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NOTES AND REFERENCES

1. A report of OCLC distributed at the February, 1986, meeting of its Users Council, of the origin of records in the OCLC database in January 2, 1986, revealed that only 2,644,940 out of a total of 12,721,827 records were contributed by LC.
2. The standard cataloging rules are given in the *Anglo-American Cataloguing Rules*, 2nd edition, edited by Michael Gorman and Paul W. Winkler (Chicago: American Library Association, 1978), plus 1983, 1984 and 1985 revisions, and subsequent updates appearing in the Library of Congress publication, *Cataloging Service Bulletin*.
3. Ruth Hafter, *Academic Librarians and Cataloging Networks: Visibility, Quality Control, and Professional Status* (New York: Greenwood Press, 1986), 63-78.
4. Interpretations of the cataloging rules by the Library of Congress (LCRIs) are published in its periodical publication *Cataloging Service Bulletin*. LCRIs may also be found in privately prepared and published compilations, and indexes to LCRIs are available, too.
5. *Anglo-American Cataloguing Rules*, 15. No minimal-level records were included in the study, partly because definitions of "minimal-level" vary and what is considered acceptable differs from place to place and partly because these records are clearly identified as less-than-full standard.
6. Standard descriptors are defined to mean subject headings from the *Library of Congress Subject Headings*, 9th ed. Washington: the Library, 1980, and its updates; or, properly identified and coded alternatives.
7. Standard classification numbers are defined to mean *Library of Congress* or *Dewey Decimal* classification numbers, assigned according to the latest edition of either classification system.
8. Errors in field tags, indicators and subfield codes were judged according to published OCLC-MARC or RLIN-MARC formats for printed monographs, as appropriate.
9. David S. Walonick, *StatPac: Statistical Analysis Package for the IBM*, version 6.0 (Minneapolis: Walonick Associates, 1986).
10. Indeed, the presence of the same error in both records in a pair led to the discovery and subsequent exclusion of a number of tape loaded records—originally input into one database and later sent by magnetic tape to be loaded into the other—that had been overlooked during the first examination of the record pair.
11. The investigators counted the errors found in the edition area, but, since editions subsequent to the first were excluded from the study, errors in this area were few, as expected.
12. When more than one form of an author's name appears in the catalog, his/her works then are dispersed under two or more heading forms. Searching either form alone will not retrieve all the works, since links do not exist between forms to direct searchers to the variants.
13. *Anglo-American Cataloguing Rules*, rule 1.4D2., p. 33.
14. Arlene G. Taylor and Charles W. Simpson, "Accuracy of LC Copy: A Comparison between Copy That Began as CIP and Other LC Cataloging," *Library Resources and Technical Services* 30 (Oct./Dec.): 375-387. The researchers reported approximately 20 percent of the LC records studied contained significant errors; regarding shared cataloging, they said it had "smaller proportions of significant errors, even though they had higher proportions of errors overall" (p. 385).

THE LIBRARY LEADERSHIP PROJECT: A TEST OF LEADERSHIP EFFECTIVENESS IN ACADEMIC LIBRARIES

Eugene S. Mitchell

Almost 20 years ago, one writer commented that "we know very little about what makes a supervisor effective or why a supervisor is effective in one situation but not another" (Hill, 1969). About ten years later, James MacGregor Burns (1978), in his Nobel Prize-winning book, *Leadership*, described the same situation. "Leadership is one of the most observed and least understood phenomena on earth."

The situation does not appear to have improved much since Burns's lament. What's more, the lack of understanding extends to the field of librarianship. Dragon (1976) has commented that "Leadership, although recognized by management theorists as an element in the management process, is generally ne-

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glected in the literature of library administration. Little is known about the leader behavior pattern of library administrators."

Libraries seem to be excellent places to study leadership. Although there are formal leadership positions in libraries, many non-administrative librarians assume leadership positions in task forces, committees and the like. There are a variety of both structured and unstructured tasks to be supervised. Staff members discharge duties with relative independence; performance depends largely on their own abilities and skills. Finally, libraries are complex organizations with two related but different dimensions: a nonprofessional dimension providing support services by clerks and pages and a professional one providing information services by highly educated and experienced professionals.

Consequently, there may be a need for various leadership styles within the same organization. This suggests that there is no one *best* way to lead or manage a group. In fact, this is just what much of the research shows. "Some studies have shown that directive, autocratic, managing types of leadership promote effective work performance in some situations. Other studies have shown that permissive, nondirective, human relations-oriented leadership is comparatively more effective under other situations" (Hunt, 1967).

This inconsistency has also been shown in some of the research involving teachers and educational administrators. VanGundy and Haynes (1978) have suggested that different situational requirements for college presidents (for example, president as leader of the institution versus president as leader of an administrative cabinet) will dictate leadership effectiveness and therefore may demand different types of leadership behavior. Reavis and Derlega (1976) have identified studies of teacher effectiveness which have shown that teachers with both "task-oriented" and "person-oriented" leadership styles have positive effects on student learning.

In order to better understand the role of certain variables in the leadership process, the Library Leadership Project was undertaken to examine the relationship between situational factors and the leadership effectiveness of academic library department heads.

MAJOR TRENDS IN LEADERSHIP RESEARCH

Discussions of leadership can be found in the writings of the ancient Chinese and Egyptians, but it was not until the early 1900s that scientific research into the topic began. The research at the beginning of this century first focused on the personality characteristics presumed to set leaders apart from others. This line of research was known as the Great Man Theory. Some of the characteristics which were identified and studied included physical factors (height, weight, age, appearance), fluency of speech, intelligence, self confidence, emotional control, social and economic status, popularity, and prestige. Although some correlations were shown between these traits and effectiveness, this line of research did not

prove to be very fruitful because the relationships discovered (although statistically significant) were weak and of limited predictive value. In addition, longitudinal comparisons of effective and ineffective leaders in identical or similar roles were not conducted. The methodology used instead was to compare the traits of leaders to the traits of followers. Finally, too many inconsistencies and contradictions appeared as researchers tried to develop a universal theory of leadership. Some of the same traits were found in both leaders and followers.

By the early 1950s, researchers had begun to become disenchanted with the trait approach and had begun to study leader behaviors, that is, what leaders actually *do*. A wide variety of activities in which leaders engaged were identified and researchers tried to group them together.

At Ohio State University, two major dimensions were identified: consideration and initiating structure (Fleishman, 1973). Consideration referred to "the extent to which a leader exhibited concern for the welfare of the other members of the group"; initiation of structure referred to "the extent to which a leader initiated activity in the group, organized it, and defined the way the work was to be done" (Stogdill, 1981). The greatest effectiveness was usually achieved when a combination of both factors was present, the actual mix of the two being influenced by situational variables. At the University of Michigan, Likert (1961) also identified two dimensions in effective leader behavior which he distinguished as job-centered and employee-centered. His studies suggested that both sets of behavior improve performance, but that employee-centered behaviors led to better group morale. While suggesting the best ways to lead a group, these models failed to account for the situational variables which must be considered in determining leadership effectiveness.

By the 1970s, the important role played by situational variables in predicting organizational outcomes was realized and led to a situational approach in the study of research. Four of the most prominent approaches are: *Situational Leadership Theory* (Hersey and Blanchard, 1977), which considers the maturity of the group being led; *Vertical Dyad Linkage Theory* (Graen and Cashman, 1975), which concentrates on the formation of relationships between leaders and individual subordinates; *Path Goal Theory* (House, 1971), which suggests means by which the leader can identify paths to convergent organizational and individual goals; and the *Contingency Model of Leadership Effectiveness* (Fiedler, 1967), which proposes an interaction between leader style and the favorableness of the situation for the leader.

THE MODEL

The model used in this study was Fiedler's Contingency Model of Leadership Effectiveness. Fiedler contends that a group's effectiveness is contingent upon "the appropriate match between leadership personality attributes, reflecting his or her motivational structure, and the degree to which the leader has situational

control and influence." There are two basic motivational structures: task motivation and relationship motivation. A task-motivated leadership style satisfies the leader's need to gain satisfaction from performing the task; a relationship-motivated leadership style is oriented toward achieving good interpersonal relations within the work group and satisfies the leader's need to gain a position of prominence.

According to Fiedler, neither style is appropriate in all organizational situations. The nature of the situation for the leader can run from very unfavorable to very favorable and leadership style can run from task to relationship motivation. Task-motivated leaders perform best in situations which are highly favorable or in those which are highly unfavorable. Relationship-oriented leaders tend to perform best in situations which have only moderate favorableness.

Motivational structure (or leadership style) is determined by an 18-item bipolar adjective scale called the Least Preferred Co-Worker (LPC) Scale in which individuals are asked to rate a co-worker with whom they have worked least well. The assumption is not that the rater's score will necessarily reflect an accurate perception of the least preferred co-worker, but rather that the way in which the rater perceives another will affect his relations with him or her. The LPC score is interpreted as a reflection of the relative motivation toward task versus interpersonal success. A person who describes the least preferred co-worker in a negative way is considered task-motivated. A person who sees the least preferred co-worker in a relatively more positive way is considered relationship-motivated.

Situational control is the moderating variable in the relationship between leadership style and effective performance. It refers to the degree to which the dimensions of the group situation give the leader power and influence over the group.

Fiedler's Model considers three situational dimensions confronting the leader. In order of importance, they are: (a) leader-member relations, the degree of trust and respect group members have for their leader; (b) task structure, the degree of structure in the task to be performed by the group; and (c) position power, the degree of formal authority and power within the leader's job. The particular mix of these three variables determines situational control.

In the Contingency Model, these variables are dichotomized to provide eight categories or octants of situations ranging from highly favorable to highly unfavorable for the leader. Octant 1 is the most favorable and Octant 8 is the least. See Table 1.

Since its appearance, there have been numerous test and extensions of the Model, but none in libraries. The validation studies have almost all been laboratory experiments. Extensions of the Model have been attempted for research firms, supermarket chains, manufacturing firms, hospitals, classrooms, Army training classes, and volleyball teams. Applications of the Model are prolific and attempts to validate it have presented evidence which is not uni-

Table 1. Octant Characteristics

Octant	Situation Classification				Situation Favorableness
	Leader-Member Relations	Task Structure	Position Power	Motivation	
1	Good	High	Strong	Task	Most Favorable
2	Good	High	Weak	Task	
3	Good	Low	Strong	Task	
4	Good	Low	Weak	Relationship	
5	Poor	High	Strong	Relationship	Least Favorable
6	Poor	High	Weak	Relationship	
7	Poor	Low	Strong	Relationship	
8	Poor	Low	Weak	Task	

formly supportive and the Model is still somewhat controversial. It is still important, therefore, to investigate its descriptive and predictive ability.

PURPOSE

The primary purpose of this study was to investigate in academic libraries the validity of Fiedler's Model in predicting the relationships between leader motivation and leadership effectiveness under varying conditions of situational control. A second purpose of this study was to determine the situational favorableness in various specific library departments, namely, acquisitions, catalog maintenance, cataloging, circulation, collection development, processing, and reference. By analyzing the situational variables in these departments, the intent was to place each one along what can be called an "advantage for the leader" continuum represented by the line on the right of the table above. In other words, could library departments in an academic library be placed in specific Fiedler octants?

METHOD

Four hypotheses were developed to test Fiedler's Model:

1. There is no significant difference in the mean situational control for the library departments being examined.
- 2a. Task-motivated leaders are not significantly more effective than relationship-motivated leaders when the leader-member relations are

good and the leader's position power is strong regardless of the amount of task structure.

- 2b. No significant interaction effect exists between leadership style and task structure when leader-member relations are good and the leader's position power is strong.
3. There is no relationship between the four combined independent variables of leader motivation, leader-member relations, task structure, and position power and the dependent variable of effectiveness.

The field study approach was chosen for several reasons. Actual managers and their associates could be examined in real-life situations. Since constraints did not allow control over the assignment of subjects to groups or over independent variables, the situation demanded *ex post facto* research. Finally, the real test of any theory is its ability to withstand the test of validation under real-life field conditions.

The units of analysis in this study were academic library department heads responsible for acquisitions, catalog maintenance, cataloging, circulation, collection development, processing, and reference. A total of 278 department heads were randomly selected from 137 U.S. academic libraries. The libraries were affiliated with schools that shared the following characteristics: (1) medium to large enrollment (5–20,000); (2) four-year colleges and universities both with and without graduate work; and (3) overall entrance difficulty from moderate to most difficult, meaning more than 75 percent of freshman were in the top 50 percent of their high school class and scored over 900 on the SAT or over 18 on the ACT. Up to 85 percent of the applicants were accepted. A total of 209 usable responses were received for a response rate of 75 percent.

All of the independent variables in this study were measured using scales developed by Fiedler. The leader's motivational structure was determined by using the Least Preferred Co-Worker Scale. This scale and another designed to measure leader-member relations were administered to the department heads being studied. Other scales to measure task structure and position power were completed by the immediate supervisors of the managers being studied.

The dependent variables of leader and group effectiveness were measured using two scales. One, developed by Bare (1978), determined *group* effectiveness (the usual approach). The second scale, developed by Morse and Wagner (1978), determined *managerial* effectiveness (a better surrogate for leadership effectiveness than group performance). This second scale was used to rate a department head's effectiveness by identifying and judging observable actions and behavior leading to the accomplishment of the organization's goals. The instrument was concerned with six managerial roles: managing the organization's resources and its environment, organizing and coordinating, information handling, providing for growth and development, motivating and conflict han-

dling, and strategic problem solving. Both effectiveness scales were administered to the immediate supervisors.

The data to test the first hypothesis consisted of the scores on the situational control scales (Leader-Member Relations, Task Structure, and Position Power). The data were analyzed using a one-way analysis of variance in order to see if the mean scores on each scale and the mean total (i.e., situational control) scores of all the scales for each department were significantly different from one another.

The data to test Hypothesis 2 consisted of the scores on the LPC, Task Structure Rating, Managerial Performance Effectiveness, and Group Effectiveness Scales. The data were analyzed using analysis of variance to determine any significant main or interaction effects.

To test Hypothesis 3, scores from all the scales were used. Step-wise multiple regression analysis was used to determine if leader motivation, leader-member relations, task structure and position power were useful predictors of leadership effectiveness.

RESULTS

The first step in operationalizing the Contingency Model was to determine the motivational structure of the department heads. On the version of the LPC scale used in this study, the minimum score obtainable was 18 and the maximum score was 144. Scores of 64 or above were considered high indicating a relationship motivation on the part of the leader while scores of 57 or below were considered low suggesting a task-motivated leader. For all department heads, the mean score was 62.0, the median was 61.0; and the standard deviation was 22.2.

The three intermediate variables of situational control were then determined in order to describe how favorable or unfavorable the situation was for the leader. The degree to which the group supported the leader was determined by using the Leader-Member Relations Rating Scale. The possible scores obtainable ranged from 8 to 40. A score of 30 or above indicated good leader-member relations and a score of below 20 indicated poor relations. The degree to which the task was clearly spelled out by objectives, procedures, and specific guidelines was determined by the Task Structure Rating Scale. The minimum score obtainable was 0 and the maximum was 20. A total of 6 or below indicated a task low in structure; a score of 14 or above indicated a highly structured task. The degree to which the leader's position gave him or her authority to reward or punish subordinates was determined by the Position Power Rating Scale. The minimum score obtainable was 0 and the maximum was 10. A score of 7 or more indicated high position power and a score of 3 or below denoted low position power.

The means, medians and standard deviations for these variables are shown on Table 2. The results suggest that the library activities selected for this study represent favorable leadership situations. Overall, the department heads had

Table 2. Situational Control Results

Variable	Range of Scores	Mean	Median	Standard Deviation
Leader-Member Relations	8-40	33.8	34.0	4.8
Task Structure	0-20	12.7	13.0	4.6
Position Power	0-10	8.2	8.0	1.8

good relations with the members of their groups and possessed strong position power. Although some faced structured tasks and others unstructured, the combination of these results placed all the department heads in highly favorable octants.

The dependent variable of leadership effectiveness was determined in two ways. One examined a set of activities identified with good managerial performance and was designed to focus on the individual leader. The second examined the performance of the groups led by the department heads. The latter approach is the one traditionally followed by Fiedler and tests of his Model. The former was included because it was assumed to more realistically examine the behavior under study, namely, leader behavior rather than group behavior.

The minimum score obtainable on the Managerial Effectiveness Scale used to determine the effectiveness of the individual under study was -204 and the maximum was +204. Higher scores suggested greater effectiveness. For all department heads, the mean score was 96.2, the median was 114.0, and the standard deviation was 66.2.

The minimum score obtainable on the Group Effectiveness Scale used to determine the effectiveness of the group in the performance of its assigned task was 9 and the maximum was 45. Once again, a higher score suggested greater effectiveness. For all department heads, the mean score was 35.1, the median was 36.0, and the standard deviation was 6.1.

Hypothesis 1

The purpose of this hypothesis was to determine whether academic library departments could be arranged along Fiedler's continuum.

ANOVA testing of Hypothesis 1 showed significant differences in the amount of situational control among the seven library tasks under study. However, when each of the situational control variables were tested individually, a significant difference was found only among task structure scores. See Table 3.

The first hypothesis was supported. It was possible to place all of the departments into one of two of Fiedler's octants. Acquisitions, Catalog Maintenance, Cataloging, Circulation, and Processing were all Octant 1 situations, that is, they had good leader-member relations, high task structure, and strong position power. Collection Development and Reference were Octant 3 situations. They

Table 3. Summary of Analysis of Variance for Situational Control Variables

Source of Variation	df	Sum of Squares	Mean Square	F
Situational Control:				
Between departments	6	1868.75	311.46	5.58*
Within departments	202	11267.68	55.78	
Total	208	13136.43		
Leader-Member Relations:				
Between departments	6	225.22	37.54	1.65
Within departments	202	4608.82	22.82	
Total	208	4834.04		
Task Structure:				
Between departments	6	875.04	145.84	8.55*
Within departments	202	3446.84	17.06	
Total	208	4321.88		
Position Power:				
Between departments	6	19.16	3.19	0.95
Within departments	202	678.63	3.36	
Total	208	697.79		

* $p = .0001$

had good leader-member relations, a low amount of task structure, and the leader possessed strong position power. Both Octants 1 and 3 are considered favorable situations for the leader.

It was not surprising that departments clustered in two octants. This is the usual pattern found in this type of research. It would be highly unlikely, if not impossible, to find all octants in the same work situation. Furthermore, it was suspected that task structure would be the differentiating variable. Catalog maintenance, cataloging, acquisitions, and circulation are much more routinized (and therefore more structured) than tasks like collection development and reference.

The fact that leader-member relations and position power showed no significant differences was also not surprising. People tend to accept legitimate authority and appointed leaders are generally likely to be at least accepted and perhaps even liked. With respect to position power, it is probable that all department heads have some say in retention and promotion decisions. Therefore, they have strong position power.

The significant difference among task structure scores was also anticipated. The tasks performed in Octant 1 departments are all carried out to more or less detailed standard operating procedures. The tasks, therefore, are structured. In the context of the Model, they represent the most favorable leadership situation.

The tasks performed in Octant 3 departments are more creative, resulting in a situation not commonly found in real-life except in such organizations such as research or planning groups. The creative performance required in these situations cannot, generally speaking, be commanded. The significant difference among task structure scores supported the assumption that task structure would be the variable by which academic library task groups could be ordered along the favorableness continuum.

Hypothesis 2

The purpose of this hypothesis was to determine if one leadership style was more effective than another. Since Octants 1 and 3 represent favorable situations, a main effect was anticipated between leadership style and effectiveness in which task-motivated leaders would be more effective than relationship-motivated leaders. An interaction effect was also expected between style and task structure.

Because the differences among the department scores for leader-member relations and position power were not significant, these variables were not considered in the testing of hypothesis 2. Since Octants 1 and 3 represent favorable situations, a main effect was anticipated between LPC and effectiveness in which the task-motivated leaders would be more effective than the relationship-oriented leaders. An interaction effect was also expected between LPC and task structure.

To analyze the data, a 2x2 factorial design between LPC (high and low) and task structure (structured and unstructured) was used. Analysis of variance with leader LPC treated as a dichotomous factor was performed. Both the manager's effectiveness and the group's effectiveness were used as the dependent variables.

The median-split method was used to distinguish between high- and low-LPC leaders. That is, department heads with scores above 61 were considered high-LPC, relationship-motivated leaders, while those with scores below 61 were considered low-LPC, task-motivated leaders.

Task structure scores were also split at the median to distinguish between structured and unstructured tasks. Those scores above 13 were assumed to indicate structured tasks; scores below 13 were assumed to indicate unstructured tasks.

As a result of splitting scores at the median, 28 department heads were deleted and not considered in testing Hypothesis 2. The results of the analysis of variance are shown in Table 4.

No main effect was found between style and effectiveness but a main effect was found between task structure and effectiveness. No significant interaction effect was found between style and structure when managerial effectiveness was used. No interaction effect at all was found between style and structure when group effectiveness was used.

Table 4. Summary Table for Two-Dimensional Analysis of Variance for Managerial and Group Effectiveness Scores

Source of Variation	df	Sum of Squares	Mean Square	F
<i>Managerial Effectiveness</i>				
Main Effects		(74956.29)		
LPC	1	11551.29	11551.29	2.84
Task Structure	1	61550.42	61550.42	15.16*
LPC x Task Structure	1	1854.57	1854.57	0.46
Residual	177	718824.76	4061.16	
Total	180	793781.05		
<i>Group Effectiveness</i>				
Main Effects		(419.83)		
LPC	1	95.63	95.63	2.56
Task Structure	1	361.75	361.75	9.69**
LPC x Task Structure	1	0.00	0.00	1.00
Residual	177	6609.38	37.34	
Total	180	7029.20		

* $p = .0001$

** $p = .002$

These findings provide no support for the role that LPC is supposed to play in determining effectiveness. Effectiveness does not appear to be dependent upon any relationship between LPC and task structure, but rather upon task structure alone. The data obtained in testing Hypothesis 2 for this study suggest that differences in leadership effectiveness are attributable to task structure alone and that LPC and the interactions between the independent variables play a small role, if any. Nevertheless, the fact that task structure had an effect supports the idea that *some* situational variables have an impact on leadership effectiveness.

Hypothesis 3

The aim of this hypothesis was to take a closer look at the dependent variables to see what effect, if any, each one had on effectiveness. This would determine whether the situational variables actually impact on a situation in the way Fiedler suggests, namely, leader-member relations twice as much as task structure and task structure twice as much as position power.

Because there is some overlap in the contribution of each of the independent variables, stepwise multiple regression analysis was used to test Hypothesis 3. The assumption is that a knowledge of all the independent variables provides for

a better job of predicting leadership effectiveness than knowledge of any of those variables taken alone. Multiple regression analysis identifies the best combination of predictor variables.

All variables were treated as continuous and all 209 department heads were included in the test of Hypothesis 3. The minimum significance level considered was .1500. The results of the analysis are shown in Table 5. This table shows that the variables of task structure, position power, and LPC (in that order) controlled almost 20 percent of the total variance in managerial effectiveness. Task structure and position power controlled 13.4 percent of the total variance in group effectiveness.

Although these are meaningful amounts of variance to account for, it should be noted that between 80 percent and 87 percent of the variance in effectiveness

Table 5. Summary Table for the Analysis of Regression for Managerial and Group Effectiveness Scores

Source of Variation	df	Sum of Squares	Mean Square	F	R Square
<i>Managerial Effectiveness</i>					
Task Structure	1	119909.09	119909.09	31.40*	.1317
Residual	207	790584.71	3819.25		
Total	208	910493.80			
Task Structure and Position Power	2	173784.61	86892.30	24.30*	.1909
Residual	206	736709.19	3576.26		
Total	208	910493.80			
Task Structure and Position Power and LPC	3	181734.72	60578.24	17.04*	.1996
Residual	205	728759.08	3554.92		
Total	208	910493.80			
<i>Group Effectiveness</i>					
Task Structure	1	761.83	761.83	22.91*	.0996
Residual	207	6883.79	33.25		
Total	208	7645.62			
Task Structure and Position Power	2	1027.61	513.80	15.99*	.1344
Residual	206	6618.01	32.13		
Total	208	7645.62			

* $p = .0001$

still remains unexplained. This obviously suggests that other variables relevant to leadership effectiveness exist.

Contrary to expectations based on Fiedler's Model, the degree of task structure was the variable most strongly related to effectiveness. Position power also played a major role since it increases the amount of controlled variance by 3.5 percent for group effectiveness and by almost 6 percent for managerial effectiveness.

LPC played a minor role in determining managerial effectiveness, since it increased the amount of controlled variance by less than 1 percent. It failed to play any significant role in accounting for the variance in group effectiveness.

DISCUSSION

Little support was found for Fiedler's Model in academic libraries. However, there do appear to be situational variables which can predict effectiveness. There is strong evidence to show that task structure does, and so (perhaps) does position power. Certainly there are others since task structure and position power account for only 13.4 percent of the variance. Furthermore, the nature of leadership situations in academic libraries was illuminated. They are favorable with good leader-member relations and strong position power, but there is enough difference among task structure to affect performance.

The Library Leadership Project was significant for several reasons. First, it investigated the external validity of the Contingency Model as it applies to academic libraries.

Secondly, it study examined the Model in coacting groups. Much of Fiedler's research has dealt with interacting groups which are highly interdependent groups requiring the close coordination of several team members in the performance of the primary task. Examples are basketball teams, assembly lines, and orchestras. Library departments more closely resemble coacting groups in which each group member works relatively independently of other team members. Each group member is usually on his or her own and performance depends on individual ability, skill, and motivation. Other examples of coacting groups are bowling teams and department stores.

Thirdly, this study was significant in that it examined the dependent variable of leadership effectiveness directly. Fiedler and most other researchers examining his Model use *group* effectiveness as a surrogate measure for leadership effectiveness. Fiedler readily admits, however, that group performance is not entirely a function of leadership skills. Other factors may also come into play such as personality clashes, bad luck, member abilities, motivation, and organizational support.

Finally, there were some aspects of this study which should have more direct and practical (or policy) effects. This study provided information on an important aspect of organizational behavior to librarians. To the extent that we can under-

stand some of the variables in the leadership function, we can better perform when we are called upon to lead.

The results also broaden our awareness of the effects of different leadership styles in different situations. There are many different types of library tasks, both structured and not, and each may require a different type of leadership. Understanding the nature of the situation can lead to better placement decisions.

Finally, this study provides guidance to library educators who seek to improve the preparation of their students for the assumption of management positions. Better understanding of the theoretical foundations of management will improve the education given to new and potential leaders.

In conclusion, the Library Leadership Project provided information on an important aspect of organizational behavior to librarians. Guided by theory and tested under real conditions, it helped bridge the gap between theory and practice. Where the results agree with the Model, they provide some validity for Fiedler's position; where they disagree, they raise further questions and suggest directions for further research.

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APPLYING STRATEGIC PLANNING TO THE LIBRARY: A MODEL FOR PUBLIC SERVICES

Larry J. Ostler

The 1980s have been a particularly turbulent time for libraries. With declining budgets, academic libraries have been losing support since 1977, and according to Leach (1984: 3) they may never recover this loss. Reduced buying power due to inflationary price increases for library materials during the past ten years has caused substantial declines in serials subscriptions. Book purchases have also declined, but not as sharply as journal purchases. For example, in *Library Issues* (1987: 4) Leach notes:

The declining purchasing power of library budgets in recent years is taking a heavy toll on the quality of library collections. Most academic libraries—forced to confront materials price increases far in excess of either the CPI or their own budgetary increases—are able to obtain fewer book titles. Exacerbating this situation is the necessary reallocation of funds from book to periodical purchasing to cover the unusually high inflation rate in subscription prices.

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