Quality circles have proliferated in organizations throughout the 1980s, but their success depends on careful planning and monitoring, and on an awareness of social psychology and group dynamics. This presentation accordingly evaluates some of the assumptions of the literature on quality circles and suggests ways in which social psychology research can make quality circles a more viable team performance strategy. While voluntary, democratically controlled, participatory quality circles work well in Japan, with its traditions of lifetime employment and group loyalty, they are less successful among Americans, who are more oriented toward their personal career goals, and who are motivated more by a sense of individual responsibility. For this population, participation in quality circles is therefore likely to be more successful if it is either mandatory or a path toward individual advancement, with a clear agenda set by facilitative leaders who are higher in the organization, in which the focus is on measurable accomplishments and workers are empowered to act on their own suggestions. (Twenty-five references are included.) (TE)
USING SOCIAL PSYCHOLOGY TO MAKE QUALITY CIRCLES MORE EFFECTIVE

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To a very large extent, I think we have Peters and Waterman's (1982) In search of excellence to thank for the "quality" revolution that has had important effects on the American workplace during the 1980's. According to Peters and Waterman, America's best-run companies—including Digital Equipment, Maytag, Hewlett-Packard, and others—"pursue quality with quixotic zeal."

Nevertheless, as important as quality considerations became during the 1980's, American efforts in this area paled when contrasted with the efforts of the Japanese, where, for example, a one percent error rate is sometimes considered unacceptable (Hayes, 1981). For American managers, business teachers, and social scientists, a major focus for their quality concerns was the Japanese quality circle (QC).

Interestingly, Peters and Waterman themselves had little good to say about quality circles. In a section of their book focusing on management fads, they denounced quality circles as a gimmick used by managers to avoid the real job of people management. Although they saw nothing inherently wrong with a QC approach, they felt that too often it was simply another in the succession of productivity-raising techniques that enthuse, then later disappoint, managers.
Despite their misgivings, quality circles blossomed—and continue to blossom—throughout the 1980's. Research about their effectiveness, however, remains sketchy. On the one hand, there are many anecdotal reports of their success; on the other, there are a few scholarly papers (e.g., Lawler and Mohrman, 1987; Marks et al., 1986; Meyer and Stott, 1985) that point out some of their shortcomings. Obviously, the quality circle concept is far more complex than what earlier proponents suggested. In their informative review of the quality circle approach, Lawler and Mohrman (1985) stated, in fact, that "circles contain in their initial design many of the elements that lead to their elimination and destruction."

By now we should be clear that the establishment of a quality circle program requires, at the very least, careful planning and continued monitoring; even in Japan, only one-third of the quality circles are said to achieve meaningful success (Cole, 1971). Summarizing the published research, there seem to be three basic conclusions about quality circles:

1. Managerial support is critical to the success of a QC program;

   Within the quality circle itself, the leader must have some skill at facilitating a meeting; and

3. Quality circle programs that do not meet these conditions rarely last beyond two years.

As important as these factors may be, however, they limit their focus to situational constraints on quality circle functioning. Virtually all published evaluations of quality circles or guides to establishing them
Quality Circles

overlook a critical domain of performance—the motivational factors at work within any group. Although success cannot occur without management support and some skill at running a meeting, ultimately it is the individual group members and the social psychology that occurs between them that make the quality circle an effective team performance strategy. An example of the importance of individual differences: Brockner and Hess (1986) found that, in the quality circles they studied, levels of self-esteem among group members were more predictive of QC performance than group size, longevity, or organizational function.

Along the same lines, another study (Tang, Tollison, and Whiteside, 1987) found that management-appointed quality circles were more effective at problem solving than the traditional voluntary QC's. When management assigned a problem and made attendance compulsory—rather than voluntary, as is the typical case—members of the QC focused more readily on the problem and arrived at solutions more quickly.

In the voluntary quality circle, on the other hand, more time was spent in "social loafing," and members used the QC meetings to avoid work and to engage in social interaction. Such an outcome is not surprising given the social loafing literature: When group members know their individual efforts are not going to be evaluated, they are simply less likely to expend effort toward task accomplishment (Harkins and Jackson, 1985; Williams, Harkins, and Latane, 1981).

In the quality circle and team performance programs I have worked with, the managers who had even an intuitive knowledge of social psychology or group dynamics were more likely to be successful than those who simply followed a list of "Do's and Don'ts" in establishing quality circles. In this presentation, I want to focus on some of the assumptions of the QC
literature and how social psychology research can make quality circles a more viable team performance strategy.

The first assumption relates to the voluntary nature of the quality circle. Most quality circles are, in fact, voluntary meetings where workers agree to meet to discuss problems in the workplace and possible solutions. In one study (Dean, 1985), a desire to solve problems was the reason most often given for volunteering to join a quality circle.

But can we accept at face value the stated desire to solve problems as the most important motivation for joining quality circles? Certainly some of the research in social cognition would suggest otherwise.

By now we have good evidence that very often reasons for a decision are arrived at after the decision has already been made (e.g., Nisbett and Wilson, 1977; Wilson, 1985). That is, researchers in social cognition tell us that at least part of the reasoning process occurs unconsciously, and only when people are challenged to explain their actions do they consciously think of reasons for their behavior. I think this may be the case with why people join quality circles. Social and career pressures are at least as motivating as a desire to improve the workplace. Following this line of thought, emphasizing social and career aspects of QC meetings may result in higher participation than appealing to altruism or guilt about making the workplace more efficient. So the first change I would suggest is to make certain that the quality circle program recognizes the personal goals of its participants.

Another aspect of the quality circle is its democratic and participatory nature. That is, members are usually allowed to set the agenda and everyone has a chance to participate. This is another area that
probably needs refinement. From the goal setting literature, we know that assigned goals are met as effectively as goals that are set participatively (Locke, Shaw, Saari, and Latham, 1981). Because of the aforementioned problems that arise when individuals know they are not going to be evaluated, it seems reasonable to conclude that quality circle membership may be more productive if agendas are set by persons higher in the organization. So a second suggestion is a structured agenda.

The assignment of membership and the setting of the agenda by superiors deal with some structural matters within the quality circle; what about what happens within the group meeting? How can we use social psychology to make the actual meeting more productive?

One of the cultural components of the Japanese organization—and one that sharply contrasts with American organizational practice—is that responsibility is usually diffused among members of a work group rather than being concentrated in an individual (DeFrank, Matteson, Schweiger, and Ivancevich, 1985). The rationale for collective decision making in the Japanese organization is often explained in terms of lifetime employment: Because Japanese workers are going to be together for a long time, they must necessarily develop the skills of compromise and shared responsibility that facilitate order in the workplace. Americans, on the other hand, spend much less time in any particular job—or company—and are usually more oriented toward their personal careers than they are toward the group and the organization. Consequently, they may be less disposed toward cooperation and group effort than the Japanese.

By now we have a large literature in social psychology suggesting that individual responsibility is an important factor in prompting individual action. Starting from the work of Darley and Latane (1968) in attempting
to understand the ...ty Genovese murder, individual responsibility seems to be a prerequisite for all kinds of actions. Several studies have shown that making people self-aware seems to motivate them to work harder (Duval, Duval, and Neely, 1979; Hoover, Wood, and Knowles, 1983). Wearing nametags, filling out self-report questionnaires before participating in a group activity, simply talking to participants on a personal basis—all have been shown to heighten the taking of personal responsibility during group activities.

One of the most successful quality circle programs I know posts productivity charts in the work area so that any passerby—including vice presidents and other company officials—can quickly determine the success—or failure—of the work unit. Even more to the point, a photo of the unit's supervisor is attached to the chart so the manager can identify who is responsible for the team effort. At least in this particular manufacturing environment, this kind of "responsibility-within-the-circle" seems to heighten team performance. After implementation of the modified quality circle program, the monthly production rate in one unit increased 300% over eleven months while labor hours actually dropped by 52%. In a different work group, production increased 53% over a nine month period after QC's were initiated. So my third suggestion is that the quality circle program be designed to stress personal responsibility.

A fourth area where we might make quality circles more effective has to do with the nature of interaction within the group itself. Although quality circles usually do have leaders who may set the agenda and direct the discussion, overall, the general atmosphere is one of democratic participation. The meeting, after all, is designed to give those who actually do the work an opportunity to voice concerns and offer suggestions
about the workplace. In my opinion, this admirably democratic model is likely to distract from the processes that we know are occurring when groups meet. The democratic model provides some good things, but good solutions to problems may not be among them.

[As we have just heard confirmed by Joyce Hogan,] research suggests that in any group, leadership is necessary for team success. By tradition, de jure leadership is likely to rest in the most senior person at the meeting, but de facto leadership is likely to rest in one of two places. Small group research suggests that persons who are likely to emerge as leaders are those who either appear to have expertise in the matter at hand, or who simply talk the most (Bottger, 1984). Although both persons may make valuable contributions, simply knowing the most or talking the most certainly does not automatically qualify an individual to lead the group to a decision.

As the group dynamics literature points out, group decisions are a two step process. First, someone must identify the correct—or at least satisfactory—solution. Perhaps more importantly, someone must "sell" this solution to the rest of the group. Obviously, good solutions can fall through the cracks because of an unsuccessful selling job. Looking at group decisions this way, it may be the person with persuasive abilities who is actually the most important for team performance.

Why should quality circles be run democratically? In terms of the quality of decision, we know that only problems that require a pooling of information before finding a solution benefit from everyone's input. According to Steiner's (1972) work with task typologies, this is the only case where a group decision is likely to be better than a decision made by one qualified individual. Of course, the reason for democracy in the
quality circle may be politics rather than efficiency. Allowing only the best decision makers access to the quality circle meeting may result in charges of elitism. On the other hand, keeping the QC democratic may lead to the process of decision making becoming more important than the quality of the decision. This, of course, is inefficient and probably harmful to the organization, but it simply may be necessary because of organizational politics. My fifth suggestion is to ensure that the quality circle has strong, facilitative leadership even if some democracy is lost.

This question of democracy in the quality circle relates to another aspect of social interaction in work groups. One thing we know about childcare in the workplace is that it may not affect productivity, but it very often affects worker satisfaction (Smither, 1988). Perhaps this is the case with the quality circle; irrespective of productivity, workers regard it positively and consequently morale is raised. One danger here is that increased satisfaction with social interaction may be mistaken for increased productivity. One way to manage this problem is to keep the focus of the quality circle on measurement.

In the quality circle literature, there are virtually no references to either record keeping or goal setting. Without a quantitative focus, however, it may be difficult to measure progress in team performance. Again, the quality circle may become an outlet for social needs rather than genuine problem solving. As important as the social aspects of meetings may be, measurement keeps the focus on the real reason everyone is there.

One of the most frequently-cited reasons why quality circles fail relates to their inability to accomplish anything concrete. There are basically two reasons for failure: that the leader cannot manage group
members successfully or that implementation of quality circle suggestions takes so long that the group ultimately develops a sense of failure.

Quite frequently, management does not empower the workers to act upon the decisions they make. These decisions must pass upward through a chain of command before they can be implemented. Naturally, the bureaucratic process itself impedes action, but so does the social psychology of the workplace. Managers may feel threatened by workers taking the initiative, or they may feel insecure that they did not think of the solution to the problem the workers were discussing. This is the "dark side" of participatory decision making. Not only do managers begin to worry about being replaced by committees—after all, if the workers could design and implement a solution, why have a manager?—but union officials themselves worry about too much worker autonomy. Some recent studies (Bushe, 1988; Whatley and Hoffman, 1987) have discussed the problems of implementing quality circles in a union setting. Ostensibly, unions are wary of management asking for more work at no extra pay, but I think it is reasonable that with regard to workgroup decisions, union officials may be feeling the same kind of insecurities about their own usefulness that middle managers feel.

To maintain the effectiveness of the quality circle, the solutions proposed by members must be accepted and acted upon without the delay between recommendation and approval or rejection becoming too lengthy. In matters that are relatively routine, perhaps the decision maker can attend the meeting and make a decision on the spot. For more significant decisions, some bureaucratic channeling may be inevitable. But as the reviews of quality circle functioning tell us, it is critical that the period between recommendation and implementation not be too long. Again,
in the best quality circles I know about, the attendance of support personnel at meetings is mandatory so that all relevant persons are aware of manufacturing issues and so that routine decisions can be made promptly.

**Modifications to Make Quality Circles More Effective**

So, looking at the quality circle and small group literature, there seem to be nine suggestions for making quality circles more effective. The most commonly-cited recommendations are, first of all, ensuring that management demonstrates its support of the quality circle program, and second, making certain that the leader of the quality effort has some skill at facilitating the group meetings.

On a more psychological level, however, there are seven additional suggestions:

1. **recognize that workers have personal motives for participation in quality meetings that may be more salient than the professed desire to make the workplace operate more smoothly; don't be surprised if altruism is not the sole motivating force in the quality circle;**

2. **whenever possible, set an agenda for the meeting so that conversation stays focused on real workplace problems;**

3. **emphasize personal responsibility within the group, possibly by making productivity data public;**
(6) recognize the inefficiencies inherent in the democratic group meeting and, if possible, minimize the participation of those persons who are unlikely to contribute to solutions;

(7) make certain the leader is clearly identified;

(8) as much as possible, keep the focus of the group on measurable accomplishments; generate data and charts that illustrate the effects of the quality effort; and

(9) whenever possible, empower the workers to act on their own suggestions.

Having stated these, it may now appear that following these suggestions will transform the quality circle into a routine staff meeting rather than a real problem solving meeting. My tenth suggestion is for management to see that this does not happen. By emphasizing the personal responsibility of members and empowering the group to act upon some decisions immediately, the spirit—if not the exact form—of the quality circle can be maintained. Even the Japanese recognize that the quality circle cannot be applied everywhere and that it must be adapted to prevailing cultural conditions. My suggestions are designed simply to make the form of the quality circle more congruent with what we know about the social psychology of American workers.
The Paradox of Efficiency

Finally, there is an interesting paradox in the quality circle concept that applies to many team performance situations. When circles are successful and manufacturing is streamlined, jobs are likely to be lost. Higher yield per worker often necessitates fewer workers, particularly in a unit or small batch production system. Consequently, "Why participate in a streamlining effort when streamlining eliminates jobs?" seems to me to be a perfectly reasonable question.

Management usually has two responses to this challenge. First, streamlining does, in fact, lose some jobs, but in a competitive manufacturing environment, non-streamlining will result in the loss of all jobs. Second, being more competitive should logically result in the creation of more work for everyone. Overall, I think these statements are idealistic and probably examples of "coming-up-with-reasons-after-the-decision" that I mentioned earlier. In fact, increased efficiency in the workplace will probably result in job loss, and for some workers, participation in quality circles—or any quality effort—is just not in their best interests.

Nevertheless, both anecdotally and empirically, quality circles have made substantial contributions to organizational productivity and, in some reports, they have lowered employee absenteeism and improved attitudes about the workplace (Marks, Mirvis, Hackett, and Grady, 1986). We are all familiar with the criticism that Western social psychology is useless when confronted with real life situations (Carlson, 1984; Moghaddam, 1987). Perhaps one way that social psychology can redeem itself at least in part is by making the quality circle—or any workgroup—operate more smoothly and productively.
REFERENCES


