level: .05

Sig. Lev. :.05

Sig. Lev. :.05

Hypothesis II (a) was designed to test whether locus of control moderates the effect of the MBO intervention on the performance outcome. The t test conducted indicates that the moderating effect of the locus of control on performance is significant at the .05 level. The results are summarized in table 5.2. This indicates that there is a significant difference between internals and externals in the experimental group with respect to performance.

Hypothesis II (b) was designed to test whether the locus of control made any difference in the performance of the members of the control group. Hypothesis II (b) was not supported. The results are summarized in table 5.3. We may, therefore, conclude that the difference in performance over time between the experimental group is explained by the internal locus of control of the individuals in the study. The externally oriented individuals were not significantly affected by MBO.

Table 5.2
HYPOTHESIS II (a)
PERFORMANCE

EXPERIMENTAL GROUPS	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²
INTERNALS	13.5185	20.4444	54	6.9259	43.335
EXTERNALS	11.3500	14.000	40	2.6500	33.593
				4.2759	

Between Groups t Test

t Statistic: 3.3365

Degrees of Freedom: 89

Significance Level: .05

Table 5.3
HYPOTHESIS II (b)
PERFORMANCE

CONTROL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²
INTERNALS	16.4545	19.9091	44	3.4546	25.506
EXTERNALS	12.5909	13.3636	44	.7727	16.343
				2.6819	

Between Groups t Test

t Statistic : 2.7500

Degrees of Freedom: 86

Significance Level: .05

The third hypothesis was designed to test the effect of the criterion variable job satisfaction across the experimental and control groups. The analysis presented in Table 5.4 indicates that the results are significant. Hypothesis III is therefore supported. A close look at the table reveals that the within group differences for the control group is significant, however, it is obvious that the within groups differences for the experimental group (4.9556) is more than twice as much as the within group difference in the control group.

Table 5.4
HYPOTHESIS III
JOB SATISFACTION

GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²	COMPUTED t WITHIN GROUP
EXPERIMENTAL	108.6810	122.8720	94	14.191	192.710	4.9556
CONTROL	104.091	111.727	88	7.636	250.119	2.2647

6.555 Within Group t Tests
Between Groups t Test Experimental Group Control Group

t Statistic: 2.9635 t Stat.=4.9556 t Stat.=2.2647

Degrees of Freedom: 89 D. of F. :46 D. of F. :43

Significance Level: .05 Sig. Lev. :.05 Sig. Lev. :.05

Hypothesis IV (a) was developed to assess the moderating effect of the locus of control on the relationship between the MBO intervention and the job satisfaction criterion. The t statistic clearly indicates that there is a greater increase in job satisfaction for those subjects who are internally oriented. The difference of means is about twice as large for internals than externals. The results are significant at the .05 level (see table 5.5). Therefore, the hypothesis is supported.

Hypothesis IV (b) was developed to assess the effect of the locus of control on job satisfaction in the control group. The t test conducted indicates that there is significance in the relationship among the variables (see table 5.6). Therefore, hypothesis IV (b) is not supported.

Based on the results discussed above, we may conclude that the difference in job satisfaction over time in the experimental group is explained by the individual's intrinsic locus of control moderation. Although the externally oriented individuals were affected by MBO with regard to job satisfaction, the mean difference for internals was much greater than the mean difference for externals.

Table 5.5
HYPOTHESIS IV (a)
JOB SATISFACTION

EXPERIMENTAL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²
INTERNAL	107.815	126.111	54	18.296	184.437
EXTERNAL	109.850	118.500	40	8.650	195.409
				9.646	

Between Groups t Test
t Statistic: 3.3480
Degrees of Freedom: 89
Significance Level: .05

TABLE 5.6
HYPOTHEHSIS IV (b)
JOB SATISFACTION

CONTROL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²
INTERNALS	108.2270	124.7270	44	16.5000	144.053
EXTERNALS	99.9545	98.7272	44	-1.2273	170.390
				17.7273	

Between Groups t Test

t Statistic: 6.6313

Degrees of Freedom: 86

Significance Level: .05

Hypothesis V was developed to assess the difference, if any, in the criterion variable motivation across the experimental and control groups. The t test conducted shows there is no significance with respect to motivation among the individuals in the MBO group. There was also a slight increase in motivation among the members of the control group over the period of the study. The within group t tests are likewise not significant. Hypothesis V is therefore not supported. Table 5.7 portrays a summary of the results.

TABLE 5.7
HYPOTHESIS V
MOTIVATION

GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²	COMPUTED t WITHIN GROUP
EXPERIMENTAL	15.2128	15.9574	94	.7446	7.215	1.3438
CONTROL	15.5455	15.7500	88	.2045	10.455	.2966
				.5401		

Within Group t Test

Experimental Group

t Statistic: 1.3438

Degrees of Freedom: 46

Significance Level: .05

Control Group

t Statistic: .2966

Degress of Freedom: 43

Significance Level: .05

Hypothesis VI (a) was formulated to assess the moderating effect of the locus of control of individuals on the relationship between MBO and the motivation criterion. The t test conducted to evaluate this hypothesis indicates that there is a significant increase in motivation among the internally oriented individuals in the experimental group. There is a decrease in the difference of motivation mean score for the externally oriented individuals in the MBO group. Hypothesis VI(a) is supported. Table 5.8 gives a summary of the results.

Hypothesis VI (b) assesses the effect of locus control on motivation among the individuals in the control group. The t test indicates a significant relationship. Therefore, the hypothesis is not supported. Table 5.9 gives a summary of the results.

In view of the above discussion, we may conclude that the moderating influence of the locus of control is significant when considering the effect of MBO on motivation. On the other hand, the results obtained for VI (b) do not warrant acceptance of the hypothesis.

TABLE 5.8
HYPOTHESIS VI (a)
MOTIVATION

EXPERIMENTAL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S^2
INTERNALS	15.4815	17.1111	54	1.6296	5.3730
EXTERNALS	14.8500	14.4000	40	-.4500	7.7720
				2.0796	

Between Groups t Test

t Statistic: 3.8367

Degrees of Freedom: 92

Significance Level: 0.05

TABLE 5.9
HYPOTHESIS VI (b)
MOTIVATION

CONTROL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS N	DIFFERENCE OF MEANS D	COMBINED VARIANCE S^2
INTERNALS	16.000	17.1364	44	1.136	5.205
EXTERNALS	15.0909	14.3636	44	-.7273	13.974
				1.8633	

Between Groups t Test

t Statistic: 2.8222

Degrees of Freedom: 86

Significance Level: .05

Hypothesis VII was formulated to assess the relationship of the alienation criterion variable across the experimental and control groups. The t test reveals a significant decrease in alienation in the experimental group as predicted. In view of these results, hypothesis VII is supported. The statistical data is summarized in table 5.10.

TABLE 5.10
HYPOTHESIS VII
ALLENATION

GROUP	MEANS PRE- TEST	MEANS POST- TEST	OBSERVA- TIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²	COMPUTED t WITHIN GROUP
EXPERI- MENTAL	1.3191	1.1915	94	-.1276	1.777	- .4642
CONTROL	1.3182	1.8864	88	.5682	3.023	-1.5327
				-.6958		
				Within Groups t Test		
Between Groups t Test			Experimental Group		Control Group	
t Statistic:	3.0160		t Stat.: -.4642		t Stat.: -1.5327	
Degrees of Freedom:	180		D. of F. : 46		D. of F. :43	
Significance Level:	.05		Sig. Lev. :.05		Sig. Lev. :.05	

HYPOTHESIS VIII (a) was formulated to assess the significance of the moderator effect of locus of control on the relationship between MBO and alienation. Hypothesis VIII (a) assesses this relationship in the experimental group. There was a decrease in alienation for both the internals and the externals, but the effect on the externals was much larger than the effect on internals which is in the opposite direction. However, the t tests between groups were not significant. Therefore, the hypothesis is not supported. The data relevant to this hypothesis is given in table 5.11.

Hypothesis VIII (b) assesses the internality-externality effect in the control group. The results are shown in table 5.12. The results of the t test are not significant, therefore, the hypothesis is not supported.

TABLE 5.11
HYPOTHESIS VIII (a)
ALIENATION

EXPERIMENTAL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²
INTERNALS	.8881	.8519	54	-.0370	1.1940
EXTERNALS	1.900	1.6500	40	-.2500	2.1670
				.2130	

Between Groups t Test

t Statistic: .7660

Degrees of Freedom: 92

Significance Level: .25

TABLE 5.12
HYPOTHESIS VIII (b)
ALIENATION

CONTROL GROUP	MEANS PRE-TEST	MEANS POST-TEST	OBSERVATIONS n	DIFFERENCE OF MEANS D	COMBINED VARIANCE S ²
INTERNALS	.7273	1.0455	44	-.3182	1.5080
EXTERNALS	1.9091	2.7273	44	-.8182	3.5760
				.5000	

Between Group t Test

t Statistic: 1.476

Degrees of Freedom: 86

Level of Significance: .07

Discussion

The above presentation of data analysis reveals that some hypotheses are completely supported, others are partially supported and one was not supported.

Hypotheses I, III, VII and VIII were completely supported. There is a clear case in which the trends cross over and the means are significantly different from each other in one direction at the pre-test but in the other direction at the post-test. This situation is highly desirable with respect to accepting a meaningful relationship among the variables particularly since the experimental design used eliminates most threats to internal validity. When this data pattern occurs, the plausibility of an alternative scaling interpretation is reduced, a regression alternative explanation is less likely, and the selection maturation problem is reduced.

We may conclude that the MBO intervention produces a meaningful and significant increase in performance and job satisfaction. The findings regarding performance, and job satisfaction are consistent with findings reported in the literature.

With respect to hypothesis VII, which postulates a decrease in alienation in the experimental group but not in the control group, the data presents a situation in which the control group has a higher level of alienation than the experimental group. Nevertheless, the results are significant and the hypothesis is supported. There is a decrease of alienation in the MBO group. This is a significant new finding.

For hypotheses VIII, which postulates a greater decrease in alienation for internals in the MBO group and no difference between internals and externals in the control group, the results are in the direction predicted. We can therefore conclude that the locus of control of the individuals, as measured by the internality-externality variable, dominated the positive outcomes of MBO with respect to alienation. This hypotheses is completely supported.

The fact that this study was conducted using a quasi-experimental field methodology with a control group should also add to the confidence on the acceptance of this and earlier less scientifically controlled studies' findings.

With respect to hypotheses II, which postulates a greater performance increase for internals in the MBO group and no difference between internals and externals in the control group, and hypothesis IV, which postulates a greater increase in job satisfaction for internals in the MBO group and no difference between internals and externals in the control group and hypotheses VI, which postulates a greater increase in motivation for internals than for externals, only partial support is warranted. In the above cases we detect a trend line cross over and the means are significantly different in opposite directions from pre to post-tests. We can therefore conclude that the locus of control of the individuals, as measured by the internality-externality variable, dominated the positive outcomes of the MBO program for performance and job satisfaction and motivation. Internally oriented individuals displayed greater and positive

performance, were more satisfied with their jobs and more motivated than externally oriented individuals in the experimental group. A final conclusion is not possible at this time because hypothesis II(b), IV(b) and VI(b) were not supported. The results with respect to the control group may be due to selection-maturation problems and/or local history. Unfortunately, it is not possible to correct these problems by statistical means, matching the groups or using alternative scales.

This is an important and new finding that may account for some of the discrepancies found in the MBO literature. It is conceivable that some of the failures reported with respect to MBO interventions happened to take place in organizations and/or groups that were heavily populated by externally oriented individuals. It is also conceivable that a heavy concentration of externals can cause sufficient job dissatisfaction to affect the MBO program over time even if it starts producing positive outcomes earlier on in the adoption of the program.

The results with respect to hypotheses V, which postulates a greater increase in motivation in the MBO group and no difference in the control group, form interaction patterns in which both groups are growing at different rates. The differences are not significant and we can not assume a meaningful relationship. This hypothesis was not supported. It is possible that the group mean differences in motivation are caused by biased social aggregation, selection or maturation. Although there are some remedies to the above problem,

i.e. rescaling the measures, they are not feasible at this point. Therefore, we must forego the causality assumption until further research is undertaken.

CHAPTER SIX

Summary, Conclusions and Directions for Future Research

In this chapter, the findings and theoretical implications of this dissertation will be put in perspective. Furthermore, implications of the results and recommendations for further research will be presented.

Summary - Theory

The objective of the research described in the preceding chapters was to investigate how some of the purported outcomes of an MBO program may be affected by the internal/external orientation of the participants in the program and how this orientation affects subsequent performance, job satisfaction, motivation and alienation.

Performance: Increased performance is reported as a positive outcome of MBO programs in the literature. Raia (1965 and 1966) pointed out that productivity over time increased through MBO. French, Kay and Meyer (1966) and Carrol and Tosi (1968) indicated that MBO clarified performance evaluations and that it produced pressure for improved performance. Ivancevich (1973) reported that MBO followed by reinforcement procedures produced better and longer lasting performance.

Performance quantity and quality is widely recognized as a worthwhile and desirable organizational outcome. Its study and

understanding in the MBO context and for the field of organizational behavior is very important.

Job Satisfaction: This variable has been of much concern for managers and students of organizational behavior. Job satisfaction is a worthwhile goal for managers as well as for the members of the organization. Ivancevich et. al. (1970) reported that need satisfaction under MBO increased with top management involvement. White (1973) reported that job satisfaction increased with participation in decision-making.

An examination of the literature does not provide conclusive indication as to the effect of MBO on job satisfaction. There is also inconclusive evidence regarding the ability of MBO programs to provide any lasting positive job satisfaction. Therefore, it is necessary to study this problem further.

Motivation: Carrol and Tosi (1968) reported that MBO increased motivation. Raia (1965) found the same results in his study. In general, MBO has been reported as having positive motivational outcomes as well as improved attitudes and higher achievement levels (French, Kay and Meyer, 1966).

While it might be concluded that MBO increases motivation, it is not clear how MBO may affect individuals having different orientations or personality characteristics. Personality might be expected to affect how the MBO is accepted and practiced and consequently it

is expected to affect the outcomes of the program.

Alienation: MBO programs have been reported to improve participant attitudes and relations between superiors and subordinates by Raia (1965), French et. al. (1966), and White (1973). Although attitudes and superior subordinate relations may have an important effect on whether desirable organizational goals are attained, relatively little attention has been given to this problem in the literature.

Alienation among the members of organizations in our society is an important phenomenon affecting not only human relations but also the organization's ability to achieve its objectives. Since MBO has been reported to have produced positive attitudes and relations among participants in the program, and since this can reasonably be expected to reduce alienation, it may be predicted that MBO will cause a significant reduction in alienation.

Locus of Control: This variable is very relevant for the explanation of causal behavior in organizational tasks. As indicated by Simon (1974), Frieze and Weiner (1971), and Luginbuhl, Crowe, and Cahan (1975), people go through a great deal of effort to find the reasons for their performance outcomes. Bem (1972) suggests that the greater the freedom of choice an actor perceives to have over his actions, the more likely that responsibility will be attributed to himself. Collins and Hoyt (1972) indicate that perceived choice conveys a sense of personal responsibility.

Given, that individuals try to determine the reasons for their organizational outcomes, and given that their locus of control is a stable personality characteristic over time, it is desirable to investigate how the internality or externality of individuals in an MBO program affect the desired organizational outcomes of greater performance, job satisfaction, motivation and less alienation.

Situational Constraints

The relationships suggested in the above paragraphs between MBO and the outcomes of performance, job satisfaction, motivation and alienation, can be expected to be influenced by the personality aspect of the individual participants in the MBO program namely, their locus of control. This assumption is founded on the generally accepted principle that behavior is a function of the interactions of the person with the situation.

Consequently, it is reasonable to expect that individual orientation (internality/externality) would influence the relationship between the MBO intervention and the expected outcomes of MBO. Specifically, it would be reasonable to expect that individuals who are internally oriented should be affected to a greater positive significant effect by MBO than individuals who are externally oriented.

This theoretical framework led to the formulation of two sets of hypotheses.

1. That there will be a statistically significant increase in performance, job satisfaction and motivation; and a decrease in alienation in the MBO treatment group but not in the control group.

2. That the locus of control of the individual moderates the relationship between MBO and performance, job satisfaction, motivation, and alienation. For the MBO group, the moderator effect will be greater for internals than externals.

Method

To assess performance, actual individual performance data was obtained from the organization. To assess the internal-external control variable, the I-E scale developed by Rotter (1954) was used. To assess job satisfaction, the Smith, Kendall, and Hulin JDI scale was used. To assess motivation, the Job Motivation Index developed by Patchen (1965) was used. Finally, the Middleton (1963) Alienation Scale was used to measure alienation.

The questionnaires were administered to a control group and experimental group at two points in time four months apart. This time frame was chosen to reduce the chance of contaminating variables entering into the quasi-experiment. The control group consisted of 44 subjects (88 observations) and the experimental/MBO group consisted of 47 subjects (94 observations).

The hypotheses were tested by means of t-tests.

Results

The first hypothesis, testing performance, was confirmed. The data showed that there was a significant increase in performance in the experimental group as compared to the non MBO group.

The second hypothesis, testing the internality-externality effect on performance, was partially confirmed. The data indicates that internality moderates the effect of the MBO intervention on performance in the experimental group which supports part (a) of the hypotheses. The data also indicates that the locus of control did significantly affect the performance relationship in the control group which does not support part (b) of the hypotheses.

The third hypothesis, testing job satisfaction, was confirmed. The data showed that there were significant differences in job satisfaction between the MBO group and the control group. The results obtained for hypothesis four may lend explanation to these results.

The fourth hypothesis, testing the internality-externality effect on job satisfaction, was partially confirmed. The data indicates that the locus of control did significantly affect job satisfaction in the MBO group which supports part (a) of the hypotheses. The data also showed that there was a significant effect regarding job satisfaction in the control group when corrected for locus of control which does not support part (b) of the hypotheses.

The fifth hypothesis, testing motivation, was rejected. The data shows that there was no significant increase in motivation in the MBO group as compared to the non MBO group.

Hypothesis six, testing the internality-externality effect on motivation, was partially supported. The data indicates that there is a significant increase in motivation for the internally oriented individuals in the MBO group which supports part (a) of the hypothesis. It can be similarly surmised from the data that there was a similar effect in the control group which does not support part (b) of the hypothesis.

Hypothesis seven, testing alienation, was supported. A significantly greater decrease of alienation was found in the MBO group over the control group.

Hypothesis eight, testing the internality-externality effect on alienation, was supported. The data indicates that there were reductions in alienation for internals in the MBO group and no significant reduction in alienation in the control group.

Conclusions

The most important finding of this study is the moderator effect of the locus of control of individuals in an MBO program in reference to the outcomes of performance, job satisfaction and motivation. More specifically, internally oriented individuals performed better, were more satisfied with their job and displayed higher motivation

than externally oriented individuals. Locus of control, even when taken under consideration in the assessment of the outcome variables in the control group, dominates the positive outcomes. We may conclude that the increases in the outcome variables over time is completely explained by the internal locus of control of the individuals in the study.

In addition, conclusions regarding the effect of MBO on alienation and the moderating effect of locus of control on alienation in an MBO program area worthwhile. The results are consistent with existing theory.

The extent to which the above mentioned conclusions can be generalized is limited by: (1) the nature of the subjects, (2) the situational constraints and (3) the limited time covered by the study. To be able to generalize with greater confidence, different kinds of populations should be used; different situations should be used, and a longer time frame for the study should be used.

The second important conclusion is that the study supports earlier findings by other researchers of MBO. Specifically that MBO increases performance and job satisfaction. In this connection, since the study followed a quasi-experimental design, it should add support via a new methodology to the earlier less strict methodologies used. This augments the generalizability of the findings.

Implications

The results of this dissertation have theoretical and practical implications for organizational theory and for managers. The theoretical implications are concerned with how personality characteristics may be useful in explaining and predicting organizational behavior. The practical implications, on the other hand, represent recommendations to managers regarding handling of MBO programs.

Theoretical Implications: The most important theoretical implication is that a generalized response to MBO, expecting that MBO outcomes are going to be positive and predictable, is not a realistic assumption. MBO may produce the desirable effects for some members of the organization but not for others. This dissertation takes the position that the influence of MBO on individuals is moderated by personality and situational variables. This was confirmed by the results of the present research. The results show that the individual's locus of control (his internality); a personality characteristic, affect the outcomes not only of MBO but also across the control group.

The results of the study have the following theoretical implications: (1) personality characteristics may be important in evaluating the outcomes expected from an MBO program and (2) the predictability of individual behavior in an MBO context is moderated by their locus of control.

Practical Implications: The results of this study indicate that the need for management to understand behavior in the organization can not be limited to the observation and measure of actual individual and group behavior. Management must also try to understand how individuals identify the locus of causality in their organizational behavior that is relevant to their personality. By making this identification, management would be in a better position to plan ahead what approach to use in reference to setting objectives and taking action to elicit individual performance.

Significance of the Study

The present study sought to provide a departure from the typical difficulties found in previous MBO research. By using a quasi-experiment with a control group, the problem of lack of scientific rigor in earlier MBO research is addressed. The subjects in earlier studies were basically managers. Since the subjects in this study were account representatives of a financial organization, the findings will add to the generalizability of MBO research findings. Since earlier studies have been conducted by MBO participants, consultants and managers and the present study was done by an independent researcher, the credibility of the findings is enhanced.

This study uses external criteria of work behavior, i.e. actual individual performance changes, instead of internal criteria directly linked to the MBO program. This approach improves the quality of the study and allows us to make meaningful conclusions from the study.

The present study, through its experimental design and methodology, makes possible to determine with some degree of confidence the causal relationships between the variables studied. Threats to internal validity, statistical conclusion validity and construct validity have been accounted for within the constraints imposed by the field situation. Therefore, although not free from criticism, the experiment has attempted to avoid the difficulties encountered in earlier research.

The most significant finding was the effect due to the locus of control on individuals in the MBO program. The internality dimension dominated the positive outcomes of the MBO program in the following criteria: performance, job satisfaction, and motivation. This finding is significant for not only further MBO research but for other organizational variables such as leadership, participation in decision making, decision analysis, creativity and many others.

This research indicates clearly how the effects of MBO are moderated by the individual participants' internal or external orientation. This may account for many of the problems reported in the literature with respect to MBO programs.

Recommendations for Further Research

Since, as indicated earlier in this study, MBO has had such wide adoption and acceptance it is important to continue to answer as many questions as possible about it. With this in mind, we must conclude that further research is necessary.

The present study can be expanded over time to see if the passage of time has any effect on the findings. Retest and measures of actual performance can be taken after a year and a comparison of the results can be obtained. The study should be replicated using different types of subjects and in different types of organizations to assess the generality of the findings.

Further research should consider the actual attributions that internals and externals make in reference to performance, job satisfaction, motivation, identification with the organization and alienation in MBO programs.

Research is also needed to test the internality-externality effect on different demographic groups. The effects on men versus women may prove to be interesting and important. Age differentials, racial differences, and/or level of differences in the organization may have an effect on the power of the model to predict.

Limitation of the Study

The present study is not without its limitations. Some limitations stem from the experimental design utilized and other limitations stem from the organizational setting in which it was conducted. Random assignments to the experimental condition was not possible due to the difficulties that this would have created within the host organization. Therefore, the experiment was not entirely free from threats to internal validity and as we saw in the analysis of the results there were areas in which strong causal inference was not possible.

It must also be pointed out that statistical conclusion validity threats can not be totally ruled out of the experiment. There is always a possibility that the statistics have led us to falsely conclude there is significant covariation in our data.

QUESTIONNAIRE

I am engaged in a research project to study variables related to job behaviors and how they affect a number of important job factors. The purposes of this study are to advance knowledge in this area of management and to fulfill the last requirement for my Ph.D.

Your cooperation in filling out this questionnaire will be a vital contribution to the fulfillment of the objectives of the study and my personal objectives. The results of the study will be available to you for your information. The findings may be of help in your own understanding of the relationships studied and for your own development.

All responses are confidential. Your name is not to be given on the questionnaire. The information provided does not permit the identification of any of the participants to the researcher. Questionnaires are being distributed in four field offices. All of the information received will be pooled together to carry out the study.

Thank you very much for your cooperation. I appreciate your help and contribution very much.

Sincerely,

M. F. Cairol
Chairman
Business Administration/Graduate Division

MFC/maf

PERSONAL BACKGROUND QUESTIONNAIRE

Please check the appropriate statement in the space provided.

1. AGE
 - 20-30 _____
 - 31-40 _____
 - 41-50 _____
 - 51-60 _____
 - 61-70 _____
 - Over 70 _____

2. SEX
 - Male _____
 - Female _____

3. MARITAL STATUS
 - Single _____
 - Married _____
 - Divorced _____
 - Separated _____

4. LEVEL OF EDUCATION
 - High School Diploma _____
 - Two years of college _____
 - Bachelor's degree _____
 - Master's degree _____
 - Doctorate degree _____
 - Other _____

5. MAJOR FIELD OF STUDY IN COLLEGE
 - Engineering _____
 - Business or Economics _____
 - Liberal arts, Humanities _____
 - Other (Specify) _____

6. SALARY RANGE

\$10,000-14,999 _____	60,000-69,999 _____
15,000-19,999 _____	70,000-79,999 _____
20,000-29,999 _____	80,000-89,999 _____
30,000-39,999 _____	90,000-99,999 _____
40,000-49,999 _____	100,000 _____
50,000-59,999 _____	_____

7. With which of the following groups do you most closely identify?
 - Black _____
 - Spanish surnamed _____
 - Asian _____
 - American Indian _____
 - White _____

FOR THE FOLLOWING, PLEASE CIRCLE

- | | | | | |
|--|-------|-----|------|------------|
| 8. Number of people you directly supervise? | 0-1 | 2-5 | 6-10 | 11 or more |
| 9. Length of experience in present position?
(years) | 0-1 | 2-5 | 6-10 | 11 or more |
| 10. How long have you been employed by this
company? | 0-1 | 2-5 | 6-10 | 11 or more |
| 11. How many years (including present position)
have you been working in a supervisory
position? | 0-1 | 2-5 | 6-10 | 11 or more |
| 12. How long have you worked under your
present supervisor? (years) | 0-1 | 2-5 | 6-10 | 11 or more |
| 13. During the last ten years, how many
different companies have you worked for? | 0-1 | 2-5 | 6-10 | 11 or more |
| 14. How many levels of management are between
you and the President? | 0-1 | 2-5 | 6-10 | 11 or more |
| 15. How many people is your supervisor directly
responsible for (excluding yourself)? | 0-1 | 2-5 | 6-10 | 11 or more |
| 16. How many levels of management are under
you? | 0-1 | 2-5 | 6-10 | 11 or more |
| 17. What is your job title? | <hr/> | | | |

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These consist of pages:

79	JOB DESCRIPTION INDEX
<hr/>	
80-83	ROTTER'S INTERNALITY-EXTERNALITY SCALE
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84	PROFILE OF ORGANIZATIONAL CHARACTERISTICS
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85	NEAL AND SEAMAN POWERLESSNESS SCALE
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86	PATCHEN MOTIVATION SCALE
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87	RIVISED JANIS - FIELD SCALE
<hr/>	
88-90	ATTRIBUTION SCALE

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IDENTIFICATION WITH THE WORK ORGANIZATION INDICES

104. If you could begin working over again, but in the same occupation as you're in now, how likely would you be to choose your present company as a place a work?

- Definitely would choose another place over my company
 Probably would choose another place over my company
 Wouldn't care much whether it was my company or some other place
 Probably would choose my company over another place
 Definitely would choose my company over another place for my occupation.

105. Following are two somewhat different statements about the relations between management and employees at your company:

- A. The relations between management and employees at your company are much different than in most other companies, because in your company both are working together toward the same goals.
- B. Relations between management and employees at your company are not really very different than in other companies; management is looking out for the organization's interests, and employees have to look out for their own interests.

Which of the two statements above comes closer to your own opinion?

- Agree completely with A
 Agree more with A than with B
 Agree more with B than with A
 Agree completely with B

The following almost identical question was used at the electronics company:

105b. Following are two somewhat different statements about the relations between management and employees at your company:

- A. The relations between management and employees at your company are much different than in most other companies, because they both are working together toward the same goals.
- B. Relations between management and employees at your company are not really much different than in other companies; management is looking out for the organization's interests, and employees have to look out for their own interests.

- Agree completely with A
 Agree more with A than with B
 Agree more with B than with A
 Agree completely with B

106a. How do you feel when you hear (or read about) some one criticizing your company's method of public power or comparing it unfavorably to private power?

- I mostly agree with the criticism
- It doesn't bother me
- It gets me a little mad
- It gets me quite mad
- I never hear or read such criticism

106b. How do you feel when you hear (or read about) some one criticizing your company or your company's products, or comparing your company unfavorably to other companies?

- It doesn't really bother me; I don't care much what other people think of my company
- It bothers me a little
- It bothers me quite a bit; I'm anxious to have people think well of my company
- I never hear or read such criticism

107. If someone asked you to describe yourself, and you could tell only one thing about yourself, which of the following answers would you be most likely to give? (Put a number 1 next to that item.)

- I came from (my home state)
- I work for my company
- I am a (my occupation or type of work)
- I am a graduate of (my school)

If you could give two answers, which of the items above would you choose second? (Put a number 2 next to that item.) If you would give three answers, which one of the items would you choose third? (Put a number 3 next to that item.) (Scored 1 through 4, with those choosing (your company) as first choice getting a 4 and those not choosing it at all getting a 1.)

108. If you or were to have a son, how would you feel if someone suggested that he work for the same company that you work for? (If you are a woman, answer for a daughter.)

- Would completely approve
- Would generally approve, but with some reservations
- Would neither approve nor disapprove
- Would disapprove a little
- Would strongly disapprove

109. In general, how often do you tell someone in your immediate family (wife, child, parent, brother, sister) about some project that TVA has done or is doing?

- Once a week or more
- Several times a month

- _____ About once a month
_____ Once every few months _____ About once a year
_____ Don't have any immediate family to talk to

110. In general, how often do you tell someone outside your immediate family (friends, neighbor, store clerk, etc.) about some project your company has done or is doing?

- _____ Once a week or more
_____ Several times a month
_____ About once a month
_____ Once every few months
_____ About once a year

111. During the past two years, how many times has your part of the company had a dinner, a picnic, or other social event outside of office hours?

- _____ Five or more times
_____ Four times
_____ Three times
_____ Once
_____ Never that I know of

Of any social events held:

How many of these social events did you attend?

- _____ Five or more
_____ Four
_____ Three
_____ Two
_____ Once
_____ None

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