

PERSONALITY RIGIDITY, PATTERNS OF OPERATION
AND LEADERSHIP EFFECTIVENESS OF
SECONDARY SCHOOL PRINCIPALS

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Leadership is a complex social phenomenon. It is a phenomenon which may be related to the personality of the leader and to the situation in which he finds himself. Studies of personality structure have resulted in the development of instruments which are useful as measures of certain personality traits and syndromes. Leadership studies have resulted in the development of instruments which may be used to measure certain facets of leader effectiveness. Other studies of leadership have resulted in the development of instruments which are useful in assessing the working patterns of leaders.

The Instruments Used in This Study

The Rehfisch Personality Rigidity Scale

The scale (consisting of 39 T-F items) was constructed empirically from a pool of 957 "True"--"False" personality inventory items, taken from the MMPI, the California Psychological Inventory (CPI) and a number of items especially constructed for the Institute of Personality Assessment and Research (IPAR) assessments.

The Personality Syndrome Rigidity may best be understood by describing the typical high scorer on the Ri Scale. The typical high scorer would, when compared to the typical low scorer, tend to be: (a) socially introverted and lacking in social presence (defined as poise, spontaneity, and self-confidence); (b) submissive and low in leadership qualities; (c) anxious and self-disparaging, and (d) unoriginal and relatively deficient in cognitive and motivational factors associated with intellectual competence and achievement.

A review of several studies made for the purpose of determining the validity of the Ri scale is reported in the October 1958 issue of the Journal of Consulting Psychology.

The Principal Behavior Check List

The PBCL was developed by Morton Alpren at the University of Florida. It was used as one of the basic instruments for gathering data for the Florida-Kellogg Leadership studies. The original PBCL contained 86 situations. As a part of his dissertation at the University of Florida, Doc Farrar shortened this to 20 situations. The 20 situations included in Farrar's G-D form are those which

best distinguish the high scorers from the low scorers measured on the authoritarian-democratic continuum.

Essentially the PBCL is an instrument which measures the extent to which a principal behaves in a democratic or authoritarian manner, when these two types of behavior are set up as the poles of a continuum.

The Leader Behavior Description Questionnaire

The LBDQ was developed at Ohio State University by the Bureau of Business Research in conjunction with the Ohio Leadership Studies.

The LBDQ has been administered in a wide variety of situations. It has been used in studies of commanders and crews of AF bombers both in training and in combat, studies of both commissioned and non-commissioned officers of the Navy, foremen in industrial plants, executives and regional cooperative associations; college administrators, school superintendents, principals, teachers, and leaders in a wide variety of student and civilian groups and organizations.

The LBDQ measures two components of leadership--initiating structure and consideration. These two components are said to account for from 70 per cent to 80 per cent of the leader's effectiveness.

Leaders have been found to vary considerably in their leadership characteristics. Some of them emphasize group goal achievement even to the detriment of group maintenance. Others will sacrifice goal achievement by putting their emphasis on group maintenance. These styles of leadership do not fall into a neat dichotomy. Rather, combinations of these styles usually occur. These two leader behavior dimensions may be best conceptualized as a pair of co-ordinates with reference to which any leader's behavior may be described.

		CONSIDERATION			
Initiating structure		+ S		+ S	
		- C		+ C	
		- S		- S	
		- C		+ C	
		Mean of consideration			
				Mean of Initiating structure	

Fig. 1 Initiating structure and consideration as co-ordinate dimensions of leader behavior.

Effective leader behavior is associated with high performance on both dimensions.

To score high on both these dimensions a leader must (a) define the role which he expects each member of the group to assume, and delineate patterns of organization and ways of getting the job done, and (b) establish a relationship of mutual trust and respect between the group members and himself.

The Problem

This study of the leadership behavior and personality rigidity of 40 secondary school principals in three Florida counties was concerned with two sets of relationships: (1) The relationships existing between the descriptions of leader behavior obtained by the administration of the Leader Behavior Description Questionnaire (LBDQ), and the descriptions of leader behavior obtained by the administration of the Principal Behavior Check List--Greatest Difference Form (PBCL--GD); and (2) the relationships between personality rigidity of secondary school principals and aspects of their behavior as leaders of their school faculties.

Hypotheses

1. There are no significant relationships between the leadership effectiveness of school principals, as measured by the Leader Behavior Description Questionnaire, and their patterns of operation, as measured by the Principal Behavior Check List--Greatest Difference Form.

2. Principals who are high in effectiveness, as measured by the Leader Behavior Description Questionnaire, display a moderate degree of personality rigidity, as measured by Rehfish's Personality Rigidity Scale.

3. There are no significant relationships between principals' patterns of operation, as measured by the Principal Behavior Check List, and their personality rigidity, as measured by Rehfish's Personality Rigidity Scale.

Methods of Study

Each of the 40 secondary school principals included in the study filled out a form concerning himself and his school and executed the Principal Behavior Check List and the Rehfish Personality Rigidity Scale. In addition, the Leader Behavior Description Questionnaire and the Principal Behavior Check List were administered to five teachers selected from among the faculty members of each of the 40 secondary schools represented in the study. The supplementary data collected for the study included age of each principal,

number of teachers on his faculty, and the number of years he had served as principal of that school.

Analysis of the Data and Findings

The number of teachers on the faculties of the principals studied ranged from 9 to 92 and were distributed evenly across the entire range. The ages of the principals also were evenly distributed across the range; 8 being under 40 and 9 being over 50 years of age.

This even distribution did not hold true for tenure in present position. Although the range was from 1 to 26 years, only 3 principals had been in their present position more than 15 years while 31 principals had been in their present position fewer than 10 years at the time data were collected for this study. The distribution is markedly skewed toward the upper end of the distribution.

It was noted that the principals scored higher on the "Consideration Scale" of the LBDQ than on the "Initiating Structure Scale" of the same instrument. However, the range and standard deviations were practically the same. A computed F ratio of 1.05 for the significance of difference between the variances was found not significant at the .05 level of confidence. It appeared that both scales had about the same distribution despite a higher mean score for the "Consideration Scale."

The theoretical range of the PBCL--GD scores was restricted by the limits of the instrument to a maximum of 3.05, with a possible high of 4.5, and a possible low of 1.45. The range of the scores of the 40 principals in this study was from a high of 3.66 to a low of 2.24, with a mean of 3.03.

The distribution of the rigidity scores was also characterized by a decided, though not as extreme, grouping around the mean. The range of rigidity scores was from a low of 8 to a high of 26, with a mean of 15.4. The two extreme cases accounted for almost half the range.

Product-moment correlation coefficients were computed for the following sets of data:

1. Age and Rigidity r = .27
2. Number of teachers on the faculty and "Initiating Structure" r = .19
3. Number of teachers on the faculty and "Consideration" r = .05
4. Number of teachers on the faculty and PBCL--GD r = .13

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| 5. Tenure of Principal and
"Initiating Structure" | $\underline{r} = .09$ |
| 6. Tenure of principal and
"Consideration" | $\underline{r} = .27$ |
| 7. Tenure of Principal and
<u>PBCL--GD</u> | $\underline{r} = .13$ |
| 8. "Consideration" and "Initiating
Structure" | $\underline{r} = .68^*$ |

* significant at the .01 level of confidence

When the LBDQ scores were analyzed it was found that 16 of the 40 principals scored above the means and 11 of the 40 principals scored below the means of both scales. Of the 16 who scored above the means on both scales of the LBDQ, 9 also scored within one standard deviation of the mean on the Rigidity Scale and 9 scored above the mean of the PBCL--GD Scale. Of the 11 who scored below the means on both scales of the LBDQ, 6 also scored more than one standard deviation from the mean on the Rigidity Scale, and 7 scored below the mean on the PBCL--GD Form. Chi-square analysis revealed that the observed frequencies did not differ significantly from those which could be expected by chance in either instance.

No significant difference was found between the mean rigidity of the group of 16 principals who scored above the means of the two scales of the LBDQ and the group of 11 principals who scored below the means of the two scales of the LBDQ. Neither were the variances found to differ significantly.

Correlation coefficients were computed for the Rigidity--"Initiating Structure" and the Rigidity--"Consideration" distributions. The computed correlation coefficients were .01 and .03 respectively. Neither was statistically significant.

The author of the Rigidity Scale suggested grouping the items of the scale according to psychological content. Item analyses were made to determine which items on the Rigidity Scale discriminated between the highest and lowest 27 per cent of the principals on each of the two scales of the LBDQ and the sum of the two scales of the LBDQ. Only a few items were found to discriminate between high and low scores on the two scales and on the sum of the two scales. Those which were found did not fall into any of the psychological groups suggested by the author of the Rigidity Scale.

Correlation coefficients were computed for the relationships between Rigidity and five separate scales for the PBCL. The following results were obtained:

1. Rigidity--Authoritarian	$\underline{r} = .03$
2. Rigidity--Best Practices	$\underline{r} = -.16$
3. Rigidity--Democratic	$\underline{r} = -.05$
4. Rigidity--Situational	$\underline{r} = -.18$
5. Rigidity--Greatest Difference	$\underline{r} = -.23$

None of the correlation coefficients computed was found to be statistically significant at the .05 level of confidence.

Correlation coefficients were computed for the "Consideration Scale" of the LBDQ and five separate scales of the PBCL. The following results were obtained:

1. Consideration--Authoritarian	$\underline{r} = -.01$
2. Consideration--Best Practices	$\underline{r} = .06$
3. Consideration--Democratic	$\underline{r} = .03$
4. Consideration--Situational	$\underline{r} = .27$
5. Consideration--Greatest Difference	$\underline{r} = .23$

None of the computed correlation coefficients was found statistically significant at the .05 level of confidence.

Correlation coefficients were computed for the "Initiating Structure" Scale of the LBDQ and five separate scales of the PBCL. The obtained results were:

1. Initiating Structure--Authoritarian	$\underline{r} = .04$
2. Initiating Structure--Best Practices	$\underline{r} = .05$
3. Initiating Structure--Democratic	$\underline{r} = .05$
4. Initiating Structure--Situational	$\underline{r} = .14$
5. Initiating Structure--Greatest Difference	$\underline{r} = .25$

None of the computed correlation coefficients was found statistically significant at the .05 level of confidence.

A correlation coefficient was computed for the two scales of the LBDQ ("Initiating Structure" and "Consideration"). The computed

correlation coefficient of .68 was found to be significant at the .01 level of confidence.

Conclusions

The Major Hypotheses

The hypothesis concerning the relationships between the Leader Behavior Description Questionnaire and the Principal Behavior Check List--Greatest Difference Form was supported.

Although they each may be valid measures of leader behavior, within their respective frames of reference, the PBCL and the LBDQ apparently measure two different dimensions of leader behavior.

No evidence was found in this study which could be used to substantiate the hypothesis regarding the relationships between personality rigidity and leader effectiveness. Rejection of the hypothesis leads to the conclusion that personality rigidity and leader effectiveness, as defined and measured in this study, are not related.

Analysis of the data concerning the relationships between personality rigidity and the patterns of operation of secondary school principals yielded no evidence for rejection of the hypothesis. Retention of this hypothesis leads to the conclusion that personality rigidity, as measured by Rehfish's Personality Rigidity Scale, is not significantly related to the pattern of operation of a secondary school principal, as measured by the Principal Behavior Check List.

Other Findings of the Study

1. Ineffective principals vary significantly more in the extent to which they initiate structure than do effective principals. Ineffective principals tend either to initiate much structure or to initiate very little.

2. When compared with effective principals, ineffective principals tend to have been in their present position either a comparatively short time or a relatively long time.

3. The "Consideration Scale" of the LBDQ has a significant linear relationship to the "Initiating Structure Scale" of the same instrument.