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Leadership Experience and Organizational Performance

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This report summarizes the major findings of a 20-year program of research on the role of cognitive resources in organizational performance. By cognitive resources we mean principally intellectual abilities, job-relevant technical knowledge, and experience. This particular report focuses primarily on the role and function of leadership experience.

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EXECUTIVE SUMMARY

LEADERSHIP EXPERIENCE AND ORGANIZATIONAL PERFORMANCE

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This report summarizes the major findings of a 20-year program of research on the role of cognitive resources in organizational performance. By cognitive resources we mean principally intellectual abilities, job-relevant technical knowledge and experience. This particular report focuses primarily on the role and function of leadership experience.

Experience is a much valued but poorly understood leader attribute. Employment and promotion procedures almost invariably inquire about a candidate's managerial experience and make it a major determinant in selection and promotion decisions. Nevertheless, very little empirical research has been published on this topic. Yet most studies, including our own, show that measures of leadership experience by themselves do not predict performance. The research which is reported here investigated over 1100 leaders from a wide variety of military, para-military, and civilian organizations, as well as leaders who participated in laboratory experiments.

As is the case with many terms in everyday language, there is no generally accepted definition of leadership experience. The most common usage is based on time spent in an organization, job, or occupational specialty (e. g., "How long have you been in the army?"). Other definitions consider the diversity, richness, or relevance of previously held jobs. However, all definitions of experience imply overlearned skills, knowledge and behavior. These may be acquired in the course of dealing with recurring events and job-related problems, or less commonly, by a single "unforgettable" or traumatic event that becomes indelibly etched in the individual's memory.

Almost invariably, an experience from which one has "really learned" occurred in association with stressful or anxiety-arousing conditions. In return, in emergencies, stressful conditions, or crises, there is frequently little time to think, and responses to these conditions tend to be automatic, and based on experi-

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ence and overlearned behavior. Hence, there is strong emphasis on drill and experience in such emergency-response organizations as fire departments, military combat units, or emergency medical teams.

In interpreting the reported findings, three further points must be noted:

a. Our research focuses on leadership experience (e.g., conducting an orchestra), and the results may not necessarily apply to experience in individual tasks (e.g., playing an instrument.)

b. References to high or low leadership experience, intelligence, or expertise indicate levels of experience, intelligence, etc., relative to other members of the particular sample or population. For example, we compare the level of experience in a sample of company commanders, not the experience of a seasoned manager and a new apprentice.

c. The "effective utilization" of a cognitive resource (e.g., experience) is inferred from the correlation between that resource and the performance of the leader or the group. Thus, a correlation of .80 between time in service (TIS) and performance implies that experience contributed strongly to performance; .00 implies that experience had no influence; and -.80 that experience was detrimental or interfered with performance.

Summary of Major Findings

1. Zero-order correlations between experience and performance. Experience by itself (that is, when not moderated by other variables) does not predict **leadership** performance. This conclusion is strongly supported regardless of the type of experience measures we use, and whether or not performance is evaluated by superior's ratings or by objective criteria.

2. Stress as a moderator in the prediction of leadership performance. The utilization of leadership experience as well as intelligence is highly affected by the presence of stress, either as perceived by the leader or induced by strongly adverse environmental conditions: When stress is low, leaders use their intelligence but not their experience; when stress is high, they use their experience but not their intelligence. In fact, intelligence tends to correlate negatively with performance under high stress; experience tends to correlate negatively with performance under low stress. This is seen not only in various studies of military leaders and fire department officers but also in a laboratory experiment in which stress was experimentally induced (see below).

These important findings are illustrated here by a study of army combat infantry officers and NCO's in which we compared leaders with relatively high and low experience or intelligence

who reported relatively high or low stress with their boss. The figures displays mean performance on the vertical axis and levels of stress on the horizontal axis. As can be seen on Figure 1a, under low stress, the more intelligent leaders performed better than less intelligent leaders, but under high stress, less intelligent leaders outperformed the more intelligent leaders.

The reverse is found for experience: under low stress the more experienced leaders performed more poorly than less experienced leaders; however, under high stress, the less experienced leaders outperformed those with more experience (Figure 1b). Contrary to what one might expect, the leader's perception of stress is essentially uncorrelated with the performance evaluation of the leader by the superior. Preliminary evidence also suggests that leadership experience contributes to good group climate and group member job satisfaction under stressful but not low-stress conditions.

3. Intelligence and experience. According to popular belief, people who aren't bright do not learn from their experience. This adage does not seem to apply to leaders. Correlations between experience and performance are not substantially higher for relatively more than relatively less intelligent leaders.

4. Situational control and experience. High situational control implies that the leader has influence and power to see that his or her ideas, plans, and action strategies are implemented by the group. If the leader's decisions are good, the group should be effective. The leader's situational control is indicated by good relations with group members, relatively structured tasks and high position power. To the extent to which experience contributes to good decisions and action plans, the experience of leaders with high situational control should then correlate more highly with performance than the experience of leaders who have relatively low situational control. However, our findings do not support this. High situational control does not enable leaders to make more effective use of their experience than relatively lower situational control.

Apparently, leaders cannot simply try harder to use their experience effectively. These findings suggest that the leader cannot deliberately call on experience. Rather experience-based knowledge and behavior is evoked or triggered by stressful conditions. And while we can exhort leaders to "think hard" and to "use their head", we cannot exhort them to make a greater effort in using their experience.

5. Stress, Experience and Intellectual Abilities. As we have seen, stress plays a major role in the way in which leaders' cognitive resources contribute to organizational performance. Some tasks and working conditions call for deliberation and careful weighing of alternative options. Others call for quick and automatic responses based on experience and overlearned behavior. When there is little or no time to think, or when

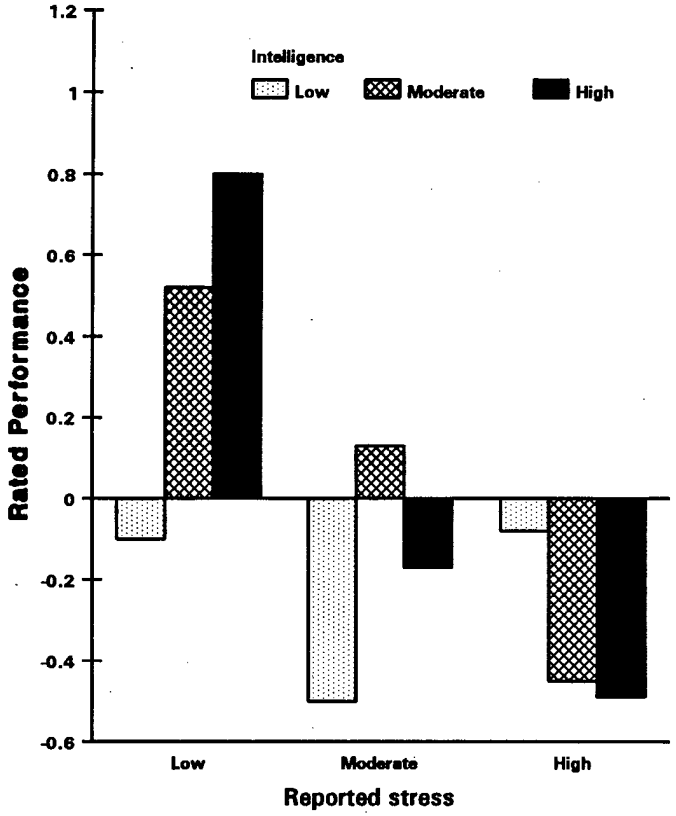

Figure 1a. Rated performance as a function of intelligence and reported stress (Company COs, Plt Ldrs, Plt Sgts)

Borden (1979)

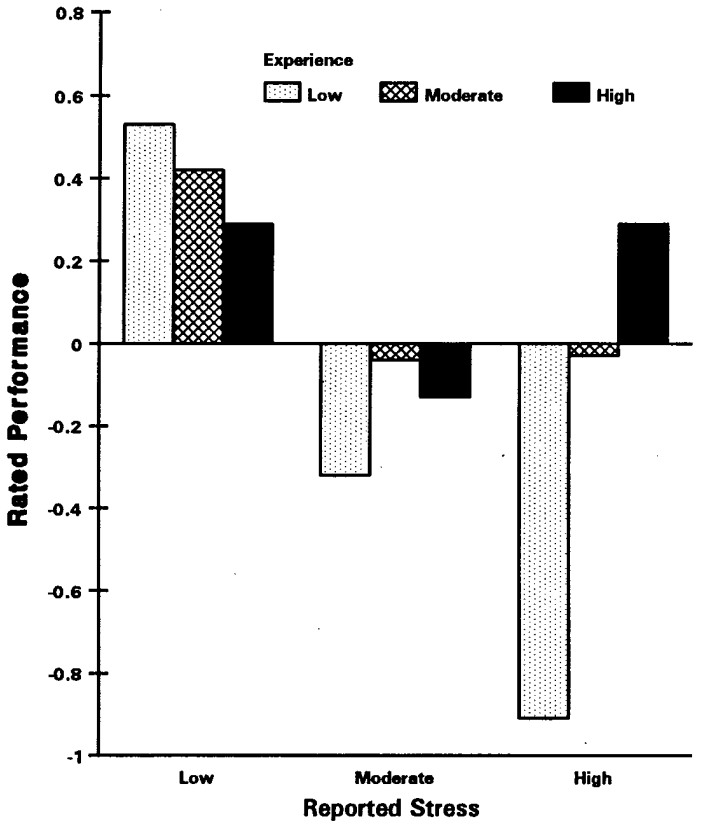

Figure 1b. Rated performance as a function of experience and reported stress (Company COs, Plt Ldrs, Plt Sgts)

Borden (1979)

there is stress and uncertainty, the safe course of action is to fall back on what has worked in the past. Those who have a large repertoire of previously successful behaviors are more likely to perform well than those who lack this fund of experience. But why is high intelligence detrimental under stressful conditions and experience under stress-free conditions?

In order to explain these findings we must note, first of all, that people seek to capitalize on what they have or can do well ("Give a kid a hammer and the whole world looks like a nail.") Thus, when faced with a problem, bright people are more apt to rely on their intellectual abilities than on hunch and intuition (Gibson, Fiedler & Daniels, 1990; Locklear, 1990); highly experienced people are more apt to rely on their knowledge of what worked before than on rethinking the problem at hand.

Second, creative or analytical thinking is incompatible with reacting automatically on the basis of overlearned behavior and hunch, i.e., experience. By the same token, emergencies and stressful situations that require quick and nearly automatic responses do not provide the time for creative and analytical thinking. But this presents a conflict for the intelligent leader who has learned to rely on intellectual effort. Even under stressful conditions, when immediate action is called for, this person will want to delay and think carefully about other alternatives. The higher the leader's intelligence, the more likely is the delay or inhibition of the automatic, experience-based response the stressful situation requires. This results isa negative correlation between intelligence and performance.

Conversely, when the task requires deliberation and careful reconsideration of the consequences, the highly experienced leader is likely to be impatient and call for immediate action in the belief that "we don't need another study; we already know what to do". Hence, the greater the leader's experience, the greater will be his or her tendency to short-cut or denigrate the needed deliberation in favor of the immediate action which is likely to be detrimental to the task.

6. Experience and the Contingency Model. As mentioned above, high situational control does not increase the effective use of experience. However, high experience does increase task structure, and task structure increases the leader's situational control, and this has important consequences or how different types of leader perform.

The Contingency Model of Leadership Effectiveness (Fiedler, 1967) predicts (a) that an increase from low to moderate situational control increases the performance of relationship-motivated (high LPC) leaders, but decreases the performance of task-motivated (low LPC) leaders and (b) an increase from moderate to high control increases the performance of task-motivated leaders, but decreases the performance of relationship-motivated leaders. This finding, supported in a number of investigations, is illustrated here by a study of 58 army squad leaders whose units

were evaluated by the same superior officers at the beginning of a training cycle and at the time of combat-readiness inspection, about 8 months later.

As Figure 2 shows, with increasing experience, and the concomitantly increased task structure, the relationship-motivated leaders' performance decreased while that of task-motivated leaders increased. Thus, other conditions being equal, an increase in experience calls for different types of leaders or a change in the leadership situation, and leaders who had performed well at one time are likely to perform poorly when they become more experienced; leaders who performed poorly at first are likely to be the "late bloomers" who perform better at a later time. These findings have important implications for managerial selection and placement.

Implications for the Effective Management of Human Resources

Stressful situations call for experienced leaders, and experienced leaders require a modicum of stress in order to function well. Intellectually demanding problems require that intellectually able leaders work in a relatively stress-free environment. Several empirical studies, summarized in the report, how that leadership situations can be modified by the organization, and that leaders can be trained in being less vulnerable to stress. They can also learn to identify and develop the job environment so that it maximizes their particular cognitive resources. The feasibility of applying our findings is shown by three controlled studies in which stress and leader directiveness are experimentally manipulated.

One experiment (Murphy and Macaulay, 1992) showed that the deliberate creation of even moderate stress increases the effective utilization of leadership experience in group decision making tasks. A field experiment with officer candidates (Link, Jacobs & Fiedler, 1992) increased the effective utilization of intellectual abilities of officer candidates by providing a 6-hour stress reduction training course. And two related experiments (Murphy, Blyth & Fiedler, 1992) showed that task-relevant training and expertise of leaders contributed to performance only if the leaders were also instructed to be directive. Task-relevant training of group members improved performance only if the leaders were instructed to be non-directive.

Our research demonstrates that such cognitive resources as intellectual abilities, experience, and expertise are effectively utilized only under very limited conditions. These highly valued abilities, experience and expertise may, in fact, be detrimental to leadership performance under other conditions. The more effective utilization of experience as well as of other cognitive resources clearly presents a practical and highly cost-effective method for increasing the performance of leaders and their work units, and for materially improving the utilization of creative, intellectually able, and experienced manpower.

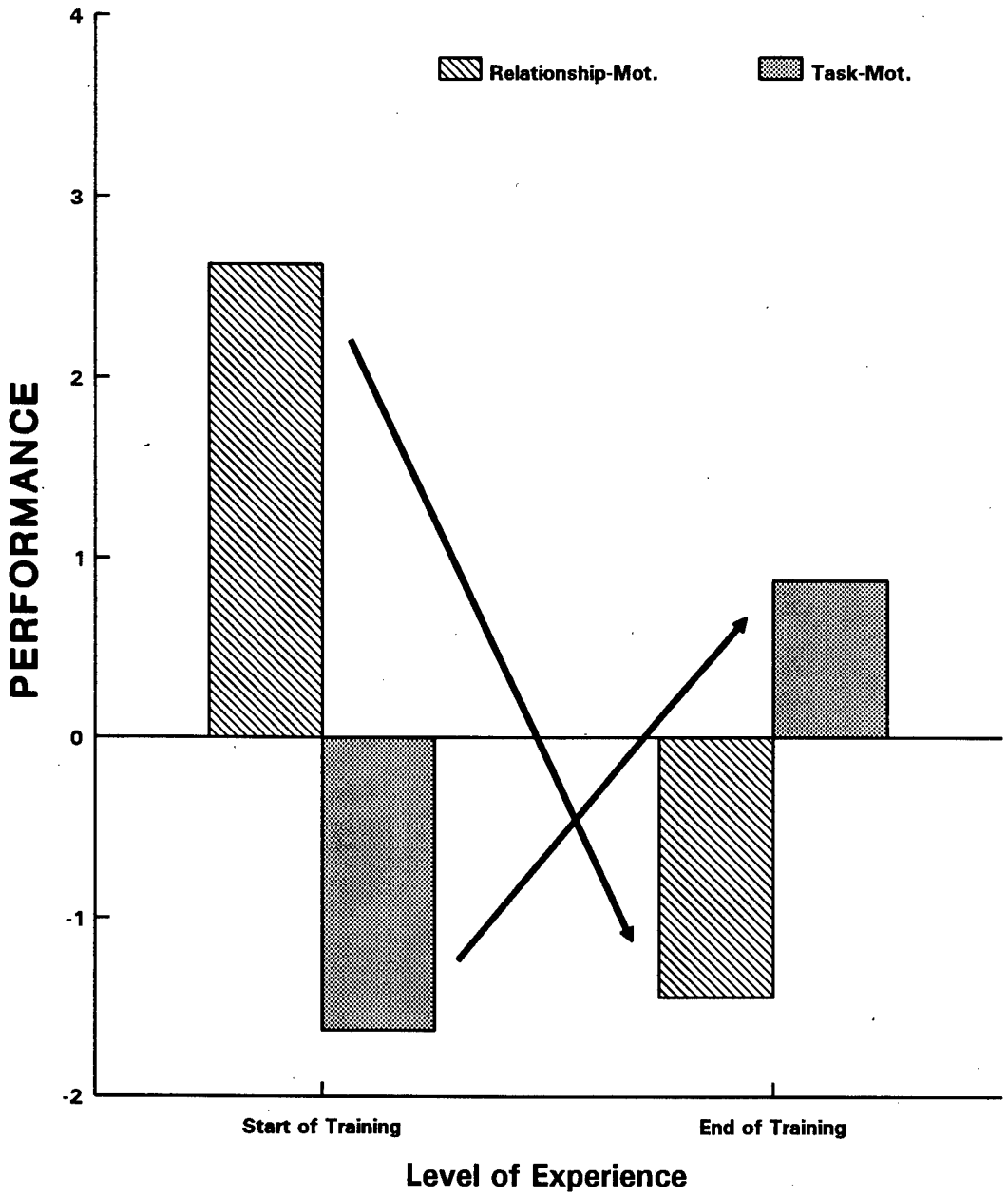

Figure 2. Change in leadership performance as a function of increased experience during the training cycle.

Source: Fiedler, Bons & Hastings, 1973

APPENDIX

Empirical Tests.

Increasing stress for more effective use of experience. The feasibility of increasing the utilization of leader experience by increasing the level of stress was demonstrated in recent laboratory experiment (Murphy & Macaulay, 1992) in which 160 3-person groups of college students performed decision-making tasks. The study showed that a relatively small increase in experimentally induced stress (having the teams observed) led to an increaased contribution of previous leadership experience to the performance on a team decision task than was the case under less stressful conditions.

Increasing the utilization of leader intelligence. The practical value of increasing intellectual functioning by means of stress-reduction training has recently been demonstrated in a field experiment conducted in collaboration with the Officer Candidate Schools of the Washington and Oregon State National Guard (Link, Jacobs & Fiedler, 1992). Officer candidates were given three 2-hour training-sessions in such techniques as progressive muscle relaxation, breathing exercises and cognitive restructuring. The training program increased the correlation between intelligence and performance to a significantly greater degree than was the case in a comparable control group, indicating a more effective utilization of the trained candidates' intellectual abilities. Thus, leaders whose training made them-less vulnerable to stress also made more effective use of their intellectual abilities.

Increasing the utilization of leader expertise. As mentioned earlier, if the leader's intellectual abilities or expertise are to effect performance, it is necessary that the leader's plans and decisions must be communicated to the group. This communication typically takes the form of directive behavior and instructions to group members (Blades & Fiedler, 1976).

A laboratory experiment, using college students, was conducted by Murphy, Blyth & Fiedler (1992). The group's task consisted of ranking 15 objects which were supposedly salvaged after a plane crash in the middle of a desert. The groups were to rank these items on the basis of their value for surviving in the desert and returning to civilization. Performance was measured by agreement of the group's ranking with the ranking of items by desert survival experts. Half the leaders were instructed to behave in a directive manner and half in a nondirective manner. In addition, half of the directive and half of the nondirective leaders were given a brief training session to provide task-relevant knowledge (TRK) about the general value of various items for desert survival. The other leaders received non-relevant information.

Figure A-1 shows the average performance of groups in the four conditions. The study demonstrated that the leader's expertise increased group performance only for leaders who were also directive in their leadership style. In a companion study all group members (but not leaders) were provided with tasks-relevant knowledge; half of the leaders were again instructed to be directive and the other half non-directive. As Figure A-2 shows, the training given to group member contributed to performance only when the leaders were non-directive.

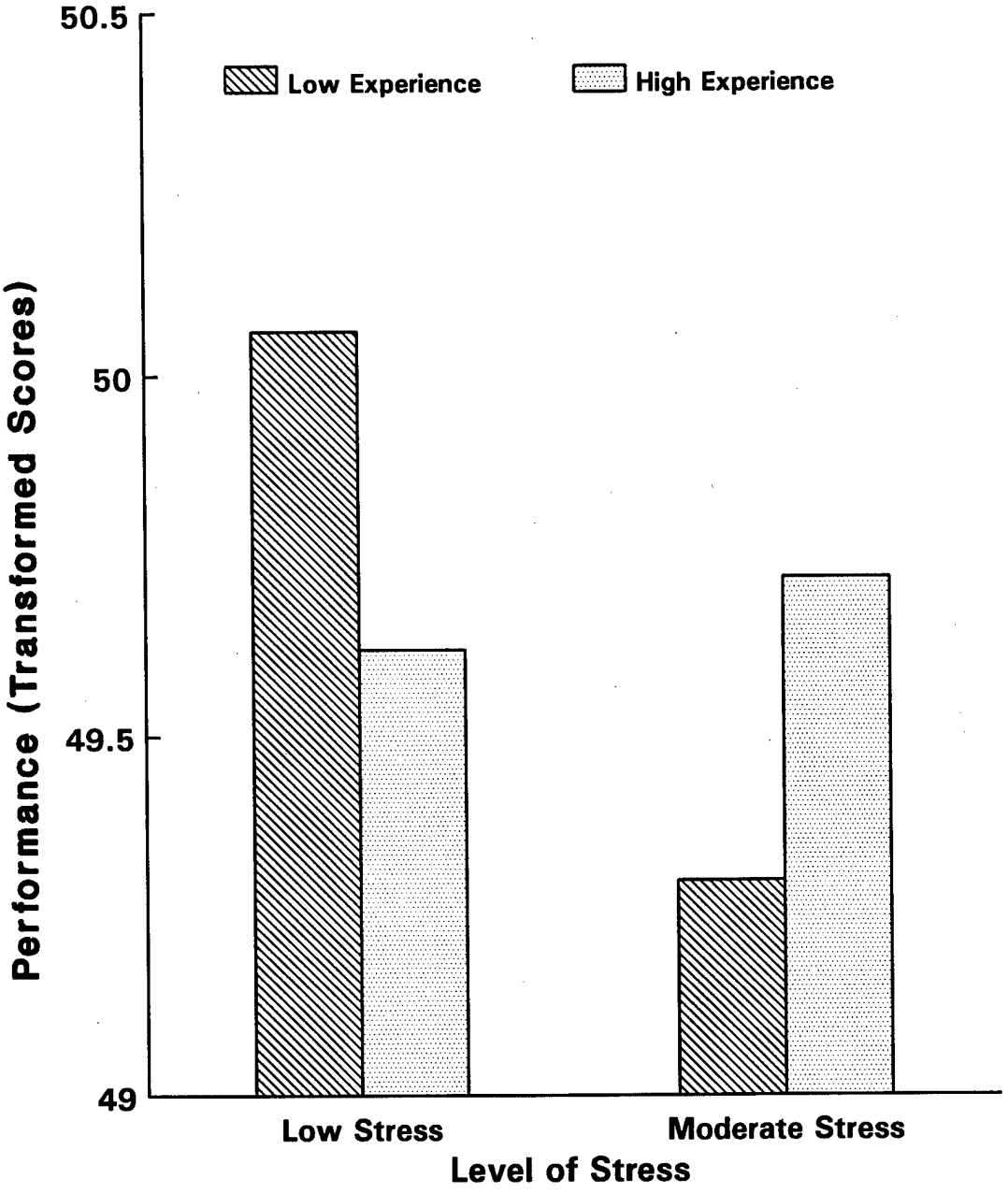

Figure A-1. Effect of induced stress on utilization of leader experience.

Source: Murphy & Macaulay (1992)

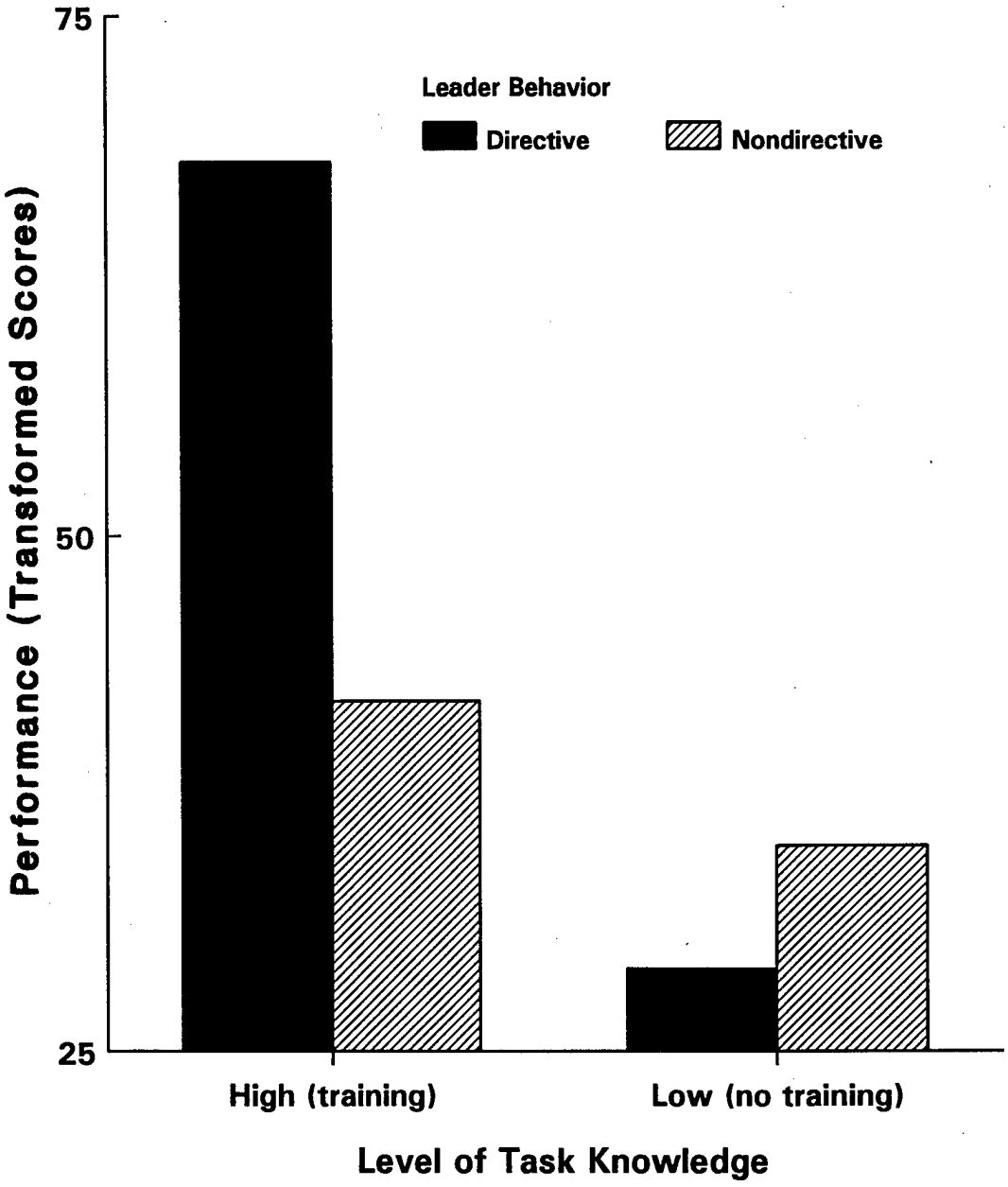

Figure A-2. Group performance as a function of leader's task knowledge and leader's behavior.

Source: Murphy, Blyth & Fiedler (1992)