

MBO PROGRAM CHARACTERISTICS, TYPE A PERSONALITY AND
INDIVIDUAL PERFORMANCE

by

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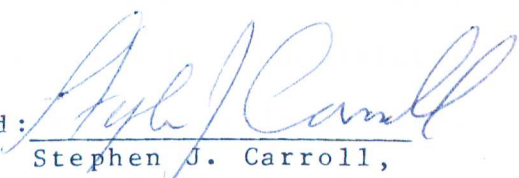
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ABSTRACT

Title of Dissertation: MBO Program Characteristics, Type
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Cynthia Lee, Doctor of Philosophy, 1984

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Management

This study sought to explain some of the inconsistent results in the Management By Objectives research by examining the moderating role of the motivational individual difference variable, Type A Behavior Pattern, and the mediating role of the cognitive individual difference variable, perceived self-efficacy. Specifically, individuals low in Type A Behavior Pattern (TABP) were hypothesized to respond more positively to various components of Management By Objectives (MBO) programs than individuals high in TABP. This is based on the assumption that Type A individuals generally set higher performance goals, seek performance feedback, and in general, attempt to control their performance situation more than their Type B counterparts. On the other hand, the mediating role of self-efficacy is based on the assumption that certain external environment variables,

such as MBO programs, affect performance primarily through influencing an individual's percept of self-efficacy. The results did not support the above hypotheses. The findings, however, provide further support for Bandura's (1977) assertion that self-efficacy has a positive effect on performance. Moreover, the results also supported previous research on the positive effect of quality MBO attributes on performance.

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TABLE OF CONTENTS

	Page
Chapter 1 - INTRODUCTION	
A. Overview	1
B. Background	5
C. Need for study	10
Chapter 2 - REVIEW OF THE LITERATURE	
A. Background	15
B. Management By Objectives (MBO) and Performance	18
C. MBO and individual difference variables	20
D. Historical overview of the moderator variable: Type A Behavior Pattern (TABP)	30
E. Assessment of TABP	31
F. TABP and personality variables	32
G. TABP: its relevant components & performance	36
H. Self-efficacy	42
I. Self-efficacy and performance	43
J. Self-efficacy as a mediator	44

Chapter 3 - Hypotheses	
A. Quality MBO and performance	48
B. TABP and performance	49
C. Interaction of Quality MBO and TABP on performance	50
D. Self-efficacy as a mediator between Quality MBO and performance	59
Chapter 4 - Method	
A. Sample & Procedure	62
B. Measures	63
Chapter 5 - Analyses & Results	69
Chapter 6 - Discussion & Conclusion	73
REFERENCES	86
APPENDIX	111

LIST OF TABLES

	Page
1. Type A Characteristics in research literature	105
2. Intercorrelations among variables used in the study	106
3. Moderating role of TABP on Quality MBO and Performance Relationship	107
4. Moderating role of TABP on Quality MBO components and Performance Relationships	108
5. Moderating role of TABP on Quality MBO components and Performance Relationships	109
6. Mediating role of self-efficacy on Quality MBO and Performance Rating	110

CHAPTER 1

INTRODUCTION

Overview

Goal setting has been found to be one of the most effective motivational techniques for improving individual performance. According to Locke, Shaw, Latham & Saari (1981), goal setting is extremely effective in influencing individual performance in both laboratory settings and in industry. Most studies have found that specific, challenging goals led to better performance than easy or vague goals. Participation in goal setting and performance feedback have been found to motivate higher performance when it led to the setting of high goals. When goal setting is incorporated into a more complex system of management called Management By Objectives (MBO), the performance results also have generally been positive. (Carroll, in press; Gillen, Carroll & Fitzpatrick, 1984; Kondrasuk, 1981).

However, some disappointing and even negative results for MBO programs have been obtained. According to Odiorne (1979), setting inappropriate objectives will result in problems during task execution. Moreover, claims Odiorne,

when MBO is administered as a system of administrative control without workers' participation in setting the objectives or without providing these individuals with progress feedback, such a system may foster mistrust and fear.

The lack of success of an MBO system may be because of the variations in the basic components of the MBO program implemented among organizational units. Gillen et al. (1984) have suggested that in order for an MBO system to be effective, all of the basic components of a quality MBO system must be in place. The list of quality MBO program characteristics have been suggested by Gillen et al. (1984) as:

- 1) involvement or participation of the person for whom the objectives are developed.
- 2) high degree of difficulty or challenge of the objectives that are set.
- 3) high degree of specificity for objectives.
- 4) feedback on the progress of performance relative to goals.

Gillen et al. (1984) have noted that some organizations or units with official MBO programs may differ in the level of goal challenge, goal clarity, or differ in the amount of feedback provided. Moreover, while some units or individuals may be given a good deal of participation in

the establishment of individual or unit goals, other units may have lower levels of such influence. Such differences in MBO program components could contribute to differences in MBO program success.

Evidence to support the need for quality MBO program components can be found in a study by Ivancevich (1974). Ivancevich (1974) found that the sales performance of the marketing departments in both of the MBO plants studied, as contrasted to the non-MBO plants, improved over the three year period covered by the study. However, the highest performance (both qualitatively and quantitatively) improvement was found in the plant where the entire system of MBO components was of higher quality (the strong MBO system) rather than just one or some of the MBO components (the weak MBO system). Although the components of the "strong MBO system" were not clearly specified by Ivancevich (1974), McConkie (1979) in a thorough review of the MBO literature, has suggested that successful MBO program requires setting specific work objectives which are joined to an action plan. Further, subordinate participation during goal setting may also facilitate the integration of individual and organizational goals. Further feedback can also be used to evaluate performance or to change goals as circumstances warrant.

In addition to MBO program characteristics, another reason for the lack of success of an MBO system may be that MBO systems should be tailored to the characteristics of the individual (Carroll, in press; Campbell, 1982). Research has indicated that individual and organizational outcomes obtained in goal setting or MBO programs may vary, depending on the participant's characteristics such as the level of need for achievement (Steers, 1975), higher-order need strength (Ivancevich & McMahon, 1977a), self-assurance and maturity (Carroll & Tosi, 1970), race (Ivancevich & McMahon, 1977b), and education (Latham & Yukl, 1975). While the above studies imply that individual differences may moderate the effects of MBO programs, The results of the individual difference studies of MBO are inconsistent. For example, high need achievers generally have been found to set more difficult goals (Steers, 1975; Yukl & Latham, 1978) but at other times, it is the low need achievers who set more difficult goals (Steers, 1976).

A number of possible explanations for these inconsistencies have been suggested by Locke et al. (1981) who noted that individual difference effects generally have not been the primary focus of these studies. As a result, the individual difference variables studied were not included because of any clear theoretical rationale.

It is quite possible that some of the research supporting the moderating effects of individual differences may be simply due to chance. Moreover, the use of varied individual difference measures with questionable psychometric properties across studies further complicates any conclusions drawn from such research results. Therefore, there is a need to further examine the role of individual difference variables which also bear theoretical relationships with MBO characteristics as potential moderators of the MBO-performance relationship.

One individual difference variable which may moderate the effectiveness of MBO programs is the Type A behavior pattern (TABP). TABP can be described as an action-emotional complex which manifests itself in individuals who are trying to do more and more in less and less time (Friedman & Rosenman, 1974). Type A individuals are characterized by attributes such as unbridled ambition, high need for achievement, time urgency, impatience, polyphasic thought, and hard-driving competitiveness. TABP is viewed as a continuous variable ranging from very high levels to the relative absence of TABP, a state known as Type B.

TABP and Performance

TABP seems particularly relevant for the studies of organizational effectiveness because it has been related

to the individual's performance and health. For example, Type As are three times as likely to suffer from coronary heart disease (controlling for other risk factors) than are their Type B counterparts (Burke & Deszca, 1982; Matteson & Ivancevich, 1980). Further, Type As tend to set higher goals and to perform better under certain conditions than Type B individuals (Matthews, Helmreich, Beane & Lucker, 1980; Taylor, Locke, Lee & Gist, in press). Although TABP has been shown to be related to performance in the laboratory setting or in college student samples (Glass, 1977; Matthews, 1982), only Taylor et al. (in press) and Matthews et al. (1980) have examined and found a positive relationship between TABP and performance in field settings. However, both of these studies employed faculty members in major universities as their research samples. Therefore, based on the above results, this study also predicts a positive association between TABP and performance.

The interaction of TABP and MBO characteristics on individual performance

Based on Locke et al.'s (1981), Carroll (in press) and Kondrasuk (1981) reviews, the quality MBO characteristics described above (clarity and difficulty of objectives, participation in setting objectives and feedback) were predicted to be related to individual

performance. In spite of the fact that individual difference variables have not consistently been shown to moderate the effects of MBO on performance, there are several reasons to suspect that Type A levels may affect an individual's responses to MBO systems. Specifically, individuals low in TABP might be expected to benefit more from some MBO characteristics.

For example, Matthews (1982), in a review of the Type A literature, has proposed that TABP reflects a combination of a strong value placed on productivity and the existence of unclear standards for evaluating that productivity. To reduce this ambiguity, Type As display hard-driving competitiveness (HDC) and a strong aversion to missing deadlines or wasting time. Further, there is some evidence to suggest that Type A individuals naturally seek out standards for their performance with comparisons to others who are similar but slightly better than themselves (Suls, 1977; Gruder, 1977) and to request higher, normative data for use in evaluating their own performance when the standard for comparison is ambiguous or absent (Matthews & Angulo, 1980). Therefore, Type A individuals may, on their own, without a formalized, externally imposed MBO program, set higher goals and seek information to clarify work objectives in order to improve performance.

Moreover, Yarnold & Grimm (1984) found that extreme Type As were significantly more interpersonally dominant and exhibited greater nonconformity than the extreme Type Bs in a forced negotiation situation. This is based on the inherent achievement orientation, competitiveness and aggressiveness of the Type A individuals. Further, TABP is correlated with a desire for public esteem (i.e. through task mastery) and a desire for dominance and a leadership position (Klein & Willerman, 1979; McClintock, 1972; Megargee, 1969; Sales, 1969; Sanders & Milkis, 1982). Perhaps an externally imposed MBO system with high goal difficulty and high goal clarity may benefit a Type B's performance more than the nonconforming Type A's.

Self-efficacy as a mediating variable in the QMBO and performance relationship

Self-efficacy, that is, the judgment of "how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982), has been found to be related to performance in a variety of settings (Barling & Abel, 1983; Barling & Beattie, 1983; Locke et al., 1984; Bandura, 1982). Moreover, Locke et al. (1984) and Taylor et al. (in press) have also found that self-efficacy was positively related to the individual's setting higher performance goals.

Self-efficacy is affected by past performance, by

modeling (observing others taking similar actions), by persuasion or by autonomic arousal (Bandura, 1977). The feedback component of the QMBO program indicates to the individuals their level of past performance and ways to improve performance. Similarly, the joint setting of specific and difficult goals from the QMBO program are based on past performance as well. Thus QMBO programs may also increase an individual's self-efficacy perceptions.

Further, self-efficacy is a concept similar to other individual difference variables such as task-related self-esteem or self-assurance. For example, Carroll & Tosi (1970) found managers with high levels of self-assurance to increase their effort when performance goals were difficult. However, the low self-assurance managers effort levels were lowered from previous levels when performance goals were difficult. Similarly, Dossett, Latham & Mitchell (1979) found high self-esteem female clerks to outperform the low in self-esteem clerks when the same performance feedback was given.

From the above, it appears that self-efficacy is a critical variable in explaining behavior. The present study tries to explain the relationship between external goal setting or QMBO on performance as mediated by self-efficacy. This prediction is based on the assumption that self-efficacy is related to performance both directly

and indirectly (Bandura, 1984). It has repeatedly been found to be related to various behaviors such as improved performance, or setting higher performance goals. Self-efficacy may also indirectly affect performance when QMBO leads to the setting of specific and difficult goals, knowledge of performance (feedback) may affect individual performance through cognitive processes such as self-efficacy (Bandura, 1977; Mitchell, 1983). Thus, it might be expected that self-efficacy will mediate the relationship between QMBO and performance.

Purpose of this dissertation

Given the present state of knowledge about the relationship of MBO and its component subsystems and performance as described in the overview, it is the purpose of this dissertation to examine the moderating role of TABP on MBO program characteristics and their relationship to performance. Moreover, the direct as well as the mediating role of self-efficacy on the relationship between QMBO with performance will also be examined.

Need for study

As indicated in the overview, the positive effects of goal setting on task performance has been found to be extremely robust and replicable. Over 90% of the studies reviewed by Locke et al. (1981) found that specific and difficult goals, once accepted, led to higher performance

than did nonspecific goals or no goals. Similarly, MBO has also been widely studied and although the effectiveness of MBO programs are less robust, the design and implementation of MBO are more complex than individual goal setting. Despite such documentation on their effectiveness, the moderating role of individual differences on the relationship between MBO characteristics and individual performance have yielded inconsistent results.

Individual differences play an integral role in several prevailing motivation theories (McClelland, 1965; House, 1971; Hackman & Oldham, 1976; Vroom, 1964; Miner, 1980). According to Ivancevich (1978), there is no reward system, performance evaluation procedure, organizational structure or goal setting technique that is "ideal" for all employees. Individual differences in needs, goals and backgrounds exist and need to be carefully studied if MBO programs are to be effective in influencing individual, unit and organizational performance. Moreover, Steers & Porter (1974), Carroll & Tosi (1973) and Ivancevich & McMahon (1977a) have indicated that the relationship between MBO attributes and various outcome measures may be obscured by individual difference variables. As suggested above, TABP appears to be an especially important individual difference variable and offers an explanation

of the differences that have been found in the effectiveness of MBO programs.

The concept of self-efficacy has also been emerging as an important intervening variable in the studies of individual behavior. Recently Taylor et al. (in press), and Locke et al. (1984) have examined the relationship of self-efficacy and internal goal setting with individual performance. Bandura (1984) has called for more studies designed to examine the mediating role of self-efficacy on the relationship between an externally imposed system variables such as MBO and performance in the field setting. This dissertation attempts to provide such an examination.

Chapter Organization

The remaining chapters of this dissertation will contain the following elements:

Chapter II - Review of the literature and hypotheses

Since this dissertation is concerned with individual performance, the literature review pertains only to the relationship of personality variables and quality MBO (QMBO) components with individual performance. The literature on goal setting and MBO have been thoroughly reviewed elsewhere (Locke et al., 1981; Carroll, in press). This chapter will examine only the literature on

goal setting or MBO related to personality variables.

Similary, the relationship between Type A behavior pattern (TABP) and coronary heart disease has been reviewed by Matthews (1982), and Matteson & Ivancevich (1980) and is beyond the scope of this dissertation. This chapter will briefly assess the Type A behavior pattern as a construct, followed by a discussion of its relationship to the QMBO components. The last section consists of a brief review of the literature on self-efficacy and its relationship to QMBO and individual performance.

Chapter III - Hypotheses

The major hypotheses and minor hypotheses will be stated and explained.

Chapter IV - Methodology

The sampling procedures, the instruments used to measure the independent and dependent variables will be described in this chapter. Psychometric properties of the instruments used in this dissertation will be assessed. Validities and reliabilities of these instruments will be reported.

Chapter V - Analyses and results

Detailed analysis of the data will be provided along with summaries of the results.

Chapter VI - Discussion, conclusion and implication

A thorough discussion of the research results will be presented, followed by a general conclusion drawn from the research results. The last section will identify the limitations and implications of this dissertation.

CHAPTER 2

LITERATURE REVIEW

A. Background

The importance of setting work objectives or goals was first noted by Frederick W. Taylor (1911). DuPont, General Motors, and Standard Oil of New Jersey were among the first to adopt an objective-based management style of organization (Greenwood, 1981). General Motors was the first to make their performance standards difficult to achieve, but possible to attain. It was not until much later that Peter Drucker (1954) used the term Management By Objectives (MBO) for the first time.

Since that time, a large amount of research has been conducted to examine the effects of MBO on individual, unit or organizational performance. MBO has attracted the attention of the world of academic, private and public sector managers. While some consider MBO to be a philosophy, others consider MBO to be a management technique or style of management. According to McConkie (1979), MBO is "a managerial process whereby organizational purposes are diagnosed and met by joining superiors and subordinates in the pursuit of mutually agreed upon goals and objectives which are specific, measurable, time bounded, and joined to an action plan;

progress and goal attainment are measured and monitored in appraisal sessions which center on mutually determined objective standards of performance". Carroll (in press) has maintained that MBO systems have at least four common features. The first two consisted of the joint setting of specific and difficult, short-term performance goals with the subordinates by the supervisor. Third, through participation, an action plan is developed for meeting the goals. The potential obstacles to goal attainment are identified and strategies are devised for overcoming the obstacles. Lastly, after an agreed-upon amount of time passage, another meeting is held to review and evaluate the individual's progress toward accomplishing his/her goals, or performance feedback. On the basis of this evaluation, follow-up or revised goals are developed and the process begins all over again.

The basic components of a QMBO program - the setting of specific and difficult work objectives, participation in setting the work objectives, and performance feedback or evaluation - have drawn world-wide attention and wide adoption of this management technique. According to Carroll (in press), there are an enormous number of papers, articles and books on the subject. Tafoya (1978) published a bibliography on MBO which contained over 60 books, over 200 articles, and over 80 dissertations. The

Bureau of National Affairs (1980) surveyed the use of MBO in industry and found that 60% of all firms and 75% of firms with over 2,500 employees were using an MBO approach. According to Odiorne (1978), hundreds of company-prepared manuals and documents are designed for internal company training and guidance in applying MBO. At least one regular monthly journal and several newsletters on MBO are currently in existence. Thus the application of MBO in American industry is clearly extensive.

Carroll & Tosi (1973) have indicated that MBO systems can improve performance in a number of ways. First MBO influences performance by specifying performance criteria as well as the expected level of performance on the specified criteria. Locke et al. (1981) have demonstrated that specific and hard goals, once accepted, will generally result in higher performance than easy goals. Thus participation in establishing objectives are used in MBO systems to ensure acceptance. Moreover, MBO also contributes to performance by providing individuals with a standard for evaluating one's own performance. Moreover, the periodic performance feedback provided to the individuals will activate self-evaluation and self-corrective devices to bring current performance levels up to the intended levels.

MBO and performance

Many of the studies of MBO have been descriptive (Kondrasuk, 1983; Odiorne, 1965). Case studies typically relate personal experiences of the authors and documents that support and encourage the use of MBO. Negative impact, issues of performance and other job related attitudes are generally excluded from the report or case study.

However, Kondrasuk (1983) has indicated that there are quite a number of research studies which relate the use of MBO to performance levels achieved by individuals, groups or organizations. Since this study is concerned with individual performance, the following review will primarily be based on individual performance.

According to Carroll (in press), the research studies designed to test the relationship of MBO characteristics and individual performance have mostly been positive especially when the tasks are quite simple. Locke et al. (1981) have found that the positive performance effect of specific hard goals on performance has been extremely robust and replicable. Similarly, Meyer, Kay & French (1965) studied managers participating in an MBO program at the General Electric Company as compared to managers working on a traditional performance appraisal system not using specific objectives. They found that over a one

year period, the managers participating in the MBO system showed performance improvement of 65% on the performance dimension which were translated into specific goals. However, only 27% of the performance dimensions not converted into specific goals showed improvement. Thus it appears that specific goals lead to higher performance than nonspecific goals.

Despite the positive findings on the effectiveness of MBO characteristics on individual performance, various writers and authorities on the subject do not agree on how effective the typical MBO program really is. While some have claimed that MBO is definitely beneficial (Locke et al., 1981; Carroll & Tosi, 1973; Jones, 1975; Klingner, 1979; McConkey, 1973; Odiorne, 1979; Weihrich, 1976; Weihrich & Mendelson, 1978), Chesser (1972), Stein (1975), and Baker (1978) have noted, however, MBO can lead to success or failure depending on how it is implemented. Further, research has also indicated that the suitability of particular MBO characteristics may change across organizations, tasks, and people (Carroll, in press). The mediating role of personality variables on the effectiveness of QMBO systems have been suggested by many (Carroll & Tosi, 1970; Locke et al., 1981; Steers, 1975) but has received little research attention. Since this dissertation examines the moderating role of personality

on the relationship between QMBO and individual performance, the following literature review will be concerned only with studies which examined the joint effects of any of the QMBO components and personality variables on individual performance and other behavioral and attitudinal outcomes. Moreover, since this dissertation is concerned with individual performance only, QMBO's impact on unit and organization performance will be excluded from the following literature review.

B. QMBO components and personality variables

1. The interactive effect of difficult work objectives, personality and individual performance

Research has indicated that specific, difficult goals lead to higher performance than easy or non-specific goals (Locke & Latham, 1984). However, with few exceptions, the joint effect of personality and QMBO system characteristics influences have not been explored.

Some research on need for achievement (Nach) has shown that high need achievers performed better on tasks of moderate difficulty than on easy or difficult tasks (Atkinson, 1957; Feather, 1961; Heckhausen, 1967). However, Atkinson may have assumed that difficult tasks will not be translated into goals. Locke, however, argues that attainable difficult goals can lead to higher performance.

Steers (1975) and Steers & Porter (1974) have argued that high need achievers will exhibit greater responsiveness to the quality MBO components such as the setting of specific and difficult work objectives, participation in setting work objectives and performance feedback. Yukl and Latham (1978) provided empirical support for Steers' suggestion indicating that the high need achievers set more difficult and challenging work objectives than the low need achievers.

In a study in which individuals were allowed to set their own goals, Matsui, Okada & Kakuyama (1982) found that high need achievers chose significantly higher goals than did the low need achievers. Moreover, the high need achievers also demonstrated greater effort after receiving feedback than before the feedback.

Singh (1972) found that students with high *Nach* set higher objectives for themselves over repeated trials when performing a mathematical, clerical task than did the low need achievers.

Steers (1975) obtained some evidence indicating that the effects of difficult work objectives may be moderated by the need for achievement. He found that difficult work objectives were positively related to performance for high need achievers and negatively related to performance for low need achievers, while neither relationship was

statistically significant.

Based on the job design literature which indicates that growth need strength moderates the relationship between job characteristics and behavior, Ivancevich & McMahon (1977a) have investigated the moderating effects of higher-order need strength and QMBO attributes. Using a sample of skilled maintenance technicians, they found that the relationship between challenging work objectives, the clarity of work objectives and feedback with various effort and performance measures were significantly stronger for technicians who were low on higher-order need strength.

Carroll & Tosi (1970) selected a sample of managers participating in the work-planning and review program of a medium-sized national manufacturing firm. Using the Ghiselli self-description inventory, they found a significant positive relationship between difficult work objectives and increased effort for managers high in self-assurance. For managers low in self-assurance the relationships between difficult work objectives and increased effort were significantly negative.

The above studies seemed to suggest that difficult objectives may work well for individuals with high self-assurance, low growth need strength, and high need for achievement. However, with only a few studies have

examined these relationship reliable and valid generalizations cannot be made.

2. The interactive effect of setting specific work objectives and personality on individual performance

Steers (1975) found weak support for the moderating effect of need for achievement among a group of female first line supervisors. Rated performance was significantly related to specific work objectives for high Nach individuals but not for low Nach supervisors. Unfortunately, Steers (1975) did not test the significance of the differences between correlation coefficients to establish a moderating effect (Zedeck, 1971).

Arvey & Dewhirst (1976) have suggested that need for autonomy may moderate the QMBO attributes such as specific work objectives and employee behavior relationships. Individuals who have a high need for autonomy may resent the excess paperwork and time required in the QMBO process. Both Raia (1965) and Tosi & Carroll (1968) reported that some portions of their samples felt unduly constrained by the requirements of the QMBO program. Perhaps highly autonomous employees may dislike the clarification of what they are to do and how they are to do it while low autonomy individuals may find these same features highly desirable. Perhaps high goal clarity may facilitate performance for some individuals and not

for others. Unfortunately, the lack of replication and inconsistency in the results across studies makes it difficult to provide reliable generalizations about the influence of personal factors on the relationship between QMBO components and individual performance.

3. The interactive effect of participation in setting work objectives and personality on individual performance

Much effort has been directed toward understanding the impact of participation in decision making, or joint decision making, on two categories of employee responses: affective responses, such as morale and job satisfaction, and behavior responses, such as productive efficiency (Locke & Schweiger, 1979). The results of laboratory, field and correlational studies summarized by Locke & Schweiger (1979) indicated that participation in decision making studies failed to show any consistent trend to support its predicted relationship to affective and behavior responses.

Locke & Schweiger (1979) summarized the review by suggesting that participation may be more effective among the less rather than the more motivated employees, e.g. those low in job involvement, low in need for achievement, and low in commitment to organizational goals (Tannenbaum & Schmidt, 1958; Vroom, 1969; Singer, 1974; Tannenbaum, 1974; Fein, 1976). For example, in a field experiment

conducted by Latham & Yukl (1975) to compare assigned, participative, and "do your best" goal setting conditions among logger crews, they found, in the uneducated sample, that the loggers working under the participative condition had higher productivity than the assigned and "do your best" loggers.

Arvey & Dewhirst (1976) have suggested that high need for affiliation individuals may react well to interaction during the QMBO process. Unfortunately few data are available concerning the possible moderating effect on need for affiliation individuals within the context of QMBO programs. Steers (1973) found that participation in setting work objectives was related to job performance for subjects low on need for affiliation.

In another study, Steers (1975) in a study of first-level superiors participating in a QMBO program found that participation in setting work objectives was significantly related to effort and performance for low need achievers. Perhaps the increase in participative goal setting serves as a catalyst to the low need achievers by providing group support and a feeling of ego-involvement in the goal outcomes (Vroom, 1960). However results obtained by Yukl & Latham (1978) indicated that when high Nach typists were allowed to participate in the setting of their production goals, they set more

difficult goals than those low in Nach. However, the high Nach typists did not outperform the low Nach typists.

Searfoss & Monczka (1973) failed to find a moderating effect of need for independence on the relationship between participation in setting budgetary objectives by managers and their subsequent motivation to achieve these goals. Similar results were obtained by Latham & Yukl (1976) and Dossett, Latham & Mitchell (1979). Need for independence did not moderate the effects of participation in setting work objectives on performance.

Latham & Yukl (1976) in a study on typists, did not find self-esteem to moderate the effects of participation in setting work objectives or assigned goal setting on performance. In another study, Yukl and Latham (1978) found self-esteem and goal instrumentality had an interactive effect on performance. Locke et al. (1981) have suggested that this could be a result that people with high self-esteem may work harder without extrinsic rewards than those low in self-esteem.

The above studies seem to suggest that participation in setting work objectives may work better with employees who are low in motivation. According to Locke & Schweiger (1979), possibly employees with low motivation feel powerless and unefficacious and participation gives them a feeling of control which is manifested in setting

challenging goals, higher goal commitment, and/or greater job involvement. For the highly motivated employees, PDM may simply be redundant and unnecessary.

4. The interactive effect of performance feedback and individual difference on individual performance

There is limited evidence to suggest that both effort and performance are increased for high need achievers when they are given considerable feedback on task performance. On the other hand, the low need achievers seem to be less concerned with their level of performance and generally are not strongly motivated by such feedback (Heckhausen, 1967; Wendt, 1955).

Steers (1973) found that feedback was significantly and positively related to effort and performance for individuals with high need for achievement, affiliation, and independence.

In another study, Ivancevich & McMahon (1977a) found that for goal challenge, clarity and feedback, the relationships with various performance criteria were significantly larger for the technicians with high growth need strength than those with low growth need strength.

Matsui, Okada & Kakuyama (1982) found that high need achievers increased their effort and performance levels more after the provision of performance feedback than the low need achievers when the performance goals were set by

the individual themselves.

In another line of research performed by Baron and his associates (Baron, Cowan, & Ganz, 1974; Baron, Cowan, Ganz, & McDonald, 1974; Baron & Ganz, 1972), they found that individuals with high internal locus of control performed better than externals when task or intrinsic feedback was the only type of feedback available. On the other hand, externals outperformed internals when they received extrinsic feedback or feedback provided by others. According to Ilgen, Fisher & Taylor (1979), the above results were replicated on lower-class blacks and white children as well as college students, indicating that the effect is a stable one.

Schranger & Rosenberg (1970) found that shifts in performance following feedback depend on the individual's self-esteem. Specifically, high self-esteem individuals improved their performance more than low self-esteem individuals following positive feedback, while the performance of low self-esteem individuals decreased more than the high self-esteem individuals following negative feedback. It is likely that high self-esteem individuals are influenced more by positive feedback, whereas low self-esteem individuals are influenced more by negative feedback. Dossett et al. (1979) found that high self-esteem word processing operators who were given

performance feedback attained their goals significantly more often than their low self-esteem counterparts.

In another study, Weiss (1977) found that subordinates with high self-esteem relied less on their job environments and more on their own self perceptions to guide their task-related behavior. Perhaps their high levels of self-esteem led them to be more confident of their ability to do well in the job setting (Ilgen et al., 1979), and consequently, felt less need to explore their environment for cues about how to perform.

From the above, it seems likely that individual differences may significantly affect how people respond to feedback. Affiliation oriented individuals appear to respond more to group level feedback, while task or achievement oriented individuals respond more to individual feedback (Nadler, 1979). Berkowitz, Levy & Harvey (1957) found that highly motivated individuals were more affected by individual and unfavorable feedback than were the poorly motivated individuals. Moreover, French (1958) found that high need achievers responded to task feedback with higher performance levels. On the other hand, the low need achievers performed better with performance feedback.

C. Type A Behavior Pattern

Historical Overview: The medical profession was among the first to observe a possible association between coronary heart disease (CHD) and behavioral attributes. After interviewing a random sample of several hundred hospital patients, Dunbar (1943) concluded that these patients varied distinctly in their "coronary personality", i.e., they were being compulsive, dominating and aggressive. However, only twenty-two of the several hundred interviewed individuals were cardiac patients. It was not until the 1960s that researchers began to use a more systematic approach to identify the possible "coronary personality" components and CHD relationships. At about the same time, Friedman & Rosenman of the Harold Brunn Institute for Cardiovascular Research began to search for a personality type. Their research led them to propose that it is a behavior pattern called Type A, which bears an etiology relationship with CHD.

The Type A behavior pattern is a set of aggressive, ambition, time-urgent, impatient and competitive behaviors that are elicited by environment stressors or challenges (Friedman & Rosenman, 1974; Matthews, 1982; Price, 1982). The type A behavior pattern has been measured both by a standardized interview and through questionnaires. Neither of these two methods offer a comprehensive domain

of the Type A construct. More studies should be conducted using both methods to obtain higher construct validity.

Assessment of Type A Behavior Pattern

The most publicized techniques for assessing Type A are the standard interview (SI) (Rosenman, 1978; Chesney, Eagleston & Rosenman, 1980), and questionnaires such as the Jenkins Activity Survey (JAS) (Jenkins, Rosenman, & Zyzanski, 1974; Jenkins, 1971). Other scales include the Bortner Scale (Bortner, 1969), and the Framingham Type A Scale (Haynes, Levine, Scotch, Feinleib, & Kannel, 1978) and the Behavior Activity Profile (Matteson & Ivancevich, 1980).

Comparisons of the two assessment methods (questionnaire: JAS or the SI) have consistently shown that the SI to be a better predictor of CHD than questionnaires (Brand, Rosenman, Jenkins, Sholtz & Zyzanski, 1978; Rosenman & Chesney, 1980). Moreover, the JAS and the SI do not always show high levels of agreement in distinguishing Type A and Type B behavior patterns. Jenkins, Zyzanski & Rosenman (1971) report the agreement between the SI and JAS classifications in approximately 73% of all cases. According to Carver & Humphries (1983), this is because the stress-inducing character of the interview "pulls" Type A behavior from susceptible individuals, thus distinguishing them more clearly from

the Type B's. In addition, Matteson & Ivancevich (1980) have suggested that the classification which derives from the SI is heavily dependent upon interview observations of overt behavior, while the JAS must depend on self-report content alone.

Although the agreement between the classifications made by the JAS and SI are lower than might be desired, it is perhaps unreasonable to expect a subjective self-report measure to provide the same information as a direct "objective" observation. The most recent questionnaire designed to measure Type A behavior pattern called Behavior Activity Profile (Matteson & Ivancevich, 1980) was assessed to correlate $r=.73$ with the SI (Ivancevich, Matteson & Preston, 1982) and the resulting subscales are consistent with the basic dimensions of TABP, that is, job involvement, competitive hard driving, and impatience, polyphasic thought (Taylor et al., in press).

Type A behavior pattern and personality variables

Empirical work has been designed to examine other personality dimensions which the Type A behavior pattern is related to. Table 1 presents a list of the characteristics which have been used to describe Type A behavior pattern. According to Matteson & Ivancevich (1980), the Type A behavior pattern is possibly the manifestation of underlying personality dimensions. For

example, in a study by Bahnson & Wardwell (1966) designed to evaluate personality traits and sociological conditions predisposing to CHD, it was found that Type A behavior pattern explained some of the personality manifestations of the older age coronary group including compulsivity, and reaction formation.

INSERT TABLE 1 ABOUT HERE

In another study by Caffrey (1968) using the SI to assess the Type A behavior pattern, he found no meaningful relationship with the dimensions as measured by the Cattell 16-PF questionnaire. A factor analysis of the Cattell 16-PF questionnaire and the Type A behavior pattern resulted in independent factors.

In an intensive study designed to examine empirical relationships between personality variables and the Type A behavior pattern by Rosenman, Rahe, Borhani and Feinlieb (1974), using the SI, these researchers found that the Type A behavior pattern is correlated with the Thurstone Temperament Schedule's (Thurstone, 1949) scales of "active", "impulsive", and "dominant" dimensions. Type A behavior pattern is also correlated with Gough's (1952; 1957) Adjective Check List of aggressive, exhibition, and correlated negatively with self-control, and counseling readiness. Moreover, the behavior pattern is also correlated with the Minnesota's Multiphasic personality

inventory's (Hathaway & McKinley, 1952) "worried breadwinner" and two of the Cattell 16-PF scales of imaginative and relaxed-tense.

Competitive, achievement striving is a component of Type A behavior pattern viewed as an underlying dimension of the other dimensions, i.e. time urgency and aggressiveness. For example, the Type A's sense of time urgency may be seen as stemming from an attempt to accomplish more and more in less and less time and the Type A's aggressiveness appears to arise when an accomplishment has been thwarted (Carver & Humphries, 1983).

In a study designed to examine Pattern A's relationship with achievement striving and scientific merit among social scientists, Matthews et al. (1980) found that the behavior pattern is positively associated with mastery work and competitiveness. More specifically, they found that Type A individuals to prefer challenging tasks, to like work and to be competitive in their orientation.

Glass (1977) found the Type A syndrome to be associated with internal locus of control scale, as well as other measures including self-confidence, dominance, aggressiveness, and achievement motivation. Using Edwards (1957) measure of achievement motivation, Glass found Type

A, as measured by the JAS scores, to be slightly but significantly related to achievement motivation in two samples ($r=.14$ and $r=.17$). However, using the TAT measure of need for achievement, Matthews & Saal (1978) found no significant relationship between pattern A and achievement motivation. Further, they found that those individuals who had very high achievement motivation and little fear of failure had high Type A scores on the JAS. Similar results were obtained by Gastorf and Teevan (1980).

It appears that high Type A individuals, especially measured by the JAS, can be characterized as vigorous achievement strivers who are also aggressive. From the above, it seems that the behavior pattern is not independent of other personality dimensions. According to Matteson & Ivancevich (1980), no one, or combination of a few traits could explain or could predict aggression and impulsivity. These traits have been used to describe both the behavior pattern itself and the characteristic of individuals who have experienced a variety of CHD symptoms. However, the Type A behavior pattern, as a construct, does represent a relatively "independent" cluster of behaviors as described earlier. As Glass (1977) and Matteson & Ivancevich (1980) have pointed out, the modest association between this behavior pattern and a variety of other personality traits linked to it attest to

the psychological meaningfulness and multidimensional nature of the behavior pattern.

Type A behavior pattern: its relevant components and performance

The following section will explore the relationship between the various components of the Type A behavior pattern with performance.

Time urgency and impatience are characteristics of TABP which would lead to an experience of time passing more quickly than the actual time passage. Burnam, Pennebaker, & Glass (1973) asked undergraduates to estimate the passage in time of one minute while performing a reading task. When the individuals believed one minute had elapsed they were asked to indicate that by saying "stop". The results showed that As signalled the passage of one minute sooner than Bs. In addition both groups (As and Bs) had mean estimates significantly different than accurate, although As and Bs were equally and oppositely inaccurate. Unfortunately, Burnam et al. (1973) did not record the number of words As and Bs read during their time estimate of the one minute while reading. One conceivable manifestation of time urgency is shorter task-completion latencies and/or faster work rates (or higher quantity of performance levels).

To test the above assumption, Yarnold & Grimm (1984)

replicated Burnam et al.'s (1973) procedure and recorded the number of words the subjects read before signalling the passing of one minute. The results indicated that As reported the passage of one minute sooner than Bs did independently of reading rates. In addition, the Type As were found to complete questionnaires at a reliably faster rate than the Type Bs. Thus the prediction that As may work faster and produce more than Bs in the same amount of time was supported.

Glass, Synder & Hollis (1974) contrasted the performance of As and Bs on a task involving differential reinforcement of low response rates (DRL). This task requires subjects to wait for a fixed time interval before responding in order to obtain reinforcement. Premature responses will trigger a penalty by resetting the time interval. Thus in order to perform well on this task, patience is required. As were predicted to perform poorer than Bs on this task. The results indicated that the As received a lower percentage of reinforced responses (each correct response worths two cents) than Bs, although As and Bs made the same overall number of responses. The results also indicated that As and Bs differed only in that As did not wait long enough after receiving reinforcement. This is despite the fact that both the As and Bs were equally able to correctly identify the DRL

time interval.

The above seems to suggest that Type As perceive time passes more quickly and are more impatient than the Type Bs. The Type As also tend to work harder and faster and produce more in the same amount of time than Type Bs. However, it is unclear about the quality of such performance. Producing more may not be equivalent to producing quality material. However, by using the citation index as an indicator of performance quality, Matthews et al. (1980) and Taylor et al. (in press) found that the As do in fact produce more with higher quality performances than Bs. Despite the above findings, we still have no evidence that As do produce quality performance in industrial settings; this study will replicate Matthews et al. (1980) and Taylor et al.'s findings by using a sample of salespersons instead of scientists.

The literature on TABP also supports the notion that As are more easily provoked to higher levels of aggression/hostility than are Bs. Friedman & Rosenman (1974) have argued that Type A's aggressiveness is often translated into the tendency to compete with other individuals. Moreover, As also compete with themselves. Sales (1969) reported significant positive correlations between Type A scores and measures of achievement

striving, persistence, acceleration of functions, competitive orientation, sense of time urgency, desire for public esteem, need for independence, and positions of leadership.

Earlier it was indicated that one manifestation of time urgency might be accelerated pacing of activities or higher quantity of performance. Another plausible explanation for the accelerated activity is As tendency to compete with themselves or with others. Still another explanation might be a higher level of aspiration or achievement orientation inherent in the TABP.

In a study by Eurnam et al. (1973) randomly assigned As and Bs to one of two experimental conditions. Subjects in both conditions were asked to solve simple mathematical problems. In the 'deadline' condition, subjects were told that they would have five minutes to compete as many problems as possible. Subjects in the 'no-deadline' condition were told they had no time limit. In fact, all subjects were told to stop after five minutes had passed. The dependent measures were the percentage of errors made and the number of problems attempted during the testing session. The results showed no difference between the As and Bs in the percentage of errors made. However, there was a significant difference between the two groups on the number of problems attempted. In the 'deadline'

condition, As and Bs did not differ in the number of problems attempted, although As attempted more problems in the 'no-deadline' condition than the Bs. In addition, the As attempted approximately the same number of problems under both conditions while the Bs attempted more problems in the 'deadline' condition than in the 'no-deadline' condition. The above findings indicate that in the absence of an imposed deadline, As work as if the deadline exists (self-imposed deadline). On the contrary, Bs respond to external contingencies.

In a field study, Matthews, Helmreich, Beane & Lucker (1980) examined academic productivity and meritorious achievement of 118 male social scientists. Academic achievement was measured by the total number of publications during a three year period (1974-1976) and the citation index (the number of times an individual's research was cited by others excluding self-citations) covering the same time period. The results indicated that the high citation groups had reliably higher Type A scores than the low citation groups although these groups did not differ in the academic productivity measure. In addition, the Type A scores were significantly positively correlated with three measures of Nach including the preference for challenge tasks, positive attitudes toward work, and the desire to win in interpersonal situations.

Taylor et al. (in press) replicated Matthews et al.'s (1980) study on a more heterogeneous sample of college professors, including both the male and female gender. Taylor et al. (in press) also found that Type As were cited (both social science citation and science citation indexes) more often than the Type Bs in the six year period (1977-1982). In addition, they found evidence that the Type As higher academic productivity could be explained by their setting higher performance goals, having higher self-efficacy and a greater tendency to work on multiple projects as compared to the Type Bs.

In addition to the direct evidence of TABP effects on performance, Glass (1977) found the Type As participated in and received more athletic awards (in high school), while the Type Bs participated in more high school social activities. The above indicates that the Type As may outperform the Type Bs in many situations especially when the Type As can set their own goals and monitor their own progress. The Type Bs, however, appear to be more aware of the external contingencies than the Type Bs and may respond more positively to environmental control than the Type As.

D. Self-efficacy

The concept of self-efficacy is a central component of social learning theory (Bandura, 1977; 1982). It is the judgments of how well one can organize and execute courses of action required to deal with prospective situations containing many ambiguous, unpredictable, and often stressful elements. Self-percepts of efficacy can affect people's choice of activities, how much effort they expend, and how long they will persist in the face of obstacles and difficulties (Bandura, 1982). Social learning theory suggests that self-efficacy beliefs serve as a cognitive mechanisms mediating behavior change. Such beliefs are expectations which arise from previous experience, from observations, from verbal inputs, from modeling and from emotional states such as arousal. According to Bandura (1982), successful behavior change programs should alter relevant efficacy expectations of personal mastery.

Self-efficacy and performance

The impact of self-efficacy to other individual or organizational outcomes in various organizational settings have also been documented. For example, Wheeler (1983) found self-efficacy to predict occupational preferences. Barling & Abel (1983) in a study of 40 tennis players, found self-efficacy to be consistently and significantly related to 12 dimensions of tennis performance.

Similarly, Lee (1982) found fourteen female gymnasts' expectations to be more accurate estimates of performance than their previous scores. Her study indicates that self-efficacy does predict skilled physical performance well.

In addition to the above, the effects of self-efficacy beliefs predict degree of change in diverse types of social behavior such as phobics (Bandura & Adams, 1977; Bandura, Adams, & Beyer, 1977; Bandura, Adams, Hardy & Howells, 1980; Biran & Wilson, 1981), varieties of phobic dysfunctions (Biran & Wilson, 1981; Bourque & Ladouceur, 1980), deficits in children's achievement behavior (Schunk, 1981; Bandura & Schunk, 1981; Collins, 1982; Keyser & Barling, 1981), social skills (Kazdin, 1980; Lee, 1984), smoking cessation (Condiotte & Lichtenstein, 1981; Owen, Ewins, Bullock & Lee, 1982), recovery from heart attacks (Bandura, 1982), physical endurance (Weinberg, Gould & Jackson, 1979), sports performance (Feltz, Landers & Raeder, 1979; Lee, 1982), career choice and development (Betz & Hackett, 1981; Hackett & Betz, 1981; Wheeler, 1983), and goal setting in behavior (Locke et al., in press; Taylor et al., in press). However, despite the potential relevance of social learning theory in organizational context, only a few studies have assessed empirically the influence of

self-efficacy beliefs in organizational settings. These studies found support that self-efficacy has a positive relationship to insurance sales performance (Barling & Beattie, 1983) and faculty productivity (Taylor et al., in press).

Self-efficacy as a mediator

In the social learning theory perspective, self-efficacy beliefs operate through the mediating influences of internal standards and self-evaluative reactions to substandard and excelling performance. According to Bandura (1982), negative discrepancies between standards and performance generate self-corrective reactions through the individual's percept of efficacy in attaining the standard they set for themselves. For example, self-efficacy has been found to be one of several mechanisms governing the motivational impact of goal structures. A strong sense of self-efficacy for goal accomplishment fosters sustained effort, strong goal commitment, and superior performance (Bandura & Cervone, 1983; Locke et al., 1984).

The work of Bandura & Schunk (1981) and Bandura & Simon (1977) have indicated that proximal subgoals provide immediate incentives and guides for performance. These goals also provide standards to measure and evaluate performance. Self-knowledge of capabilities as reflected

in successful task accomplishment can enhance task interest, and goal setting as well as subsequent performance. In this view, self-efficacy is reciprocally related to both goal setting and performance.

Self-knowledge of capabilities are obtained through internal comparisons which require persons to be aware of both their personal standards and the level of their performance. According to Locke et al. (1981), and Bandura & Cervone (1983), neither knowledge of performance without standards nor standards without knowledge of performance provide a basis for the self-evaluative reaction which enhance motivation to improve performance (Becker, 1978; Strang, Lawrence & Fowler, 1978; Locke et al., 1981; Bandura & Cervone, 1983).

In support of the above, Bandura & Cervone (1983) found that knowledge of performance combined with the setting of proximal goals increase the individual's subsequent self-efficacy more than either feedback or goal setting alone. Others have found that both goal setting and feedback can enhance self-efficacy (Barling & Snipelisky, 1983; Schunk, 1983). Therefore, there is evidence that goal setting and performance feedback may affect performance either separately or jointly. However, most of these studies examined the effects of either goal setting and/or feedback on self-efficacy and performance.

This study will further explore these issues in the Quality MBO setting by including participation in setting work objectives.

Another line of research concerns the effects of self-efficacy on intellectual achievement. Several studies have focused on enhancing self-efficacy perceptions in children with gross deficits in cognitive skills by the use of enactive mastery supplemented with goal structures, causal attributional feedback, social comparison information, self-verbalization of strategies and incentives (Bandura & Schunk, 1981; Brown & Inouye, 1978; Schunk (1981; 1983). They found that the enhancement of self-efficacy perceptions was associated with increases in the persistence in seeking solutions, cognitive achievement, and intrinsic interest in formerly disliked activities.

In the competitive athletic setting, perceived self-efficacy has been associated with higher performance in track (Morelli & Martin, 1982), tennis (Barling & Abel, 1983), diving (Feltz, 1982), and gymnastics (Lee, 1982). According to Bandura (1984), in athletic contests, after capabilities are perfected and massively practiced, perceived self-efficacy is often the difference in outcome.

The above suggests that perceived self-efficacy can

be influenced by one's previous performance on a task results from setting specific, difficult goals and knowledge of performance. Since specific and difficult goals along with the presence of feedback have been found to increase self-efficacy perceptions (Bandura & Cervone, 1983), it would appear likely that the addition of participation may increase goal acceptance and further increase self-efficacy.

CHAPTER 3

HYPOTHESES

QMBO and Performance

According to Carroll (in press), MBO improves performance by specifying the expected type and level of performance (allegedly through the setting of specific goals) which is accepted by the individual (through participation). Further, MBO contributes to improved performance by providing individuals with a difficult standard (goal) and information (feedback) for evaluating their own performance. Carroll (in press) and Gillen et al. (1984) have argued that the inconsistent relationship between MBO and performance found in the MBO literature are a result of companies using only some of the above MBO components instead of implementing them together as an integrated whole.

Gillen et al. (1984), in a study of forty seven sales and service units of a large national manufacturing firm, have found that QMBO was related to unit performance. As a replication, it is hypothesized that:

Hypothesis 1: The QMBO components of specific, difficult work objectives, participation and feedback will be positively related to

individual performance.

TABP and Performance

Type A individuals, with their overriding concern for numbers and speed, have been found to display a higher quantity of performance than the Type Bs (Matthews, 1982). Further, both Matthews et al. (1980) and Taylor et al. (in press) have argued and found that Type A individuals also performed higher on quality dimensions of work. Type A individuals have been found to value the respect of competent others in their field and, as a result, might be expected to strive for high quality performance to win the praise and respect of significant others (Friedman & Rosenman, 1974). Thus Type A individuals may display high levels of qualitative as well as quantitative dimensions of performance.

TABP has been found to be related positively to individual performance in laboratory settings and in college student samples (Glass, 1977; Matthews, 1982). So far, only two field studies have studied this relationship. These studies replicated and found a similar positive relationship in university setting employing faculty members as research samples (Matthews et al., 1980; Taylor et al., in press). The present study will attempt to replicate the above findings on still another sample, composed of salespersons. It is

hypothesized that:

Hypothesis 2: TABP will be positively related to individual performance.

The interaction of QMBO and TABP on performance

According to Price (1982), the Type A individuals developed internal standard for comparison via past experience or vicariously from others. Such internal standards serve as a basis for the Type A individuals to compete with themselves and with others in an attempt to excell. As a result, Type As are seen as achievement-oriented and competitive and having a tendency to work faster and harder than their Type B counterparts. For example, in a study reviewed earlier, Burnam et al. (1973) found Type As to outperform Type Bs when no-deadline was imposed on them to complete a mathematical task. Subjects were asked to complete as many problems as possible. Performance was measured by the number of problems attempted and the number of errors made. However, in the presence of an imposed task completion deadline, the Type As and Bs performance did not differ. The above study seems to indicate that the Type As employ their own standards to guide their performance.

In addition to the above, the TABP literature has suggested that the Type As are characterized by a desire for interpersonal dominance (Friedman & Rosenman, 1974;

Jenkins et al., 1978; Matthews et al., 1980; Sales, 1969). Such interpersonal dominance suggests that in leaderless discussion groups, Type As tend to compete for discussion time by introducing ideas and opinions for the group to discuss, guide the discussion, and make attempts to influence the group's opinion (Klein & Willerman, 1979; McClintock, 1972; Megaree, 1969). Sanders & Milkis (1982) have also found that the Type As are more likely than Type Bs to be seen as leaders and are rarely nominated as the least helpful member although their problem solutions may be lower in quality than their Type B counterparts.

Based on the above rationale that Type As tend to exert interpersonal dominance, Yarnold & Grimm (1984) found that Type Bs conformed twice as much as the Type As and the Type As are unilaterally more dominant than their Type B counterparts. Thus it appears that the Type As tend to be interpersonally dominant, lower in conformity, and tend to screen out external contingencies in favor of their own internal, high standards.

In a QMBO setting where performance objectives are jointly set with the supervisor, the objectives represent compromises between supervisors and subordinates. If the Type As do in fact pay less attention to external contingencies or systems while the Type Bs respond more positively to external contingencies or systems by

performing better, then the QMBO system characteristics may influence the performance of the the Type Bs more than the performance of the Type As. Therefore, it is hypothesized that:

Hypothesis 3: The QMBO components, as a system, will be more strongly and positively related to Type Bs' performance than for the Type As'.

The interaction of QMBO components and TABP on performance:

According to Matthews (1982), ambiguous standards of evaluation tend to enhance the Type As sense of time urgency and vigorous, competitive achievement striving provided that these individuals also value productivity. Similarly, Friedman & Roseman (1959) have suggested that Type A individuals are ambitious for "self-selected but usually poorly defined goals". Defined goals, according to Price (1982) would limit the arenas in which the Type A individuals could attempt to prove their worth unless those priorities and goals completely overlapped the ones endorsed by his/her social milieu. Defined goals indicate to the individual when to quit in a particular task and this prevents the individual from doing more than necessary.

Festinger (1954) has suggested that chronic achievement striving behavior in the absence of an

explicit deadline may result from their basic drive to evaluate their abilities. Individuals generally engage in a variety of information-seeking behaviors that are designed to determine how good they are at a given activity. The presence of ambiguous standard or criteria may motivate the individuals to look for subjective standards of ability levels. Results from studies by Suls (1977), and Gruder (1977) indicated that the Type As tend to compare their performance to either their own standards, or someone who is similar, but slightly better than they are on a given performance dimension. Provided these individuals value productivity, perceptions of performance below the standard may motivate the Type As to exert more effort than the Type Bs on the next task or to set higher goals.

Similar results were obtained from studies using children. Matthews & Siegel (1982), using fourth graders, asked the children to list uses of five different objectives, such as a bar of soap. Half of the children were not given an explicit standard. The other half were told what "good performance" is, i.e. three uses per object, or a total of 15 uses across the five objects. The children were then asked to choose for examination one other child's score ranging from first to the last place scores. Matthews & Siegel (1982) assumed that the better

the chosen score, the higher the standards that the children used to evaluate their own performance. They found that the Type A children chose the highest score, regardless of condition.

In addition to the above, results from Goethals & Darley (1977) suggested that Type As are concerned about comparing themselves to competitors who represent extraordinarily high goals. From the above, it appears that the Type As may respond more positively to ambiguous work objectives than their Type B counterparts. From the above, it is hypothesized that:

Hypothesis 4: The setting of specific work objectives will be more positively related to Type B individual's performance than the Type

A's performance.

The interaction of difficult work objectives and TABP on performance: Price (1982) has suggested that when a goal is seen as easily attainable, it may lose its value to the Type A individuals. In other words, when something ceases to be a challenge, it ceases to be a means by which a person can prove his/her excellence. The Type As chronic struggle to work harder and to excel may be a result of their high internal or comparative standards (Burnam et al., 1973; Carver, Coleman & Glass, 1976). So far, there are only two field studies which directly examined Type

A's performance outside the laboratory setting. Both Taylor et al. (in press) and Matthews et al. (1980) have found that the Type A pattern was positively related to the quality and quantity of research of social scientists. Further, Taylor et al. (in press) found that Type As tend to set higher goals than their Type B counterparts. So far, only one other study has examined and found such a relationship (Snow, 1978). Using the JAS in a study of 53 undergraduate students, Snow (1978) found that the Type As do set higher goals than did the Type Bs on the first of five puzzles. They also found that Type As adjusted their goals to match their previous performance levels thereafter. Moreover, Suls, Becker & Mullen, (1981) reported that the Type As were motivated to perform well relative to others, to their own standards, and to the best possible performance.

The above studies only focused on self-imposed or self-set goals. These studies found that the Type As do set higher goals and also outperformed their Type B counterparts. However, Burnam et al. (1973) found that the Type As work according to self-imposed standards while the Type Bs tend to respond more positively to external contingencies. Similar results have also been reported by Grimm & Yarnold (1984). Therefore, it is hypothesized that high system goal difficulty may influence the

performance of the Type Bs more than the performance of the Type As.

Hypothesis 5: Setting difficult work objectives will be more likely to be positively related to Type B's performance levels than their Type A counterparts.

The interaction of participation and TABP on performance:

Participation in goal setting has not been consistently related to higher performance (Latham & Yukl, 1975; Locke & Schweiger, 1979). Latham & Yukl (1975) have noted that the superiority of participation in goal setting is found only under certain conditions or with certain types of individuals. One individual difference variable which may interact with participation in goal setting is TABP.

The TABP, as shown in Table 1, is composed of a number of individual difference variables. Since most individuals have a variety of characteristics, it may be that one individual difference variable such as Nach is inadequate in explaining the inconsistent findings in the participation literature. Carroll & Tosi (1976), in a study of several hundred managers in a large container company in Michigan, found participative goal setting to be positively related to effort expenditure when individuals were low in motivation or low on self-esteem,

low on esteem for boss, low on managerial ability, high on extrinsic reward orientation, low in intrinsic reward orientation, low on performance feedback and low on effort-performance relationship. However, participation was not significantly related to effort expenditure when the managers were high in motivation.

Steers' (1975) results also suggest that participation works for individuals low in Nach. Others (Vroom, 1960; Locke & Schweiger, 1979) have suggested that participation may work best for individuals who have a lower need for independence and low in motivation. Such individuals may feel powerless and participation gives them a sense of control which may manifest in higher performance. Type A individuals, who are also characterized by achievement striving, high productivity level, ambitious, need for autonomy (Price, 1982) may not need participation as much as their Type B counterparts for performance improvement. Thus, it is hypothesized that:

Hypothesis 6: Participation in setting work objectives will be more positively related to performance levels for Type Bs than the Type As.

The interaction of feedback and TABP on performance:
Locke et al. (1981) have suggested that in addition

to setting specific and difficult performance goals, knowledge of result or progress feedback is necessary to stimulate performance improvement in relation to goals. Feedback, according to Asford & Cummings (1983), Nadler (1979) and Ilgen, Fisher & Taylor (1979) can enhance both performance and motivation. Feedback provides information to the individual as to which aspect of performance is unsatisfactory or deviates from the desired standard. Feedback then allows the individual to correct performance discrepancies prior to evaluation. In contrast the feedback provided by others (from the QMBO system) or having to comply to other's evaluations may indicate to the Type A individuals that personal control is lost.

Grimm & Yarnold (1984) found that the Type B students incorporated information or feedback based on prior behavioral outcomes (i.e. the discrepancy between performance and self-set standards) to set new standards or goals. On the other hand, the Type A students persisted in setting high standards despite feedback regarding performance or the relationship between standards and performance. Perhaps the Type As will feel satisfied when meeting extremely high standards of performance. Further, the use of publicly stated standards provide an impression of self-imposed excellence.

The Type As appear to be less aware of external information or contingencies while the Type Bs appear to conform more to external information. Thus it may appear that feedback from an MBO system may be positively related to the Type B's performance and not the Type A's. From the above, it is hypothesized that:

Hypothesis 7: Feedback will be more positively related to Type B's performance levels than the Type A's.

Self-efficacy as a mediator between QMBO and performance: Although the positive relationship between self-efficacy and individual behavior has been established in numerous settings, only Barling & Beattie (1983) found self-efficacy to be related to sales performance (insurance). This study tries to replicate their finding in another sales environment (manufacturing) and further extend their finding to suggest that the positive QMBO and performance relationship found by Gillen et al. (1984) may be a result of the individual's perceived self-efficacy.

Hypothesis 8: Self-efficacy will be positively related to individual performance.

Although the research on self-efficacy is fairly consistent with respect to the relationship of goals and MBO process variables to performance (Bandura, 1984), there is still some question of why this relationship

exist. Bandura (1982) indicates that perceived self-efficacy can be a major cause of the relationship between various types of external events such as goals and subsequent behavior. Perceived self-efficacy has been shown to influence the degree to which individuals set challenges for themselves, and intensify their efforts when their performances fall short of goals or internal standards (Bandura & Cervone, 1983). Bandura (1984) has indicated that self-efficacy can be a mediator between external factors and individual performance.

Assuming that the direct QMBO-performance relationship found by Gillen et al. (1984) is a valid one, it is essential to learn more about the mechanism of this effect. If QMBO contributes to successes on past task performance, such individuals may display higher levels of self-efficacy. According to Taylor et al. (in press), high self-efficacy would be expected to contribute to subsequent performance effectiveness through strengthening the individual's beliefs that higher performance is possible and attainable. In a QMBO setting where participation can be used to ensure acceptance of work objectives, the provision of performance standards (the joint setting of specific and difficult goals) and performance feedback may provide the individual a basis for self-evaluation reactions. However, Bandura (1977)

has suggested that the negative discrepancies between performance standard and actual performance generate self-corrective reactions when self-efficacy perceptions are high, that is, when the individual perceived that self-correction actions can lead to attainment of the desirable performance standard. So far, no studies have been conducted to examine the mediating role of self-efficacy on QMBO and performance. Thus study will explore the above relationship.

Hypotheses 9: Self-efficacy mediates the relationship between QMBO components and individual performance.

CHAPTER 4

METHOD

Sample & procedure: Data were collected from the sales division of a large Northeastern manufacturing corporation employing 160 sales representatives located in six regions across United States. These respondents were participating in a MBO program administered by their headquarters. Questionnaires were sent to the sales managers and all salesmen of the six regions. These six regions include the Northeast (such as New York City), midwest region (such as Chicago), the Pacific Northwest (such as San Francisco), Southwest (such as Dallas), the Pacific South (such as Los Angeles), and the Southeastern region (such as Miami). The questionnaires contained cover letters indicating the purposes of the research, how the data were to be used and indicated that participation in the study was voluntary and that responses would be kept confidential. Participants were also informed that the data would only be fed back to them in the summary form upon request. All questionnaires were to be completed on company time and be mailed directly back to the researcher.

Of the eighty-three returned responses from all the regions, 64 were male, and 19 were female. Twenty-two respondents had graduate degrees, 45 respondents had bachelor degrees and 16 respondents had only a high school degree. The average age in the sample was 36 and they had all been working in their divisions for at least a year prior to participating in the study. The average tenure in the company was 12 years while the average tenure in the occupation and the division were approximately 8 years.

Measures

All the scales employed in this study which will be discussed in the following are included in Appendix I.

Type A behavior pattern. Matteson and Ivancevich's (1980) Individual Behavior Activity Profile (I-BAP) was used as a measure of the Type A behavior pattern. The validity of this scale has been discussed earlier in this dissertation. The 21-item, bi-polar scale was constructed based on Friedman & Rosenman's (1974) conceptualization of the Type A behavior pattern reflecting the subdimensions of job involvement, impatience/polyphasic thought and hard-driving competitiveness found in other Type A scales such as the Jenkins Activity Survey (Jenkins, Rosenman & Zyzanski, 1974). Examples of the items are as follows:

1. People who know me well would describe me as:

hard driving 5.....1 relaxed &
 & competitive easy going

2. In general, my behavior is governed by:
 a desire for 5.....1 doing what I want
 recognition & to do, not by
 achievement satisfying others

Preliminary factor analyses of the 21-items failed to reveal any meaningful factors. Therefore, all 21-items were standardized and used here because using the entire scale permitted greater comparability between our findings and those of others (Taylor et al., in press). Moreover, the scale mean and standard deviation from this study (\bar{X} =67.48, and s.d.=8.69) were comparable to Taylor et al.'s (\bar{X} =67.92, s.d.=9.83). The alpha coefficient for this scale was .76.

QMBO. This was assessed by combining the four scales developed and evaluated by Steers (1976). They were the specificity of the performance objectives ("My work objectives are very clear and specific"), difficulty of the performance objectives ("My work objectives are quite difficult to attain"), participation in setting work objectives ("The setting of my work goals is pretty much under my own control"), and performance feedback ("I am provided with a great deal of feedback and guidance on the quality of my work"). These scales, consisting of 3-4 items each were standardized and their respective alpha

coefficients were .65, .68, .75, and .66.

Self-efficacy. Self-efficacy items were constructed specifically for the work tasks (sales) performed by the respondents regarding their judgments of how well they could meet certain performance criteria as specified in their performance rating from (see Appendix 1). Consistent with Bandura's (1982) conceptualization, two self-efficacy measures were developed: a) Magnitude items which asked respondents to indicate either a 'yes' or 'no' to questions concerning their capability to reach certain performance criteria; and b) Strength items to assess the degree of certainty (from a scale of 1-10) the respondents felt about each of their magnitude responses. A total self-efficacy measure was formed by standardizing and summing over all the 'magnitude' and 'strength' items. The alpha coefficient for this scale was .83.

Performance criteria

Although the work of sales offers the opportunity to collect objective performance data such as volume of sales, it also is the least controllable aspect of the salespersons performance. First of all, salespersons typically have little control over the performance targets set by them from the headquarters. These targets are based on factors such as market composition, level of competition and customer's need and may not be accurately

assessed by headquarters when setting the objective performance targets.

Moreover, Carroll (1977) has suggested that comparisons among individuals with different sales locations, different amounts of experience, resources, and supervisors may not be valid with respect to attributing performance differences to characteristics of the individual. In addition, even when all these factors are held constant, the differences in performance may reflect differences in susceptibility to various stimuli such as product demand and competition in a college town versus product demand in a major city rather than to differences in ability or motivation. Thus such comparisons may lead to feelings of inequity.

Performance ratings, on the other hand, represent specific behaviors which are observable by the immediate supervisor. Moreover, the QMBO characteristics of participation, the setting of specific and difficult work objectives and feedback on performance progress were set between the supervisor and the salesperson. Such objectives were reflected in the subjective performance rating scale and not the objective targets set for them by the headquarters.

In this sample, both objective and subjective performance data were collected. The subjective criteria

reflected those performance dimensions set jointly by the supervisor with the sales representatives. However, the objective criteria were set by the headquarters. These criteria included sales on a variety of products. The demand and supply of these products also varied by region. Further, the objectives set by the headquarters were separated into categories and each of these categories were appraised every three months in a in-house sales contest. Thus, the awards given were based on superior performance on some aspects and not on all of the performance objectives. Although the headquarters did try to take regional differences into account when assigning objectives and appraising performance, inadequate assessment of the regional differences could potentially be demotivating. In this sample, the correlation of the subjective and objective performance criteria was .15 (n.s.). As explained previously, the objective performance criteria may not accurately reflect the sales representatives' performance as established and appraised by the supervisor, thus it is not surprising that the correlation between the two performance measures was not significant. As a result, only the performance ratings by the supervisor were used as the criterion measure in this study. Such ratings reflected performance at the end of the year on the standards established with the supervisor

at the beginning of the year in each of the critical job area.

The performance rating was the supervisor's subjective ratings of each respondent on all the dimensions of their performance appraisal form. This particular rating scale evaluated the extent to which the sales representatives and managers were able to meet the performance standards regarding various sales-related behaviors and skills such as the sales representative's job knowledge, selling effectiveness or communication skills. Performance improvements and targets were set with the supervisors who had the opportunity to observe these salespersons on the job behaviors periodically. These supervisors visited clients with the salespersons and gathered such observations which in addition to actual sales obtained formed the bases of performance evaluation. According to Carroll (1977), when the supervisor has the opportunity to observe the subordinate's on-the-job behaviors and can compare the subordinate's performance to past performance, subjective ratings may be superior to objective criteria.

CHAPTER 5

ANALYSES & RESULTS

Means, standard deviations and intercorrelations among the variables used in this study were shown in Table 2. Of the QMBO components, performance feedback had the highest standard deviation and was also positively related to performance rating ($r=.27$, and $p < .01$). Participation was also positively ($r=.20$, $p < .05$) related to performance related. In addition, self-efficacy was significantly related to the overall 1983 performance rating ($r=.39$, $p < .01$).

INSERT TABLE 2 ABOUT HERE

Hypothesis 1 which predicted the positive relationship between QMBO components and individual performance were partially supported. As shown in Table 3, the overall QMBO measure was positively related to the overall performance rating ($\beta=.27$, $p < .05$). The multiple regression reported in Table 4 confirmed the results of the correlation matrix. When the QMBO components entered the regression equation as a set, performance feedback was marginally predictive of 1983 performance rating ($\beta = .25$, $p = .10$).

INSERT TABLE 3 ABOUT HERE

TABP was unrelated to the performance rating. Thus Hypothesis 2 which predicts a positive relationship between TABP and individual performance was not supported.

INSERT TABLE 4 ABOUT HERE

Hypotheses 3 to 7 predicted the moderating effect of TABP with each of the QMBO components on individual performance. These hypotheses were tested using moderated hierarchical regression (Arnold, 1982; Cohen & Cohen, 1975). Arnold (1982) has pointed out that when a moderator affects the form of relationship between two variables, such that the slope of the relationship changes predictably depending on the value of the moderator, then the appropriate parameter to test is the difference between the beta weights, hierarchical regression analysis is appropriate to test this kind of moderating effect. Moderated regression involves the hierarchical regression of the dependent variable (performance rating or ranking) on the independent variables (QMBO components), the moderating variable (TABP), and the product of the independent and moderating variables. If the interaction terms contributes significantly to the incremental R-square for the regression, a moderating effect has been identified; or in this case, TABP moderates the relationship between QMBO components and individual performance.

As noted by Cohen (1978) and Cohen & Cohen (1975), one of the advantages of moderated hierarchical regression is that it can be used even when a correlation between the independent and moderator variables exist, or between these variables and their cross-product (interaction) terms. This is because the variance shared between the interaction terms and the independent and moderator variables is partialled out in the preceding steps in the hierarchical regression. Thus it enables the researcher to assess the independent contribution of the interaction between the independent and moderator variables even when they are not orthogonal constructs.

As shown in Tables 3, 4 and 5, there were no significant interaction relationship on the dependent variables, performance rating. Moreover, although the main effects of the QMBO components (Tables 4 and 5) explained more variance than the independent effects of TABP, these QMBO components' effect on performance rating were nonsignificant.

INSERT TABLE 5 ABOUT HERE

Hypothesis 8 predicted the positive association between self-efficacy and performance while Hypothesis 9 predicted that self-efficacy mediates the relationship between QMBO and performance. As shown in Tables 2 and 5, self-efficacy had a positive association on performance

rating ($r=.39$, $p < .01$; $R^2=.15$, $p < .01$). The next question is, whether self-efficacy accounts for the relationship between QMBO and performance. Thus hierarchical regression analysis was run on performance rating to test for the additive effects of QMBO components scales after controlling for the effect of self-efficacy.

Table 6 indicates that the QMBO components had independent association on performance rating when self-efficacy was controlled. Thus the mediating hypothesis was not supported.

INSERT TABLE 6 ABOUT HERE

Summary

The above results found support only for hypotheses 1 and 8. Hypothesis 1 predicted the positive relationship between QMBO components and performance rating. Specifically, of the QMBO components, performance feedback was positively but marginally related to performance rating. In addition, hypothesis 8 predicted and found a positive association between self-efficacy and performance rating.

CHAPTER 6

DISCUSSION & CONCLUSION

The positive relationship between QMBO and performance rating found in this study is consistent with Gillen et al.'s (1984) study. It supports Gillen et al.'s argument that QMBO facilitates performance and that the QMBO components must be present together in order to affect performance positively.

Mitchell's (1979; 1983) view that motivation personality variables probably control only a minor percentage of variance in behavior when compared to situational factors may explain the lack of association between TABP and performance in this study. Moreover, the situational factors affect our thinking processes and indirectly affect behaviors and attitudes. Thus Mitchell's notion is supported by the results of this study that cognitive process variables such as self-efficacy affect performance directly more and not from motivational personality variables such as TABP.

Moine (1984) has suggested that salespersons are generally motivated by a need for recognition, a need to influence others, a need for accomplishment, stimulation, and respect. Successful salespersons may employ various

human relations strategies to attract clients and accounts. Although Type A individuals generally have the above needs and qualities, they are also characterized by being impatient, hostile, preoccupied with deadlines and the need to work alone. These other qualities may contribute to the lack of association between TABP and individual performance. The impatient, time urgent, hostile and aggressive components of the TABP may inhibit the Type A individual's performance on tasks which require the salespersons to spend time with the clients and to assure good customer relations in order to secure and maintain accounts. This may work against other positive effects in the TABP. The more stable motivational personality variable may not fit the particular environment and unless such stable characteristics change, behavior change may not be evident. Thus, future studies should examine what conditions change TABP and how the consequence of changes in TABP affect other behavioral and attitudinal changes. In other words, longitudinal designs emphasizing reciprocal or dynamic interaction effects are needed (Weiss & Adler, 1984). Future research should also examine what aspects of TABP are appropriate for each occupational group and such work will have implications for both selection and training.

Hypotheses 3 to 7 predicted that TABP will moderate

the relationship between QMBO, its components with performance rating. The results did not support the hypotheses. Campbell (1982) after a thorough review of the goal difficulty literature, concludes that "the evidence suggesting that the level of goal difficulty is partially a personality characteristic is quite impressive". Partial support of Campbell's view can be found in this study. Specifically, TABP, which is characterized by individuals who are job involved, hard-driving, competitive, was positively related to goal difficulty ($r=.43$, $p < .01$). It may be that goal difficulty was not perceived as an external influence but as an internal self-regulatory process central to the Type A individuals.

Although Grimm & Yarnold (1984) found that Type As set significantly higher performance standards than Type B students for both the midterm and final examinations in introductory psychology classes, actual performance among the two groups (of Types A & B) was similar. The results of this study showed similar relationships. TABP was positively and significantly related to goal difficulty but unrelated to performance rating. As suggested earlier, the Type As may feel satisfied only when they can meet high standards of performance and that the use of publicly stated high standards provide an impression of

self-imposed excellence. However, in the context of sales performance, the ability to make adjustment to external contingencies such as customer's needs may be critical for sales performance. If the Type As do in fact pay less attention to external factors than their Type B counterparts, the setting of higher performance goals which may lead to higher performance may be washed out by their inability to cope with constrained settings.

Setting specific and high standards have been found to be related to higher performance (Locke et al., 1981). However, impatience, time urgency, hostility, speech mannerisms, and preoccupation with deadline or accelerated pace may also work against the Type As in a sales environment even though other dimensions of the Type A personality such as achievement striving, hard driving, or job involvement may have helped them for accomplishing higher performance levels. Perhaps what might have inhibited the Type As performance facilitated the Type Bs performance at least in this sales environment. As a result, the Type A personality failed to moderate the relationship between QMBO and performance in this study. studies should examine which aspects of the TABP facilitate or inhibit sales performance in order to select and train salespersons for such tasks.

Further, according to Moine (1984), drive and

confidence in salespersons affect their success. Moine has also suggested that each type of sales work requires its own configuration of personality profile due to the different requirement of each type of sales work. Thus requirements of the task, the type of competitors, customers, management support services, all have a significant impact on sales performance (Wotruba & Schoel, 1983).

Matthews (1982) reported that Type A individuals are typically more concerned than the Type Bs about quantifying performance. Both Matthews et al. (1980) and Taylor et al. (in press) focused only on one aspect of the college professor's performance, that is, the number and quality of publications. Other performance aspects such as quality of teaching, student advising were not measured. Moreover, although the number of publications are somewhat externally imposed, to a large part, the college professor themselves can regulate the quantity and quality of such performance. In most industrial settings, performance ratings are generally externally imposed, time-bound (much shorter than those for college professors), and include all the performance aspects (as evident by the performance appraisal forms). Perhaps the Type A individuals are more responsive to performance criteria which can only be quantified. Future studies

should include all the performance dimensions and examine the extent to which as well as the reasons why Type As and Bs differ in performance quality and quantity.

The present study employed performance ratings based on sales behavior and skills. Evaluating the nonquantifiable aspect of performance may explain the lack of association between TABP and performance rating. In addition to evaluating successful sales behavior and skills, other performance measures such as sales volume per product, number of new accounts secured, and customer satisfaction should also be taken into account.

The marginal significance of feedback on performance rating may have been due to the small sample size in this study. Locke et al. (1981), Bandura & Cervone (1983) and others have suggested that both goal setting and feedback are necessary to effect performance change. Feedback, or information about the current state of operations, can be used to compare with the system's goal state. Discrepancies between the two may motivate the individual to restore congruence between the current and goal states of operation (Taylor, Fisher & Ilgen, 1984). The individual's may then either raise or lower their goal levels or select other behaviors or strategies (Campion & Lord, 1982). Again, longitudinal designs to examine reciprocal and dynamic interactions are necessary for

studying the above process.

As reviewed in an earlier section of this dissertation, Matsui et al. (1982) found that high achievers tend to outperform the low achievers when the goals are set by the individuals themselves. On the other hand, Dossett et al. (1979) tested for the moderating effect of achievement need on the feedback and performance relationship. In a sample of clerical workers, Dossett et al. (1979) did not find support for the hypothesized effect. However, Dossett et al.'s (1979) study used goals that were participatively set and assigned. On the other hand, Matsui et al.'s (1982) study employed self-set goals. It may be that the participatively set goals prevented the high need achievers from setting sufficiently high goals (Matsui et al., 1982).

Moreover, Ilgen, Fisher & Taylor (1979) have indicated that feedback was critical for performance improvement. The finding here provides additional support for the established finding in the literature (Ilgen et al., 1979; Nadler, 1979). Specifically, feedback enhances performance because feedback provides information about the extent of error being made so that corrective action can be initiated. Perhaps the supervisors of the sales representatives should be trained to increase the subordinate's self-efficacy by providing feedback useful

for helping the subordinates to improve their future performance.

The correlations between the various QMBO components and performance rating are mostly nonsignificant. This may be a result of the small sample size since goal specificity and participation have some correlation with performance rating ($r=.19$, $p .10$; $r=.20$, $p .05$) respectively. Goal difficulty, on the other hand, was the only QMBO component which showed no relationship to performance rating. This may be because of the interdependence between the supervisor and the subordinates in the sales environment. The supervisors depend, to some extent, on the performances of all their subordinates sales for higher bonuses. Thus the objectives set by the supervisors may be too difficult and may even be dysfunctional to some subordinates.

Another possible explanation for the lack of association between goal difficulty and performance can be found in Yukl & Latham's (1978) study. Their study also relied on self-rating of goal difficulty. They found that only objective goal level and not subjective goal difficulty was related to the typists performance. Further, Mento, Cartledge & Locke (1980) found that measures of subjective goal difficulty did not explain additional variance in performance over and above

performance explained by the objective performance levels. Future studies should employ objective goal difficulty or objective QMBO measures.

The lack of significant relationship between most of the QMBO components and performance rating could also have been the result of the salespersons being caught in two different performance appraisal systems. One system was set jointly with their immediate supervisors. The other set of performance criteria were set by headquarters based on region characteristics which may not speak to the unique work environment the salespersons were in. Perhaps the lack of association between difficult goals and performance ratings reflected to some extent the complexity of the goals as well as the conflict imposed on them by the two performance appraisal systems. Future studies should also take into consideration the two other goal content variables of complexity and conflict as discussed by Locke et al. (1981) when examining the effects of MBO programs.

In addition, the objectives set by the headquarters cannot take unplanned or emergency goals into account. According to Odiorne (1979), headquarters can only set routine goals because they may have trouble in predicting when unplanned or emergency goals will appear.

Similar to Barling and Beattie's (1983) finding,

self-efficacy beliefs significantly predicted current performance rating. However, the other individual difference variable, TABP, was unrelated to performance rating in this study.

Weiss & Adler (1984) have noted that the personality variables used in the organizational behavior literature are overwhelmingly motivational (e.g. Growth need strength, need for achievement). Less attention has been paid to cognitive personality variables such as self-efficacy. This study suggests that cognitive personality variables have a significant impact on individual performance while such a relationship was not found in the motivational-oriented personality variable, TABP.

This study suggests the importance of building up the sales representatives confidence to sell the product and to perform the various sales and job responsibilities that are part of the job. It was stated earlier that confidence and drive in salespersons affect their performance (Moine, 1984). This study indicated that having a good quality MBO program may help to do this to some extent but there are many other ways to build or increase self-efficacy. Future studies should examine what an organization can do to increase an individual's self-efficacy. This would require a longitudinal instead

of correlational design.

Limitations

Since this study employs self-report measures and a concurrent correlational design instead of an experimental or longitudinal design, alternative explanations to the results found in this study are possible. For example, the lack of significant relationships may have been a result of social desirability phenomenon. The Type A personality and QMBO items are probably fakable. The use of multiple measurements are necessary to improve the quality of findings in future studies. Moreover, the lack of association between goal difficulty and performance may have been because the subjective goal levels were not consistent with the subjective specific objectives. Earlier it was suggested that the salespersons in this sample worked under two different performance appraisal systems. One set by the headquarters and the other jointly set with their supervisors. The specific goals may come from both systems while the subjective goal difficulty levels may be set with reference to the in-house sales contest. Since this study only employed the supervisor's performance rating, perhaps this explains why feedback had the most significant relationship with performance ratings and not with the other QMBO attributes. Future studies should control for

environmental biases such as regional differences, possible changes in competitors, suppliers or demand of the products.

Other limitations include the small sample size, and the lack of information concerning regional differences. Future studies should improve this design by interviewing both the headquarter's personnel as well as the regional supervisors and salespersons to examine if MEO is implemented appropriately, and if the externally imposed objectives are actually accepted by both the regional salespersons and supervisors.

Future studies should also examine if the regional supervisors and salespersons substituted the system goals with their own goals. Further, this organization has an inhouse sales contest. This quarterly contest emphasizes performance on some products and not on all of the products or all of the performance objectives. Thus the salespersons may focus effort on dimensions critical to winning the inhouse sales contest but not necessarily critical for attracting or maintaining sales accounts.

Moreover, this study only employed performance ratings as the dependent variable. Earlier it was suggested that perhaps other dependent variables such as customer satisfaction or sales volume per product should also be measured.

In addition, Locke et al. (1981) have suggested that strategies individuals use for task accomplishment may explain the goal setting and performance relationship. Perhaps successful salespersons employed various strategies specifically tailored to the clients needs. Future studies should explore what sales strategies contribute to sales effectiveness.

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Table 1. Type A Characteristics in research literature: frequency of citation.

Characteristics cited	Frequency of Citation		
	Total	1959-1974	1975-1979
Competitiveness	72	27	45
Time urgency	62	24	38
Aggressiveness	44	13	31
Drive*	41	22	19
Achievement striving	33	9	24
Preoccupied with/subject to deadlines	28	14	14
Ambition; desire for advancement	26	14	12
Accelerated pace	25	12	13
Impatience	24	9	15
Hostility	19	2	17
Motor mannerisms	18	11	7
Hyperalertness	14	4	10
Speech mannerisms	13	9	4
Struggle	13	6	7
Hard-driving	12	5	7
Restlessness	12	8	4
Job commitment	12	5	7
Involved in too much	11	8	3
Extremely conscientious/responsible	11	6	5
Seek recognition	10	8	2
Coping style to gain control	7	0	7
Job success	3	3	0
High productivity	3	1	2
High activity level	3	2	1
Chronic conflicts; challenge	2	2	0
Neglect of non-job activities	2	1	1
Perfectionism; high standards	1	1	0
Anxiety	1	0	1
Unwillingness to define limits	1	0	1
Expressiveness	1	0	1
Need for power	1	0	1

Number of articles reviewed-Total: 101; 1959-1974: 44; 1975-1979: 57.

*Often used in conjunction with another characteristic, as in 'competitive drive' or 'aggressive drive'.

Table 2: Means, Standard Deviations and Intercorrelations among variables used in the study

	1	2	3	4	5	6	7	<u>Mean</u>	<u>S.D.</u>
1. Goal specificity	-							11.6	1.9
2. Goal difficulty	.06	-						11.3	1.9
3. Participation	.48 ^a	-.02	-					10.5	2.6
4. Performance feedback	.26 ^a	.18	.18	-				9.4	2.3
5. QMBO	.70 ^a	.44 ^a	.70 ^a	.66 ^a	-			42.7	5.5
6. Type A Behavior Pattern	-.03	.43 ^a	.03	.06	.18	-		67.5	8.7
7. Self-efficacy	.19	-.10	.25 ^b	.17	.22 ^b	-.04	-	7.7	2.3
8. Performance rating	.19	-.01	.20 ^b	.27 ^a	.27 ^a	.08	.39 ^a	66.4	2.4

N = 70-83, due to missing cases

QMBO = goal specificity + goal difficulty + participation +
performance feedback.

a = $p < .01$

b = $p < .05$

(decimal points are omitted)

Table 3: Moderating role of Type A Behavior Pattern (TABP) on additive Quality Management by Objectives (QMBO) and performance relationship.

		<u>Performance Rating</u>				
		<u>Beta Weight</u>	<u>Standard Error</u>	<u>Standardized Beta</u>	<u>ΔR^2</u>	<u>F</u>
1.	QMBO	3.18	1.39	.27 ^b	.07 ^b	5.51 ^b
2.	TABP	.52	1.42	.04	.00	2.74 ^c
3.	Interaction Term	.58	.82	.09	.01	1.98
1.	TABP	.52	1.42	.04 ^b	.01 ^b	.40 ^c
2.	QMBO	3.18	1.39	.27 ^b	.06 ^b	2.74 ^c
3.	Interaction Term	.58	.82	.09	.01	1.98

a = p < .01 N = 70-83
b = p < .05
c = p < .10

Table 4: Moderating role of Type A Behavior (TABP) on Quality Management by Objectives (QMBO) and performance relationship.

	Performance Rating		Standardized Beta	ΔR^2	F
	Beta Weight	Standard Error			
1. QMBO component set				.10	1.88
a) participation(PDM)	1.44	1.62	.12		
b) feedback(FD)	2.95	1.49	.25 ^c		
c) goal difficulty(DIF)	1.84	1.64	-.07		
d) goal specificity(SPC)	-.13	1.73	-.01		
2. TABP	1.15	1.59	.10	.01	1.62
3. Interaction terms					
a) PDM x TABP	-1.52	1.84	-.20	.05	1.25
b) FD x TABP	-1.59	2.01	-.13		
c) DIF x TABP	.12	1.48	.01		
d) SPC X TABP	2.66	1.67	.42		

a = $p < .01$
b = $p < .05$
c = $p < .10$

PDM = participation
FD = feedback
N = 70-83

DIF = goal difficulty
SPC = goal specificity

Table 5: Moderating role of Type A Behavior Pattern (TABP) on Quality Management by Objectives (QMBO) and performance relationship.

	<u>Performance Rating</u>		<u>Standardized Beta</u>	<u>ΔR^2</u>	<u>F</u>
	<u>Beta Weight</u>	<u>Standard Error</u>			
1. TABP	1.15	1.59	.10	.01	.40
2. QMBO component set				.10	1.62
a) PDM	1.44	1.62	.12		
b) FD	2.95	1.49	.25 ^c		
c) DIF	-.84	1.64	-.11		
d) SPC	-.13	1.73	.19		
3. Interaction Terms				.05	1.25
a) PDM x TABP	-1.52	1.84	-.20		
b) FD x TABP	-1.59	2.01	-.13		
c) DIF x TABP	.12	1.48	.01		
d) SPC x TABP	2.66	1.67	.42		

a = p < .01
b = p < .05
c = p < .10

PDM = participation
FD = feedback
N = 70-83

SPC = goal specificity
DIF = goal difficulty

Table 6: Mediating role of Self-Efficacy (SE) on Quality Management by Objectives (QMBO) and Performance Rating.

	<u>Performance Rating</u>			ΔR^2	F
	<u>Beta Weight</u>	<u>Standard Error</u>	<u>Unique Variance</u>		
1. SE	.98	2.93	.39 ^a	.15 ^a	10.75 ^a
2. QMBO	2.27	1.52	.20	.04	6.86 ^a

a = p < .01
b = p < .05

N = 70-83

APPENDIX IA. Quality Management by Objectives Items:

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

- | | |
|--------------------------------|--------------------|
| 1 = Strongly Disagree | 4 = Agree |
| 2 = Disagree | 5 = Strongly Agree |
| 3 = Neither Agree nor Disagree | |

(a) Feedback

1. I receive a considerable amount of feedback concerning my quantity of output on the job.
2. I am provided with a great deal of feedback and guidance on the quality of my work.
3. My boss seldom lets me know how well I am doing on my work toward my work objectives.

(b) Participation

1. The setting of my work goals is pretty much under my own control.
2. My supervisor usually asks for my opinions and thoughts when determining my work objectives.
3. I am allowed a high degree of influence in the determination of my work standards.
4. I really have little voice in the formulation of my work objectives.

(c) Goal Difficulty

1. I should not have too much difficulty in reaching my work objectives; they appear to be fairly easy.
2. My work objectives will require a great deal of effort from me to complete them.
3. It will take a high degree of skill and know-how on my part to attain fully my work objectives.
4. My work objectives are quite difficult to attain.

(d) Goal Specificity

1. My work objectives are very clear and specific; I know exactly what my job is.
2. I think my work objectives are ambiguous and unclear.
3. I understand fully which of my work objectives are more important than others; I have a clear sense of priorities on these goals.

B. Type A Behavior Pattern:

Each of us displays kinds of behaviors, thought patterns, or personal characteristics. The best answer for each set of descriptions is the response that most nearly describes the way you feel, behave, or think. Please answer the 23 items below in terms of your regular or typical behavior, thoughts, or characteristics.

Place an X on the portion of the line which you feel best describes where you are between each pair.

1. People who know me well would describe me as

hard driving and competitive	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	relaxed and easy going
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2. I'm always on time for appointments

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	I'm never quite on time
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3. Quite honestly, the things I enjoy most are

job related activities	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	leisure time activities
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4. In general, my behavior is governed by

a desire for recognition and achievement	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	what I want to do, not by trying to satisfy others
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5. When someone is talking to me, chances are I'll

anticipate what they are going to say by nodding, interrupting or finishing sentences for them	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	listening quietly without showing any impatience
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6. At the end of a typical work day, I usually feel like

I needed to get more done than I did	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	I accomplished everything I needed to
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7. In trying to complete a project or solve a problem, I tend to
 wear myself out before I'll give up on it 5 4 3 2 1 take a break if I'm feeling fatigued
8. When I'm working, my mind tends to
 remain on one idea or thought until it's completed 1 2 3 4 5 shift back and forth rapidly from one idea to another
9. Someone who knows me very well would say that I would
 rather work than play 1 2 3 4 5 rather play than work
10. When I play a game (tennis, cards, etc.) my enjoyment comes from
 winning 5 4 3 2 1 the social interaction
11. When it comes to waiting in line (at banks, theaters, post offices, etc.)
 I really get impatient and frustrated 5 4 3 2 1 it simply doesn't bother me
12. When it comes to getting ahead at work
 nothing is more important 1 2 3 4 5 many things are more important
13. I like to associate with people who are
 dedicated to getting ahead 5 4 3 2 1 easy going and take life as it comes
14. I always feel rushed 1 2 3 4 5 I never feel rushed

15. my primary source of satisfaction comes from my job 5 4 3 2 1 I regularly find satisfaction in non-work pursuits such as hobbies, friends and family
16. I'm not happy unless I'm always doing something 1 2 3 4 5 frequently 'doing nothing' can be quite enjoyable
17. When it comes to my temper
I find it hard to control at times 5 4 3 2 1 I just don't seem to have one
18. Most of my friends and social acquaintances are people
I know from work 1 2 3 4 5 not connected with my work
19. What I enjoy most are
competitive activities 5 4 3 2 1 non-competitive pursuits
20. I tend to do most things like eating, walking, and talking
rapidly 1 2 3 4 5 slowly
21. I'd rather stay at work than take a vacation 5 4 3 2 1 nothing at work is important enough to interfere with my vacation

C. Self-Efficacy:

For each of the following job goals common to all _____ sales positions, please do the following:

1. Indicate with a 'No' or 'Yes' in Column B whether you are capable of reaching the goal described in Column A.
2. Indicate in Column C your degree of certainty in reaching the indicated goal described in Column A. In doing this please use a '1' for being totally uncertain and a '10' for being totally certain with the intervening numbers such as 5 representing intermediate degrees of uncertainty.

COLUMN A - (Type of Performance Goal)	<u>COLUMN B</u> (Capability of reaching goal)	<u>COLUMN C</u> (certainty of reaching goal use 1 to 10)
With respect to being rated on the overall subjective rating form*, I am capable of:		
(a) Being rated in the top 50% of all sales representatives on this overall subjective rating form.	Yes(1) _____ No(2) _____	_____
(b) Being rated in the top 35% of all sales representatives on this overall subjective rating form.	Yes(1) _____ No(2) _____	_____
(c) Being rated in the top 25% of all sales representatives on this overall subjective rating form.	Yes(1) _____ No(2) _____	_____
(d) Being rated in the top 10% of all sales representatives on this overall subjective rating form.	Yes(1) _____ No(2) _____	_____
(e) Being rated in the top 05% of all sales representatives on this overall subjective rating form.	Yes(1) _____ No(2) _____	_____

*Ratings on job knowledge, selling effectiveness, DEMOS, SKU's, etc.

D. Demographics:

Differences in background often affect the way people see their work situation as well as how they feel about it. We are asking the following questions so that we can study the effects of such background factors. Please answer the following questions by placing the appropriate number in the blank to the right of each question.

1. What is your age?
2. What is your sex?
 1. Male
 2. Female
3. What is your educational level?
 1. High school or less
 2. Some vocation/business/secretarial school
 3. Degree from vocational/business/secretarial school
 4. Some college
 5. Bachelor's degree
 6. Graduate training, no degree
 7. Graduate school degree
 8. Professional school degree
4. How long have you worked for this company?
 1. Less than 1 year
 2. 1-5 years
 3. 6-10 years
 4. 11-15 years
 5. Over 15 years
5. How long have you worked with your current division or unit?
 1. Less than 1 year
 2. 1-5 years
 3. 6-10 years
 4. 11-15 years
 5. Over 15 years
6. How long have you been working in your occupational specialty?
 1. Less than 1 year
 2. 1-5 years
 3. 6- 10 years
 4. 11-15 years
 5. Over 15 years