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Why should employees want to participate in decisions? The role of perceived control and growth need strength

Kaminski, Michelle, Ph.D.

The University of Michigan, 1993

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WHY SHOULD EMPLOYEES WANT TO PARTICIPATE IN DECISIONS? THE ROLE OF PERCEIVED CONTROL AND GROWTH NEED STRENGTH

by

Michelle Kaminski

A dissertation submitted in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy
(Psychology)
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CHAPTER 1

THEORETICAL BACKGROUND

Efforts to increase employee participation in decision making have undergone spurts of popularity in American economic history, often arising as a potential solution to the problems of the day. In the 1920s, participation was viewed as a means to improve productivity and preserve jobs during a time of increasing competition and economic restructuring (Jacoby, 1983). In the early 1970s, the QWL movement was largely a response to labor unrest, and was seen as a way to reduce absenteeism and improve employee attitudes (Katz, 1985). During the 1980s and 1990s, as in the 1920s, employee participation has been seen as a response to economic restructuring in the face of increasing competition -- in the present case, competition that is global in scope.

Estimates of how common employee participation programs currently are range from 31% of all unionized firms in Wisconsin (Voos, 1987) to 50 to 60% of unionized firms in the U.S. (Levine & Strauss, 1989; Cooke, 1990). However, Levine and Strauss also identify the limits of participation within those firms: rarely are more than 25% of employees in any plant involved, and programs often peak after four years or so and begin to die out. (This "honeymoon effect" was first discussed by Lawler & Mohrman, 1987a, and is also supported by Griffin, 1988.)

The present study explores some of the limits of participation by reporting on a site that has long since past the honeymoon period -- their participative system had a 10-year history prior to the time of data collection. But the participative system has encountered other limitations, most notably that the

percentage of hourly employees who belong to the formal participative system has never exceeded 25% for any length of time, and has sometimes been substantially less.

This limited extent of participation creates a number of difficulties for management, union leadership, and employees. Managers and union leaders must contend with the inherent conflicts of addressing some issues in a cooperative, collaborative style, but resolving others via confrontational, adversarial methods. For employees, issues of equity between those who are part of the participative program and those who are not can arise over pay, preferred job assignments, amount of influence, extent of supervision, or a host of other issues. (See Trist, Susman, & Brown, 1977, for a description of how equity issues resulted in union membership voting against extending an experiment in autonomous work groups to the entire work site.)

One way to avoid these issues is to design a participative program to include all organization members. There are two significant problems with this approach. First, while this approach is frequently taken in "greenfield" settings, it is extremely difficult to implement in existing work places -- particularly those with a history of adversarial relations between management and union leaders or employees. But a second, and more fundamental problem, is that to impose a participative system is contrary to the nature of such a system. If a participative system is one in which high value is placed on employees' ideas and decisions, then to force an employee to join a participative group when his or her own decision is not to become involved sends a contradictory message.

In addition, the implementation of a participative system in a unionized setting raises some special difficulties. Many unions insist that participative groups not address any issues that are covered in the union contract. This can significantly limit the effectiveness of the participative system, because many of

the key issues at a work site, such as pay, job classifications and duties, and benefits are all handled via collective bargaining. An example of the kind of difficulty that arises is that employees sometimes suggest ways to increase productivity that require a reorganization of job responsibilities and/or work flow. This frequently conflicts with the existing job classifications in the local union contract, and hence the changes might be opposed by the union. In fact, the QWL movement was seen as ineffective in some industries because many of the changes and improvements that QWL groups wanted to make required contractual changes, and hence were not implemented (Katz, 1985).

While limiting the range of issues that participative groups can address may seem at first glance to be an unreasonable request on the part of the union, it is important to recognize that collective bargaining is the primary base of power for the union itself, and anything that weakens the union's ability to bargain effectively is a potential threat to the existence of the union. Hence, unions have imposed limits on participative systems in part to protect their own survival. In recent years, some unions have developed new forms of local contracts that encourage rather than limit employee participation.

A second difficulty that is frequently encountered in unionized settings is that tension between the local union and management rises substantially during contract negotiations, and collaborative efforts may be temporarily abandoned during this time. In some cases, the withholding of cooperation in participative efforts is used as a bargaining chip in negotiations. Depending on how the respective parties handle the negotiation process, bargaining may weaken or strengthen the trust between all parties that is required to maintain a successful participative system.

In spite of these two difficulties with implementing participation in a unionized setting, unionized workers have one crucial advantage over non-

organized ones when a participative system is being established. That is, if the participative system is created in a non-union setting, management can choose to discontinue the system at any point in time. In contrast, in a unionized setting, if the participative system was jointly agreed to by union and management, then the union can hold management accountable if it fails to live up to its agreement to support the participative system. Thus the union can ensure that participation occurs regularly and on the full range of agreed-upon topics, rather than occurring merely at the discretion of management (Lawler & Mohrman, 1987b).

In spite of the issues listed above, each employee at a work site with a participative system must decide for him- or herself whether or not to become involved in the system, and what level of commitment to make to it. Ultimately, those individual decisions have a substantial impact on the effectiveness and the continued existence of the participative system. The present study addresses the issue of individual involvement in and attitude towards the participative system. A positive attitude on the part of employees is crucial to the long-term success of a participative system. If employees do not support the system, they can withhold their involvement. Since a participative system, by its very nature, requires extensive employee involvement, it ultimately cannot survive unless it is endorsed by employees. Hence, positive employee attitude is seen as one essential element that contributes to the success of a participative system.

What factors contribute to a positive employee attitude towards participation? Theorists have typically proposed explanations that focus either on individual personality or on situational factors. The present study will test the relative strength of some specific personality and situational factors, and will also test a model that combines both personality and situational variables.

This study examines employee attitude towards participation at one site. Because the history, design, and implementation of the participative process can

greatly influence an individual's attitude, a detailed description of the site appears in the methods section. Ideally, a multiple-site study could also explore the effect of differences in history, design, and implementation on employee attitude. However, that is not possible here. Instead, information about these factors is provided in the hope that it will be useful to future researchers who try to compare single-site studies on these dimensions.

Situational Factors

Neumann (1989) criticizes the large body of research on participation for its focus on personality factors in explaining why people might not want to become involved in participative work groups. Such explanations seem to "blame the victim" for not taking part in something that outside academicians and consultants think must be good for them. Personality factors also call attention away from the very real issues of the design of the particular form of participation, the organizational culture and history, and factors outside the workplace that may effect an individual's willingness to participate. If behavior does indeed result from a combination of the person and the environment, as Lewin (1936) suggested, then to ignore the environment is to ignore a large part of the puzzle. More recent work by Davis-Blake & Pfeffer (1989) suggest that organizations present such strong situational stimuli, that there may be relatively little difference in individual response.

To counter the personality explanations, Neumann (1989) proposes a comprehensive list of situational reasons why people might choose not to participate in an organizational change effort, such as the introduction of employee participation. Neumann discusses three main categories of reasons why people might not participate: structural explanations related to the design characteristics of the organization, work group, or participative process; relational

explanations concerning the dynamics of hierarchy, process of participation, or the individual's view of the role of work in life; and societal explanations concerning socialization, ideology, political views, and dominant values.

Neumann focuses on reasons why people choose not to participate. The present study focuses on the opposite outcome; it uses these factors to predict a positive attitude towards the participative system. Although this study is not a full test of Neumann's model, her arguments, combined with data from other studies, guide the selection of situational variables predicted to affect employee attitude towards participation.

One of Neumann's main categories -- **structural barriers** that limit the extent of participation -- has been discussed by several researchers. They report that one primary structural obstacle to full participation in many work sites is what workers perceive to be "sham" participation -- a situation in which hourly workers are only allowed to make decisions about insignificant topics, workers' decisions are regularly rejected by upper management, or management manipulates the participative process (e.g., by withholding information) to ensure that workers arrive at the decision outcomes that management has already chosen (Neumann, 1989; Levine & Strauss, 1989; Witte, 1980).

Other researchers also suggest that the structural design of the participative program itself is an important consideration. For example, Dachler & Wilpert (1978); Locke & Schweiger (1979); and Cotton, Vollrath, Froggatt, Lengnick-Hall, & Jennings (1988) all propose classification schemes for studying different types of participation, suggesting that outcome measures may vary by form of participation. Cotton et al. (1988) demonstrate this by comparing 91 previously published studies. They conclude that some types of participation (i.e., participation in work decisions, informal participation, and employee ownership) are more reliably related to improvements in productivity and satisfaction than are

other forms (such as short term participation and representative participation). Hence, there is evidence that the structural characteristics of a participative program have an impact on the program's success.

One key structural characteristic of a participative system is the amount of control or influence that workers have. This is one dimension that is common to all the classification schemes referred to above. The amount of worker control varies with the form of participation, but having some control in the hands of hourly workers is a key part of any participative system. Tannenbaum (1974) agrees that the level of control exercised by lower level employees is crucial to the concept of participation:

> Participation means different things to different people. As we see it, participation implies a system of management in which all members influence organizational decisions. Participation, therefore, means that employees at lower ranks exercise some legitimate control over decisions, along with managerial personnel. (p. 77)

Tannenbaum adds, "To talk about participation is to talk about control.... Workers exercise more control in the participative than in the nonparticipative system." (p. 78)

Thus, the concept of participation and increased levels of control for workers are inextricably linked. But because in real work settings, so-called participative systems have been implemented in ways that do not increase employee influence or control, (i.e., "sham participation"), it is necessary to determine whether a participative system at a given site is indeed related to more control for workers. When such control is in place, the participative system is expected to be more successful and long-lasting than when a so-called participative system does not increase the amount of control or influence that workers have.

The importance of influence itself was emphasized in a more recent work by Israel, House, Schurman, Heaney, & Mero (1989). They suggest that it is the

influence that results from participation, rather than belonging to a participative group itself, that is important in limiting job stress and negative feelings about work.

Because of the importance of workers' control in establishing and maintaining a successful participative system, it is predicted here that employees will have a positive attitude towards participation when their amount of influence is high. Specifically, because this study addresses employees' attitude towards an entire participative system, rather than towards their own participative work group, the level of influence that respondents perceive hourly workers as a group to have is predicted to be related to their attitude towards the participative system. Hence, employees who perceive hourly workers as having high levels of control are predicted to have a more favorable attitude towards participation. If high levels of worker control do not exist, workers are likely to view the participative effort as disingenuous or as a sham, and will not endorse it.

H1: Perceived control of hourly workers will be positively associated with attitude towards participation.

Secondly, a review of the literature identifies the interaction between supervisors and subordinates as a crucial component of the participative process. (In fact, a large number of studies examine the amount of participation that supervisors allow their subordinates in work sites without a formal participative system. This is considered informal participation under the classification system proposed by Cotton et al., 1988) In Neumann's (1989) categorization scheme, the supervisor-subordinate interaction is a **relational** factor that might inhibit an employee's willingness to participate. She suggests that employees who feel that their supervisors are very authoritarian and will not listen to workers' suggestions are often very skeptical about the potential of any participative group to implement workers' decisions. In addition, Levine & Strauss (1989) suggest that employees

might not endorse such programs because they fear retaliation from supervisors. This could occur when supervisors perceive, correctly or not, that good suggestions from employees imply that supervisors are not adequately performing their jobs.

Because of the vital role played by supervisors in the participative process, it is predicted that individual employees who report that their supervisors listen to their views will have a more positive attitude towards participation. Such employees are likely to feel that their ideas will receive a fair hearing, and that the participative group will entail genuine, rather than "sham" decision-making.

H2: Supervisor responsiveness will be positively associated with attitude towards participation.

Another factor predicted to be related to attitude towards participation is perception of the participative system as a threat or as an opportunity. Opportunity and threat are two cognitive categories that can be applied to a wide range of situations. According to Dutton & Jackson (1987: 80),

> The 'opportunity' category implies a *positive* situation in which *gain* is likely and over which one has a fair amount of *control*; in contrast, the 'threat' category implies a *negative* situation in which *loss* is likely and over which one has relatively *little control*.

Previous work by Pyle (1989) applied this categorization theory and the threat-rigidity hypothesis (Staw, Sandelands, & Dutton, 1981) to a sample of supervisors and their subordinates at the present site. Pyle found that workers whose supervisors view the participative system as a threat reported fewer opportunities to participate, and attributed higher levels of control to their supervisors and lower levels of control to themselves. The results were less clear for supervisors who viewed the participative system as an opportunity. However, the present sample consists of hourly employees, and their perceptions of threat and opportunity can be expected to differ from those of supervisors.

Supervisors are often likely to view the implementation of a participative system as a threat, because lower level employees will be making decisions and taking over tasks that were formerly performed by the supervisor. Hence, supervisors may question what role, if any, will remain for them after the new system is in effect. Unless a new role for them is created, it is quite likely that supervisors in such situations will categorize the participative system as a threat.

On the other hand, hourly employees generally do not perceive the implementation of a participative system as a threat to their jobs. There are some exceptions to this. For example, the closing of the GM Fiero plant, which had a reputation for cooperative union-management relations and extensive participation, led some remaining GM workers to wonder why they should risk becoming involved in a participative system. In addition, Kochan, Katz, & Mower (1984) site two cases (Xerox and local 14B of the Amalgamated Clothing and Textile Workers Union, and a second case that was reported anonymously) in which the implementation of a participative system was followed by layoffs, causing workers to wonder why they should work to be more productive and save the company money when it resulted in layoffs and/or plant closings.

But, in general, hourly workers are less likely than supervisors to expect that the implementation of a participative system will result in the loss of their own jobs. Rather, when presented with a new participative system, employees are likely to have one of two responses: they might be skeptical that anything will be different under the new system, or, on the contrary, they might think this is a genuine opportunity to have more input and decision making authority. Regardless of their initial view, if the new system fails, employees can simply expect a return to the old ways of doing things. While nothing was gained, little will have been lost. And so, perception of threat is not likely in this case.

However, hourly workers are likely to differ in what they think will be gained by the successful implementation of a participative system. Hence, in contrast with supervisor's views, perception of opportunity is expected to be an important predictor of hourly employees' attitude, while perception of threat is not. Support for this is offered by Neumann (1989), who suggests that individuals are not likely to endorse a participative system unless they view it as an opportunity to enhance their rank and status. Hence, it is predicted here that employees who view the participative system as an opportunity will have a more positive attitude towards it than those who do not.

H3: Perceived opportunity will be positively associated with attitude towards participation.

Opportunity, as used here, is an important cognitive category that individuals use to assess a variety of situations. It involves a global rather than a specific evaluation on the part of the respondents. As measured here, it is left to the respondents to determine what "opportunity" means to them in this particular context. However, there is a related but more specific concept that theorists have predicted to be related to individual involvement in and commitment to a participative system: goal instrumentality. In a study of the decision to participate in quality circles, Dean (1985) reports that a belief in the group's potential to achieve goals was a significant predictor of who joined the group. Similarly, in a model of organizational change in unionized settings, Kochan & Dyer (1976) propose that people will be more likely to participate initially if the program is seen as instrumental to goal attainment, and they will be more likely to maintain commitment over time if they believe that goal attainment will continue. In a related view, Neumann (1989) maintains that some tasks do not require participation or interaction to be performed well. She considers this irrelevance to work goals as a **structural** explanation for choosing not to participate.

Conversely, if participation enhances employees' abilities to achieve their work goals, then employees would be expected to support it. Hence, it is predicted here that employees who believe the participative system will help them achieve their work goals will have a more positive attitude towards participation:

H4: Goal instrumentality will be positively associated with attitude towards participation.

In addition to the **structural** and **relational** reasons discussed above that might affect employee attitude towards participation, Neumann (1989) also points to the importance of **societal** factors. Neumann identifies socialization processes that encourage most people to be subordinates rather than leaders, and deeply held values about the legitimacy of hierarchy as societal factors that potentially affect an individual's willingness to participate. However, these factors are beyond the scope of this study. No societal explanations are tested here.

Personality Factors

As mentioned in the introduction, personality factors are a competing explanation for why some employees have a negative attitude towards participation. Rather than examining the situational factors, many researchers sought out explanations based on individual differences for why participation did not become as widespread as expected. For example, Vroom (1960) found that the correlation between participation in decision making and job attitudes was more positive for those with high need for independence and low authoritarianism. Tosi (1970), Alutto & Belasco (1972), Alutto & Acito (1974), and Abdel-Halim & Rowland (1976) all failed to replicate these results. Since then, a host of studies have examined other personality variables and their potential relationship to participation. A review of 14 studies led Hespe & Wall (1976) to conclude that bureaucratic orientation, introversion, locus of control, and

neuroticism were all unrelated to the desire for participation. In addition, Juralewicz (1974) found no effect for intolerance of ambiguity. Hence, there are few seemingly relevant personality variables that have not been tried and discredited as predictors of attitude towards participation or related processes.

There is one area of personality that has not been fully tested in relation to participation. Some researchers have made vague references to "higher-order needs" and suggest they will be related to the desire for or the response to participation. For example, Lowin (1968: 75) states that,

> Participation in the design of his own activities meets the ego-needs of the subordinate.... The exact structure of ego needs is most unclear, but the following are commonly referred to: achievement, autonomy, power, self-realization.

In a similar vein but using slightly different terms, Singer (1974) also suggests that the desired to satisfy higher order needs is an important factor in the study of participation. And Hackman & Oldham (1980) suggest that those with high growth need strength will respond positively to opportunities to develop their skills, and will be alert to the opportunities to do so that are presented by enriched work systems. Because participative systems have many traits in common with enriched work systems, it is predicted that those with high growth need strength will also have a positive attitude towards participation:

H5: Growth need strength will be positively associated with attitude towards participation.

Another personality variable has only recently been explored in relation to participation: self-esteem. Brockner & Hess (1986) predicted that participation would work more effectively if group members had high self-esteem. In support of this hypothesis, they found that the mean self-esteem of members of successful quality circles was higher than the mean self-esteem of members of unsuccessful quality circles. Brockner (1988) also predicts that, in a work organization undergoing a transition from a traditional to a participatory system,

those with high self-esteem will be more willing to become involved in a new participatory system, because they have confidence in their ability to initiate and perform the new kinds of behaviors that are required by such a system. Hence, it is predicted that those with high self-esteem will have a more positive attitude towards participation.

H6: Self-esteem will be positively associated with attitude towards participation.

Control Variables

Finally, previous research has identified a number of demographic variables that affect either the desire for or the outcomes of participation. These measures are also frequently cited informally by internal change agents, who identify certain demographic groups as resistant to participation. They are discussed briefly below, and will be used as control measures in the analysis of both the situational variables and the personality variables.

Informal discussions with internal change agents (at this and other sites) suggest that older workers are more resistant to participative systems because they are used to working under an adversarial system and because they are simply biding their time until retirement, and are not interested in changing. However, the evidence on this question is mixed. A review by Hespe & Wall (1976) supports this connection. They find that age is negatively related to the desire for certain types of participation. In contrast, Dyer, Lipsky & Kochan (1977) find no effect of age on preferences for solving issues via joint programs or via collective bargaining. In a replication of the Dyer et al. study with a different sample, Ponak & Fraser (1979) also find no effect for age. Thus, age is sometimes negatively related to the desire for participation, and sometimes unrelated to it.

A similar argument is often made for education level. It is frequently proposed that participation is more popular and more effective among those with higher levels of education because more educated individuals have both a higher desire for participation and the skills required to take advantage of it. Again, the evidence is mixed. Dyer, Lipsky & Kochan (1977) report that those with higher levels of education have a preference for joint programs. But when examining the outcomes of participation, Latham & Yukl (1975) found that among those with lower education, performance was higher under the condition of participatively set goals than under the condition of assigned goals. Among those with higher education, there was no difference in performance between those working with participatively set goals and those who were assigned goals. And so, there is some evidence that those with higher levels of education prefer a participative system, but evidence about performance suggests that participation has more impact on those with lower rather than higher levels of education.

Like age and education, job category is frequently suggested as an important factor in determining attitude towards participation, and will also be included as a control measure in the analysis. Within the manufacturing sector, there is typically a strong distinction between production workers and skilled trades workers. Production workers are typically tied to a particular machine or to a station on an assembly line, and frequently have little control over the pace of their work or the manner in which it is done. In contrast, skilled trades workers are responsible for the setting up and maintaining all the equipment in a plant. They move about freely throughout the plant, and have significantly more autonomy over their work than do production workers. Their work is not routine; rather, they must solve problems as they arise. Hence skilled trades workers typically feel like they would be giving up control, rather than gaining any, by joining a participative group. Thus, skilled trades workers are generally viewed as

more resistant than production workers to joining a participative group or team (Katz, 1985).

Along with age, education, and job category, current membership in a participative group will also be used as a control variable in this model. At the present site, membership in a participative group is voluntary. Hence, it is likely that members have more positive attitude towards participation than do non-members. Using membership status as a control variable serves to limit the potential impact of self-selection bias and experience with participation.

CHAPTER 2

METHODS

This study is based on survey data collected from a stratified random sample of 410 hourly employees at one site. (See the appendix for a copy of the complete questionnaire.) Missing data on some items reduced the N to 354. The sample was stratified based on current involvement in the participative system (i.e., belonging to a participative group or not). The percentage of respondents in the total sample who were currently involved in a participative group (270 members of 410 respondents, or 66%) was the same as the percentage of current group members among the respondents with complete data (233 of 354, or 66%). Hence, there was no difference between members and non-members in completeness of response.

The overall response rate was 54%. Although this is somewhat low, this is comparable to the response rates received for other surveys conducted at this site. However, the response rates for current members of participative groups and non-members differed substantially. Of 350 group members in the sample, 270 completed surveys, for a response rate of 77%. Among non-members, 140 surveys were completed from among 405 employees in the sample, for a response rate of 35%. Because potential respondents were asked in a letter to take part in a study of the participative group system, non-members may have felt that the study was not relevant to them, or that they had no information to offer. Although the letter clearly stated that their views were welcome regardless of the experience with participative groups, they might have felt that their contribution

was not as valuable. Also, they may have had less positive views about the participative system, and may have been less willing to take part in the study as a result.

In addition to the quantitative surveys on which the data analysis is based, a number of semi-structured interviews were conducted. Five people who were involved in the initial development of the participative system (three hourly and two salaried) were interviewed about the history of participative groups in this facility. Two of these five also served as human resource staff consultants to the groups. In addition, 15 others were interviewed to get a flavor of the current views of the participative system. These interviews included four supervisors who currently work with participative groups, three supervisors who do not work with groups, five hourly employees who currently belong to a participative group (some of whom serve as group leaders), and three hourly employees who do not currently belong to a group. The information presented below concerning the history of the participative process at this site and its current state is taken from these 20 interviews.

Description of Site

The site is a manufacturing plant located in a small Midwestern city. The plant employs approximately 2000 people, and is part of a large corporation. All hourly employees at the site are represented by one local of an international union. The plant has increasingly come under competitive pressures in recent years. The present employment level is only about half of peak employment, and the work force is struggling to prevent further job losses.

The participative system in this plant is well-established in that it began 10 years prior to the time of data collection. However, it is not fully institutionalized. Specifically, only about one-quarter of the hourly employees belong to a

participative group at any given time. Membership in participative groups changes frequently as a result of layoffs and other changes in employment level.

The roots of employee participation in this plant are traced to the 1970s QWL movement. The local union supported initial efforts to form QWL groups. However, these groups did not last. While the union continued to support employee efforts to organize participative groups, the support of top management was not forthcoming. A few groups continued to meet, but there was little diffusion of the participative process.

A change in plant management in the mid-1980s served to revitalize the participative process in this plant. The new manager not only agreed with the participative approach as a matter of personal philosophy, but also provided substantial organizational support and resources to the existing participative groups (e.g., training in both technical and interpersonal skills). In addition, union leadership remained staunchly in favor of participative groups.

Through the joint efforts of the union leadership and the new management, existing groups were strengthened and many new groups were created. As groups developed, they followed the typical pattern of first addressing simple issues related to working conditions and productivity, then moving to more complex problems in those areas, and eventually to taking on more and more tasks formerly considered managerial, such as scheduling of work tasks, and maintaining production records. Hourly employees at this site were particularly proud of their involvement in selecting and dropping outside vendors. They viewed this as strong evidence that the participative process was not just another management ploy, but rather something that enabled workers to have real influence.

The process of shop floor involvement was mirrored at the level of plant management. Business information was shared with union leadership, joint

committees were established, and many business decisions were either made jointly or made by management after consulting with the union leadership. A few hourly employees were also members of the committee charged with charting the plant's strategic direction for the next decade.

The leadership's high level of commitment to the joint process and belief in a new paradigm of industrial relations was also reflected in the adoption of a living contract agreement. In contrast with traditional contracts, the living agreement does not have a set expiration date. Management and union leadership agree to jointly work out issues as they arise, rather than accumulating them as bargaining chips for the next round of contract negotiations. Such agreements provide the advantage of increased stability. Because the living contract does not expire, one crucial opportunity for strikes -- the expiration of a contract without the successful negotiation of a new one -- is eliminated.

As is frequently the case when a formerly traditional atmosphere becomes more cooperative, the union leadership at this site eventually faced an electoral challenge from those that preferred a more adversarial approach. Such an election was held in the late 1980s, with the results strongly supporting the incumbent leadership that favored the cooperative approach.

In addition to the unusually high level of union and management support, the human resources staff identified two other key structures that contributed to the success of the participative system at this site. One was a monthly communication meeting of the joint plant leadership and representatives from the participative groups. This meeting served to inform the leadership of the groups' plans, and provided the opportunity for the groups to enlist higher-level support when some of their approved plans met roadblocks from other corners of the organization.

The second structure identified as important by the staff was the supervisory committee, which addressed the special concerns of supervisors in the context of this particular participative system. Supervisors often face the difficult task of having to learn a new style of supervision as they move from adversarial to cooperative relations with subordinates. But, since not all subordinates belong to participative groups, most supervisors also find they must frequently switch between two different styles. They work cooperatively with group members but also work in a traditional, adversarial style with non-members. They might have to make this shift in styles many times each day. The supervisors' committee met regularly to address such difficulties.

Despite largely favorable circumstances, the participative system in this plant, which is voluntary, has only spread to about 25% of the work force. In order to form a participative group, employees from a common work area must get together and decide to initiate a group. Once enough employees agree to join, the group goes through training in interpersonal skills and group processes, and may also receive technical training. Hourly and salaried members of the human resource staff within the plant are available to the groups for consultation on an ongoing basis.

Thus, while the organization provides support for participative groups once they form, employees must take the initial steps to create a group. Informal leadership is particularly important in this case. Many groups report that in their early stages, there was one individual who mustered support for the group process and served as group leader.

The group leaders are also important in maintaining the groups over time. Changes in the leaders' work assignments brought about by the plant's changing economic fortunes have sometimes had detrimental effects on existing participative groups. When the plant employment level changes, there are many

transfers between departments and shifts. When a group leader is transferred, the group faces a crisis. Either another leader must emerge, as sometimes occurs, or the group will disintegrate. Unfortunately, the latter outcome is also common. In general, participative groups in this plant experience frequent changes in membership, making institutionalization more difficult.

The transitory nature of these participative groups added some complexity to the research design. The sample was stratified based on group membership at the time of data collection: all current members were invited to respond to the survey, as was a random sample of those hourly employees who were not members of a participative group at that time. However, this latter set included a number of employees who had formerly been members, but did not currently belong to a participative group. Because membership is voluntary, former members might have left their group because of dissatisfaction with it. However, informal discussion with some former members and with the plant human resources staff suggests that it is more frequently the case that members leave groups not because of dissatisfaction, but rather because their groups were decimated by layoffs and/or associated transfers between shifts and departments. Because current members, former members, and those who never opted to belong to a participative group might have a very different attitude towards the participative process, group membership status is controlled for in the data analysis. In this sample, there are 233 (66%) current members, 69 (19%) former members, and 52 (15%) respondents who have never been members of a participative group.

One other historical note about this site is relevant to the data analysis. At the time of data collection, the plant leadership was considering a proposal to extend the participative system to all employees. They were disappointed in the relatively low percentage of employees (about 25%) who presently belonged to a

participative group. Although some of this could be accounted for by transfers and layoffs, there still remained a sizeable group of employees who had never opted to join a participative group. The proposal under consideration would require all employees to join a participative group. Because this proposal was widely discussed at the time of data collection, an item related to it is included in the analysis. (The proposal itself was ultimately rejected by the joint leadership of the plant; group membership remains voluntary.)

Measures

Dependent Measure

Attitude towards participation. This variable assesses the extent to which employees positively endorse the participative system at this site. It is the dependent variable in the analyses. The items and factor loadings for this scale are as follows:

Items:	Factor Loadings
It would be a good idea if everyone in the plant had to belong to a participative group (such as an EPG, self- or shared-management group). [1 = Strongly agree, 5 = Strongly disagree] Reverse scored.	.77
The union should work with management in furthering the development of the participative group system (EPGs, self- or shared-management groups). [1 = Strongly agree, 5 = Strongly disagree] Reverse scored.	.81
How important is it to you to work in a system with a participative group process? [1 = Not at all, 5 = Extremely]	.81

A confirmatory factor analysis of these three items yielded one factor. Reliability analysis indicated the alpha for this scale is .70.

Independent Measures: Situational Explanations

Perceived control of hourly workers. This variable assesses the overall level of control that hourly workers have over a variety of issues in the plant. Control graph items modeled after Tannenbaum (1968) were used to create this measure. The items and factor loadings for this scale are as follows:

Items:	Factor Loadings
How much say or influence do you think hourly workers as a group CURRENTLY have on.... [1 = None, 5 = A great deal]	
What goes on in this plant	.77
Health and safety issues	.79
Working conditions	.85
Ways to improve customer satisfaction	.78
Adoption of new plant policies	.79

In work by Thacker & Fields, (1987) similar items comprised two separate scales, one for traditional areas of union/employee influence (such as scheduling shifts and vacations) and one for non-traditional areas (such as helping improve customer service and implementing technological change). But confirmatory factor analysis conducted with the present data resulted in only one factor. Reliability analysis for this scale indicated alpha = .85.

Supervisor responsiveness. This variable assesses the extent to which employees feel their supervisors listen to their views on a variety of issues. The items and factor loadings for this scale are as follows (with alternate wording for group members and non-members shown in brackets):

Items:	Factor Loadings
In the past six months, how often did your supervisor listen to your views on the following topics? If you [or your group] made this decision without talking to your supervisor, please answer "always." [1 = Always, 5 = Never] Reverse scored.	
Determining how to improve quality	.80
Determining how to improve productivity	.80
Determining work schedules (vacation time, when to have overtime, etc.)	.66
Arranging for equipment maintenance	.80
Deciding how to evaluate [the group/your co-workers]	.75
Evaluating outside vendors	.74

Although the items used in this scale were originally intended to be combined into two separate measures based on traditional and non-traditional areas of employee influence (based on Thacker & Fields, 1987), a confirmatory factor analysis did not support this. Instead, one factor resulted. Reliability analysis resulted in alpha = .84.

Opportunity. This variable assesses the extent to which employees feel that belonging to a participative group is an opportunity (as they define "opportunity"). It is a single item, with the alternate wording shown in brackets for those who currently are and those who are not participative group members:

> I see [being a member of/joining] a participative group (such as an EPG, self-management or shared-management group) as an opportunity. [1 = Strongly agree, 5 = Strongly disagree] Reverse scored.

Goal instrumentality. This variable assesses the extent to which employees feel that belonging to a group will help them achieve their work goals. The items and

factor loading for this scale are as follows (with alternate wording for members and non-members listed separately):

Items:	Factor Loadings
Members: When I compare working in a participative group (such as an EPG, self-management or shared-management group) with working in the traditional way, I believe that being a member of a participative group has resulted in:	
Non-members: When I think about working in a participative group (such as an EPG, self-management or shared-management group), I think that joining a participative group would result in:	
A loss in my ability to do the job well. [1 = Strongly agree, 5 = Strongly disagree]	.80
A gain in my ability to attain my work goals. [1 = Strongly agree, 5 = Strongly disagree] Reverse scored.	.80

Factor analysis of these items yielded one scale; however the reliability is relatively low. For this measure, alpha = .43. Reliabilities are often lower when one item stem is worded positively (i.e., "a gain in...") and another is worded negatively (i.e., "a loss in..."). However, this helps reduce response bias. Although the reliability of this scale is somewhat low, this factor accounts for 64% of the total variance in the items.

Independent Measures: Personality Explanations

Growth need strength. This variable assesses the individual's felt psychological need for learning, personal growth and accomplishment. It is adapted from Hackman & Oldham's (1980) Job Diagnostic Survey. The items and factor loadings are given below:

Items:	Factor Loadings
Listed below are a number of characteristics that could be present on any job. People differ about how much they would like to have each one present in their own jobs. Using the scale below, please indicate the degree to which you would personally like to have each characteristic present in your own job: [1 = Somewhat, 5 = A very great deal]	
Opportunities to learn new things from my work	.89
A sense of worthwhile accomplishment in my work	.89

The reliability of this scale (alpha) is .87.

Self-esteem. This is a measure of the extent to which a person feels positive about him- or herself. The items and factor loadings are given below:

Items:	Factor Loadings
I feel that I am a person of worth, at least on an equal basis with others. [1 = Strongly agree, 5 = Strongly disagree] Reverse scored.	.84
All in all, I am inclined to feel that I am a failure. [1 = Strongly agree, 5 = Strongly disagree]	.84

The reliability of this measure (alpha) is .58.

Control Measures

Group membership: current. This is a dummy variable assessing current status as a member of a participative group:

> Do you currently belong to a participative work group (i.e., an EPG, self-management group or shared-management group)? [1 = Yes, 2 = No] Reverse scored.

Group membership: never. This is a dummy variable, asked only of those who are not currently members of participative group:

Have you ever belonged to a participative work group? [1 = Yes, 2 = No] Reverse scored.

Current group members were automatically assigned the "yes" value for this item.

Age. This variable measures chronological age in years.

Education. This variables assesses respondents' level of formal education, not including trade school. Respondents were asked to indicate the highest grade of school or year of college they completed by circling a number from 01 to 19+.

Job category. This is a dummy variable assessing respondents' status as a skilled trades worker or production worker.

Analysis Plan

The hypotheses listed earlier were analyzed via a series of eight regressions, described below. For each regression, all predictor variables were entered as a single block. The first three regressions explored the effects of the control measures, so their impact could be taken into account before assessing the effect of the independent measures of interest. The next two regressions tested versions of the situational explanations of attitude towards participation. Regressions six and seven explored the effects of the personality variables. Finally, the last regression was the combined model that compared the relative strength of the personality and situational variables. Details are given below.

1. Dependent variable: attitude towards participation

   Control variables: age
   education
   job category

   This model explored the effects of these control variables on attitude toward participation, independently of the variables of theoretical interest. This helped clarify their role in further analyses.

2. Dependent variable: attitude towards participation

Control variables: group membership: current
group membership: never

As discussed previously, only about 25% of employees at this site belong to a participative work group. Joining a group is voluntary. However, leaving a group is sometimes a result of circumstance. In order to better understand the role played by group membership in the present model, it was first examined separately, and then in conjunction with other control variables. (See step 3.)

3. Dependent variable: attitude towards participation

Control variables: age
education
job category
group membership: current
group membership: never

Examining all the control variables together helped assess whether the anticipated effects of group membership could be explained by the other control variables.

4. Dependent variable: attitude towards participation

Independent variables: perceived control of hourly workers
supervisor responsiveness
opportunity
goal instrumentality

This model provided an initial assessment of the situational explanations proposed in Hypotheses 1 to 4 above.

5. Dependent variable: attitude towards participation

Independent variables: perceived control of hourly workers
supervisor responsiveness
opportunity
goal instrumentality

Control variables: age
education
job category

group membership: current
group membership: never

This tested the full situational model. Specifically, it determined whether the situational effects still held after taking into account the effects of the control variables.

6. Dependent variable: attitude towards participation

   Independent variables: growth need strength
   self-esteem

   This provided an initial assessment of the two main effects for personality variables predicted in Hypotheses 5 and 6 above.

7. Dependent variable: attitude towards participation

   Independent variables: growth need strength
   self-esteem

   Control variables: age
   education
   job category
   group membership: current
   group membership: never

   This tested the full personality model. It determined whether the personality effects still held after taking into account the effects of the control variables.

8. Dependent variable: attitude towards participation

   Independent variables: perceived control of hourly workers
   supervisor responsiveness
   opportunity
   goal instrumentality
   growth need strength
   self-esteem

   Control variables: age
   education
   job category
   group membership: current
   group membership: never

This tested both the situational model and the personality model. It is referred to as the "combined model" in the text. It indicated whether any significant situational effects were diminished by the addition of personality variables to the model, or vice-versa.

CHAPTER 3

RESULTS

Table 1 displays descriptive statistics for all variables, and Table 2 shows the correlations between all variables. As shown in Table 1, the mean age of respondents was about 46 years, with the mean education level being slightly more than high school (12.55 years). The sample was about evenly split between production workers (53%) and skilled trades (47%). As mentioned earlier, 66% of respondents were group members at the time of data collection, 19% were formerly group members, and 15% were never members of a participative group.

As indicated in Table 2, the dependent variable, attitude towards participation, was significantly correlated with all other variables (both independent and control variables) except for age. Attitude towards participation was most strongly related to perceiving the participative groups as an opportunity ($r = .65$, $p < .001$), and seeing them as instrumental in achieving one's work goals ($r = .57$, $p < .001$). In addition, attitude toward participation was strongly and positively associated with high levels of perceived control of hourly workers ($r = .40$, $p < .001$) and with current membership in a participative group ($r = .41$, $p < .001$).

Table 2 also indicates that there were some moderately high correlations between independent variables. The highest correlation was .59 between opportunity and goal instrumentality. This raised some concerns about potential multicollinearity. Although some statisticians do not become concerned about multicollinearity until the correlations between independent variables reach .90 or

TABLE 1

Descriptive Statistics

Variable	Mean	S.d.
Attitude towards participation	3.44	0.90
Age	45.99	6.16
Education	12.55	1.31
Job category[a]	0.47	0.50
Group membership: current[b]	0.66	0.48
Group membership: never[c]	0.15	0.35
Perceived control of hourly workers	2.86	0.82
Supervisor responsiveness	3.43	0.94
Opportunity	3.88	0.96
Goal instrumentality	3.66	0.69
Growth need strength	4.02	0.98
Self-esteem	4.53	0.55

[a]For Job category, 0 = production worker, 1 = skilled trades worker

[b]For Group membership: current, 1 = currently a group member, 0 = never or formerly a group member

[c]For Group membership: never, 1 = never a group member, 0 = currently or formerly a group member

N=354

TABLE 2

Correlations[a] among All Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Attitude towards participation	(.70)											
2. Age	-.07											
3. Education	-.13**	-.21***										
4. Job category[b]	-.22***	.12*	.17***									
5. Group membership: current[c]	.41***	-.10*	-.04	-.12*								
6. Group membership: never[d]	-.29***	.14**	-.01	.04	-.58***							
7. Perceived control of hourly workers	.40***	.01	-.15**	-.07	.17***	-.04	(.85)					
8. Supervisor responsiveness	.23***	.02	-.10*	.07	.19***	-.06	.39***	(.84)				
9. Opportunity	.65***	-.06	-.06	-.14**	.39***	-.20***	.35***	.23***				
10. Goal instrumentality	.57***	-.13**	-.06	-.15**	.28***	-.22***	.34***	.23***	.59***	(.43)		
11. Growth need strength	.23***	-.08	.09*	.18***	.08	-.11*	.10*	.12*	.21***	.16**	(.87)	
12. Self-esteem	.11*	-.07	-.01	.06	.01	-.01	.08	.05	.11*	.10*	.23***	(.58)

[a]Reliability coefficients for multi-item scales are on the main diagonal

[b]For Job category, 0 = production worker, 1 = skilled trades worker

[c]For Group membership: current, 1 = currently a group member, 0 = never or formerly a group member

[d]For Group membership: never, 1 = never a group member, 0 = currently or formerly a group member

N=354

* p < .05

** p < .01

*** p < .001

above, two checks were conducted here. First, one common sign of problems with multicollinearity is that an overall regression is significant, but none of the independent variables reaches the level of statistical significance as a predictor. As will be seen in the regressions presented below, this was not the case here. However, this is a very cursory test for multicollinearity. Another, more stringent test is to examine the tolerances for the independent variables.

The tolerance is the proportion of variability in an independent measure that is **not** explained by linear combinations of the other independent variables. The tolerances for the independent variables used here ranged from .55 (opportunity) to .93 (self-esteem). Statistical packages such as SPSS-X typically have a default setting that rejects any independent variable with a tolerance of .01 or smaller. None of the variables in this model had a tolerance that small. Hence, while these two tests are not exhaustive, they suggest that the intercorrelations between independent variables here are not statistically problematic.

The results of Regressions 1 through 5 are shown in Table 3 (control variables and situational model). Table 4 shows the results of the Regressions 6 through 8 (personality model and combined model). As mentioned in the previous chapter, all the predictor variables for each model were entered into the regression as a single block.

Model 1 examined the effects of three demographic control variables. Results indicated that skilled trades workers had a significantly less positive attitude towards participation than did production workers, as expected. Surprisingly, education was negatively related to attitude towards participation: those with higher levels of education were less likely to report a positive attitude. This was the opposite of the expected result, although similar to the findings of Latham & Yukl (1975). Finally, age was not significantly related to attitude toward

TABLE 3

Results of Regression Analyses, Models 1 through 5

Variable		Attitude towards Participation				
		Model 1	Model 2	Model 3	Model 4	Model 5
Age		-.06		-.02		.01
Education		-.11*		-.09		-.05
Job category[a]		-.20***		-.16**		-.10**
Group membership: current[b]			.37***	.34***		.11*
Group membership: never[c]			-.07	-.08		-.09*
Perceived control of hourly workers					.16***	.15***
Supervisor responsiveness					.00	.00
Opportunity					.44***	.38***
Goal instrumentality					.26***	.23***
Growth need strength						
Self-esteem						
	F	7.81***	37.19***	19.00***	84.92***	44.23***
	R^2	.06	.17	.21	.49	.54

[a]For Job category, 0 = production worker, 1 = skilled trades worker

[b]For Group membership: current, 1 = currently a group member, 0 = never or formerly a group member

[c]For Group membership: never, 1 = never a group member, 0 = currently or formerly a group member

N = 354

* $p < .05$

** $p < .01$

*** $p < .001$

participation. Together, these three demographic variable accounted for only a small amount (6%) of the variance in the dependent measure.

Model 2 examined the effects of group membership status on attitude towards participation. As expected, current members had a significantly more positive attitude than did former members or those who had never joined a participative group. However, those who were never group members were expected to have a more negative attitude towards participation than did current and former members. This was not the case. Non-membership had a slight negative relation with attitude, but not significantly so. Together, the group membership variables accounted for 17% of the variance in the dependent variable. This was noticeably larger than the 6% accounted for by the demographic variables in Model 1.

In Model 3, the demographic control measures and the group membership variables were combined in one equation. (All variables were entered into the equation as one block.) The results suggested an additive effect of Models 1 and 2. The R^2 for Model 3 was .21, quite close to the sum of the R^2 for Models 1 (.06) and 2 (.17). Examination of individual variables in Model 3 indicated that two control variables had a significant relationship with attitude towards participation: job category and current group membership. That is, skilled trades workers tended to have a more negative attitude towards participation, and current group members had a more positive attitude. However, the effect for education, while still negative, dropped just below the level of significance.

Model 4 examined the effects of the four situational variables (entered as one block). Three of these -- perceived control of hourly workers, opportunity, and goal instrumentality -- were significantly and positively associated with attitude towards participation, as predicted. Contrary to what was predicted, the fourth variable, supervisor responsiveness, was unrelated to attitude towards

participation. Together, these four independent variables accounted for a sizeable proportion (49%) of the variance in attitude towards participation.

Model 5 examined the effects of the four independent variables plus the control measures. It was a test of the full situational model. Perceived control of hourly workers, opportunity, and goal instrumentality all remained significantly positively associated with attitude towards participation. However, the beta for the opportunity variable dropped from .44 to .38. As in Model 4, supervisor responsiveness was unrelated to attitude towards participation.

An examination of the demographic variables in Model 5 indicated that, as in Model 3, skilled trades workers were significantly less likely to express a positive attitude towards participation. Education and age were not significantly related to attitude. However, there was a change in the effects of group membership. In this model as in Model 3, current membership was associated with a more positive attitude towards participation. This effect was significant, but was noticeably weaker than in Model 3. (In Model 3, the beta for current membership was .34, compared to .11 in Model 5.) In addition, the dummy variable identifying those who had never been a group member had a significant negative relationship with attitude towards participation, as initially expected. In all other models in which it was tested, this relationship was in the same direction, although it did not attain significance in any of the remaining models.

To some extent, it appears that the independent variables and the control variables accounted for overlapping portions of the variance in the dependent measure. The R^2 of the independent variables alone was .49 and of the control variables alone was .21. But combined, these variables accounted for 54% of the variance in attitude towards participation.

Model 6 examined the isolated effects of the personality variables. (See Table 4.) Growth need strength was significantly and positively related to attitude

TABLE 4

Results of Regression Analyses, Models 6 through 8

Variable		Attitude towards Participation		
		Model 6	Model 7	Model 8
Age			.01	.02
Education			-.10*	-.05
Job category[a]			-.21***	-.13**
Group membership: current[b]			.33***	.12*
Group membership: never[c]			-.06	-.08
Perceived control of hourly workers				.15***
Supervisor responsiveness				.00
Opportunity				.35***
Goal instrumentality				.22***
Growth need strength		.22***	.23***	.11**
Self-esteem		.06	.07	.02
	F	10.69***	18.89***	37.90***
	R^2	.06	.28	.55

[a]For Job category, 0 = production worker, 1 = skilled trades worker

[b]For Group membership: current, 1 = currently a group member, 0 = never or formerly a group member

[c]For Group membership: never, 1 = never a group member, 0 = currently or formerly a group member

N = 354

* $p < .05$

** $p < .01$

*** $p < .001$

towards participation, as predicted. However, there was no significant effect for self-esteem. Combined, these two variables accounted for only a very small percent of the variance in the dependent variable, 6%. This compares unfavorably to Model 4 in which the situational effects alone accounted for 49% of the variance.

Model 7 combined the control variables with the personality variables. The effects of the personality variables remained the same: growth need strength was significant while self-esteem was not. Among the control variables, current group membership was positively associated, and skilled trades status was negatively associated with attitude toward participation, as was true in all other models in which they were included. This model accounted for 28% of the variance. It seems reasonable to conclude that most of this is accounted for by the control variables, which by themselves (Model 3) explained 21% of the variance in attitude towards participation.

In Model 7, education also had a significant negative relationship with attitude towards participation. The effect of education was negative but small in all models in which it was tested. The betas ranged from -.05 to -.11. The effect of education was statistically significant in two of the five models in which it was included (Models 1 and 7).

Model 8 tested the combined model (situational and personality models). A comparison of the situational model and the combined model indicated that the effects of all the situational variables were essentially unchanged. Perceived control of hourly workers, opportunity, and goal instrumentality were significantly related to attitude towards participation, while supervisor responsiveness was unrelated to attitude. However, the personality variables were weaker when tested in combination with the situational variables than when tested alone. The effect of self-esteem remained insignificant. The effect of growth need strength

remained significant, but the beta was cut in half (from .23 to .11). Among the control variables, current group membership was positively related to attitude and skilled trades status was negatively related to attitude towards participation. This was unchanged from previous models. Model 8 accounted for 55% of the variance in attitude towards participation. This was only slightly higher than the 54% for Model 5, the full situational model, but much higher than the 28% accounted for by Model 7, which combined the personality and control variables. This suggests that while one personality variable (growth need strength) had a significant effect on attitude towards participation, that effect was relatively weak when compared with the effects of the three significant situational factors: perceived control of hourly workers, goal instrumentality, and opportunity.

CHAPTER 4

DISCUSSION

Labor leader Sam Camens (National Staff, United Steel Workers) argues that workers are very interested in having the sort of influence and control that participative systems offer to employees:

> Most unions fail to realize that basically their members do want to participate in all such decisions that affect them. The whole concept of a democratic society now stops at the industrial gate. Once you open that up, you would be surprised to see that workers want to be involved in the decision-making process on everything that affects them in their workplace. (Kochan, Katz, & McKersie, 1986: 181.)

Despite strong support for employee participation from some leaders of organized labor, from some managers, and from some workers, participative systems are not as widespread or as institutionalized as might be expected. In trying to understand why the diffusion of participation has been limited, it is important to understand the factors that are related to individual workers' attitude toward participation. The results presented in the previous chapter and discussed below have both practical and theoretical implications about attitude toward participation.

Implications for Theory

The site at which these data were collected is one in which only about 25% of the work force belongs to a participative work group. However, the participative system has been in place at this site for over 10 years, substantially longer than the typical "honeymoon" period. From a theoretical perspective, the situational variables tested here can be seen to shed some light on two thorny

aspects of creating an extensive system of participation: how to involve more members and how to maintain it over time. More generally, both of these factors can be seen as related to diffusion of an organizational change, or to institutionalization of a new organizational form.

Situational Factors

Of the four situational hypotheses tested, three received support. Employees who perceived that hourly workers had a great deal of control (H1), that working with a participative group was an opportunity (H3), and that working with such a group was instrumental to achieving one's work goals (H4) were more likely to have a positive attitude towards participation.

The first of these three factors, perceived control of hourly workers, is something that is viewed by theorists as an essential part of the participative process, but is often lacking in practice. The results here indicate that those who perceive that workers have more control also tend to have a more positive attitude towards participation, i.e., are more likely to endorse the participative system and its continued development. Another interpretation suggests that workers endorse participation when it delivers what it promises -- more control for those at the bottom of the hierarchy.

However, there are some difficulties with the issue of control. The measure used here assesses the amount of control that workers perceive themselves to have, not how much control they actually do have. Actual control is very difficult to measure. Although the measurement technique used here is well-established (Tannenbaum, 1968), it cannot be seen as a measure of actual control.

There are some reasons why perceived and actual control might differ. Since the measure used here is of perceived control of hourly workers as a group, some employees might simply be more aware of the influence that hourly

workers do have. Workers who are more active participants in decision-making processes of all sorts (e.g., belong to participative groups, attend departmental meetings, volunteer for task forces, and/or attend union meetings,) are more likely to be aware of the mechanisms for worker input, the range of topics on which employees have input, and the weight such input ultimately carries in the decision making process. So, more active employees might perceive more influence for hourly workers as a group, and less active employees might perceive less influence, while the actual amount of influence is the same. However, more active employees are also more likely to belong to a participative group. Because group membership was controlled for in the analyses, the effect of this potential difference in perception is minimized.

Another issue with the use of perceived control as a predictor variable concerns the cross-sectional nature of the data. The causal order is unclear. One possibility is that joining a participative group leads to a higher level of control, which in turn leads to a more positive attitude towards participation. But it is also possible that having a positive attitude towards participation initially led some employees to join a group, and joining and working with a participative group led to increased control. Thus, it is not clear if increased control leads to a more positive attitude or if a positive attitude towards participation ultimately leads to increased control (via the participative process).

The second situational variable that was positively related to attitude toward participation was perception of working in a participative group as an opportunity. Previous work by Pyle (1989) showed the detrimental effects of perceptions of a participative system as a threat. While perceptions of threat focus on what might be lost, perceptions of opportunity focus on what is to be gained. Workers who believed they had more to gain from the participative system had a more positive attitude towards it. Future research could explore

what factors specifically contribute to worker perceptions of a participative system as an opportunity, and what factors contribute to labelling it as a threat.

In addition, the cognitive labelling of a participative system as an opportunity might have consequences for the longevity of that system. Work by Dutton & Jackson (1987) suggests that once something is labelled as an opportunity, old information congruent with that label (i.e., something positive, a gain, and/or some control over the outcome) will be better remembered than incongruent information (i.e., something negative, a loss, and/or little control). Similarly, new experiences that are consistent with the opportunity label are proposed to be paid more attention and to be better remembered than experiences that are inconsistent with that label. Thus, if workers label the participative system as an opportunity, they are more likely to remember positive experiences with it in the past, and selectively attend to positive experiences with it in the present. This bias in information processing might contribute to a more positive attitude towards the participative system. In turn, both this positive attitude and the biased memory for positive events might make workers more willing to work to maintain the system over time.

The third situational variable that was positively related to attitude towards participation was goal instrumentality. In other words, those employees who felt that working with a participative group would help them achieve their work goals were more likely to have a positive attitude towards participation. From a theoretical perspective, this might seem unsurprising. But again, real workers' experiences with participation have often differed from theoretical approaches. There have been many instances of management implementing a system of participation without discussing with workers and the union whether the participative system would benefit them and help them achieve their goals. In such cases, workers might be skeptical of the value of working participatively. In

contrast, when workers can clearly see how the participative system would benefit them, they are more likely to have a positive attitude towards it.

One situational hypothesis received no support: supervisor responsiveness (H2) was consistently unrelated to attitude towards participation. As shown in Table 1, the bivariate correlation between supervisor responsiveness and attitude towards participation (.23) is significant at $p < .001$, but once the effect of the other three situational variables is taken into account, supervisor responsiveness has no impact on attitude towards participation. This unexpected result is interesting, because supervisors are generally viewed as an important actors in the participative process.

There are at least two potential explanations for the lack of impact of supervisor responsiveness on employee attitude. One explanation is that while supervisory behavior is indeed important, it is not supervisor responsiveness but rather another aspect of supervisors' behavior that is related to attitude towards participation. For example, Manz & Sims (1987) describe several components of supervisors' behavior that are related to successful performance of participative groups. These behaviors include encouraging the groups to do the following: set their own goals, rehearse tasks, monitor their own performance, and reward themselves for preforming a task well. It is possible that employees whose supervisors do these things also have positive attitude towards participation. Future research could test this possibility.

A second possible explanation for the lack of impact of supervisor responsiveness on attitude toward participation is that it is not the process of supervisory behavior, but rather the outcome of increased control for workers that is important in predicting attitudes. Although this possibility was not tested here, these data are not inconsistent with this explanation: supervisor responsiveness has a significant bivariate relationship with attitude toward participation, but once

the effect of hourly workers' control is taken into account, the effect of supervisor responsiveness becomes insignificant.

Future research in the area of situational factors is needed to assess the impact of organizational history and of the design and structural characteristics of the participative system on employee attitude towards participation. Such factors vary considerably across organizations, and multiple sites would be required to adequately test this idea.

Personality Factors

In addition to the situational hypotheses, two personality hypotheses were also tested. One personality variable, growth need strength (H5) was positively associated with attitude towards participation, as predicted. Employees with higher growth need strength tended to have a more favorable attitude towards the participative system. Such employees might view belonging to a participative work group as an opportunity to fulfill their needs for personal development. Indeed, Table 1 shows a significant correlation (.21, $p < .001$) between growth need strength and perception of the participative system as an opportunity.

The remaining personality hypothesis was not supported: self-esteem (H6) was not significantly related to attitude towards participation. Although, as reported above, self-esteem of group members is related to the performance of participative groups (Brockner & Hess, 1986), it is not related to attitude towards participation. This is somewhat encouraging from the perspective of the change agent, because it suggests that even those who might not feel so confident in their own abilities might still have a favorable attitude towards participation, and might be willing to try working in a participative group. It is also possible that working effectively in such a group helps individuals develop new skills and might enhance their self-esteem. Although personality traits are generally viewed as

relatively permanent and hence not subject to change easily, other researchers (e.g., Kohn & Schooler, 1983) suggest that some aspects of our jobs causally affect our personalities, rather than the reverse. Exploring whether working with a participative group has a positive impact on self-esteem is another potential avenue for future research.

Comparison of Situational and Personality Factors

A further examination of the results allows for a comparison of the relative strength of situational and personality explanations in determining attitude towards participation. Davis-Blake & Pfeffer (1989) suggest that in order to understand the effects of personality variables in organizational settings, the personality variables must be tested in combination with situational variables, as was done here. This is because organizations might present such strong situations that there may be little variation in individual response based on personality. Evidence here provides some support for that contention. When personality factors are used in conjunction with situational factors to predict attitude towards participation, the situational factors explain substantially more of the variance in the attitude towards participation. Indeed, comparing Models 5, 7, and 8 indicates that the situational effects remain strong and are unaffected by the addition of personality variables to the model. But the reverse is not true. The strength of the one significant personality effect is cut in half by the addition of the situational variables.

Lewin (1936) proposed that behavior is the result of a combination of the person and the environment. However, organizations present the individual with an environment that is highly structured and offers only a limited range of acceptable behaviors. Individual variation might not play as important a role in such an environment. Traditional organizations serve to constrict behavioral

options, perhaps to an unreasonable degree. That constriction has, in many organizations, led workers to joke that management expects workers to "Check your brains at the door." Yet it is also possible to design organizations that encourage more flexibility in individual response, and utilize a broader range of individual skills and talents. Participative systems offer employees the opportunity to exercise more of their skills. Because of this broader range of acceptable behaviors, participative settings might be a preferred location for future research to test any potential interaction effects between personality and situational variables.

The comparison of situational and personality models is important to the larger question raised in the introduction of why participative systems have not spread as widely as might be expected. The results of this study, coupled with previous research reviewed earlier, suggest two things: first, that the appeal of participative systems is not limited, or not entirely limited, to employees with certain personality traits. Rather, it is likely that participative systems appeal to employees with a range of personality characteristics, and managers need not worry that their employees are not the "type" who would want to be involved in a participative group. Second, the situational characteristics related to the form and content of the participative process do matter greatly in determining employees' attitude. For example, employees will favor participation if they feel that hourly workers genuinely do have influence. If the structure of a participative system is such that there is no room for real influence on the part of workers, then their attitude will be less positive. In addition, if the participative process does not help them achieve their work goals, they are not likely to support it. This combination of a weak personality effect and a strong situational effect suggests that participation might appeal to a wide range of employees, but only when certain criteria are met.

Implications for Practice

Practitioners who are interested in designing or adapting participative systems so that more employees become involved in them can use the three significant situational variables identified here as levers to encourage such involvement. For example, they can design organizational structures and processes that are likely to increase the amount of hourly workers' control. And they can further develop a process that assures, to the extent possible, that the increased control will be maintained over a long period of time.

A second key issue in the spread of participative systems is communicating with workers about why they should become involved in a particular proposed system of participation. This must be tied to the workers' goals, as the workers define them. Hence, devoting time during the design process to identifying employees' work goals and the opportunities they seek can help all parties develop a participative system that meets these goals. To the extent this is achieved, the participative system will have a better chance of receiving the support of hourly employees, and presumably, a better chance of successful implementation and maintenance. Involving employees and union leadership in the design process is one crucial part of this process.

Some other concerns that practitioners face when designing and/or implementing a participative system are that certain demographic groups, notably older workers and skilled trades workers, will not want to participate. The data presented here indicate that skilled trades workers did indeed have a more negative attitude towards participation. However, age was unrelated to attitude towards participation. But, as can be seen in Table 2, both older workers and skilled trades workers are less likely to join a participative group. And both are less likely to view participative groups as helping them achieve their work goals.

To address these concerns, one could work with groups of older workers and skilled trades workers to identify their work goals and desired opportunities, and find ways to respond to these goals in the design of the participative program. This may be especially difficult with skilled trades workers, because the characteristics of their jobs already include many of the benefits offered by participation: flexibility, opportunity to use problem solving skills, and control over work tasks. It is possible that very different forms of participation are required for skilled trades workers. It is also possible that they may not derive significant benefit from working within a participative system. Skilled trades jobs might already be so enriched that to impose a participative structure might be seen as consuming valuable resources (such as time) for no real gain.

In contrast to skilled trades workers' general suspicion of the value of participative systems, older workers might simply be more skeptical about the particular system of participation under consideration. They may have witnessed, during the course of their working years, several failed attempts at participation. This may led to a healthy skepticism that it will be any different this time. Again, Table 2 indicates that while age is unrelated to attitude towards participation, older workers are less likely to join a participative group and less likely to see it as instrumental to their work goals. One potential solution to this is to better design a participative system to meet the needs of older workers, by involving them in the design process, and by communicating with them more clearly about the potential benefit of belonging to a participative group.

Limitations of the Study

There are several important limitations of this study. First, as discussed above, this is a **cross-sectional** study. Because the data were collected at one point in time, the direction of causality cannot be firmly established.

Second, the **response rates** were markedly different for those who currently belong to a participative group (77%) and those who are not currently members of such a group (35%). This disparity might reflect different levels of interest in the participative group process. Those who were currently part of the participative system might have been more interested in contributing to a study of that system. Those who were not part of the process might have felt that they had little to contribute (although the invitation specifically addressed this) or that they would not receive much benefit from devoting part of their work day to this study. The effect of this differential response rate is unknown.

A related concern is that the sample is comprised largely of employees who currently belong to participative groups, with fewer numbers of those who do not currently belong. To limit the impact of this over-representation of current member, group membership was controlled for in the data analysis.

A third methodological concern is **common methods bias**. All statistical analyses reported here were conducted with data collected via a written survey. Qualitative data was collected only for background information on the history of the participative system at this site.

A fourth issue is that of **generalizability**. To what extent are the results presented here generalizable to other work sites? The data were collected in the traditional, unionized, manufacturing sector of the economy. The results would likely be generalizable to similar groups. The concepts discussed here are potentially applicable to other economic sectors, but their usefulness can only be known if they are tested in other organizations.

Two key characteristics of this site might affect the generalizability of the results. First, unionization has a dramatic impact on a work site, and some aspects of the results might be more relevant to unionized than non-unionized settings. In particular, the dynamics of hourly workers' control might be different

in non-unionized settings. In theory, the levels of hourly workers' control that are achieved at unionized sites are potentially higher than in non-unionized settings. Second, the participative system in this site in voluntary. There are other sites in which every employee must belong to a participative group. The factors that predict a positive attitude towards participation might be very different in such a setting.

A fifth limitation of the study is that it measures **attitude**, and not actual **behavior**. However, attitude is potentially a crucial variable. There is significant debate among the hourly work force in this industry concerning the value of participative systems. If employee attitude is largely negative at a given site, then it is unlikely that a participative system there would succeed. Yet, a positive employee attitude is not in itself enough to maintain a participative system. Other factors, such as management and union support, employees' skill in working in groups, and the design characteristics of the particular participative system are key factors that contribute to the success or failure of the system. Understanding what contributes to a positive employee attitude towards participation is only one of several necessary components required to successfully implement and maintain a truly participative system.

APPENDIX

11/1/88
HR

CONFIDENTIAL SURVEY

This questionnaire is about your job and working at this plant. Please answer each question frankly and honestly. There are no right or wrong answers--the questionnaire only asks for your opinions, which we believe are extremely valuable.

Some of the questions may be sensitive, but we guarantee that your individual answers will be held in the strictest confidence—only the members of the University of Michigan Project Team will see your questionnaire. The results are only useful if you are candid, so we take confidentiality seriously! Some questions may be difficult to answer or seem unclear. Please answer them as best you can and feel free to write in comments as needed.

After completing your questionnaire, please return it to the University of Michigan Project Team. All surveys will be taken back to the University for analysis--your name will never be associated with your answers.

Thank you very much for your help! With your input, we will better understand how well the participative group system is currently working here. You will receive a summary of the survey results when the study is complete.

Sincerely,

THE UNIVERSITY OF MICHIGAN PROJECT TEAM

Michelle Kaminski
(313) 764-5431

Laura Pyle
(313) 763-0264

Monica Wolford
(313) 747-3678

Do you currently belong to a participative work group? (i.e., an EPG, self-management group or shared-management group.) Please circle one.

1. Yes	2. No

If 1. Yes:

Please check the type of group you belong to:

(1)_____ EPG

(2)_____ Self-Management Group

(3)_____ Shared-Management Group

(4)_____ Other (Please explain:
_____
_____
_____)

If 2. No:

Have you ever belonged to a participative work group? (Circle one.)

1. Yes 2. No

PLEASE GO TO SECTION A BELOW

A. FEELINGS ABOUT WORK

This section asks how you think and feel about certain aspects of your work. When answering, please refer to your thoughts and feelings IN THE PAST SIX MONTHS, and indicate the extent to which you agree or disagree with the following statements. (Circle one number per item.)

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
A1. Generally speaking, I am very satisfied with this job.	1	2	3	4	5
A2. In the past six months, I have not been doing very well at attaining my work goals (or performing my work tasks).	1	2	3	4	5
A3. It's hard, on this job, for me to care very much about whether the work gets done right.	1	2	3	4	5
A4. In the past six months, I have gotten the job done pretty well.	1	2	3	4	5
A5. In the past six months, I have received respect from people on the job.	1	2	3	4	5

		None	A little	A fair amount	Quite a bit	A great deal
A6.	How much effort have you put into your work in the past six months?	1	2	3	4	5
A7.	In the past six months, how much respect have you received from the people you work for?	1	2	3	4	5
A8.	How much does your job measure up to the sort of job you wanted when you took it?	1	2	3	4	5

B. YOUR OPINIONS ABOUT WORK AND PEOPLE IN GENERAL

The next section asks for your opinions about work and people in general. Please indicate the extent to which you agree or disagree with the following statements. (Circle one number per item.)

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
B1.	The average person prefers to be directed and wishes to avoid responsibility.	1	2	3	4	5
B2.	Leadership skills can be acquired by most people regardless of their natural traits and abilities.	1	2	3	4	5
B3.	The use of rewards is not the best way to get employees to do their work.	1	2	3	4	5
B4.	People who represent the management of a company can tell other employees what to do.	1	2	3	4	5
B5.	Because managers hold a higher position in the company, they can make others do things.	1	2	3	4	5
B6.	You can get employees to do what they're told by firing the ones who don't.	1	2	3	4	5
B7.	People designated by the owners of a business can expect that employees will follow their directions.	1	2	3	4	5

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
B8.	Employees will listen to the person who is best informed, regardless of his or her job title.	1	2	3	4	5
B9.	You can get people to do their jobs by threatening them.	1	2	3	4	5
B10.	Employees will follow the instructions of people in charge.	1	2	3	4	5
B11.	Employees will do things to gain the respect of people they admire.	1	2	3	4	5
B12.	The people who have the most information or knowledge, even if they are not in charge, are the ones employees listen to.	1	2	3	4	5
B13.	You can get people to work harder by using promotions or recognition.	1	2	3	4	5
B14.	In a company, decisions made by people who are admired and respected will get carried out.	1	2	3	4	5
B15.	There should be little action taken until a supervisor approves a decision.	1	2	3	4	5
B16.	Even small matters should be referred to someone higher up for a final decision.	1	2	3	4	5
B17.	Management and employees should be on a first-name basis.	1	2	3	4	5
B18.	It's not a good idea for management to socialize with employees.	1	2	3	4	5
B19.	Generally speaking, management and workers have the same goals.	1	2	3	4	5
B20.	There is a need for rules specifying who is to do what.	1	2	3	4	5
B21.	Employees will do a good job when they are allowed to do the work the way they think is best.	1	2	3	4	5

IF YOU CURRENTLY BELONG TO A PARTICIPATIVE GROUP (AN EPG, SELF-MANAGEMENT GROUP, OR SHARED-MANAGEMENT GROUP), PLEASE SKIP THE NEXT SET OF QUESTIONS AND ANSWER THE QUESTIONS BEGINNING ON PAGE 13.

IF YOU DO NOT CURRENTLY BELONG TO A PARTICIPATIVE GROUP (AN EPG, SELF-MANAGEMENT GROUP, OR SHARED-MANAGEMENT GROUP), PLEASE TURN THE PAGE AND CONTINUE TO ANSWER THE QUESTIONS BEGINNING ON PAGE 6.

C. YOUR WORK AREA

This section asks how your work area operates. Please keep in mind when answering the questions below that your "area" consists of your supervisor, you, and your immediate co-workers. When answering each question, please refer to the experiences you have had IN THE PAST SIX MONTHS.

C1. In the past six months, how often did your supervisor listen to your views on the following topics? If you made this decision without talking to your supervisor, please answer "always." (Circle one number per item.)

	Always	Usually	Sometimes	Rarely	Never
a. Determining how to improve quality	1	2	3	4	5
b. Determining how to improve productivity	1	2	3	4	5
c. Determining work schedules (vacation time, when to have overtime, etc.)	1	2	3	4	5
d. Arranging for equipment maintenance	1	2	3	4	5
e. Deciding how to evaluate your co-workers	1	2	3	4	5
f. Evaluating outside vendors	1	2	3	4	5

The next set of questions has to do with communication in your area. (Please circle one number per item.)

	Not once	About 1-3 times a month	About 1-3 times a week	About 1-3 times a day	About every hour
C2. During the past six months, how often did you receive written reports or memos from:					
a. Your superintendent?	1	2	3	4	5
b. Your supervisor?	1	2	3	4	5
c. Other area members or co-workers?	1	2	3	4	5

	Not once	About 1-3 times a month	About 1-3 times a week	About 1-3 times a day	About every hour
C3. During the past six months, how often did you have work-related discussions (face-to-face or by telephone) on a one-to-one basis with:					
a. Your superintendent?	1	2	3	4	5
b. Your supervisor?	1	2	3	4	5
c. Other area members or co-workers?	1	2	3	4	5

	Not once	About once a month	About every two weeks	About once a week	About 2-4 times a week	Once a day or more
C4. How frequently did your supervisor conduct regularly scheduled meetings with your area in the past six months?	1	2	3	4	5	6

		Not once	About once a month	About every two weeks	About once a week	About 2-4 times a week	Once a day or more
C5.	During the past six months, how frequently were you involved in impromptu, unscheduled meetings to solve work problems with:						
a.	Your superintendent?	1	2	3	4	5	6
b.	Your supervisor?	1	2	3	4	5	6
c.	Other area members or co-workers?	1	2	3	4	5	6

		Not at all	Somewhat	Moderately	Very	Extremely
C6.	How important is it to you to work in a system with a participative group process?	1	2	3	4	5

Please indicate whether you agree or disagree with the following statement:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
C7.	It would be a good idea if everyone in the plant had to belong to a participative group (an EPG, self- or shared-management group).	1	2	3	4	5

		None	A little	A fair amount	Quite a bit	A great deal
C8.	How much say or influence does each of the following have in deciding what kinds of work or tasks are to be performed in your area?					
a.	You	1	2	3	4	5
b.	Your supervisor	1	2	3	4	5
c.	You and the co-workers in your area	1	2	3	4	5
C9.	How much say or influence does each of the following have in deciding the rules, policies, and procedures in your area?					
a.	You	1	2	3	4	5
b.	Your supervisor	1	2	3	4	5
c.	You and the co-workers in your area	1	2	3	4	5
C10.	How much say or influence does each of the following have in deciding how to evaluate the performance of your area?					
a.	You	1	2	3	4	5
b.	Your supervisor	1	2	3	4	5
c.	You and the co-workers in your area	1	2	3	4	5

D. THE PARTICIPATIVE GROUPS

The next set of questions has to do with what you think about the participative groups (i.e., the EPGs, self-management and shared-management groups). Please indicate how much you agree or disagree with the following:

When I think about working in a participative group (such as an EPG, self-management or shared-management group), I think that joining a participative group <u>would result in</u>:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
D1.	A gain in the amount of respect I receive from people on the job.	1	2	3	4	5
D2.	A loss in my ability to do the job well.	1	2	3	4	5
D3.	A loss in the extent to which I know what is expected of me.	1	2	3	4	5
D4.	A gain in the extent to which I use complex or high-level skills.	1	2	3	4	5
D5.	A loss in the amount of variety there is in my job.	1	2	3	4	5
D6.	A gain in my certainty about how much authority I have.	1	2	3	4	5
D7.	A loss in the amount of respect I receive from the people I work <u>for</u>.	1	2	3	4	5
D8.	A gain in my ability to attain my work goals.	1	2	3	4	5

If you joined a participative group (such as an EPG, self-management or shared-management group), to what extent do you think you could control:

		Not at all	A little	A fair amount	Quite a bit	A great deal
D9.	How much <u>real</u> influence you had.	1	2	3	4	5
D10.	How much you <u>participated</u> in decisions and activities.	1	2	3	4	5
D11.	<u>Getting out</u> of the group if you decided it wasn't working out the way you wanted it to.	1	2	3	4	5

To what extent do you agree or disagree with the following statement?

I see joining a participative group (such as an EPG, self-management or shared-management group):

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
D12.	As a threat.	1	2	3	4	5
D13.	As an opportunity.	1	2	3	4	5

Please indicate how often your supervisor does the following:

		Always	Most of the time	Often	Some-times	Seldom	Hardly ever	Never
D14.	Encourages me to go over an activity before I attempt it.	1	2	3	4	5	6	7
D15.	Prompts me to define my own goals.	1	2	3	4	5	6	7
D16.	Encourages me to praise myself if I have done a job well.	1	2	3	4	5	6	7
D17.	Encourages me to be aware of my level of performance.	1	2	3	4	5	6	7
D18.	Encourages me to practice (either physically or mentally) a new task before I do it for the first time.	1	2	3	4	5	6	7
D19.	Encourages me to establish my own task goals.	1	2	3	4	5	6	7
D20.	Encourages me to know how my performance stands.	1	2	3	4	5	6	7
D21.	Encourages me to feel good about myself if I do a job well.	1	2	3	4	5	6	7
D22.	Encourages me to think about how I am going to do a job before I begin the job.	1	2	3	4	5	6	7
D23.	Encourages me to speak up when I disagree with a decision.	1	2	3	4	5	6	7

Please indicate how often your supervisor does the following:

		Always	Most of the time	Often	Some-times	Seldom	Hardly ever	Never
D24.	Encourages me to judge how well I am performing.	1	2	3	4	5	6	7
D25.	Works jointly with employees in my area.	1	2	3	4	5	6	7

D26. If you were ever a member of a participative work group (an EPG, self- or shared-management group), please indicate how long you were a member (include all participative work groups you have ever belonged to at this plant):

_____ years _____ months

PLEASE SKIP THE NEXT SECTION AND BEGIN ANSWERING THE QUESTIONS ON PAGE 20.

C. YOUR WORK GROUP

This section asks how your work group operates. Please keep in mind when answering the questions below that your "group" consists of your supervisor, group leader, you, and all other group members. When answering each question, please refer to the experiences you have had IN THE PAST SIX MONTHS.

	Once a month or less	2-3 times a month	Once a week	2-3 times a week	Almost every day
C1. How often does your group have regularly scheduled meetings?	1	2	3	4	5
C2. How often do you attend regularly scheduled group meetings?	1	2	3	4	5

C3. In the past six months, how often did your supervisor listen to your views on the following topics? If you or your group made this decision without talking to your supervisor, please answer "always." (Circle one number per item.)

	Always	Usually	Sometimes	Rarely	Never
a. Determining how to improve quality	1	2	3	4	5
b. Determining how to improve productivity	1	2	3	4	5
c. Determining work schedules (vacation time, when to have overtime, etc.)	1	2	3	4	5
d. Arranging for equipment maintenance	1	2	3	4	5
e. Deciding how to evaluate the group	1	2	3	4	5
f. Evaluating outside vendors	1	2	3	4	5

The next set of questions has to do with communication in your group. (Please circle one number per item.)

	Not once	About 1-3 times a month	About 1-3 times a week	About 1-3 times a day	About every hour
C4. <u>During the past six months</u>, how often did you receive meeting minutes or memos from:					
a. Your superintendent?	1	2	3	4	5
b. Your supervisor?	1	2	3	4	5
c. Members of your group?	1	2	3	4	5

	Not once	About 1-3 times a month	About 1-3 times a week	About 1-3 times a day	About every hour
C5. <u>During the past six months</u>, how often did you have work-related discussions (face-to-face or by telephone) on a one-to-one basis with:					
a. Your superintendent?	1	2	3	4	5
b. Your supervisor?	1	2	3	4	5
c. Members of your group?	1	2	3	4	5

	Not once	About once a month	About every two weeks	About once a week	About 2-4 times a week	Once a day or more
C6. How frequently did your supervisor conduct regularly scheduled work group meetings with your group <u>in the past six months</u>?	1	2	3	4	5	6

		Not once	About once a month	About every two weeks	About once a week	About 2-4 times a week	Once a day or more
C7.	During the past six months, how frequently were you involved in impromptu, unscheduled meetings to solve work problems with:						
a.	Your superintendent?	1	2	3	4	5	6
b.	Your supervisor?	1	2	3	4	5	6
c.	Members of your group?	1	2	3	4	5	6

		Not at all	Somewhat	Moderately	Very	Extremely
C8.	How important is it to you to work in a system with a participative group process?	1	2	3	4	5
C9.	Overall, how satisfied are you with your work group?	1	2	3	4	5
C10.	How successful do you think your work group is in dealing with issues that are important to you?	1	2	3	4	5

Please indicate how much you agree or disagree with the following statement:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
C11.	It would be a good idea if everyone in the plant had to belong to a participative group (such as an EPG, self- or shared-management group).	1	2	3	4	5

C12. What do you usually do at group meetings? (Check all that apply.)

_____ Sit and listen

_____ Bring up topics for discussion

_____ Answer questions that other people bring up

_____ Vote

_____ Talk about something being discussed

		None	A little	A fair amount	Quite a bit	A great deal
C13.	How much say or influence does each of the following have in deciding what kinds of work or tasks are to be performed by your group?					
a.	You	1	2	3	4	5
b.	Your supervisor	1	2	3	4	5
c.	Your group	1	2	3	4	5
C14.	How much say or influence does each of the following have in deciding the rules, policies, and procedures of your group?					
a.	You	1	2	3	4	5
b.	Your supervisor	1	2	3	4	5
c.	Your group	1	2	3	4	5
C15.	How much say or influence does each of the following have in deciding how to evaluate the performance of your group?					
a.	You	1	2	3	4	5
b.	Your supervisor	1	2	3	4	5
c.	Your group	1	2	3	4	5

D. BEING A MEMBER OF A PARTICIPATIVE GROUP

The next set of questions has to do with what you think about being a member of a participative group (an EPG, self-management or shared-management group). Please indicate how much you agree or disagree with the following:

When I compare working in a participative group (an EPG, self-management or shared-management group) with working in the traditional way, I believe that being a member of a participative group has resulted in:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
D1.	A gain in the amount of respect I receive from people on the job.	1	2	3	4	5
D2.	A loss in my ability to do the job well.	1	2	3	4	5
D3.	A loss in the extent to which I know what is expected of me.	1	2	3	4	5
D4.	A gain in the extent to which I use complex or high-level skills.	1	2	3	4	5
D5.	A loss in the amount of variety there is in my job.	1	2	3	4	5
D6.	A gain in my certainty about how much authority I have.	1	2	3	4	5
D7.	A loss in the amount of respect I receive from the people I work <u>for</u>.	1	2	3	4	5
D8.	A gain in my ability to attain my work goals.	1	2	3	4	5

As a member of a participative group (such as an EPG, self-management or shared-management group), to what extent do you think you can control:

		Not at all	A little	A fair amount	Quite a bit	A great deal
D9.	How much <u>real</u> influence you have.	1	2	3	4	5
D10.	How much you <u>participate</u> in decisions and activities.	1	2	3	4	5
D11.	<u>Getting out</u> of the group if you decide it isn't working out the way you want it to.	1	2	3	4	5

To what extent do you agree or disagree with the following statement?

I see being a member of a participative group (such as an EPG, self-management or shared-management group):

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
D12.	As a threat.	1	2	3	4	5
D13.	As an opportunity.	1	2	3	4	5

Please indicate how often your supervisor does the following with your group:

		Always	Most of the time	Often	Some-times	Seldom	Hardly ever	Never
D14.	Encourages us to go over an activity before we attempt it.	1	2	3	4	5	6	7
D15.	Prompts us to define the goals for our own group.	1	2	3	4	5	6	7
D16.	Encourages us to praise each other if we have done a job well.	1	2	3	4	5	6	7
D17.	Encourages us to be aware of our level of performance.	1	2	3	4	5	6	7
D18.	Encourages us to practice (either physically or mentally) a new task before we do it for the first time.	1	2	3	4	5	6	7
D19.	Encourages us to establish our own task goals.	1	2	3	4	5	6	7
D20.	Encourages us to know how our performance stands.	1	2	3	4	5	6	7
D21.	Encourages us to feel good about ourselves if we do a job well.	1	2	3	4	5	6	7
D22.	Encourages us to think about how we are going to do a job before we begin the job.	1	2	3	4	5	6	7
D23.	Encourages us to speak up when we disagree with a decision.	1	2	3	4	5	6	7

Please indicate how often your supervisor does the following with your group:

		Always	Most of the time	Often	Some-times	Seldom	Hardly ever	Never
D24.	Encourages us to judge how well we are performing.	1	2	3	4	5	6	7
D25.	Works jointly with group members.	1	2	3	4	5	6	7

D26. How long have you been a member of your current group?

_____ years _____ months

D27. How long have you been a member of a participative work group (include all participative groups you have ever belonged to at this plant):

_____ years _____ months

E. JOB CHARACTERISTICS

The following questions ask about certain aspects of your job. When answering, please keep in mind the experiences you have had IN THE PAST SIX MONTHS. (Please circle the number beneath the correct response.)

	Very true	True	Somewhat true	Not too true	Not true at all
E1. I feel certain about how much authority I have on the job.	1	2	3	4	5
E2. I know exactly what is expected of me in my job.	1	2	3	4	5
E3. My job requires me to use complex or high-level skills.	1	2	3	4	5
E4. My job requires that I do the same things over and over.	1	2	3	4	5

Next, please think about the different jobs that you might hold or people like you might hold. To what extent is it possible for these jobs to be like the following? (Please circle one number per item.)

	Not possible	Somewhat possible	Possible	Fairly Possible	Very Possible
E5. A job where people get to do a number of different things.	1	2	3	4	5
E6. A job that requires doing the same things over and over.	1	2	3	4	5
E7. A job that requires using all one's skills and abilities to be successful.	1	2	3	4	5
E8. A job that gives people a lot of chances to use their complex skills and abilities.	1	2	3	4	5

To what extent could jobs that you might hold or people like you might hold be like the following?

		Not possible	Somewhat possible	Possible	Fairly Possible	Very Possible
E9.	A job that is very challenging.	1	2	3	4	5
E10.	A job that gives people a chance to use personal initiative or judgment in carrying out the work.	1	2	3	4	5
E11.	A job where people have a lot of control over how well they do their job.	1	2	3	4	5
E12.	A job where people have a lot of say over what happens.	1	2	3	4	5

Listed below are some characteristics that could be present on any job. People differ about how much they would like to have each one present in their own jobs. Using the scale below, please indicate the degree to which you <u>would personally like</u> to have each characteristic present in your job:

		Somewhat	A fair amount	Quite a bit	A great deal	A very great deal
E13.	Opportunities to learn new things from my work.	1	2	3	4	5
E14.	A sense of worthwhile accomplishment in my work.	1	2	3	4	5

		Well Below Average	Below Average	Average	Above Average	Well Above Average
E15.	How would you rate your job performance?	1	2	3	4	5
E16.	How do you think your supervisor would rate your job performance?	1	2	3	4	5
E17.	How would you rate your supervisor's performance?	1	2	3	4	5

F. THE PLANT AS A WHOLE

The following questions are about how much say or influence different groups of people have on issues that affect the plant as a whole.

		None	A little	A fair amount	Quite a bit	A great deal
F1.	In general, how much say or influence do you think each of the following CURRENTLY has on what goes on in this plant?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F2.	How much say or influence do you think each of the following SHOULD have on what goes on in this plant?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5

		None	A little	A fair amount	Quite a bit	A great deal
F3.	How much say or influence do you think each of the following CURRENTLY has on health and safety issues?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F4.	How much say or influence do you think each of the following SHOULD have on health and safety issues?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F5.	How much say or influence do you think each of the following CURRENTLY has on working conditions?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5

		None	A little	A fair amount	Quite a bit	A great deal
F6.	How much say or influence do you think each of the following SHOULD have on working conditions?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F7.	How much say or influence do you think each of the following CURRENTLY has on ways to improve customer satisfaction?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F8.	How much say or influence do you think each of the following SHOULD have on ways to improve customer satisfaction?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5

		None	A little	A fair amount	Quite a bit	A great deal
F9.	How much say or influence do you think each of the following CURRENTLY has on the adoption of new plant policies?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F10.	How much say or influence do you think each of the following SHOULD have on the adoption of new plant policies?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5
e.	Plant union leadership	1	2	3	4	5
F11.	How much say or influence do you think each of the following SHOULD have on how employees are evaluated?					
a.	You	1	2	3	4	5
b.	Hourly workers as a group	1	2	3	4	5
c.	Supervisors as a group	1	2	3	4	5
d.	Plant management above supervisors	1	2	3	4	5

F12. In the last year, how many union meetings have you attended? (If none, write "0" and go to F14.)

_____

F13. What do you usually do at union meetings? (Check all that apply.)

_____ Sit and listen

_____ Answer questions that other people bring up

_____ Talk about something being discussed

_____ Bring up topics for discussion

_____ Vote

F14. Did you happen to vote in the last union election for officers? (Check one.)

(1)_____ Yes (2)_____ No

Please indicate how much you agree or disagree with the following statement:

		Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
F15.	The union should work with management in furthering the development of the participative group system (EPGs, self- and shared-management groups).	1	2	3	4	5

G. FEELINGS ABOUT YOURSELF

To what extent do you agree or disagree with the following?

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
G1. I feel that I am a person of worth, at least on an equal basis with others.	1	2	3	4	5
G2. All in all, I am inclined to feel that I am a failure.	1	2	3	4	5

	None	A little	A fair amount	Quite a bit	A great deal
G3. In general, how much control do you feel you have over what happens to you at work?	1	2	3	4	5
G4. In general, how much control do you feel you have over your life outside of work?	1	2	3	4	5

	Not at all	Somewhat	Moderately	Very	Extremely
G5. In general, how satisfying do you find the ways you're spending your life these days?	1	2	3	4	5

H. DEMOGRAPHICS

The work groups may be experienced differently by people of different backgrounds. The following questions will be used only to understand such differences, not to identify you personally.

H1. Are you: (Circle one.)

1. Male?
2. Female?

H2. What is your ethnic background? (Circle one.)

1. White
2. Black
3. American Indian
4. Oriental
5. Other Asian
6. Hispanic
7. Other

H3. What is the highest grade of school or year of college you have completed (not including trade school)? (Circle the appropriate number.)

Grades of School	College
01 02 03 04 05 06 07 08 09 10 11 12	13 14 15 16 17 18 19+

H4. What year were you born in? _____

H5. How long have you worked at the Bay City Plant?

_____ years _____ months

H6. Are you part of:

(1)_____ Skilled trades? (2)_____ Production?

H7. What is the number or name of your department or departments? _____

If you have any additional comments you think are important in order for us to understand your experiences with the participative groups, please make them here:

_____

_____

_____

_____

_____

_____

THANK YOU FOR YOUR HELP WITH THIS PROJECT!

YOU WILL RECEIVE A SUMMARY OF THE SURVEY

RESULTS WHEN THE STUDY IS COMPLETE.

REFERENCES

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Abdel-Halim, A.A., & Rowland, K.M. 1976. Some personality determinants of the effects of participation: A further investigation. Personnel Psychology, 29, 41-55.

Alutto, J.A. & Acito, F. 1974. Decisional participation and sources of job satisfaction: A study of manufacturing personnel. Academy of Management Journal, 1, 160-167.

Alutto, J.A., & Belasco, J. 1972. A typology of participation in organizational decision making. Administrative Science Quarterly, 17, 117-125.

Brockner, J. 1988. Self-esteem at work: Research, theory, and practice. Lexington, MA: Lexington Books.

Brockner, J. & Hess, T. 1986. Self-esteem and task performance in quality circles. Academy of Management Journal, 29, 617-623.

Cooke, W.N. 1990. Labor-management collaboration and company performance: New partnerships or going in circles. Kalamazoo, MI: W.E. Upjohn Institute for Employment Research.

Cotton, J.L., Vollrath, D.A., Froggatt, K.L., Lengnick-Hall, M.L., & Jennings, K.R. 1988. Employee participation: Diverse forms and different outcomes. Academy of Management Review, 13, 3-22.

Dachler, H.P. & Wilpert, B. 1978. Conceptual dimensions and boundaries of participation in organizations: A critical evaluation. Administrative Science Quarterly, 23, 1-39.

Davis-Blake, A. and Pfeffer, J. 1989. Just a mirage: The search for dispositional effects in organizational research. Academy of Management Review, 14, 385-400.

Dean, J.W. 1985. The decision to participate in quality circles. Journal of Applied Behavioral Sciences, 21, 317-323.

Dutton, J.E. & Jackson, S.E. 1987. Categorizing strategic issues: Links to organizational action. Academy of Management Review, 12, 76-90.

Dyer, L., Lipsky, D.B., & Kochan, T.A. 1977. Union attitudes toward management cooperation. Industrial Relations, 16, 163-172.

Griffin, R.W. 1988. Consequences of quality circles in an industrial setting: A longitudinal assessment. Academy of Management Journal, 31, 338-358.

Hackman, J.R. & Oldham, G.R. 1980. Work redesign. Reading, MA: Addison-Wesley.

Hespe, G. & Wall, T. 1976. The demand for participation among employees. Human Relations, 29, 411-428.

Israel, B.A., House, J.S., Schurman, S.J., Heaney, C.A., & Mero, R.P. 1989. The relation of personal resources, participation, influence, interpersonal relationships and coping strategies to occupational stress, job strains and health: A multivariate analysis. Work and Stress, 3, 163-194.

Jacoby, S. 1983. Union-management cooperation in the United States: Lessons from the 1920's. Industrial and Labor Relations Review, 37, 18-33.

Juralewicz, R.S. 1974. An experiment on participation in a Latin American factory. Human Relations, 27, 627-637.

Katz, H.C. 1985. Shifting gears: Changing labor relations in the U.S. automobile industry. Cambridge, MA: MIT Press.

Kochan, T.A. & Dyer, L. 1976. A model of organizational change in the context of union-management relations. Journal of Applied Behavioral Science, 12, 59-78.

Kochan, T.A., Katz, H.C. & McKersie, R.B. 1986. The transformation of American industrial relations. New York: Basic Books, Inc.

Kochan, T.A., Katz, H.C. & Mower, N.R. 1984. Worker participation and American unions: Threat or opportunity? Kalamazoo, MI: Upjohn Institute.

Kohn, M.L., & Schooler, C. 1983. Work and personality: An inquiry into the impact of social stratification. Norwood, NJ: Ablex Pub. Corp.

Latham, G.P. & Yukl, G.A. 1975. Assigned versus participative goal setting with educated and uneducated woods workers. Journal of Applied Psychology, 60, 299-302.

Lawler, E.E. & Mohrman, S.A. 1987a. Quality circles: After the honeymoon. Organizational Dynamics, 15 (4), 42-54.

Lawler, E.E. & Mohrman, S.A. 1987b. Unions and the new management. Academy of Management Executive, 1, 293-300.

Levine, D.I. & Strauss, G. 1989. Employee participation and involvement. Investing in People: A Strategy to Address America's Workforce Crises. 2. Commission on Workforce Quality and Labor Market Efficiency. U.S. Department of Labor. 1893-1948.

Lewin, K. 1936. Principles of topological psychology. NY: McGraw-Hill.

Locke, E.A. & Schweiger, D.M. 1979. Participation in decision-making: One more look. In B.M. Staw and L.L. Cummings (Eds.), Research in organizational behavior, 1, (pp. 265-339). Greenwich, CT: JAI Press.

Lowin, A. 1968. Participative decision making: A model, literature critique, and prescriptions for research. Organizational Behavior and Human Performance, 3, 68-106.

Manz, C.C. & Sims, H.P. 1987. Leading workers to lead themselves: The external leadership of self-managing work teams. Administrative Science Quarterly. 32, 106-129.

Neumann, J.E. 1989. Why people don't participate in organizational change. Research on Organizational Change & Development, 3, 181-212.

Ponak, A.M. & Fraser, C.R.P. 1979. Union activists support for joint programs. Industrial Relations, 18, 197-209.

Pyle, L.A. 1989. Resistance to participative work systems: A test of the threat-rigidity hypothesis. Unpublished doctoral dissertation. University of Michigan.

Singer, J. 1974. Participative decision making about work: An overdue look at variables which mediate its effects. Sociology of Work and Occupations, 1, 347-371.

Staw, B.M., Sandelands, L., & Dutton, J.E. 1981. Threat-rigidity cycles in organizational behavior: A multi-level analysis. Administrative Science Quarterly. 26, 501-524.

Tannenbaum, A.S. 1968. Control in organizations. New York: McGraw-Hill.

Tannenbaum, A.S. 1974. Systems of formal participation. In G. Strauss, R.E. Miles, C.C. Snow, &. A.S. Tannenbaum (Eds.), Organizational behavior: Research and issues. (pp. 77-105). Madison, WI: Industrial Relations Research Assn.

Thacker, J.W. & Fields, M.W. 1987. Union involvement in quality of worklife efforts: A longitudinal investigation. Personnel Psychology, 40, 97-111.

Tosi, H.L. 1970. A re-examination of personality as a determinant of the effect of participation. Personnel Psychology, 23, 91-99.

Trist, E.L., Susman, G.I., & Brown, G.R. 1977. An experiment in autonomous working in an American underground coal mine. Human Relations, 30, 201-236.

Voos, P.B. 1987. Managerial perceptions of the economic impact of labor relations programs. Industrial and Labor Relations Review, 40, 195-208.

Vroom, V.H. 1960. Some personality determinants of the effects of participation. Englewood Cliffs, NJ: Prentice-Hall.

Witte, J.F. 1980. Democracy, authority, and alienation in work: Workers' participation in an American corporation. Chicago: University of Chicago Press.