Center for
Effective
Organizations

MAKING MBO EFFECTIVE

CEO PUBLICATION
G 80-2 (2)

STEVEN KERR
University of Southern California

May 1994

Center for Effective Organizations - Marshall School of Business
University of Southern California - Los Angeles, CA 90089-0806 (213)740-9814

MAKING MBO EFFECTIVE

CEO PUBLICATION
G 80-2 (2)

STEVEN KERR
University of Southern California

May 1994

Center for Effective Organizations - Marshall School of Business
University of Southern California - Los Angeles, CA 90089-0806 (213)740-9814

MAKING MBO EFFECTIVE

by

Steve Kerr

G 80-2

ABSTRACT

This article maintains that many, perhaps most, approaches to MBO contain logical inconsistencies and make assumptions that are contrary to what is known about people and about organizations. The article goes on to discuss various modifications to MBO which may serve to minimize its potential dysfunctions, enabling it to serve the purposes for which it is installed.

MAKING MbO EFFECTIVE

Steven Kerr

Management by Objectives (MbO) is a term employed by numerous authors and practioners to describe a wide variety of procedures and programs. Typically, MbO is characterized by: joint goal-setting between members of two consecutive levels of management; expression of objectives whenever possible in quantifiable terms such as dollars, units, and percentages; and periodic measurement and comparison of actual performance with the agreed-upon objectives (Filley et al., 1976).

Despite tremendous interest in MbO, and its extensive use in industry as a developmental tool, Tosi and Bigoness pointed out in 1974 that "research examining the planning, implementation and evaluation of MbO systems has been surprisingly scarce" (p.44). This state of affairs remains true today. Little is known about the dysfunctions that often plague Mbo introductions and implementations.

There are two major problems with trying to evaluate Mbo. One is that, as already mentioned, "Management by Objectives" is a catch-all title for several different, if related, approaches. The other is that, when introduced as a total management system, MbO constitutes a simultaneous assault upon an organization's authority, reward, communications and control systems, changing so many variables at once that careful study is all but impossible.

Adapted from "Overcoming the Dysfunctions of MbO, <u>Management by Objectives</u>, Vol. 5, No. 1, 1976, pp.13-19.

I am not prepared to claim that Management by Objectives is or is not working in organizations today. Based on a review of the MbO literature and on related research, however, and aided by personal contact with MbO in four organizations (twice as an employee, twice as a consultant), I am prepared to suggest that most MbO efforts are accompanied by a number of dysfunctions serious enough in many cases to keep the system from performing efficiently.

MbO is often sold as a total managerial system. I hope to show that MbO is <u>not</u> likley to be effective when employed as a total system, because the typical MbO process contains logical inconsistencies and makes implicit assumptions which are contrary to things we know about organizations and about people.

Some of the explicit claims and implicit assumptions that have been made on behalf of MbO are as follows:

<u>Assumption 1</u>: "Joint" goal-setting among hierarchical unequals is impossible.

This premise lies at the heart of MbO philosophy, and presumes that the superior can comfortably go from his "boss-judge" role to one of "friend-helper" (and, presumably, back again). It is claimed of one participative system, for example, that evaluation meetings between the boss and his subordinates can be "strictly man-to-man in character ...In listening to the subordinate's review of performance, problems, and failings, the manager is automatically cast in the role of <u>counselor</u>. This role for the manager, in turn, results naturally in a problem-solving discussion (Meyer et. al, 1969).

The assumption that such schizoid behaviour can be induced on any kind of regular basis is naive. The research literature (Blau & Scotti, 1962) provides abundant evidence that hierarchical status differences produce some very predictable effects upon interaction patterns, subordinate defensiveness, and quantity and quality of communications, and these effects stack the deck against joint goal-setting by unequals. Bennis has summarized some of the difficulties:

> Two factors seem to be involved...The superior as a helper, trainer, consultant, and co-ordinator, and the superior as an instrument and arm of reality, a man with power over the subordinate...For each actor in the relationship, a <u>double</u> reference is needed...The double reference approach requires a degree of maturity, more precisely a committment to maturity, on the part of both the superior and the subordinate that exceeds that of any other organizational approach...It is suggestive that psychiatric patients find it most difficult to see the psychiatrist both as a human being and helper and an individual with certain perceived powers. The same difficulty exists in the superior-subordinate relationship. (Bennis, 1960).

<u>Assumption 2</u>: MbO can be effective at the lowest managerial levels.

Proponents have contended that successful implementation will enable MbO to permeate the entire organization, and to be effective even at the lowest level of management. However, several studies have concluded that this filtering-down process very often fails to occur, and that the lower the hierachical status of the manager the less he is likely to be a genuine participant in the goal-setting process (Ivanecevich, 1972). In part this reflects the inherent problems of attempting joint goal-setting among hierachical unequals.

Another reason for the failure of Mbo to be effective at the lower managerial levels is an illogicality in the process itself. It is that even if we assume truly democratic, participitative goal-setting at the very top of the firm (say, between the president and his divisional vice-president), their meeting must still ultimately produce firm, hard goals for the months ahead. The most collegial atmosphere in the world cannot keep these goals, once agreed upon, from being perceived as commitments by the parties concerned. These commitments must then serve as lower limits, as monkeys on the back of any vice-president who then seeks to establish democratic, participative goal-setting with his own subordinates. Having agreed with the president that 12 percent growth in sales is a fair goal for the coming year, the marketing vice-president is unlikely to accept his sales manager's carefully worded argument that 9 percent is better. While lower-level managers may enjoy the fiction of participation, they will probably soon realize that most of their objectives have already been locked in by meetings held at higher levels. They of course retain the freedom to set objectives even more challenging than those agreed upon higher up; they will seldom be able to set objectives less challenging.

Varying the goal-setting sequence can serve to alter this chain of events, but will seldom improve upon it. For example, some MbO proponents claim that simultaneous goal-setting at all managerial levels produce genuine participation. However, the ensuing problems of coordination and communications border on the unreal. The marketing vice-president might under these conditions meet with the president, and agree "tentatively" that 12 percent sales growth sounded pretty good for the next year. After meeting with his sales manager, who preferred 9 percent, he would again meet with the president to renegotiate. If 10 percent were now agreed on he would once more meet with the sales manager, to democratically explain why 9 percent was too low. Meanwhile, however, the sales manager would have held meetings with the district managers, and perhaps become convinced that 9 percent was too high. At this point the marketing vice-president would presumably return to his "friend-helper" the president for another round of "joint" goal-setting.

The only way to insure that low-level managers have influence is for them to initiate the process, by communicating to their superior the goals they wish to pursue during the coming period. Their superior would then set his objectives based on their objectives, and so on up the line. This gain in low-level influence may be costly, however, since a firm's goals are essentially being set by those at the bottom of the hierarchy, who (usually) are less educated, trained, and experienced, and who may possess inadequate information. Technical drawbacks aside, this alternative is likely to be politically unacceptable to managers at the top. It is therefore no surprise that many studies have shown MbO to be increasingly ineffective at successively lower levels.

Assumption 3: MbO is an aid in evaluating and rewarding performance.

Management by Objectives is often used in conjunction with management appraisal programs. Some writers recommend linking it directly to the compensation program, under the assumption that MbO provides "a means of measuring that true contribution of managerial and professional personnel", (Odiorne, 1963, p.55). However, this assumption calls to mind some impossible-to-answer questions, and very often leads to information supression and risk-avoidance behaviour, particularly in highly uncertain and rapidly changing organizational units.

The impossible-to-answer questions include:

1. How do you tell whether the goals whose accomplishment you are rewarding are challenging?

Padding by subordinates of the time it will take or the money it will cost may be detectable when the superior has technical expertise in the area for which the objective is being set, and when the task depends on technology which is stable and predictable. There are numerous instances, however, in engineering, marketing, product development and other areas, when even the most astute superior will be unable to determine whether target dates have a built-in safety factor.

2. How do you insure that all your subordinates have goals which are of equal difficulty?

If MbO is to be useful as an evaluation-compensation tool, subordinates must perceive that they have a fair chance to obtain organizational rewards. Yet it is virtually impossible to devise any system which will provide for goals which are equally challenging to all subordinates.

3. What do you do when conditions change?

Suppose that a new competitor or a new credit rating comes along, and what formerly were challanging goals suddenly become easy goals, or impossible goals. In a truly stable environment this may not be a daily concern, but in our age of continuous "future shock" stable environments are becoming unusual. Even a modest technological development or a small change in company policy can eliminate the challenge from objectives previously set. Do we now reward for goal attainment when a ten-year old could also have been successful? Do we punish non-attainment of objectives which have become herculean in difficulty? Or do we spend the better part of every afternoon negotiating?

The practical dilemma posed by these last two questions is poignantly revealed in an interview by Ford (1979, pp. 53-54) of a plant manager, who remarked that:

> It's pretty hard to tell a guy who has been told that his pay raise is going to be evaluated on the basis of his objective-achievement to forget such-and-such an objective

because we're going to reverse direction or something new is going to take priority because of changes in our situation. You can imagine his attitude when he sees one of his peers rolling along smoothly toward achieving his objectives. The time involved in making these adjustments and holding everyone's hand is fearsome. I have little time for anything else and it hurts.

4. Is exceeding the objective good?

Even aside from the fact that conditions continually change, this question is more difficult than it may seem. In one firm I am familiar with, the completion of a task in seven weeks when it was forcasted to take ten weeks brings mild <u>disapproval</u> rather than praise. The rationale is creditable enough; it is that others with whom the goal-setter interacts are not expecting the guidebook, product, software package or whatever to be ready, and so cannot take advantage of the fact that it is ready. This organization takes the position that deviations from standard in <u>either direction</u> are usually undesirable. While this may or may not be the best approach, the point is that it is seldom possible to determine whether early completion of a task is an indication of good performance or of bad planning. That the individual worked like the dickens is seldom sufficient to resolve this dilemma.

5. How do you "objectively: reward performance under MbO?

Proponents of Management by Objectives take special pains to avoid this question, since it is obviously one for which there is no answer. Odiorne, for example, asserts that MbO "determines who should get the pay increases...The increases are allocated on the basis of results achieved against agreed upon goals at the beginning of the period (Odiorne, 1963, p.66) The problem with this, however, is that no formula for comparing "results achieved against agreed-upon goals" exists. Researchers have correctly cautioned that "evaluations should rarely be based on whether or not the objective is accomplished or on the sheer number accomplished...", and have listed other factors that must be taken into account, including:

- proper allocations of time to given objectives
- type and difficulty of objectives
- creativity in overcoming obstacles
- efficient use of resources
- use of good management practices in accomplishing objectives (cost reduction, delegation, good planning, etc.)
- avoidance of conflict-inducing or unethical practices (Carroll and Tosi, 1973, p.83)

Certainly it is necessary to consider these and other factors; otherwise subordinates could better themselves by taking shortcuts which negatively affect total organizational effectiveness. But take another look at the above list of "other factors" to be considered. Have you seen a list which calls for greater subjectivety? Could you possibly establish objective measures of whether "proper" time was allocated to given objectives, whether "creativity" was used to overcome obstacles, or whether "good" management practices were used? In short, MbO leaves you as dependent on subjectivity as you were before, only with the additional problem that expectations of "fair" and objective" evaluation and reward systems have been created making employee dissatisfaction more likely.

If the added objectivety promised by Management by Objectives typically turns out to be illusory, the information suppression and risk-avoidance behaviour often brought on by linking MbO to rewards is certainly no illusion. Common sense suggests that many employees will build margins for error into their cost estimates and target dates, and in this case common sense is supported by research (Carroll and Tosi, 1970). Even workers high in need for Achievement will often create safety cushions, while privately setting moderate-risk objectives against which they can compete. I have seen or heard of many cases where employees set objectives on projects which were virtually or actually completed. You may be quick to brand such actions unethical; can you as quickly deny that they are rational responses to a system which requests of employees that they voluntarily set challenging, risky goals, only to face smaller paychecks and possibly damaged careers if these goals are not accomplished?

<u>Assumption 4:</u> Objectives should be as specific as possible.

Although recent years have seen a shift away from rigid formulas and toward greater flexibility (McConkie, 1979), many

MbO approaches continue to encourage quantitative goal setting, with intermediate and final results all expressed in dollars, dates, or percentages. While such quantification is often possible and desirable, MbO encourages it to the extent that goal displacement and inefficiency sometimes result. Studies indicate that the MbO process can cause employees to over-concentrate their efforts in areas for which objectives have been written, to the virtual exclusion of other activities (Raia. 1966). Since it is seldom possible to write quantifiable objectives about innovation, creativity, and interpersonal-relations, employees under MbO are seldom evaluated in these areas, and may consequently worry little about coming up with new ideas or improving relations with other organizational units.

Even in areas for which objectives do exist, excessive emphasis on quantifiable objectives encourages (and, when linked to compensation, rewards) performance in accordance with the <u>letter</u>, not the <u>spirit</u>, of the objective. Attempting to measure and reward accuracy in paying surgical claims, for example, one insurance firm requires that managers set objectives about the number of returned checks and letters of complaint received from policyholders. However, underpayments are likely to provoke cries of outrage from the insured, while overpayments are often accepted in courteous silence. Since it is often impossible to tell from the physician's statement which of two surgical procedures, with different allowable benefits, was performed, and since writing for clarification will interfere with other objectives concerning "percentage of claims paid within two days of receipt", the new hire in more than one claims section is soon acquainted with the informal norm: "When in doubt, pay it out!" (Kerr, 1975). The managers of these sections regularly meet or exceed their objectives in the areas of both quality (accuracy) and quantity. But at what cost to the organization?

<u>Assumption 5:</u> MbO is useful in a dynamic changing environment.

Certainly, the dynamic environment is where new systems of planning, evaluation and communications are most needed. We already know quite a bit about managing the stable, highly certain segments of business, and a variety of techniques such as PERT are available to us and work particularly well when parameters are known. MbO, however, is less useful when conditions are changing and the future is uncertain. We have already suggested that risk-avoidance by subordinates will most often occur under conditions of uncertainty, and we have also pointed out that under such circumstances goal difficulty is so likely to change that systematic reward and punishment under MbO is impossible.

One reviewer of the MbO literature found that "the most striking result is the emphasis on the need for goal clarity (low role conflict and ambiguity) if Management by Objectives is to be an effective planning procedure" (Miner, 1973). Low role conflict and ambiguity can be fairly well established by SOPs and job descriptions in the stable, highly-certain parts of most firms; they are nearly impossible to come by in uncertain areas, MbO, after all, attempts to produce a mutually-acceptable job description, and "no matter how detailed the job description it is essentially static - that is, a series of statements... The more complex the task and the more flexible the man must be in it, the less any fixed statement of job elements will fit what he does ..." (Levinson, 1970, p.126).

I have to this point tried to demonstrate that Management of Objectives is a sometimes overrated, flawed system which may introduce more problems than it solves. Rather than join those who attribute its failures to "errors in implementation", "not enough time", or "lack of top management support", I believe its difficulties stem from the fact that it depends upon assumptions which are contrary to what we know about organizations and about people.

Of course, if you are not knee-deep in pseudo-participation caution-crazy subordinates and make-believe objectively, don't let me convince you you're sick when you're not. In this age of situational theories it is no more possible to state that something will not work than to claim it always will. However, if you are having problems of the kind I have described, and if you buy my argument that MbO is at least partially responsible, you may still feel that sunk cost and political realities argue against trying to quit cold turkey. The remainder of this article is aimed therefore at separating those parts of MbO worth keeping from those which ought to be discarded.

FEATURES WORTH KEEPING

1. Conscious emphasis on goal-setting. Considerable research suggests that systematic, periodic goal-setting positively affects performance, and can alter an organization's activities-oriented approach in favor of one that is more results-oriented (see, for example, Quick, 1979, Latham and Lock, 1979).

2. Frequent interaction and feedback between superior and subordinates. These have been found to be related to "higher goal success, improvement in relationships with the boss, goal clarity, a feeling of supportiveness and interest from one's superior, a feeling that one can participate in matters affecting him, and satisfaction with the superior." (Carroll and Tosi, 1969). Feedback frequently is particularly important "to managers low in self-assurance, cautious in decision making, and with jobs involving frequent change" (Tosi and Bigoness, 1974, p. 46).

3. Opportunities for participation. The dimensions and consequences of subordinates participation in goal-setting, decision making, and evaluation have been explored in recent works by Greller (1978), and Dachler and Wilpert (1978). Although it is erroneous to assume that hierarchically unequal individuals comfortably engage in joint goal setting, this does not mean that all forms of participation under MbO are impossible. Even chances to give advice about matters which will ultimately be decided higher up often have favorable effects upon subordinate attitudes. While not all workers respond positively to participitation, studies indicate that performance will seldom suffer

merely because of such opportunities.

One way to increase participation under MbO is for the peer group to develop their objectives as a group, and subsequently appraise performance as a group (Howell, 1967: Levensin, 1976: French and Hollman, 1975). Status differences are likely to be less important, freeing individuals of the need to be cautious and deferential (Howell, 1967). Peer group goal-setting should serve to minimize duplication of objectives and reduce paperwork. Successful negotiation with the boss should be easier, since group support would tend to offset the boss's higher rank. Communications should be facilitated and the present tendency of MbO to reward for individual performance at the expense of overall harmony or efficiency, should be reduced.

Another way to improve participation under MbO is for the organization to provide training to all subordinates and, especially, to all managers who will be required to operate under the system. The skills and attidudes necessary for MbO to be effective are neither intuitive nor "natural" to individuals brought up in traditionally bureaucratic organizations. Both book learning and simulated experiences will probably be necessary before those who will be living with the system become competent even to try it. This point should be obvious as to be unworthy of mention; yet comparatively few MbO change agents include systematic skills and attitute training as part of their programs.

FEATURES TO DISCARD

1. Linking MbO to the compensation system. The only areas where tying MbO to reward will not tend to induce risk-avoidance and goal displacement are those where conditions are so predictable that no deceit is possible. In these areas, however, incentive plans and piecework, commission, and bonus systems are already available.

2. Using MbO as an "objective" way to measure performance. While requesting that managers in their feedback sessions with subordinates totally suppress consideration of whether agreed-upon objectives have been met is probably futile, formal comparison of goals accomplished against goals set should definitely be avoided. Such comparison will not enable performance reviews to be carried out on a more objective basis, but will cause the risk-avoidance and goal-displacement behaviour described above.

3. Focussing attention upon only those objectives which can easily be quantified. Objectives should be writen "in every area where performance and results directly and vitally effect the survival and prosperity of the business." (Drucker, 1954). This is true whether or not quantification is possible! Numerous instances could be cited where performance suffered either because non-quantifiable objectives were ignored altogether or because some simple-minded number (e.g. patents as the measure of creativity) was substituted for them (Kerr, 1975). Conversely, performance may be improved by keeping in mind that "although in many areas the qualitative aspects of output may have to be assessed largely in terms of value judgments, the discipline of

prescribing standards of performance and of testing results against them can improve the control process" (Hancock, 1974).

4. Making Personnel Division responsible for maintenance. Once it is decided that MbO will not be used as an instrument of evaluation and reward, the rationale for active involvement by personnel largely vanishes. Such involvement will serve mainly to increase both the volume of required paperwork and the level of threat perceived by lower-level participants.

5. Forms, forms, and more forms. The problems of excessive paperwork has been found to be a major impediment to the effective use of MbO (Raia, 1974). Once the notion of using MbO for evaluation and control is abandoned, surprisingly few forms are really necessary.

6. Pre-packaged programs and costly consultants. Although these may or may not be necessary for successful introduction and maintenance of the change-everything-at-once-and-see-what-happens king-sized version of MbO, they are propably unnecessary for the "mini-MbO" that will remain once"features to discard" one to five are followed.

CONCLUSIONS

In sum:

1. Management by Objectives is at present a high-cost long-run package whose success is by no means guaranteed. It generates many side effects impossible to predict or control. Two competent researchers speak of MbO as a "complex organizational change process which may be painful and time-consuming "Tosi and Carroll, 1969) and another points out that "it will take four to

five years to achieve a fully effective Management by Objectives system." (Howell, 1970).

2. Management by Objectives is yet another technique that requires friendly, helpful superiors, honest and mature subordinates, and a climate of mutual trust. Carvalho has cautioned that "successful implementation of MbO requires, even demands, that all managers have a fundamental results-oriented attitude," as well as "an attitude which accepts collaboration, co-operation, and joint sharing of responsibilities as the norm rather than the exception." He goes on to state that such attitudes are hardly commonplace in most organizations today, and that to develop them a "mini-cultural revolution" will probably be needed (Carvalho, 1972). And we have already taken note of Bennis' opinion that the double reference approach necessary for MbO to work "requires a degree of maturity, more precisely a commitment to maturity, on the part of both the superior and subordinate that exceeds that of any other organizational approach." (Bennis, 1960, p.286). In short, MbO often works best for those individuals who need it least.

3. Management by Objectives is best suited to those static environments in which we already have sufficient technology to manage competently. Rapidly changing conditions and high role conflict and ambiguity seriously impair its usefulness. In short, MbO often works best in those situations where we need it least.

4. We must stop pretending that MbO adds much to our ability to reward and evaluate. It is unlikely to be effective when employed

as a "total" management system. Its strength lies in its emphasis on goal-setting, its provisions for feedback and interaction, and its opportunities for participation. These features can and should be maintained, but not at a cost of jolting the organization with massive and simultaneous changes. A good illustration of this point is given by Lasagna (1971), who described the problems which afflicted his organization as a result of attempting to use MbO for too many purposes. He reports that they had much better success when they substituted a mini-MbO which was not tied to evaluation and compensation.

The advantages that would accrue to users of a "mini-system" of MbO are due to the fact that such an approach would introduce fewer new variables, require less time to take effect, cost far less and minimize unpredictable side effects. It would be particularly effective in combating the increase in employee anxiety and defensiveness which so often accompanies MbO introduction. Furthermore, a mini-MbO would be less likely to cause management to forget that the system is in no sense a cure-all, but is rather just another tool in the managerial kit. Finally, a"mini-system" of MbO would for the first time enable scientific study of costs and benefits to be conducted, so that we may at last discover whether or not Management by Objectives is worth its cost.

REFERENCES

Bennis, Warren G., "Leadership Theory and Administrative Behaviour: The Problem of Authority," Administrative Science Quarterly, 1960, pp. 285-287.

Blau, Peter M., and W. Richard Scott, Formal Organizations (San Francisco, Chandler, 1962), pp. 121-124 and 242-244.

Carroll, Stephen J., and Henry L. Tosi, "The Relation of Characteristics of the Review Process as Moderated by Personality and Situational Factors to the Success of the 'Management by Objectives' Approach," Academy of Management Proceedings, 1969, p. 141.

Carroll, Stephen J., and Henry L. Tosi Jr., Management by Objectives: Applications and Research (New York: MacMillan, 1973).

Carroll, Stephen J., and Henry L. Tosi Jr., "Goal Characteristics and Personality Factors in a Management-by-Objectives Program," Administration Science Quarterly, 1970, pp. 295-303.

Carvalho, G.F., "Installing MbO: A New Perspective on Organizational Change," Human Resources Management, Spring 1972, pp. 23-30.

Dachler, H. Peter, and Bernhard Wilpert, "Conceptual Dimensions and Boundaries of Participation in Organizations: A Critical Evaluation," Administrative Science Quarterly, 23, 1978, pp. 1-39.

Drucker, Peter F., The Practice of Management (New York: Harper and Row, 1954).

Filley, Alan C., Robert J. House, and Steven Kerr, Managerial Process and Organizational Behaviour (Glenview, Ill., Scott, Foresman and Co., 1976) (2nd edition).

Ford, Charles H., "MbO: An Idea Whose Time Has Gone?," Business Horizons, December 1979, pp. 48-55.

French, Wendell I., and Robert W. Hollmann, "Management by Objectives: The Team Approach," California Management Review, XVII, Number 3, 1975, pp. 13-22.

Greller, Martin M., "The Nature of Subordinate Participation in the Appraisal Interview," Academy of Management Journal, 21, 1978, pp. 646-658.

Hancock, C.J., "MbO Raises Management Effectiveness in Government Service," Management by Objectives, 3, Number 4, 1974, p. 12.

Howell, Robert A., "A Fresh Look at Management by Objectives," Business Horizons, 1967, p. 55.

Howell, Robert A., "Managing by Objectives - A Three Stage System," Business Horizons, February 1970, p. 43.

Ivancevich, John M., "A Longitudinal Assessment of Management by Objectives," Administrative Science Quarterly, 1972, pp. 126-138.

Kerr, Stephen, "On the Folly of Rewarding A, While Hoping for B," Academy of Management of Journal, 1975, 18 (4) 769-783.

Lasagna, John B., "Make Your MbO Pragmatic," Harvard Business Review, November-December 1971, pp. 64-69.

Latham, Gary P., and Edwin A. Locke, "Goal-Setting: A Motivational Technique that Works," Organizational Dynamics, 8, Autumn 1979, pp. 68-80.

Levinson, Harry, "Appraisal of What Performance?," Harvard Business Review, July-August 1976, pp. 30-48.

Levinson, Harry, "Management by Whose Objectives," Harvard Business Review, July-August 1970.

McConkie, Mark L. "A Clarification of the Goal-Setting and Appraisal Processes in MbO," Academy of Management Review, 4, 1979, pp. 29-40.

Meyer, Herbert H., Emanuel Kay, and John R.P. French, Jr., "Split Roles in Performance Appraisal," Harvard Business Review, January-February 1965, p. 129.

Miner, John B., The Management Process: Theory, Research, and Practice (New York, MacMillan, 1973).

Odiorne, George S., Management by Objectives - A System of Managerial Leadership (New York, Pitman, 1963).

Quick, James C., "Dyadic Goal Setting Within Organizations: Role-Making and Motivational Considerations," Academy of Management Review, 4, 1979, pp. 369-380.

Raia, Anthony P., "A Second Look at Management Goals and Controls," California Management Review, 1966, pp. 49-53.

Raia, Anthony P., Managing by Objectives (Glenview, Ill: Scott Foresman, 1974).

Tosi, Henry L., and Stephen J. Carroll, "Some Structural Factors Related to Goal Influence in the Management by Objectives Process," Business Topics, Spring, 1969, p. 50.

Tosi, Henry L., and William J. Bigoness, "MbO and Personality: A Search for Comparability," Management by Objectives, 3, Number 4, 1974.