Research on Leadership Selection and Training: One View of the Future

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The past 40 years have seen considerable strides in our understanding of leadership, which until recently focused on inherited traits and abilities. Although we now see leadership as a complex interaction between the leader and the social and organizational environment, this lesson is frequently ignored in personnel selection and leadership training. At this time, most leader selection and leadership training approaches have not been adequately validated. Further progress in these areas requires that we focus research on methods that integrate situational components into personnel selection and leadership training.•

I am very honored to help celebrate *ASQ*'s distinguished 40-year history and by the invitation to reflect on what we have accomplished in that time, as well as to speculate on what the future is likely to require. Since I got hooked on leadership research very early in my career and have stuck with it for over 45 years, I will leave other aspects of the organizational world to my better qualified colleagues. My reasons for concentrating on leadership training and managerial selection are in part based on a recent survey of 269 industrial and organizational (I/O) psychologists by Schippman, Higgs, and Matthews (1995), who found that the respondents saw workshops on these two topics as especially important in furthering their future careers.

WHAT HAVE WE LEARNED ABOUT LEADERSHIP?

There has been much moaning and groaning in the past that we didn't know anything worthwhile about leadership, that leadership theories and research lacked focus and were chaotic, and some writers asked even whether there is such a thing as leadership. This may be a good attention getter, but more sober reflection tells us that leadership does make a difference. Historical examples abound in which brilliant military leaders have won battles against superior forces, and managers have turned failing organizations around. An example of the former is George Washington's victory over the better-equipped and professionally trained English forces in the Revolutionary War. An example from business is the remarkable recovery of the Chrysler Corporation under Lee Iacocca. Another example of the leader's effect on performance comes from Thorlindsson's (1987) study of over 200 nearly identical ships in the Icelandic herring-fishing fleet. These ships, usually with an 11-man crew, compete for the herring catch under identical conditions. Thorlindsson found that the captains in charge of these vessels accounted for 35 to 49 percent in the variation of the catch over a three-year period. Since the effectiveness of the leader has frequently determined the survival or demise of a group, organization, or an entire nation, it has been of concern to some of the foremost thinkers in history, like Plato, Machiavelli, or von Clausewitz. If leadership were easy to understand, we would have had all the answers long before now.

Leadership research before 1945 was primarily concerned with identifying traits, behaviors, and personality patterns that would differentiate leaders from non-leaders. We do

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know a good deal more about leadership today than we did 40 years ago, but without doubt, we still have a lot to learn. First, let us ask what we know about leadership at this time. A recently published paper (Fiedler and House, 1994) listed what we considered to be among the important advances in our knowledge of leadership. This list, with some modifications, is shown below. I will define leadership as that part of management that involves the supervision of others and use the terms interchangeably in this paper.

1. *Emergent leadership.* There is no evidence for a specific leadership trait, behavior, or a leader personality. Group members who are ''visible'' and have abilities, skills, or resources that would assist the group in reaching its goal are likely to be chosen or accepted as leaders. People who are seen as good leaders are also seen as good followers.

2. *Leader effectiveness,* the ability to get a group to accomplish its mission, depends not just on the leader's abilities and attributes but also on how well the leader's personality, abilities, and behaviors match the situation in which the leader operates. Carefully conducted research on assessment centers has been reasonably accurate in identifying those who later become successful managers. But these results cannot be generalized easily because the methodology of assessment centers is not standardized and uniform, and there are wide variations in the sensitivity, skills, and competence of the assessors. It is certainly conceivable that less rigorously administered assessment centers may merely tell us that people who are bright and socially adept are more likely to have more successful careers than those who are relatively dull, unmotivated, and socially inept.

3. *Stress and control over group process and outcome.* The primary significance of the leadership situation is that it has a different effect on the behavior and performance of different types of leaders. The critical factor seems to be how the situation affects the leader's feeling of being in control and whether the leader experiences stress and uncertainty in how to deal with the group and the task.

4. *Leader behaviors.* Two major types of behavior have been identified on which leaders are evaluated by others. One is whether leaders treat their subordinates well or poorly, using such dimensions as considerate, socioemotional, and employee-centered behaviors. The other indicates the degree to which leaders structure the roles and working relationships of their subordinates, typically called structuring, task-oriented, or job-centered behaviors. These behaviors or attitudes do not predict effective leadership performance.

5. *Charismatic leaders* are individuals who are totally committed to their particular vision and course of action, who have unshakable faith in the rightness of their mission and their eventual success, and who have the ability to communicate this to their followers. Charismatic leaders may or may not be effective in achieving the organization's goals, but their followers are blindly obedient and unquestioningly loyal.

6. *Gender and race differences.* Other things being equal, men and women and those of different racial and ethnic backgrounds are equally effective as leaders.

7. *Attributed abilities, skills, and motivation.* The motivation and abilities attributed by leaders and followers to one another determine in part how the leader and subordinates deal with each other and how this affects leader and subordinate behavior.

The most important lesson we have learned over the past 40 years is probably that the leadership of groups and organizations is a highly complex interaction between an individual and the social and task environment. Leadership is an ongoing transaction between a person in a position of authority and the social environment. How well the leader's particular style, abilities, and background contribute to performance is largely contingent on the control and influence the leadership situation provides.

CHALLENGES FOR THE FUTURE

Leadership and Management Development

The rapidly changing economic conditions at home and abroad require organizations to maintain their competitiveness and to maximize the effectiveness of their management. Most larger organizations, therefore, devote a substantial portion of their human resource effort to leadership and managerial training (Saari et al., 1988). While the number of available training programs is considerable and continues to grow at an increasing pace, the scarcity of sound research on training has been among the most glaring shortcomings in the leadership area. Most of the training programs are untested and, at best, of uncertain value. Thus, 25 years ago, Campbell (1971: 565) characterized the training literature as "voluminous, non-empirical, non-theoretical, poorly written, and dull." This assessment has not been seriously challenged in the years that have passed. More recently, Goldstein and Gessner (1988: 66) concluded that this entire field of endeavor is characterized by continual discussion but very little research. Porter and McKibbin (1988: 65), in their report to the American Assembly of Collegiate Business Schools, agreed with these criticisms and, in addition, remarked that "leadership education [in business schools] has been less effective than instruction in quantitative areas."

The most systematic evaluation of research was a meta-analysis of 70 different management training studies reported by Burke and Day (1986). Their analysis reported that very few existing training evaluations were based on credible organizational performance measures that could document the extent to which the training contributed to organizational performance. They did find a moderate increase in knowledge of prescribed leadership principles and behaviors, but some studies also showed negative effects. Burke and Day could recommend only two training methods that, as of that date, had been empirically validated by appropriate procedures. These were Sorcher and Goldstein's (1972) behavior modeling approach and (I am

happy to say) Fielder and Chemers' (1984) Leader-Match training program.

All the reviews of leadership training (e.g., Gordon, 1985; Burke and Day, 1986; Bass, 1990: 807–856; Lewis, 1995) stress that we know very little about the processes in leadership and managerial training that contribute to organizational performance. At least one reason for this lack of knowledge is the scarcity of meaningful and rigorous research. The sole evaluation in most management training too often consists of no more than asking trainees how they liked the program or whether they thought they had learned something (Saari et al., 1988). Only a very ungrateful or jaded manager would say that a week of management training, especially in Hawaii or some other delightful resort, turned out to be unpleasant and a waste of time.

The same questions about effectiveness apply to the management games or simulations for improving managerial or organizational performance that have become increasingly popular during the past two decades. It is also true that very few of these games and simulations have been subjected to sound evaluation research. Thus, Gordon's (1985: 30–45) review of the literature led him to conclude that it is difficult to make clear statements of business gaming's effects. He found no published evidence that leaders who perform well in management games and simulations will improve their leadership performance in their real-life jobs. Bass (1990: 822) tactfully summarized his review of the literature on management games by stating, "Despite their widespread use, evaluations of simulations are hard to come by."

Our own studies (e.g., Fiedler, 1966; Fiedler and Chemers, 1968) did not even produce any significant or substantial correlations between a group's performance in one simulation and the same group's performance on a similar simulation (Fiedler, 1966; Murphy, 1992). This makes it very difficult to interpret the findings. There are, of course, many glossy brochures and anecdotes attesting that somebody's Aunt Suzy became a great executive after having enrolled in this or that kind of management training, but this is hardly enough. In addition to evaluating their effectiveness, we need to do solid research on which procedures or conditions make these programs effective.

Research to be done. Where should our research then try to go? A number of problems related to leadership training merit further investigation in the years to come. If the criticisms leveled by Porter and McKibbin and others are justified, we must certainly continue to ask whether we are teaching what business students and managers really need to know, and we need to examine carefully how much current training and development programs contribute to organizational performance. These efforts, worthy as they are, would address only one part of the total problem.

We must also teach managers and trainees under what conditions they will make effective use of what they have learned. A lot of managers know, for example, that they should not get mad at their subordinates or that they should remain cool in emergencies or that they should rely on their experience. How many training programs tell them how to

apply this fund of knowledge? This problem is common to leadership selection as well as to leadership training, and I shall return to it in the section that follows.

HAVING SMARTS AND BEING ABLE TO USE THEM

We have made remarkable strides in developing reliable and valid tests for selecting nonmanagerial employees in various occupations. We have been less successful in selecting leaders and managers (see, for instance, Bass, 1990: 857–876). I will confine my comments to only one aspect of leadership selection, namely, to the use of cognitive abilities and experience, although other variables such as personality and motivation are undoubtedly important. I argue that we are most likely to make important further progress in selecting managers less by assessing leader abilities and knowledge than by fully using the abilities and knowledge they already have. We need to identify the conditions under which cognitive resources are effectively used and how to bring these conditions about.

Practically all public and private organizations operate on the strong belief that it is better to hire intelligent, creative, and experienced managers than those who are dull, not creative, and inexperienced. Interestingly enough, predictions of how a leader will perform in a particular job that are based on the individual's intelligence have been marginal at best, and experience and job knowledge have been shown to be completely unrelated to leadership performance (Fiedler and Garcia, 1987: 31–48; Fiedler, 1994: 1–16). This is perhaps not too surprising. Einstein would have been an unlikely prospect for managing a shoe store, and Abraham Lincoln and Harry Truman, with relatively little leadership experience, were eminently more successful presidents than the much more experienced Herbert Hoover and Franklin Pierce. It is rather startling to note that so very few researchers and practitioners have wondered about this glaring contradiction between the empirical findings and the beliefs and practice that guide much of managerial selection.

The finding that intellectual abilities and experience do not seem to predict performance has major implications for management. Effective leadership requires sound judgment, wise decisions, and the ability to evaluate complex information. These and similar leader attributes are intellectual functions. We also generally place more trust in leaders who have experience and expertise than in those who are relatively inexperienced and know relatively little about the task. Job-relevant experience and job-related expertise are the major criteria, and often the only well-defined ones, in managerial hiring and promotion decisions (Campbell, Sessa, and Taylor, 1995).

The fact that cognitive resources and leadership performance are unrelated suggests, of course, that these cognitive resources contribute to performance about as often as they fail to contribute or are detrimental to performance. Therefore, helping leaders to make effective use of their cognitive resources, for which they were hired in the first place, would also be the most efficient and cost-effective method for improving leadership performance.

Let us first ask why leader intelligence does not predict leadership performance. As pointed out by Jon Blades (Blades and Fiedler, 1976), leader intelligence cannot affect group performance unless (1) the leader tells the group what to do, and (2) the group members listen to the leader and do what they are told. This has been demonstrated in a number of instances. For example, Blades divided mess-hall crews into those with directive and participative mess stewards and those in which the mess stewards were or were not supported by their subordinates. He found a relatively high correlation between leader intelligence and group performance when the leader was directive and had the support of his group (.56, $N = 13$, $p < .05$), but he found low or negative correlations when the leader was nondirective or not supported by the group (Fiedler and Garcia, 1987: 136). Participatory or nondirective leadership worked best in groups in which members were brighter or more competent than their leader and the leader listened to them (Jacobs, 1992; see also Vroom and Yetton, 1973).

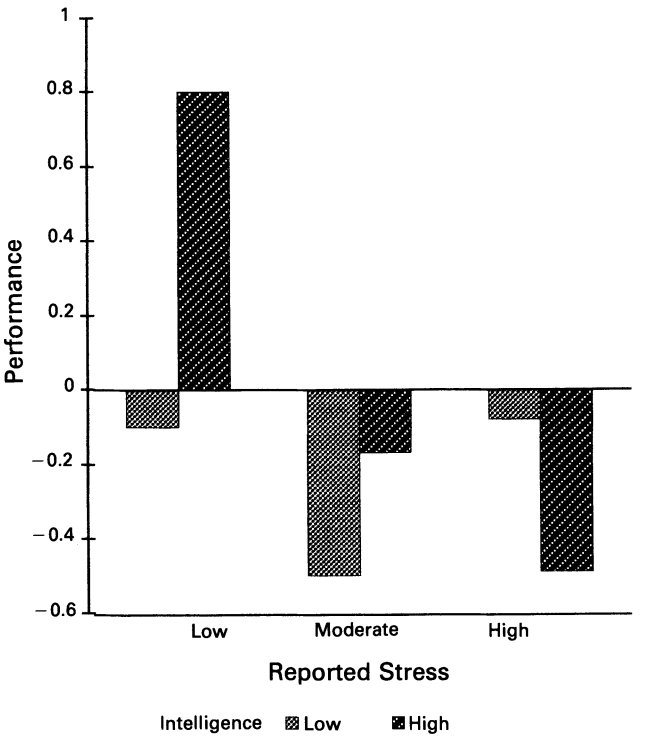
Our studies show that leader intelligence does not contribute to performance when there is a high level of interpersonal stress and uncertainty. Leaders who have stressful relations with their boss or key subordinates tend to dwell on the troubled relationships. Hence, they cannot focus their intellectual abilities on the job. In fact, when interpersonal stress is high, the more intelligent the leader is, the poorer tends to be his or her performance.

As mentioned earlier, leadership experience also does not by itself contribute to performance. In 10 different studies, all median correlations between leadership performance and various experience measures were less than .10 (Fiedler, 1995; Fiedler and Garcia, 1987: 34). Under stressful conditions, however, experience and performance correlated in the range of .40 to .60, while under nonstressful conditions, inexperienced leaders performed better than experienced leaders. The proposed explanation for these counterintuitive results is that leaders under stress fall back on their repertoire of previously overlearned knowledge and behavior (i.e., relying on intuition and hunch). The greater the range of their experience, the better is their performance. Under low-stress conditions, more experienced leaders are not challenged and tend to be bored and cut corners. Thus, under low stress, leaders use their intelligence but misuse their experience; under high stress, they use their experience but misuse their intelligence. The negative correlations between leader experience and performance are often quite substantial. For example, experience of fire department officers and their performance correlated $-.66$ ($N = 22$, $p < .01$) in low-stress administrative jobs, but they correlated .68 ($N = 20$, $p < .01$) with performance in notoriously stressful fire-combat (Frost, 1981).

Figures 1 and 2 present similar findings that Borden (1980) obtained in a study of infantry company commanders, platoon leaders, and platoon sergeants, whose performance was rated by two to five superiors. Figure 1 shows the average performance of leaders who scored in the upper and lower thirds on intelligence, compared with others in their job, who reported low, moderate, or high stress with

their immediate boss (all scores standardized separately within jobs). Figure 2 shows the corresponding average performance scores of leaders in the upper and lower thirds of army experience, indicated by time in service. Stress with boss and performance ratings were uncorrelated.

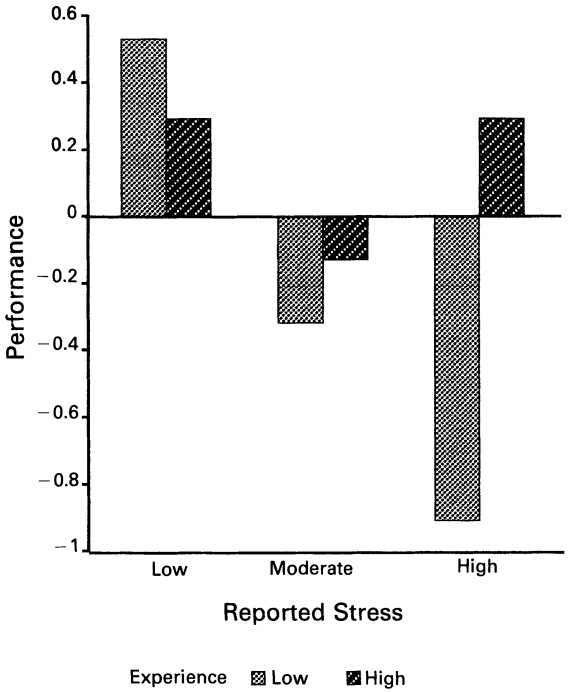
Figure 1. Effect of leader's intelligence on performance under low, moderate, and high stress.



As can be seen, intelligence contributed to leadership performance under low stress, but high leader intelligence impaired performance under high-stress conditions. In contrast, experience impaired performance under low-stress conditions but contributed to performance under high stress. Essentially identical results were obtained in a number of other studies (e.g., Fiedler et al., 1979; Frost, 1981). These findings suggest that intelligence and experience interfere with each other, a hypothesis that Murphy (1992) supported in a carefully controlled laboratory experiment. An oversimplified explanation of this interference effect is that we cannot think logically and analytically while at the same time reacting to emergencies and stress on the basis of overlearned previous knowledge and behavior, i.e., experience. Nor can a team carefully consider all the options and alternatives to solving a problem when their highly experienced leader tells them that "we have gone over all of these arguments before and don't need still another study."

These results imply that we can increase the intellectual performance of leaders by reducing the level of interpersonal stress. This hypothesis was supported in a study of army officer candidates (OCs) (Link, 1992, cited in Fiedler, 1995). These OCs completed in-basket exercises prior to and after

Figure 2. Effect of leader's experience on performance under low, moderate, and high stress.



receiving Smith and Rosenhow's (1988) stress-reduction training. Before stress-reduction training, the less intelligent OCs performed better than those with higher intelligence. After training, the more intelligent OCs' problem-solving performance increased significantly over that of the less intelligent OCs, indicating that the brighter OCs were using their intellectual abilities more effectively.

The experiment by Murphy (1992) demonstrated that we can also increase the effective use of leader experience. The study, which involved decision making by small teams, showed that the performance of teams led by more experienced leaders was relatively better than that of teams with less experienced leaders when stress was experimentally increased; performance of teams with inexperienced leaders was better than those under experienced leaders when stress was low.

CONCLUDING REMARKS

It seems safe to predict that managers who can capitalize on their cognitive resources will substantially improve their organization's performance. Leadership selection should thus be seen as a two-step process: (1) we must recruit and select individuals with the required intellectual abilities, experience, and job-relevant knowledge; and (2) we must enable leaders to work under conditions that allow them to make effective use of the cognitive resources for which they were hired.

Leadership training and management development are likely to benefit from a similar approach. Knowledge gained through training can be effectively applied only under certain conditions. While executives and those engaged in selection

and training well recognize the importance of the fit between manager and job, we know all too little about what specifically determines this "fit." Our research suggests that the stress level and the leader's situational control are two important determinants. We know that they determine in substantial measure the effective use of cognitive resources and the effectiveness of leadership performance as predicted by the contingency model, a theory that has been extensively validated (Strube and Garcia, 1981; Peters, Hartke, and Pohlman, 1985). Extending this approach to research on other aspects of the leadership process is likely to be fruitful. As a first step, we need to develop and test various methods that teach leaders how to "engineer" the leadership situations to capitalize on the particular strengths the leader brings to the job. As Fiedler and Chemers have shown in their Leader-Match program (1984), engineering the job turns out to be much easier than one would expect.

If we have learned anything from the past, it is that leadership processes are highly complex. Most serious researchers in the area agree that leadership is an interaction between the leader and the leadership situation, but this principle still has to be translated into practice. We cannot make leaders more intelligent or more creative, but we can design situations that allow leaders to utilize their intellectual abilities, expertise, and experience more effectively. In this highly competitive age, this is likely to be of considerable practical importance.

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