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PARTICIPATION IN THE BUDGETING PROCESS --
WHEN IT WORKS AND WHEN IT DOESN'T

by

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ABSTRACT

Over the past twenty or so years, a great volume of research which explores the question of the effects of participation in budgeting has been published. Yet the state of our knowledge in the area can be described as chaotic at best. The literature is replete with contradiction and failed confirmation. The purpose of this paper is to provide a review of literature which attempts to unravel past results by employing a framework of "conditional" factors upon which the effects of budgetary participation can be shown to depend. The paper concludes with a tabular summary or list of the conditional factors uncovered in the review.

KEY WORD INDEX

Participation, budgeting, cultural variables, organizational variables, interpersonal variables, individual variables.

Participation in the Budgeting Process --

When It Works and When It Doesn't

As a broad generalization, two competing managerial philosophies exist today. Firstly, a traditional "scientific management" philosophy, embracing the view that organizational participants are motivated solely by economic forces, that work is essentially unpleasant, and that human beings are ordinarily inefficient and wasteful, continues to emerge. This viewpoint probably has its origins early this century in the Taylorian principles of management where the management of capital and labor were viewed as basically identical managerial tasks. A competing viewpoint emerged in the late 1920s. The results of the famous Hawthorne Studies conducted at Western Electric from 1927 to 1932 indicated that sociological and psychological factors, long ignored by the scientific management school of thought, were fundamental to the management of people. So, the "human relations" philosophy was born as a competing framework for managerial effectiveness.

A great deal of research literature dealing with these alternative schools of thought has been published since 1930. The labels attached to the two alternative philosophies have varied greatly. "Employee oriented" versus "production oriented" [Katz, et al., 1950], "concern for people" versus "concern for production" [Blake and Mouton, 1964], "consideration" versus "structure initiation" [Halpin, et al., 1957] and, of course, "Theory Y" versus "Theory X" [McGregor, 1960] represent just a few of the labels which have been given to fundamentally the same two underlying philosophies.

In the area of managerial accounting, one concept which has been studied frequently is the issue of participation in the budgeting process. The idea that lower level members in an organization would get a say in the budget formulation, let alone exert the primary influence, would have been abhorrent to the early disciples of the scientific management doctrine. Yet the concept is possibly the most central element in the modern human relations viewpoint, at least as far as management accounting is concerned.

The results of a fairly long line of inquiry into the effects of budgetary participation are completely mixed, members of both schools of thought claiming support for their viewpoints. Research studies have shown that attitudes [Milani, 1975; Collins, 1978] job satisfaction [French, Kay and Meyer, 1966; Cherrington and Cherrington, 1973] morale [French, Israel and As, 1960], and even performance [Bass and Leavitt, 1963; Kenis, 1979] will benefit from a high level of participation in the budgeting process. However, contradictory results, especially in the area of performance [Stedry, 1960; Bryan and Locke, 1967] can also be cited. What is the manager to conclude on the basis of this evidence? Participation works? Participation doesn't work? Participation works sometimes? Hopwood [1976] seems to think the last answer is true:

"While it appears that an increase in participation in decision making can often improve morale, its effect on productivity is equivocal at the best, increasing it under some circumstances but possibly even decreasing it under other circumstances. The practical problem is in trying to identify which conditional factors determine the wider impact of a particular type of participative management programme."

A long overdue need exists for an extensive review of literature aimed at exposing the "conditional factors" which have been uncovered in the literature. This is the purpose of this paper. By presenting a catalogue of research results focusing specifically on the question of when

participation works and when it doesn't work, this paper will provide an important linkage between the research efforts of the academic community and the practical needs of management who are confronted with the problems of implementing and managing a participative budgeting and decision-making program. A communication gap clearly exists between the academic and practicing managerial communities for while academics have been keen to pursue new and different perspectives and situations within which to study budgetary participation, they have been remiss in the area of effectively integrating and juxtaposing the mass of previous results, leaving the practising community utterly befuddled on the question of the state of our knowledge in the area. Figure 1 presents the basic framework suggested by Hopwood's comment and the purpose of the paper is to discuss, classify and catalogue the variables which form the intervening set of conditional factors.

[INSERT FIGURE 1 HERE]

The review of literature to be presented will be further structured on the basis of a framework which suggests that the conditioning variables can be classified into four basic categories; cultural variables, organizational variables, interpersonal variables and individual variables. This framework is set out in Figure 2.

[INSERT FIGURE 2 HERE]

1. Cultural Variables

One pair of research studies which clearly points to the need to consider cultural setting when addressing the question of whether participation will work or not comprises the Coch and French [1948] and French, Israel and As [1960] studies.

Coch and French were able to secure the opportunity to study an "in-house" experiment at the Harwood Manufacturing Company in Virginia. The management agreed to test three possible schemes of employee involvement in decisions related to the production budget. Under one scheme, selected employee representatives were to participate in meetings with top management while in the second scheme, the active involvement of all employees affected by a budget decision was secured. Finally, a third scheme involved the usual company procedure of simply informing organizational members of the final decision. Groups of employees were randomly assigned to the three schemes but were matched across schemes in terms of efficiency ratings before the decision process.

The results graphically revealed the relative desirability of the three schemes. The group subject to the usual company procedure experienced 17% resignations in the first forty days (which was reported as having been typical in the past when budgetary changes were made) and significant deteriorations in productivity. The group subject to the partial participation scheme experienced no resignations in the first forty days and slow improvement in productivity while the group in the total participation condition (also experiencing no resignations) provided the greatest productivity improvement.

French, Israel and As [1960] were able to repeat the Harwood experiment at a footwear factory in Norway. This time, an increase in

participation did not bring about significant changes in performance. French, et al. speculated that the strength of the union ties among Norwegian workers in general may have produced an attitude on the part of the footwear factory workers that "a more legitimate pattern of participation is through union representatives rather than direct participation" [French, Israel and As, 1960, p. 18].

While few other studies allow us to address the question of the impact of cultural differences, there is a broad body of literature which bears on the question. In particular, one area of literature falls under what Strauss et al. [1976] refer to as "legal" systems of participation inspired by socialist ideology. For example, Workers' Councils, providing a formidable measure of joint-management to workers, have characterized the successful post-war development of Yugoslavia. Workers' Councils were introduced in 1950 and their form provides all employees of an enterprise ultimate authority with regard to basic policy, personnel, and technical issues facing the firm. Tannenbaum et al. [1964] showed that the differential between control exercised at the top and the bottom of the Yugoslav organization is significantly less than the differential in comparable Italian, Austrian and United States organizations. Two separate studies have shown that the Yugoslav industrial system has proven itself in terms of national productivity [Kolaja, 1965; Pateman, 1970]. Similar developments to the Yugoslav experience have been documented in France [Hauck, 1955], West Germany [Heller, 1971] and even Britain [Fuerstenberg, 1959].

Kibbutzism in Israel, has grown well beyond its traditional agricultural context and now extends to a large range of manufacturing activities. Organizational structure in a Kibbutz factory is characterized

by many participative-type features. For example, officers from first-line supervisor upwards are elected by the workers and their tenure is limited to between three and five years. In addition, a Management Board consisting of the plant manager, production manager and workers' representatives, is established and is responsible for a wide range of organizational decisions. A study of Israeli kibbutz plants by Melman [1970] showed that they are more efficient than comparable non-kibbutz plants and that labor-management conflict in the kibbutz is virtually non-existent.

Hofstede [1967], in reporting the results of his extensive survey of budget control, cautioned the reader against cross-culturally generalizing his findings which dealt with five companies in the Netherlands. Differences between the industrial climate of Europe and the United States have been documented [Kast, 1964; Nowotny, 1964], but Hofstede feels that the most dangerous generalization is from Western to Eastern culture (or vice versa):

"the game of budget control as I described it is a Western game" [Hofstede, p. 281].

2. Organizational Variables

That variables at the organizational and environmental levels are important is not self-evident from the accounting literature. Rather, the implications for budget system design and, more specifically, the role of participation in effective budgetary control systems needs to be drawn out by a review of literature principally in organizational behavior.

Three variables dominate the emphasis at this level; environmental stability, technology and task uncertainty. A fourth, organizational structure, will be mentioned in connection with a couple of significant accounting studies. I shall review the literature in each group in turn.

A. Environmental Stability

In a significant study, Lawrence and Lorsch [1967] attempted to answer the basic question of what kind of organization it takes to deal effectively with various environmental, economic and market conditions. Lawrence and Lorsch studied firms in three industries; plastics, food processing and containers. These industries were represented as being located on a continuum of environmental stability with plastics firms facing the most turbulent and dynamic environment and container firms the most stable environment.

Effective response to environmental conditions was defined by Lawrence and Lorsch in terms of the appropriate amounts of differentiation and integration.¹ They found that successful firms in the plastics industry were most highly differentiated and, at the same time, most successfully integrated. Formality of structure was low, there were fewer levels in the organizational hierarchy, less frequent performance evaluation and fewer objective performance criteria. Of relevance in the present context was the finding that successfully integrated firms were characterized by lateral rather than vertical flows of information, a much lower and broader locus of decision-making authority and a higher degree of knowledge needed for decision making was typically located at lower levels.

Consistent with these findings is the view that involvement and participation of organizational members at lower levels is desirable when the organization faces a dynamic environment. Even within the organization the locus of influence in decision-making varied depending on the sub-environment faced by major functional divisions. Boundary-spanning divisions such as marketing were characterized by a much broader base of decision-making influence and control than, for example, in production which is relatively buffered from the external environment.

In contrast, successful firms in relatively stable environments (containers and, in particular, food processing) were characterized by much lower levels of differentiation and integration, many more hierarchical levels and a far greater level of formal structure. The locus of influence in decision-making and control was high in the organization and information, authority and responsibility flows were vertical rather than horizontal. Indeed, it was observed that in the poorest performing firm in the container industry, organizational members at lower levels in the hierarchy felt they had considerably more influence in decision-making than their counterparts in the high performing container industry. The locus of knowledge to make sound decisions was apparently elsewhere in the organization.²

In a theoretical work, Thompson [1967] isolates two dimensions of the environment faced by the organization. Firstly, an environment can be homogeneous or heterogeneous by which he means that customers either want the "same thing at the same time" (e.g. schooling) or "different things at different times". Secondly, an environment can be stable or unstable, self-explanatory descriptions of the frequency and nature of changes in the size, type and share of the market. Thompson suggests that organizations facing homogeneous, stable environments should employ standardized rules as control devices and that management should be authoritative and consist of networks of rule enforcement. In contrast, organizations facing heterogeneous, unstable environments should build decentralization and autonomy into the structure and control system and management should be democratic and consist of networks of equality of power sharing and influence.

Hayes [1977] focused more broadly on the question of the role of budgets in performance assessment in organizational sub-units. His conclusion was that budgets are more useful as standards for evaluating performance in production departments, which tend to have relatively unambiguous objectives and cause-effect relationships and which tend to be buffered from the external environment. Marketing and research and development departments, on the other hand, were found not to be so well suited to budgetary control. This raises an important contrast between budgeting as a planning tool and budgeting as a control tool. As a planning tool, budgeting assumes a particularly important role in organizations or organizational sub-units facing unstable external environments. Following Lawrence and Lorsch, such organizations or organizational sub-units are likely to be highly differentiated and therefore in need of a high degree of integration. The need for integrative planning in such organizations is also suggested by Lorange [1977] and the role of budgeting and budgetary participation in satisfying this need was hypothesized and found by Merchant [1978].

It seems, therefore, that the stability of the external environment affects the uses of budgeting as a planning tool, vis à vis a control tool, in opposite fashion. The use of budgets as performance evaluation and control devices appears better suited to organizations in stable environments than those in unstable environments [Hayes] while the (integrative) planning function of budgets assumes relatively greater importance in dealing with unstable environments [Merchant]. Note that environmental stability aside, the need for adaptive planning (scanning the environment for relevant information to be used in dealing with change in the future) remains. Thompson [1967, p. 151] calls this "opportunistic

surveillance". Merchant [1978] examined the role of budgeting in satisfying this need but his results were inconclusive.

The implications of the suggestions and findings for the role of participation in decision-making are clear: the effectiveness of participation depends, at least in part, on the environmental demands facing an organization as a whole and its individual functional units viewed separately.

B. Technology

A major factor at the organizational level is technology. It has been defined as "a technique or complex of techniques to alter 'materials' in an anticipated manner" [Perrow, 1965, p. 915].

Burns and Stalker [1961] investigated this aspect and its relationship to organization design. In a study of British companies they found that where the rate of technical innovation was low, successful firms were managed with "mechanistic" systems characterized by functional specialization and detailed definitions of duties and responsibilities. On the other hand, rapid technical innovation was associated with firms which had "organic" systems of management with more flexible organizational arrangements, more consultation and participation and less rigorously specified tasks.

Woodward [1965], in another study of British industry, used four main groupings of production processes found in the surveyed organizations to characterize a technology continuum. In increasing order of technological sophistication the groupings were unit production, small batch, mass-production and continuous process. She found that firms in the middle of the technical continuum tended to be most "mechanistic" while firms at the extremes were more "organic", characterized, notably, by high degrees of

authority and responsibility delegation and much more permissive participative management styles.

Thompson [1967] views technology from a slightly different perspective. For him, technology manifests itself in the nature of the types of interdependence: pooled interdependence, where organizational units are separate and do not interact (but where failure of any one renders the organization harm); sequential interdependence, where one unit is the supplier of another; and reciprocal interdependence, where units supply one another. Corresponding to each of these types of unit interdependencies there exists, according to Thompson, an appropriate organizational structure providing for co-ordination of activities. For pooled interdependence, co-ordination is best achieved by standardization of rules and routines which are set down for the behavior of all units. Where interdependence is sequential, co-ordination is by planning and the establishment of schedules for the interdependent units, and, finally, for reciprocally interdependent units, co-ordination is by mutual adjustment and communications. Thompson makes it quite clear that participation and lower-level influence in decisions are increasingly appropriate as characteristics of co-ordination as we move from pooled through sequential to reciprocal interdependence.

The number of taxonomies of technology is substantial. While Woodward [and Stinchcombe, 1959] used length of production run, other classification schemes suggested in the literature include "routiness of the production process" [Trist and Bamforth, 1951; Gouldner, 1954; Hage and Aiken, 1969], "the degree of hardness of materials worked on" [Rushing, 1968] and "variety and programmability" [Perrow, 1970].

However, the same basic result has emerged from most examinations of the impact of technology on different organizational responses. For repetitive, easily programmable production activities, a more hierarchical structure with upward information flows and downward authority flows appears appropriate. Non-repetitive, short production run, custom type production activities are not so amenable to programmed controls and are probably better managed with use of individual supervision with small spans of control.

C. Task Uncertainty

Possibly closer to accounting in orientation is the view that organizations will respond differently (in terms of structure) to differing levels of task uncertainty. Galbraith's [1977] view is that in order to deal with uncertainty in organization needs to process more and more information. Galbraith [1977] defines uncertainty as the difference between the amount of information required and the amount possessed by the organization and he views the amount required as being a function of the diversity of outputs, diversity of inputs and the level of goal difficulty. As an organization becomes more complex and faces a greater need for information, it can engage in either of two strategies. Clearly, it can either reduce its need for information through strategies such as the creation of slack resources³ and the creation of self-contained tasks (i.e. the break-down of interdependence), or, it can increase its information handling capacity by investing in vertical information systems and by creating lateral relations. The latter of these information handling strategies is particularly relevant in the context of participation. Galbraith, when referring to the creation of lateral relations, has in mind the idea of reducing the number of decisions referred upwards in the

organization and bringing the "decision point" down to the "action point" where the information exists. In other words, increased influence of lower level organization members in decision-making is one key organizational strategy used to deal with uncertainty and the attending level of informational handling capacity expansion.

In order for this response to task uncertainty to work effectively, Galbraith points to several conditions which must be satisfied. Information required for decision-making must be accessible at the level at which the lateral relations are created, participants in lateral relationships must have the authority to commit their organizational sub-unit, and influence must be a function of knowledge and information. Status barriers unaccompanied by commensurate informational differences will be dysfunctional according to Galbraith.⁴

One body of empirical research which bears on the question of organizational response to task uncertainty is the early work on group behavior and communication initiated by Bavelas [1950] and Leavitt [1951]. Shaw [1965] presents a most complete summary of this research and he concludes that the evidence suggests that more centralized networks (for example, wheel networks) are most effective in dealing with simple tasks. In contrast, more diffused networks (for example, circle networks) are superior in the case of complex tasks. Shaw suggests that a high-centrality position in a network is likely to become overloaded more easily when the network faces a complex task than when the task minimizes the information-processing requirements of the position, as in the case of simple tasks. This evidence reinforces Galbraith's view.

D. Organizational Structure

As indicated at the beginning of this section, evidence from the accounting literature is sparse. Bruns and Waterhouse [1975] is one study in which the relationship between organizational structure and budgetary control was investigated. They hypothesized and found that in structured but decentralized organizations, the quantity of budget-related behavior was higher than in centralized organizations. Specifically, managers in decentralized organizations perceive themselves as having more influence, they participate more in budget planning and appear to be satisfied with budget related activities. In contrast, managers in centralized organizations are granted less responsibility, report less involvement in budget planning, experience superior initiated pressure,⁵ and see budgets as being less useful and limiting their flexibility.

Swieringa and Moncur [1972] investigated the budget-related behavior of a sample of managers in various branches of an international bank. Included in their study were several organizational level variables such as branch size and position in the organization. However, the results were inconclusive.

The results and suggestions from the literature, both in organizational behavior and in accounting appear to consistently indicate that participation offers some organizational advantages only in some circumstances. Organizations in unstable environments, faced with dynamic technology and high levels of task uncertainty appear to be particularly well suited to participation and influence of lower level organizational members. In contrast, centralization, providing little, if any, opportunity for lower level participation (without overlooking the continuing need for adaptability to change) may be a sounder response to

stable, homogeneous environments and technology, associated with low to moderate levels of task uncertainty.

3. Inter-personal Variables

The study which was responsible for catapulting the interest in behavioral aspects of managerial accounting, and more specifically, budgeting, to the present level was Argyris' [1952] famous Controllershship Foundation sponsored study. Argyris isolated at least four major problems of a behavioral nature with budgets:-

- (i) budget pressure tends to unite employees against management and tends to place the factory supervision under tension
- (ii) budget staff can obtain feelings of success only by finding fault with factory people
- (iii) the use of "needlers" by top management tends to make the factory supervisors see only the problems of their own area of concern
- (iv) supervisors use budgets as a way of expressing their own patterns of leadership.

Specifically motivated by Argyris' fourth conclusion listed above, Fertakis [1967] and DeCoster and Fertakis [1968] presented results of an investigation of the amount of budget pressure induced by the leadership styles of consideration and structure initiation. They hypothesized that a greater amount of pressure would result from leadership styles high on the structure initiating dimension and low on consideration than where structure initiation was low and consideration high. Their findings were interesting. In the case of both leadership styles, budget pressure resulted, although the relationship may have been stronger in the case of structure initiating style.

In a closely related investigation, Hopwood [1972, 1974] attempted to ascertain whether different amounts of job-related tension were experienced by cost center managers evaluated by supervisors using "budget constrained" styles versus "profit conscious" styles. The findings suggested that greater tension was experienced by managers evaluated by supervisors whose style was budget constrained. Hopwood reports that his two dimensions are not completely independent however, and, as a result, construct validity of his measures can be questioned. He had attempted to capture the "consideration" and "structure initiating" dimensions mentioned earlier and these are conceived as being completely independent. Related to this point is an interesting finding in Hopwood's study. Only where a distinct imbalance in leadership style exists in the structure initiating (budget constrained) direction is the tension result significant. The same absolute amount of budget constrained behavior combined with a similar amount of profit conscious behavior was not found to be tension producing.

The last result of Hopwood's begins to explain the surprising results of DeCoster and Fertakis who found consideration and structure initiation equally associated with felt budget pressure. This phenomenon of one leadership style actually moderating the effect of the other was first reported in the literature by Fleishman and Harris [1962]. They concluded that under conditions of high consideration, structure may be perceived by subordinates as supportive and helpful, whereas under low consideration the same structuring behavior may be seen as restrictive and threatening. This interpretation has been shown to be consistent with data from many other studies [Fleishman and Ko, 1962; Misumi and Toshiaki, 1965; Beer, 1966, Skinner, 1969; Fleishman and Peters, 1970; Hunt and Hill, 1971; Dessler, 1972, 1973] for such criterion variables as motivation, satisfaction,

grievances, turnover, and even performance. However, evidence that this effect may be restricted to certain levels in the organization is provided by House [1972] who suggested that consideration may be an important moderator of structure-satisfaction relationships only for lower-level organizational members.

Otley [1978], in extending Hopwood's work, concluded that only where ambiguous leadership styles were reported was job-related tension significantly higher. The effects of intermediate levels of both types of leader behavior could be examined in Otley's study as he expanded Hopwood's dichotomous "budget-constrained/profit-conscious" classification into a continuum.

The findings of Hopwood, Fertakis, Otley, and DeCoster and Fertakis all suggest that the exclusive use of one single leadership style in a budgetary context corresponds to neither reality nor to any prescriptions of leader behavior. Indeed the view more recently taken in the organizational behavior literature suggests that leader behavior should be situationally consistent only [Heller, 1971; Kerr, et al., 1974; Ritchie, 1976; Vroom and Yetton, 1973]. Such a view is inconsistent with the exhortations of McGregor [1944] who suggests that consistency in leadership style is desirable because it allows subordinates to predict their superior's behavior and adapt to it. But predictability does not imply lack of variability. The antithesis of predictability is randomness:

"The critics and proponents of participative management would do well to direct their efforts toward identifying the properties of situations in which different decision-making approaches are effective rather than wholesale condemnation or deification of one approach." [Vroom, 1970, pp. 239-240]

Argyris [1962] calls this "reality-centered" leadership style, so Vroom's idea is by no means novel.

Put alternatively, the view of leadership style suggested by Vroom and by Argyris is one by which we would expect to need to explain some within-person variance in leader behavior. No such need is implied by the theoretical views expressed earlier.

This contingency or situation-specific view of leader behavior has been investigated by Heller [1971] and by Vroom and Yetton [1973]. Heller hypothesized and found that the degree of "power sharing and influence" afforded to subordinates in decision making depends on the importance of the decision to the company, the extent of agreement between superior and subordinate as to skill differences between them, the extent of agreement as to the amount of training required to elevate subordinates to the superior's level, the span of control of the superior, and the locus of information availability.

Vroom and Yetton, investigating the same question, found that leadership style depended on the importance of a high quality decision, the extent to which the leader possesses sufficient information and expertise to make a decision alone, the extent to which the problem is structured versus unstructured (deterministic versus stochastic), the extent to which acceptance or commitment is critical to effective implementation of the decision, the extent to which subordinates are likely to disagree over the preferred solution and the extent to which a speedy decision is necessary.

These two organizational behavior studies are two major, recent expositions of the need for a contingent view of appropriate leadership style and hence appropriate participation levels. Many other studies in organizational behavior have addressed this issue, however, and have uncovered several important moderating variables.

Halpin [1954] found that pressure (in the form of time urgency, task demands, interunit stress or physical danger) affected satisfaction of military platoon members with structuring leadership styles. Structure was found to be resented by the platoon members in low pressure situations, such as training, while it was positively related to satisfaction in high pressure situations, such as combat. Oaklander and Fleishman [1964] extended this result and concluded that source of pressure was the critical moderator variable. Where the source was seen to be external, structuring behavior was preferred, while considerate behavior was found to be more helpful in dealing with intraunit pressure.

Task characteristics have also been shown to moderate the leadership-criterion relationship, although there is some disagreement as to the precise nature of the relationship. House, Filley and Kerr [1971] concluded that when work was not intrinsically satisfying, increased resentment seemed likely to occur as the imposition of structure increased. House [1971] elaborated on this conclusion by suggesting that performance, in contrast to satisfaction, would benefit from structuring leader behavior where routine, structured tasks were involved. Hunt and Liebscher [1973] confirmed this conclusion. However, Ritchie [1976] suggests that the relationship is likely to be the same for both performance and satisfaction and that, in the case of intrinsically rewarding but unstructured situations, subordinates actually seem to prefer a more directive, structured role by their superior. No evidence is cited on this latter point, however.

Level within the organization has already been mentioned in connection with the Hopwood study. Other evidence tends to confirm House's [1972] suggestion that structure is preferred at lower levels and resented at

higher levels [Stogdill and Coons, 1957; Hill and Hunt, 1973; Bradshaw, 1970]. However, Hunt and Liebscher [1971] and Hunt, Hill and Reaser [1971] report few or no important differences attributable to job-level. While there may be disagreement about the nature of the moderating effect of job-level, there does seem to be unanimity on the point of the existence of job-level type of moderator.

Work group size has also been found to affect the relationship. Meyer [1972] found that in small work groups, supervisors tended to behave more like technical specialists exhibiting supportive, considerate behavior, while supervisors with large spans of control tended to emphasize administrative functions and to exhibit more structuring behavior. Similar results are due to Merchant [1978].

The upward influence of the superior is another variable which has been found to moderate the leadership-criterion relationship. Time spent by superiors with organizational staff or higher management as an "advocate" for subordinate interests may be more important from the subordinate's view than time spent by the superior with subordinates themselves. The use of more structured, less personal leader style, where this is due to significant amounts of time spent by the superior with higher level management, was found by Meyer [1972] to please subordinates. Herold [1972] also found superior's upward influence, and the associated subordinate independence, to be a powerful subordinate satisfier.

Other factors determining appropriate leader style have been suggested in the literature. These include goal specificity [Korten, 1968], the existence of suitable communication channels [Tannenbaum and Massarik, 1950], task difficulty [Shaw, 1963], the quality of leader-member relations [Fiedler, 1967], the degree of trust exhibited by the superior

[Zand, 1972] and the homogeneity of within-group skills and abilities [Mulder, 1971].

In concluding this section of the review of literature, an extremely important caveat requires mention. Almost without exception, the empirical results reported here were produced with use of survey research techniques which raises the question of the causal direction of the relationships studied. Ritchie [1976] asks the question most cogently:

"Does democratic supervision cause high performance, or is democratic behavior a luxury permitted only supervisors whose subordinates are already highly productive?" [p. 57]

Goodstadt [1970] presents evidence that indicates that effective work groups will elicit general supportive behavior by superiors while a less effective unit will generate close supervision.

4. Individual Variables

For reasons of empirical tractability, it seems, the major level of emphasis in the accounting literature which deals with participation is at the individual level. The researcher is provided with a broader methodological base at this level for the scope of good experimental, laboratory based research is far greater here than at other levels of analysis. It is clearly more difficult to satisfactorily model organizational level variables, for example, in the laboratory. In addition, the measurement instrumentation for individual level variables, compared with that at higher order levels of analysis, is more sophisticated.

The research to be reviewed here is grouped according to the focal variables of each study. The major variables which have been studied are performance, job satisfaction, attitudes, motivation, commitment to goals, feedback, goal difficulty and personality traits.

Self report measures of job satisfaction are easy to obtain and hence a considerable number of studies has investigated the role of participation as it affects job satisfaction. In a field study of industrial supervisors, Milani [1975] developed and used an instrument⁶ to measure participation and assess its relationship to job satisfaction, attitudes towards the company and performance. He found a significant relationship between the level of participation and the satisfaction and attitude variables but his results for performance were weak. Vroom [1964] found that managers who felt they were consulted on their operating budgets and that their suggested changes were given proper consideration reported high job satisfaction. Similar results are due to Ivancevich [1972]. However, an interesting contrast was found by Carroll and Tosi [1973] who failed to report improved attitudes and job satisfaction levels resulting from participation. They suggested that the effects of participation on job satisfaction are conditioned by the perceived legitimacy of participation and the extent to which participative management practices are spread throughout the organization. This suggests a problem in the approach of systematically varying the level of participation in different organizational subunits, a strategy which Heller [1971] explicitly endorses.

Cherrington and Cherrington [1973], in their laboratory study of participative budgeting, uncovered another moderating variable. They found that the reward structure has a major impact on the relationship between participation and job satisfaction. Subjects in their "group-based" budget condition (corresponding to high participation) reported high satisfaction where reward was based, at least in part, on achieving the budget (the "budget" and "output-budget" conditions). The lowest satisfaction scores

for subjects in the "group-based" condition were reported by those who were rewarded on the basis of output only. In contrast, subjects in the "imposed" budget condition (corresponding to low participation) reported highest satisfaction where the reward structure was based solely on output. The lowest satisfaction scores reported by those in the "imposed" condition were from those who were rewarded only according to their ability to achieve the imposed budget level.

Demski and Feltham [1978] provide a theoretical view of the need for budget-based reward structures. They conclude that in the event that effort and skill levels of budget participants are not fully observable (a form of market incompleteness) by a risk-averse management, budget-based reward structures are superior to other reward structures.

Hofstede [1967] also uncovered a factor which appears to moderate the job-satisfying effects of participation. In his extensive survey of budgeting practices cited earlier, he found that the area of participation was an important consideration. Specifically, participation of foremen in the technical standards component of budget preparation was significantly correlated with job satisfaction while participation in the development of more aggregate, financial objectives components of the budget was not. Hofstede attributed this difference in result to the availability of what he referred to as external reference points. Only where individuals felt that they had a valid contribution to make based on their on-the-job experience, was participation satisfying.

The role of participation in achieving commitment of organizational members to budget goals is seen as an important one. Foran and DeCoster [1974] employed a laboratory setting to investigate whether the degree of favorableness of feedback (concerning the extent of acceptance of

subordinate recommendations) influenced commitment to goals. Their results were positive in the predicted direction. French, Kay and Meyer [1966] found little difference between the level of goal commitment of "high" and "low" participants and suggested that threat levels may condition the response of "high" participants. Searfoss and Monczka [1973] provide evidence consistent with Foran and DeCoster, on the other hand. They found a highly significant positive relationship between perceived participation and goal directed effort and goal commitment.

The chosen level of goal difficulty and its relationship to subsequent performance level is also suggested to be affected by the level of participation. Stedry [1960] studied 108 students in a laboratory study in which budget level difficulty was manipulated and aspirations and performance observed. He found that only difficult-to-achieve budgets seemed to have a positive effect on performance. Stedry and Kay [1966] performed a similar type of investigation in the field and although the results are inconclusive (due to a small number of subjects) they do suggest that, except for extremes of goal difficulty, more difficult goals are more motivating (as evidenced by performance rather than as directly measured). Shapira's [1976] results are similar but more interesting in that they indicate that the nature of the reward structure is also critical. Where reward is extrinsic, and independent of performance, chosen levels of goal difficulty will be lower than where reward is intrinsic. This result further confirms the importance of reward structure as discussed above in connection with the Cherrington and Cherrington [1973] study.

Other studies which have shown a direct relationship between participation and aspiration levels associated with more difficult goals include Raia [1965], Locke [1968] and Carroll and Tosi [1973]. Some interesting moderating factors emerge from these studies. Raia suggested that seniority influenced the extent to which difficult goals were motivating. Carroll and Tosi suggest that maturity and self-assurance are also important conditioning variables, and Stedry and Kay [1966] and Swieringa and Moncur [1972] both noted the importance of age. It is likely that these variables are highly correlated.

Collins [1978] additionally suggested the importance of tenure with the company as a variable which moderated the participation-attitudes relationship. He found that a stronger positive association existed for low-tenure (less than five years) organizational members than for high-tenure (more than fifteen years) members.

Studies which have directly assessed the motivational impact of participation are few and far between. Yet references to motivation abound due to the inference that performance and motivation are positively related. That remains an empirical question even though our priors might be strong. Hofstede [1967] attempted to measure a concept he referred to as motivation by developing an instrument based on the curious combination of attitudes toward the budget and relevance of the budget. Again, these may be correlated with motivation but the empirical question remains. Hofstede found that among many variables, participation explained the greatest proportion of observed variance in motivation, as he measured it. But he noted that past levels of participation were important. Where these are high, the effect on motivation is observed, while where they are low, participation has little effect. Meyer, Kay and French [1965] reached a similar conclusion.

Merchant [1978] hypothesized that higher levels of motivation, in particular the intrinsic component, would be associated with high participation. Using Hackman and Porter's [1968] motivation measure and a construct for participation factor-analytically derived from Fertakis' [1967] Budget-Related Behavior Questionnaire, the hypothesis was confirmed for measures of both intrinsic and extrinsic motivation. The relationship between participation and attitude towards the budget system (part of Hofstede's motivation conception) was moderated by budget difficulty, however.

Recent developments in the use of expectancy theory (see Mitchell, [1974], for a review of theoretical and empirical research) as a theoretical framework for deriving motivation measures are emerging in the accounting literature [Ferris, 1977; Rockness, 1977]. This may be a fruitful area for further research. Indeed, it has been suggested that many research findings in behavioral/managerial accounting can be explained in terms of an expectancy theory framework [Ronen and Livingstone, 1975].

Finally, personality and individual differences have been subject to some limited study in the area of participation. Perhaps the best known contribution is Vroom's [1960]. He showed that individuals high on authoritarianism were unaffected by the opportunity to participate while those low on the measure showed a distinct preference to participate. Vroom [1964] also suggested the relevance of ego-involvement in the same context. Foran and DeCoster [1974] were unable to replicate Vroom's findings concerning authoritarianism but failure of the participation manipulation was suspected in Foran and DeCoster's study.⁷

Hofstede also provided an indirect test of the moderating effect of authoritarianism on job satisfaction. Grouping authoritarianism into high,

moderate and low, he found that attitude toward the budget was significantly, and positively, correlated with participation only for high authoritarians. Separately, he reported that attitude toward the budget correlated significantly, and negatively, with job satisfaction. Although the direct correlation between participation and job satisfaction was not reported for each of his three "authoritarianism" groups, it seems reasonable to conclude (as he did) that the Vroom result was replicated.

In a questionnaire survey of 137 middle level managers in four electronics companies, Swieringa and Moncur [1975] found that three items in their questionnaire, independence of thought and action, participation in goal setting, and participation in choice of methods all loaded on a single factor in a factor analysis and each was significantly correlated with job satisfaction. They noted, however, that this correlation was strongest for individuals low on a "cautiousness" measure which they include in their study.⁸ Managers who are relatively more cautious are apparently content to be less influential in budgeting than those who are more aggressive.

Need for independence [French, Kay and Meyer, 1966] and self-esteem [Carroll and Tosi, 1973] are also suggested as important personality differences which will condition the effects of participation, and age, as an individual difference variable, was found by Alutto and Acito [1974] to moderate the participation - job satisfaction relationship.

Summary, Conclusions and Implications

The purpose of this review has been to point to conditions under which participation in the budgetary process will yield desirable organizational results. Many factors which appear to "condition" the effects of participation were uncovered, and, rather than attempt a summary of results

here, a checklist, providing for a ready reference by management, has been prepared. The list is presented in Table 1. The four categories of conditioning variables discussed in this paper are presented in the table and under each heading, the conditioning factors discussed in the paper are listed.

[INSERT TABLE 1 HERE]

It is hoped that this paper will provide a basis for managers and academicians alike to pursue new literature and research in the area with a perspective which does not ask the question "does participation work?" but, when does participation work?" As this paper has demonstrated, no simple answer to the former question exists.

In conclusion, I might return to the two opposing schools of thought introduced at the beginning of the paper. These were the "Scientific Management" school and the "Human Relations" school. My recommendation, on the basis of this paper, would be to "cross-register" and "enroll in some courses" at each school!

FOOTNOTES

1. Differentiation was defined as the "difference in cognitive and emotional orientation among managers in different functional departments". They defined integration as "the quality of the state of collaboration that exists among departments that are required to achieve unity of effort by the demands of the environment." [p. 11]. Differentiation and integration were viewed as inter-related and simultaneously difficult to achieve. The more differentiation needed, the more difficult was the achievement of successful integration.
2. This suggests an important but neglected view of the benefits of participation namely improved decision quality which might potentially result. In the majority of cases the benefits of participation are couched in terms of motivational desirability alone. Miles [1965] noted this point in his contrast between the "human relations" view and the "human resources" view of participation.
3. In this context, slack is entirely functional. The view that slack is dysfunctional seems to predominate in the literature. See Schiff and Lewin [1974], for a review of literature, and [1970] for a subtle reply to Argyris [1952].
4. Galbraith goes on to suggest that the use of lateral roles in the organization clouds the authority responsibility link which may result in organizational ineffectiveness due to role ambiguity. Role ambiguity may be desirable [Goodman, 1967] but it does behoove personnel management to carefully fit individuals to role descriptions due to individual differences in tolerance of ambiguity. Individual level variables will be considered more fully in section 4 of this review.
5. Interpersonal aspects such as superior/subordinate relationships will be dealt with more fully in the next section of this review.
6. Very few attempts at direct measurement of participation are to be found in the literature. Notable contributions in the literature in this area are those of Milani, Hofstede [1967], Likert [1961], Vroom [1960], Vroom and Yetton [1973] and Heller [1971].
7. A more recent study by Abdel-Halim and Rowland [1976] again failed to confirm Vroom's finding, however.
8. The Gordon Personality Profile and Personality Inventory [Gordon, 1963].



FIGURE 1

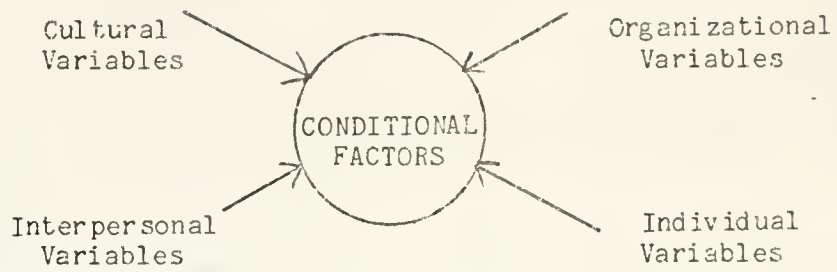


FIGURE 2

<u>Cultural</u>	<u>Organizational</u>	<u>Interpersonal</u>	<u>Individual</u>
Union ties Nationality Religion	Environmental Stability Technology Structure Task Uncertainty	Leadership Style Skill differences Span of control Time Pressure Work interest Group size Superiors upward influence	Goal difficulty Reward structure External references Feedback Seniority Maturity Age Personality

TABLE 1

Checklist of Conditional Factors
Affecting the Impact of Participation

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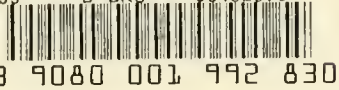
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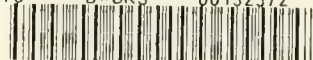
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