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A Comparative Analysis of Leader Behavior of College Chairpersons and Elementary and Secondary School Principals

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Empirical research in the field of organizational behavior reveals that the effectiveness, dynamism, and success of any formal organization depends upon the motivation of the humans within it. Some of the variables affecting motivation may include communication networks, organizational structure, human atmosphere, and uniformity of activities. Researchers at the Ohio State Leadership Studies Center originally described leader behavior in terms of twelve hypothesized dimensions. Through various revisions (Hemphill & Coons, 1957; Stogdill & Coons, 1957) two dimensions have consistently reappeared among the twelve as major dimensions of leader behavior: consideration and initiation of structure.

Fleishman (1957) and Stogdill and Shartle (1955) confirmed the importance of these two major dimensions. "Consideration" was by the extent to which a leader is friendly defined approachable, does his or her part to create a pleasant atmosphere for the subordinates, accepts and puts suggestions of the group into operation, treats his or her subordinates as his or her equals, prepares the group for changes, looks for subordinates' needs and welfare, and is willing to make changes to satisfy the subordinates. "Initiation of structure" was defined by the frequency a leader informs his or her subordinates of what expected of them, tries new ideas, makes his or her attitude clear to the subordinates, decides on action to be followed by the subordinates, schedules the work to be done, maintains a definite standard of performance, and requests the group to follow rules and regulations (Leader Behavior Description Questionnaire, 1962).

Since elementary schools, secondary schools, and universities are organizations with varying educational purposes, it is expected that differential emphases are placed on the interpersonal relationships within and among these organizations. The department chairpersons at the university level and the building principals at the elementary and secondary school levels are in the middle of their hierarchical structures and their success as leaders is of critical importance to the overall success of these organizations. Upper authorities expect these middle managers to lead their individual units by initiating activities related to change, guidance, and control. Faculty expect them to consider their human needs and welfare. These two outside sources, plus the psychological forces within the individual chairpersons and

principals, shape their leader behavior. Thus, it is conceived that lack of congruency may exist between the self-perceptions of these chairpersons and principals of their own administrative behavior and the perceptions of their faculty of that same behavior. These perceptual differences may contribute to a dissonance between the administrative team and the subordinate team within the same organization creating conflict and failure.

Statement of the Problem

The purpose of this investigation was to study discrepancies in the perceptions of superordinates and subordinates on each of the two dimensions of leader behavior (consideration and initiation of structure) and across each of the three levels of education-elementary school, secondary school, and university. In particular, the focus was on the following three research questions:

- 1. To what extent is there congruence between the perceptions of administrators and those of their subordinates with respect to how frequently the administrators exhibit "consideration" and "initiation of structure" in their administrative behavior?
- 2. To what extent does this congruence vary among elementary school, secondary school, and university settings?
- 3. To what extent does this congruence change as the administrators and their subordinates perceptions change?

While in principle all administrative leader behavior involves two constructs of "initiation of structure" the "consideration," the degree of perceptual congruence differs the two as each construct is defined and enacted by the leader. been observed that most people in a variety of human associations will tend to seek more satisfiers and dissatisfiers. Thus, subordinates within an organization will tend to expect more frequent "consideration" behaviors and less frequent "initiation of structure" behaviors than their superordinates may provide. This leads to perceptual discrepancies between and their superordinates with respect to subordinates superordinates' leader behavior. It is expected that the greatest perceptual discrepancies will be found in organizations where subordinates feel that the structure of the organization needs consistent modification to fit their human and professional needs simultaneously, supervisors exhibit maintenance where, behaviors and are subordinate spokespersons for authorities in the organization.

Management is expected to set constraints to influence the behavior of subordinates. This is needed for a unified action of the group to achieve an organization's objectives. If management has the clairvoyance to perceive of its managerial actions in this

manner, this will reduce perceptual discrepancies between superordinates and subordinates. However, if management does not realize that it is limiting the individual freedom and autonomy of its subordinates, perceptual discrepancies will increase. organizations where subordinates place great importance on their autonomy and their freedom of action within the context of their professional activities, the greatest perceptual differences superordinates and subordinates with respect administrative behavior tend to be found. However in organizations where subordinates expect more guidance and direction from their superordinates within the context of their job performance, the less there are perceptual differences between superordinates and subordinates with respect to administrative behavior.

Instrumentation

The instrument employed in this study was the $\underline{\text{Leader}}$ $\underline{\text{Behavior}}$ $\underline{\text{Description}}$ $\underline{\text{Questionnaire}}$ (LBDQ-XII) for subordinates and an adapted version of this same instrument for superordinates.

The <u>Leader Behavior Description Questionnaire-XII</u> consists of 100 behavioral items that describe twelve constructs of leader behavior. Four of the constructs are assessed by five items each and the remainder employ ten items each, consideration and initiation of structure, being among this latter group.

Each item utilizes a five-point Likert scale to determine how often a specifically named leader engaged in the described behavior from "always" to "never." Twenty of the 100 items were reverse-scored and the total score on each subscale was the sum of scores on the items comprising that scale. The higher the score, the more frequently an individual is perceived to have exhibited a behavior that was considered to be leader behavior.

Stogdill employed a modified Kuder-Richardson formula to determine the reliability of the instrument's subscales. This procedure, which involved correlating each item in its subscale with the remainder of the items in that subscale, resulted in the following reliability coefficient ranges: for initiation of structure from .70 to .80, and for consideration .76 to .81 (Stogdill, 1963).

In 1969, with the assistance of a playwright, Stogdill developed a series of scenarios to test the validity of six of the instruments' subscales including consideration and initiation of structure. Each scenario depicted a leader acting out the behaviors described by the items in one of the subscales, and a film was made of actors playing the roles of supervisors and workers. The film was shown to observers who used the LBDQ to score the leader behavior of the supervisors. No significant differences were found when different actors played the same supervisory role or when they exhibited the same pattern of leader

behavior. By contrast, the actor playing different roles was scored significantly higher (more leader behavior exhibited) in the enacted role than in other roles. Thus, Stogdill concluded that since each role was reflected in the items or its respective subscale, and since the same items were viewed by observers to describe the enactment of the role, the subscales did, in fact, measure what they purported to measure (Stogdill, 1974).

Sampling Procedures

- 1. Selected at random from within Illinois were 20 of the 54 universities and four-year colleges, 20 of the 833 elementary and unit school districts, and 20 of the 573 secondary and unit school districts.
- 2. Reference materials such as Barron's <u>Profiles of American Colleges</u> (1976) and the <u>Directory of Illinois Schools</u> (1977, 1978) were employed to identify the departments in each having 10 or more faculty members. If one of the original selections did not have at least one department or building with at least 10 faculty members, the table of random numbers was used to draw another comparable school organization from the appropriate list.
- 3. A table of random numbers was again used to select one college department from each of the 20 preselected colleges, from each of the 20 preselected elementary and 20 secondary schools.
- 4. Letters were sent to the chairperson of each selected department or the principal of each selected school building describing the purpose of the research, asking for confirmation of the presumption that the department or school building had 10 or more faculty members, seeking the department chairpersons' and building principals' willingness to participate and to allow participation of faculty members in the study and, if in agreement, to furnish lists of all faculty members in their departments or school buildings who had been on their staffs for the past two years.
- 5. Mail and telephone follow-ups were made to department chairpersons or building principals who did not respond within two weeks to the invitation to participate in the study. When it proved to be impossible to reach one of the identified chairpersons or principals, or if any declined to participate, the above procedures were again used to identify a new potential participant.
- 6. A sample of 10 faculty members was selected at random from these lists of faculty. If replacements for any nonrespondents within these sets were needed, additional faculty were again randomly selected from the respective lists.

In summary, the final sample included 20 university department chairs, 20 elementary school principals, and 20 secondary school

The 10 items comprising each dimension are shown in Table 1. Their factor loadings on the two factors are given in Table 2 and are graphically portrayed in Figure 1.

For purpose of subsequent analyses, a composite score (total) on each of the two dimensions of "consideration" and initiation of structure" of the LBDQ as defined by Stogdill was computed for each administrator from the raw scores on the items making up that dimension. In addition, a median score was computed for the 10 teachers associated with each administrator, for the dimension of "consideration" and another for the dimension of "initiation of structure." The use of the median score of teh 10 teachers was considered to be the most useful in this situation (to describe their administrators), given a desire to reflect typicalness. Kerlinger (1973) indicates that the median, in addition to being an important descriptive measure, can be used in tests of statistical significance when the mean is inappropriate.

Using the various median-scores of the subordinate group and the raw (self report) scores of their superordinates, a Lindquist Type 1 two-way analyses of variance with the status variable being treated as a repeated measure (since the administrator score and the teacher median were considered "paired") were then conducted to compare the mean-score of the various superordinates and the mean-score of the various teacher medians (describing these superordinates) at each of the three levels of education: elementary school, secondary school, and university.

Pearson correlation coefficients were computed between the discrepancy scores (of the administrator and their respective teacher-median) and the scores of administrators on each of the two dimensions of "consideration" and "initiation of structure." Similar computations were made at each of the three levels of education separately. Fisher's transformation was also used to test for significant differences between the computed correlation coefficients at the three levels of education. Similar correlations were made between discrepancy scores and the teachers' scores on each of the two leader behavior dimensions overall and at each of the three levels of education and tests of significant differences were similarly conducted.

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Table 2

Factor Loadings on Two LBDQ-XII Dimensions

Consideration			Init	Initiation of Structure		
Item #	Factor 1	Factor 2	Item #	Factor l	Factor 2	
07	0.115	0.636	04	0.668	0.255	
17	0.304	0.570	14	0.518	0.022	
27	0.283	0.620	24	0.362	0.096	
37	0.205	0.630	34	0.700	0.126	
47	0.501	0.380	44	0.520	-0.320	
57	0.200	0.342	54	0.159	0.073	
67	0.411	0.508	64	0.677	0.277	
77	0.152	0.508	74	0.572	0.021	
87	0.235	0.475	84	0.701	0.174	
97	0.249	0.542	94	0.501	-0.103	

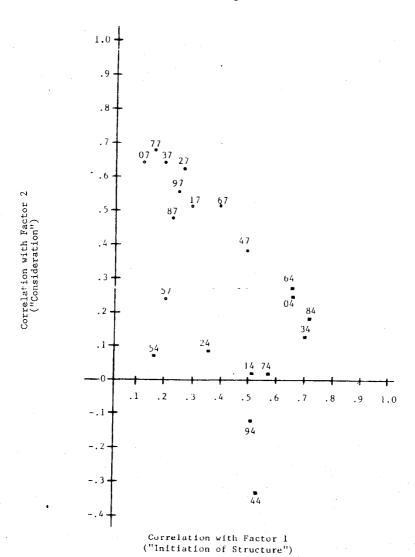


Figure 3. Graphical illustration of varimax rotated factor results: "consideration" and "initiation of structure" items.

principals. In addition, for each of these 60 administrators also included were 10 associated faculty thus generating a total sample of 600 teachers.

When the sample of administrators and teachers had been identified, separate mailings were sent to each administrator and teacher. Instruments were precoded to assure anonymity of response and were returned directly to the primary investigator.

An eighty percent response rate was attained by the fourth week; nonrespondents were mailed letters of inquiry and subsequent telephone calls were made. Where necessary, replacements (as described above) were made to arrive at the planned quotas.

Data Analysis Procedures

Cronbach's alpha reliability coefficients were computed for the two dimensions of "consideration" and "initiation of structure." Based on the total sample of 600, these coefficients for the 10 items comprising each scale were .90 and .86 respectively.

In addition, a factor analysis of responses on the LBDQ was conducted to ascertain and confirm the validity of the two major constructs of "consideration" and "initiation of structure." Using the raw scores of the 11 respondents (1 administrator plus 10 subordinates) in each of the 60 schools (N = 660), a factor analysis was conducted on all 100 items of the questionnaire using PA1 orthogonal rotation and no limit on the number of factors. This analysis yielded 16 factors with eigenvalues of 1.0 or more, which explained 66.5% of the total variance. In addition, a second RAO factor analysis with 12 defined factors confirmed that 2 of the factors accounted for 68.6% of the explained variance on the 100-item LBDQ questionnaire. More importantly, these two factors matched relatively well on the item definitions for "consideration" and "initiation of structure".

Factor 1, which accounted for 51.8% of the explained variance, had 37 items with intercorrelations of 0.50 or more. These 37 items included 8 of 10 "initiation of structure" items and 1 of the 10 "consideration" items. The 8 "initiation of structure" items were 04, 14, 34, 44,64, 74, ;84, and 94; the only "consideration" item was Item 47.

Factor 2, which accounted for 16.8% of the explained variance, had 19 items with intercorrelations of .50 or more. These 19 items included 7 of the 10 "consideration" items and none of the "initiation of structure" items. The 7 "consideration" items were: 07, 17, 27, 37, 67, 77, and 97.

Results

Research Question 1

The scores of the 60 administrators and the 600 teachers on the "consideration" dimension of the LBDQ-XII instrument, show a statistically significant status effect (see Tables 3 and 4). Administrators perceived that they exhibit "consideration" in their administrative behavior to a significantly greater degree than did their faculty.

Table 3

Mean Scores for Administrators and Faculty by Level

	Consideration		Initiation of Structure	
	Admin.	Faculty Medians	Admín.	Faculty Medians
Elementary (n = 20)	38.70	36.76	38.85	37.59
Secondary $(n = 20)$	39.30	33.06	41.20	37.88
University $(n = 20)$	41.10	38.38	39.40	37.53
Overall	39.70	36.07	39.82	37.57

On "initiation of structure," a similar result was observed (see Tables 3 and 4). Both administrators' and teachers' meanscores were found to be relatively high (against a maximum of 50) on the dimensions of "consideration" and "initiation of structure." These findings were consistent with prior literature on administrative leader behavior which indicated the significance of both categories of activities in defining leader behavior. Haplin (1967) indicated that both "consideration" and "initiation of structure" are fundamental dimensions of leader behavior. He also suggested that the presence of high "consideration" and high "initiation of structure" in the leader behavior of the administrator was associated with favorable attitudes in the group membership, both leaders, and followers.

CONSIDERATION

Source	df	SS	MS	F	Р
Level	2	255,257	127,628	6.51*	0.0028
Error	57	1,117,968	19,613		
Status	. 1	396,022	396,022	24.74*	0.0001
Status x Level	2	105,061	52,531	3.28*	0.0448
Érror	57	912,604	16,011		
			,		

*Significant at the indicated p-level

INITIATION OF STRUCTURE

Source	df	SS	MS	F	P
Level	2	30,408	15,204	0.55	0.5802
Error	57	1,576,659	27,660		
Status	1	151,949	151,949	9.65*	0.0030
Status x Level	2	30,059	15,029	0.95	0.391
Error	57	389,658	15,749		
*Significant at the indicated p-level					

Research Question 2

There was a significant interaction effect between status and education level on the leader behavior dimension of "consideration" (see Table 4). Follow-up t-tests indicated that there was no significant difference between the mean scores of principals and faculty at the elementary school level, but there was a significant difference at the secondary school level, and at the university level, the greatest differences being at the secondary level and not at the university level as anticipated.

There was no significant interaction effect between status and educational level on the "initiation of structure" dimension, but status difference did exist. Administrators rated themselves significantly higher than they were rated by their faculty at all educational levels, and the faculty/ administrator differences were similar at all three levels.

The result of a significant statistical interaction between status and level of education on the dimension of "consideration" and not on the dimension of "initiation of structure" could be supported by prior research on leader behavior of school administrators where other independent variables had affected scores on one leader behavior dimension but not the other. For example, Holland (1970) reported that the variable "high grievance" affected responses on the "consideration" dimension of the LBDQ-XII instrument, but not on the "initiation of structure" dimension. Lambert (1969) reported that the variable "effectiveness of the administrator" was only significantly related to scores on the "initiation of structure" dimension of the administrator, and it was not significantly related to scores on the "consideration" dimension.

The presence of a significant interaction on the dimension of "consideration" may be explained by the secondary school teachers scoring their principals lower on "consideration" than the group of university teachers, or the group of elementary school teachers. This may have been due to secondary schools being larger in size and typical elementary schools or university department units, consequently the communication channels between principals and their teachers tend to be directed through division heads. Furthermore, the secondary school principals may tend to be viewed by their teachers as belonging to the administrative corps of the educational institution more than is the case with elementary principals and university department chairs. Another explanation of the above results could be that secondary school teachers expected more "consideration" behavior from their principals than what was manifested.

The presence of a nonsignificant statistical difference in perceptions between the elementary school principals and their teachers on the dimension of "consideration" may be explained by the presence of an open channel of communication between the elementary school principals and their teachers. Also, both elementary school principals and teachers may have viewed with the same objectivity and importance the principals' manifested "consideration" behaviors. However at all educational levels, administrators seem to perceive that they are initiating structure significantly more frequently than they are manifesting this behavior.

Research Question 3

The discrepancy scores on the dimension of "consideration" were significantly correlated (\underline{r} = +.40) with the <u>administrators</u> perceptions. The higher the administrators' perception, the larger the discrepancy (see Table 5). Although significant over all levels, this was essentially due to the significant relationship at the university level which was not found at the elementary level or at the secondary level. These discrepancy scores were also observed to be significantly correlated with the teacher perceptions <u>but inversely</u> and were consistently so related at all levels. The higher the teachers' perceptions, the smaller the discrepancy.

Table 5

<u>Correlations Between Discrepancy Scores and Target Group Responses</u>

	Consideration		Initiation of Structure	
	Admin.	Faculty	Admin.	Faculty
Elementary	+.28	88*	+.55*	53*
Secondary	+.34	73*	01	89*
University	+.72*	89*	+.81*	56*
Overall	+.40*	83*	+.48*	71*

^{*}Significant at .05 level

On the dimension of "initiation of structure," the discrepancy scores were also significantly related in a positive direction to the administrators' perceptions but <u>not</u> at the secondary level. AGain, these discrepancy scores were inversely related to the teacher scores at all levels, with the strongest relationship being observed at the secondary level.

The investigation of Research Question 3 indicated that degree of congruence in perceptions between administrators teachers on each of the two dimensions of "consideration" and "initiation of structure" was significantly related to the magnitude of the rating by either administrators or teachers. was found that when the administrators increased their self-rating on the dimension of "consideration," the magnitude of difference in perception between them and their teachers increased. This same finding was observed on the dimension of "initiation of structure." The results also indicated that when teachers as a total group increased their scoring of their administrators' "consideration" behavior and "initiation of structure" dimension, the difference between administrator and teacher perception scores decreased.

These findings are consistent with the literature. The dimensions of "consideration" and "initiation of structure," while being defined as distinctive leader activities, were not contradictory in nature. Sergiovanni and Starrat (1971) showed that when superordinates and subordinates in educational organizations were asked to rate leader behavior, the prevailing rating of both groups reflected a perception of an "integrated" leadership concept (rather than one that was disintegrated) which consisted of a combination of assumed satisfiers (such as "behavior") and assumed dissatisfiers (such as "initiation of structure" activities). Wiederholt (1978) who expected the ideal "team" manager to have high concern for the subordinates' needs and high concern for the production.

Implications for Practice

In light of these findings, administrators should be aware of differences between their perceptions of their own leader behavior ("consideration" and "initiation of structure") and the perceptions of their faculty about them. This difference may indicate lack of communication between administrators and subordinates. Various internal and external factors (such as status and level of education) within their organizations may contribute to these perceptual discrepancies between them and their subordinates, and these discrepancies may inhibit achievement of organizational goals. It is suggested that there is no contradiction between

administrators' "initiation of structure" and their "consideration" behaviors, nor is it necessary for them to decrease their "initiation of structure" behavior if they thought of increasing their "consideration" behavior, because both dimensions are essential to effective leader behavior. The size of institutions may affect congruencies between perceptions of the leader and the perceptions of the faculty of that leaders behavior. Administrators may need to work on organizing formal meetings with faculty to allow free expression of opinions regarding administrative leadership. The nature of the formal organization may put some constraints on the leader behavior of administrator. Thus, one may not be able to prescribe a desirable standard style of leadership. The findings of this investigation indicated that administrators tend to overrate their "initiation of structure" behavior and their "consideration" behavior relative to their subordinates' ratings on these dimensions. Teachers, on the other hand, may underrate administrators because of personal issues creating a larger discrepancy score than merited by the administrator. Another implication for the discrepancy score may be the institutional setting. The greatest discrepancy scores occur at the secondary level where student populations require attention not demanded by elementary and university students. Further research is indicated to elicit the source of the discrepancy between administrator and teacher perceptions of leadership qualities and to validate the findings of this study.

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