The Role of Relevant Experience and Intellectual Ability in Determining the Performance of Military Leaders: A Contingency Model Explanation

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Abstract

A field study involving 79 army combat officers in middle echelon leadership positions was conducted to evaluate the role of relevant experience and intellectual ability in predicting leadership performance. Biographical and organizational data were the primary measures used to ascertain the relevance of leader experience. This represents a departure from previously used methodology which considered only the leaders' organizational tenure in determining experience levels. Results shed light on the components of Fiedler's Contingency Model of Leadership Effectiveness supporting the hypothesis that task- and relationship-motivated leaders make effective use of their experience only in situations which match their leadership personality. The study also suggests a plausible relationship between the leader's cognitive resources and leader behaviors.

There is a widespread belief that experienced leaders bring job relevant skills, knowledge, and judgment to their positions. The term, experience, is defined in Webster's dictionary as "...knowledge, skill, or practice derived from participation in, or direct observation of an activity..." (Gove, 1971). This definition presupposes that as an individual gains experience, he or she also gains knowldege or skills which are then transferable to accomplish subsequent tasks. Experience, in other words, is generally viewed as a valued resource to be brought to the new position or acquired during the leader's tenure. It is one of the most widely used predictors in judging an individual's suitability for a job or for a promotion.

Although experience is generally thought to enhance performance, the empirical evidence does not support this view. In a report of findings from three experimental tests and seven field studies, Fiedler (1970) failed to find a signficiant relationship between years of organizational service and leadershp performance. These results (median correlation = -.12) indicated that length of service in an organization did not contribute positively to group performance.

In an effort to explain these counter-intuitive findings, Fiedler and his associates investigated the moderating effects of the situation on the use of leadership experience. Their research concentrated on the effects of interpersonal stress between the leader and his or her superior. This study extends that research and investigates the role of situational favorableness as it affects task- and relationship-motivated leaders differentially.

Method

Subjects. This study investigated the effects of experience on the performance of middle-echelon leaders of an Army infantry division. It involves the company commanders and staff officers of ten combat battalions. These subjects were drawn from a population of army officers occupying positions which normally call for the rank of captain. Restricting the sample to this grade makes it much less likely that experience is confounded with previous performance. A total of 84 officers participated in the study: 44 company commanders and 40 battalion staff officers. With the exception of seven lieutenants serving as staff officers, all subjects held the rank of captain.

Tests and Measures

Experience. Researchers have most commonly defined experience as time in a particular organization, time in a specific position, or time in a general occupational field. As a main effect, these measures have not yielded a consistent relationshp between years of "experience" in an organization and managerial or leadership effectiveness. These surprising, non-obvious results suggest that time may not be an adequate measure of a leader's experience.

In essence, a person's experience level encompasses what he or she has done, where the person has done it, and for how long. Although experience is routinely discussed in terms of time spent doing something, it is important to realize that experience is a psychological, not a physical, dimension. Even though time may be necessary to gain experience, it may not be sufficient to capture the sum total of knowledge and skills a person acquires. Time, therefore, should not be considered the sole measure of experience.

Each subject in this study completed a detailed biography of his work and training experiences since entering the army. Independent, expert judges, blind to the identity of the subjects, assessed each officer's experience level. The interrater correlation, a measure of the reliabiity of the method, was.81 ($p < .001$).

Intelligence. A modified version of Horn's Crystallized (Gc) and Fluid (Gf) Intelligence Sampler (Horn, 1968) was administered. Crystallized intelligence has been related to scores on complex tasks and common cultural activities. It is correlated with formal education and seems to measure what a person has learned over time. Fluid intelligence, or on the other hand, correlates with speed of learning in novel situations. It appears to measure person's ability to solve problems which are unique or have not been previously learned. The two intelligence measures, Gc and Gf, are relatively independent, with inter-correlations ranging from .17 to .53 and test-retest reliabilities between .75 and .87 (Horn, 1968).

Leader Performance. The performance of each subject was evaluated by the superiors in his immediate chain of command. The raters were asked to complete a 49 item, 8-point Likert type scale on each subject. The scale was designed to measure effectiveness in such areas as task performance, communication, subordinate development, decision making, and interpersonal relations. Scores were standardized for each rater permitting comparisons among officers from different organizations. The substantial agreement between raters ($r = .62$, $p < .001$) permitted the ratings to be summed. The overall, standardized performance score had a high degree of reliability (Cronbach's alpha - .94).

Leadership Style. The leadership motivation of the subjects in this sample was measured by the Least Preferred Co-worker (LPC) scale (Fiedler, Chemers, and Mahar, 1976). The LPC score is interpreted as a measure of the leader's motivational hierarchy. Leaders with relatively low LPC scores are considered to be task-motivated while those with high LPC scores are considered to be relationship-motivated. The latter primarily desire a cohesive, pleasant group. Therefore, interpersonal relations receive the leader's attention when the situation is tense or his relations with the group members seem to be tenuous. However, when the goals of being related are satisfied, the high LPC leader shows concern for the task relevant aspects of the group's activities. Conversely, the major objective of the task-motivated leader is to accomplish the task and thereby earn self-esteem by doing a good job. When this need is being satisifed, he seeks friendly, good interpersonal relations with his co-workers (Fiedler, 1972).

In this sample, LPC scores ranged from 18 to 108 with a mean of 61.23 and a standard deviation of 17.15. The sample was divided into two groups; those scoring 63 and below were considered to be primarily task-motivated, those scoring 74 or higher were classified as relationship-motivated. This split resulted in a loss of 5 subjects with LPC scores between these standard cutoff points.

Situational Control. Fiedler's Contingency Model postulates that the performance of leaders is dependent upon two interacting factors, the leader's style and the situational control. Situational control is the degree to which the situation provides the leader with influence, control, and power. This research investigated the impact of role ambiguity, uncertainty, and stress on the leader's perception of situational control.

Stress. The degree of leader-perceived job stress was assessed by a 23 item scale designed to distinguish stress from five theoretical job dimensions: role conflict, role ambiguity, organizational decision-making, interpersonal competition, and unethical competition. Contrary to the a priori attempt to develop five distinct stressors, this scale had a reliability coefficient of .92 ($p < .001$), indicating it is unidimensional and quite reliable.

Results

The preception of task structure is positively related to the leader's experience level and negatively related to the leader's intelligence ($r=.26$, $p < .05$ and $r = -.33$, $p < .01$ respectively). More experienced leaders view their responsibilities as less complex, more structured, and are able to determine when they have been properly accomplished. More intelligent leaders, on the other hand, seem to interpret their duties as being more complicated, less precise, and having more than one correct solution. By seeing more facets of the problem and more alternative solutions, the intelligent leader is confronted with situations which they believe require more information and resources.

More intelligent leaders perceive a more stressful relationship with the superior ($r = .29$, $p < .01$) and more stress resulting from their job ($r = .26$, $p < .05$). This may be interpreted by the notion of cognitive complexity. More intelligent leaders view their environment and interpersonal relationships as more complex. For these leaders, there are far fewer "black and white" situations and many more circumstances in which the solution depends upon a number of alternatives.

The interrelation between stress and situational control variables is quite interesting and provides support for the concept posited by Fiedler (1982) that stress reduces a leader's control over his situation. Leaders who report good relations with their subordinates report less stress resulting from thier job than do leaders with poor leader-member relations ($r = -.33$, $p < .01$). This makes perfectly good sense if one takes the position that discharging one's duties through the actions of subordinates is a primary aspect of leadership. If you trust your subordinates it is less likely that you will view your job as stressful. In addition, there is a significant negative relationship between task structure and job stress ($r = .28$, $p < .05$) and between task structure and boss stress ($r = -.26$, $p < .05$) which permit alternative explanations. Leaders who perceive their jobs as complex also view their work environment as more stressful. Thus, complex jobs may contribute to the perception of stress or stress on the job makes one's leadership situation seem less certain and therefore more complex. Whatever the explanation, in this sample, at least, situational control was related to the perceived stressfulness of the environment. It is very important to note that job stress is not related to rated leadership performance. Equally important, the stress level was not a result of the performance evaluation.

Leader-member relations are unrelated to the leader's experience level. Having experience is not a prerequisite for having good relations with one's subordinates. Although one would expect more experience leaders to have more power, authority, and influence, that does not appear to be the case in this sample. Power in the military is significantly related to the leader's official position. Commanders reported significantly more position power than do the staff officers ($F = 19.79$, $p. < .001$).

Since we are relatively certain that leader behaviors are a result of the interaction of the leader's personality and the situation, it seems that the next logical step is to investigate the impact of the situation on the use of experience and intelligence by task- and relationship-motivated leaders. This will provide clues as to why the more experienced leaders excel in specific situations but not in others. It was hypothesized that relevant experience will correlate with leadership performance for task-motivated leaders in high control situations and for relationship-motivated leaders in moderate control situations. In other words, in situations which "match" the leader's style, the leader is able to take advantage his previously learned skills and abilities. The date from this study provide ample support to the concept that leader's use their experience in situations which match their style.

According to the Contingency Model, task-motivated leaders perform best in situations of high control. As predicted above, it is in this situation that the task-motivated leaders' experience correlates significantly with rated leadership performance ($r = .52$, $p < .01$). Conversely, the high LPC leaders performed poorly in this situation. Note that it is in this situation that their experience is not related to performance ($r = -.07$, n.s.). In moderate situations, the relationship-motivated leaders performed best. And, as hypothesized, in this moderate control situation the high LPC leaders' experience was positively related to performance ($r = .45$, $p < .05$) while the low LPC, task-motivated, leaders' experience was unrelated ($r = .10$, n.s.).

Conclusion

As stated earlier, the major contribution of this study is the finding that task- and relationship-motivated leaders make effective use of their experience in situations which match their leadership personality and misuse their intelligence in situations which do not.

The results of this study support the Contingency Model and provide new insight into the reasons why certain leaders excel in some situations and perform poorly in others. Research has shown that, although low LPC leaders are primarily motivated by task accomplishment, when they are in high control situations they are able to focus on their secondary motivation which is good interpersonal relations with the group members. As a result, in these situations task-motivated leaders behave in a considerate, supportive manner. In moderate situations, the high LPC leaders emphasize their primary motivation, need for relationships. Therefore, they, too, display open, considerate, participative behaviors in situations which match their leadership style.

The major theoretical implication of this information is that we may be able to make a link between cognitive resources, experience and itelligence, and leader behavior. In circumstances in which the leader behaves in a considerate manner leaders tend to use their experience. It seems that experience may be related to interpersonal activities. Experience may tell us how to treat others and act interpersonally. Intelligence, on the other hand, is significantly related in situations in which the leader tends to focus on the task relevant aspects of the job and ignores the interpersonal aspects. For the low LPC leader, this occurs in the moderate situation. For the relationship-motivated leader, it occurs in the high control situations. In conclusion, it appears that experience is related to interpersonal activities and intelligence is related to task activities.

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