

Some Implications of Leadership and Control for Effectiveness in a Voluntary Association¹

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AMONG THE MOST important problems of organizational functioning is the need to integrate member activity in the direction of coordinated effort. The effective integration and coordination of member effort are obtained in large part through processes of control. Research in labor unions and industrial and voluntary organizations suggests that concerted effort, and consequently the effectiveness of these organizations, may depend upon the manner in which control is distributed within them (Likert, 1961; Morse, Reimer & Tannenbaum, 1951; Smith & Tannenbaum, 1963; Tannenbaum, 1956a, 1961).

In a study of the League of Women Voters of the United States, Tannenbaum (1961) found a relationship between patterns of control within local leagues and effectiveness of these leagues. Two aspects of control were considered: the hierarchical distribution ('slope'), and the total amount of influence from all hierarchical levels within the organization ('total control'). Leagues that have a more positively sloped distribution of control (higher membership influence relative to president influence) and a higher level of total control are significantly more effective in their operation than leagues lower in these respects ($r = .31$, $p < .01$ and $r = .29$, $p < .01$, respectively). Together, degree of positive slope and amount of total control yield a multiple correlation of approximately .42 with effectiveness.

While amount of member activity is related to degree of positive slope ($r = .38$, $p < .001$), it is not related by itself to league effectiveness. Since slope is related to effectiveness, and amount of member activity is related to slope, it would seem that member activity might bear an indirect relationship to effectiveness. This raised the question of how member activity might become translated into effective control. Of the possible mechanisms by which such a translation may be achieved, the present paper is concerned with the effect that certain leadership behaviors might have in helping to channel member activity in the direction of control over the organization. Some results suggested that leadership might play a significant role in this process. There is a relationship between the actual pattern of influence in the local league and the attitudes or ideals of board members regarding influence in their leagues. Board members favoring a high degree of influence for the leaders tend to be in leagues where member, relative to president, influence is low ($r = -.30$, $p < .01$). Board members who favor high influence for the membership tend to

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be in leagues where members report that they have high influence relative to that of the president ($r = .20, p < .05$). These findings suggested that the structure of influence may be, in part, affected by leader attitudes regarding control.

The manner in which leader behavior might serve to initiate an effective structure of influence is suggested by the following findings. First, administrative activity is the only area of activity among four areas in which high president influence (as judged by members) relates positively to league effectiveness ($r = .23, p < .05$). President influence in more goal-related activities, such as study, action, or voter's service activities are not related to effectiveness ($r = -.08, r = -.07, r = -.15$, respectively). Second, among a number of characteristics on which presidents were rated by board members, competence in administration and in coordination stand out as significant correlates of effectiveness. On the other hand, such rated characteristics of the president as 'working hard to further league ideals' and 'sociability' are not related significantly to effectiveness. An important function of leadership may be that of creating and maintaining a structure through which a high level of interaction, communication, and influence occurs in the organization. Without a structure of this kind, members may be unable to exercise effective influence. Thus, the effective leader may be one who supports or facilitates members' efforts to influence league politics and actions.²

The following are two hypotheses we should like to consider concerning the effects of leader behavior in channelling activity in the direction of control in the organization:

1. Coordinative competence by the league president will lead to a relatively high degree of positive slope under conditions of high member activity, but not under conditions of low member activity.
2. Coordinative competence by the league president will lead to a relatively high level of total control under conditions of high member activity, but not under conditions of low member activity.

These hypotheses imply that the leader may contribute to effective league performance by helping to create conditions for influence by the membership. Coordinative characteristics on the part of a leader may, of course, contribute to league effectiveness in other ways too, and we shall investigate the possibility that the coordinative role of the leader contributes to effectiveness over and above its possible relationship to the patterns of control in a league.

2. Research in small groups and organizations also suggests the importance of the 'initiation of structure' function of leadership for group performance and member satisfaction. See the extensive reviews by Gibb (1954) and Bass (1960). Leadership may be effective not so much through the direct contributions of the leader to goal achievement, but rather through structuring the situation so that high member participation is encouraged and processes of high mutual influence of members are directed toward goal achievement (Likert, 1961; Whyte, 1953). For example, in industrial settings, analysis of supervisory behavior indicates that productivity and morale are related to the supervisor's ability to play a 'differentiated' role, i.e. to perform a planning function (Katz & Kahn, 1952; Kahn & Katz, 1953). These functions of leadership may be concerned with the coordination of member effort.

PROCEDURE

A. Research Setting

This is part of a larger study of the League of Women Voters of the United States.³ The national organization consists of approximately 1,000 autonomous local leagues throughout the country. These vary in size from about 25 to 3,000 members and form the units of the present study. Each local league is organized into three hierarchical levels, consisting respectively of an elected president, a board of directors, some of whom are elected and some of whom are appointed, and the rank-and-file members.

B. Research Design and Measures

A sample of 112 leagues was drawn from a complete list of all leagues in the country, each league being assigned a probability of falling into the sample proportional to its size.⁴ A questionnaire was mailed to approximately 25 randomly chosen members in each of the sample leagues, with the exception of the few larger leagues which were sampled more than once. A final response rate of 77 per cent was obtained after an elaborate set of follow-up procedures. The total number of respondents who returned questionnaires is 2,847, but, of this group, about 15 per cent did not answer some of the questions relevant to the present research purposes.

OPERATIONALIZATION OF VARIABLES

1. Measures of Control in the Leagues

The descriptive technique by which the concepts of organizational control are operationalized is called the control graph. It has been discussed and illustrated in a number of earlier publications (Smith & Tannenbaum, 1963; Tannenbaum, 1956a, 1956b, 1961; Tannenbaum & Georgopoulos, 1957; Tannenbaum & Kahn, 1957). The control graph is designed to characterize the pattern of control in formal organizations. The horizontal axis of this graph represents the hierarchical levels of an organization. The vertical axis represents the amount of control that is exercised by each of these levels, i.e. how much influence each of these levels has in determining the policies and actions of the organization. Two aspects of organizational control structure can be determined from the control curves: (a) the hierarchical distribution of control, represented by the shape or slope of the curve; and (b) the total amount of control exercised by all levels in the organization, represented by the general height of the curve.

Each respondent was asked a set of questions concerning control in the local league:

'In general, how much influence do you think the following groups or persons actually have in determining the policies and actions of your local league?'

The persons or groups in question include the president, the board members as a group, and the rank-and-file membership as a group. The influence of each person

3. This voluntary association has been extensively described previously in several reports (The League of Women Voters of the United States, 1959) and by Tannenbaum (1961).

4. The sampling procedure employed has been more fully specified by Tannenbaum (1961).

or group was rated on a five-point scale ranging from 'no influence' to 'a very great deal of influence'. The amount of control exercised by each hierarchical level in a league was computed by averaging the judgments of all respondents regarding that level. The resultant values were plotted, and the slope of the control curve was derived by computing the slope of a best fit straight line for the data of each league. Total control was obtained by adding the amounts of control exercised by the three hierarchical levels in each league, as reported in response to the above question.

2. *Measures of Amount of Member Activity*

Measures of member activity were based on several questions dealing with the amount of time members spent in the activities of the league and the number of different kinds of meeting that they attended. Two questions were asked:

- (i) 'How many of the following types of meeting have you attended during the past year?'

Such meetings included study or resource meetings, board meetings, other committee meetings, general meetings, unit meetings, and county, state, or national meetings.

- (ii) 'How much time would you say you spend *during the course of an average month* on league affairs?'

These questions, answered by members, were formed into an index with a split-half reliability of .87.

3. *Measures of Leader Behavior*

Information concerning leader behavior was supplied by board meetings in response to the following question:

- 'How well would you say the following comments fit the leader in the league with whom you have the most contact?'

The vast majority of board members indicated that they were answering this question in relation to their president. The comments were as follows:

- 'She is quick to help out when things go wrong.'
- 'She coordinates various activities of the league.'
- 'She is efficient as an administrator.'
- 'She understands the views and sentiments of the members.'
- 'She knows what she is doing.'
- 'She has a pleasant and friendly disposition.'
- 'She works hard to further the interests of the league.'
- 'She understands the views and sentiments of the other officers.'
- 'She helps the members see what their league is doing.'
- 'She is devoted to the ideals of the league.'
- 'She gets along well with other people.'
- 'She suggests to others what they should be doing.'
- 'She follows through on what she says she will do.'
- 'She enjoys the prominence which her position in the league gives her in the community.'
- 'She enjoys the recognition she gets in the league.'

Each characteristic was rated on a three-point scale in terms of how well the description fitted the leader in question.

The measures of leader behavior were intercorrelated, and a number of these measures were found to cluster around a general factor of administration-coordination. The items making up this factor include: (i) coordinates various activities of the league, (ii) is an efficient administrator, (iii) is quick to help out when things go wrong, (iv) helps members to see what their league is doing, (v) knows what she is doing. These items were intercorrelated .45 or above. They were formed into an index, taken as representing general coordination by the leader.

4. Measures of Local League Effectiveness

A score for each of the 104 leagues was obtained through rating forms filled out by 29 persons assigned by the national headquarters. These persons qualify as experts through their experience in the organization at the state and national levels and by their familiarity with the work of many of the local leagues. In judging the overall effectiveness of each of the leagues, raters were asked to consider several criteria, based on a number of objectives established for leagues by the national organization. These criteria included the primary objective of high quantity and quality of league publications, and the significance of the impact of the league in the community, as well as success in fund-raising campaigns, growth of the league, its size relative to the community, the amount of activity of members, and their knowledge of league activities. Leagues were rated on a scale from low effectiveness (00) to very high effectiveness (100). (For a description of this scale, see Tannenbaum, 1961.)

Effectiveness scores were computed for each league by averaging the ratings made by all judges who rated that league. (Some of the raters were not sufficiently familiar with all 104 leagues to provide a rating of each. However, each league was rated by at least two raters, and many were rated by all.) The scores derived in this way ranged from a low of 8 to a high of 100. Their split-half reliability is .82.

RESULTS

Table 1 presents the results in a test of Hypothesis 1. The highest degree of positive slope occurs under conditions of high member activity and high leader coordination. The lowest degree of positive slope obtains under conditions of low member activity and high leader coordination. While there appears to be some trend in the mean slope scores as a function of member activity and leader coordination in the predicted direction, a more powerful test yields equivocal support of the hypothesis. The difference between the correlations of leader coordination and positive slope under conditions of low and high member activity is by no means clearcut, $p = .08$. Thus, the confirmation of Hypothesis 1 is questionable. A similar analysis performed in a test of Hypothesis 2 failed to support the hypothesis.

In order to explore further the implications of leadership and control for the functioning of these leagues, member activity, leader coordination, positive slope, and amount of total control were employed in a prediction of league effectiveness. While the relationship between the leadership factor and the measures of control is low or negligible, leader coordination is significantly related to effectiveness, $r = .31$, $p < .001$. The multiple correlation of effectiveness with member activity,

TABLE I
POSITIVE SLOPE¹ AS A FUNCTION OF MEMBER
ACTIVITY AND LEADER COORDINATION

I. DATA

		Leader Coordination	
		Low	High
Member Activity	Low	^a $\bar{X}=10.8$	^b $\bar{X}=12.7$
		S=4.7	S=6.3
	High	n=29	n=25
		^c $\bar{X}=10.1$	^d $\bar{X}=8.6$
		S=5.2	S=5.7
		n=27	n=31

Correlation between leader coordination and positive slope

Member	Low	$r_1 = -.10$
Activity	High	$r_2 = .17$

II. TEST OF SIGNIFICANCE²

Difference $r_2 - r_1 = .27$ $z = 1.38, p = .08$

¹ Inverse measure.

² A test of the relative difference of the differences of means $d - c > b - a$, yielded slightly higher significance levels— $t = 1.69$, $df = 108$, $p = .05$.

leader coordination, and the two measures of control structure is $r_{5.1234} = .56$, which is highly significant. We are thus able to account for over 31 per cent of the variation in effectiveness in terms of these variables. Deleting coordination by the leader from the multiple prediction of effectiveness yields a multiple correlation of $r_{5.134} = .41$, a significant reduction in the percentage of variance accounted for by $r_{5.1234}$. This is equivalent to the prediction of effectiveness yielded by degree of positive slope and amount of total control only. Amount of member activity, within the range of variation considered, does not contribute significantly to effectiveness, i.e. its removal from the multiple correlation makes no appreciable difference.

DISCUSSION

The coordination function of the leader, as we have measured it, appears to be fairly distinct from the measures of control that we have investigated. While the data do not clearly support the hypothesis that coordination on the part of the leader is instrumental in translating member activity into a positively sloped distribution of control, the results do suggest that the coordinative function may complement the control function in contributing to league effectiveness. Part of the impact that coordinative behavior by the leader makes on league effectiveness may come through expediting the goal-directed behavior of members. The good coordinator, for example, 'helps members see what is going on in the league' and 'is quick to help out when things go wrong'. She probably is effective in getting things at the right place and at the right time, and in seeing that the behaviors of members and committees are arranged with a minimum of overlap and conflict. She may also act in ways to minimize and resolve more serious conflicts involved in making and implementing league policies and decisions. She may thus contribute in these ways to turning out the league product. This is consistent with the general

notion that the leader's function is that of providing structure, regularity, and predictability in the behavior of members.

The good coordinator may also have a more direct effect on the level of member activity, and thereby structure an effective 'interaction-influence' system. Leagues in which presidents are high on the index of coordinative behavior tend to have more active members ($r=.30$, $p<.01$). Coordinative behavior may imply that members are more likely to know about meetings and to find meetings arranged in convenient locations and at suitable times. However, member activity is only a necessary and not a sufficient condition for effective league functioning. Effectiveness seems to depend more upon whether or not member activity involves making decisions and exercising influence. Unless it does, it is not likely to contribute to league effectiveness. For example, we find a correlation of $.28$ ($p<.01$) between degree of positive slope and effectiveness when amount of member activity is held constant, and a correlation of only $.07$ ($p>.05$) between member activity and effectiveness when slope is held constant (Tannenbaum, 1961). Furthermore, the results seem to indicate that the leader does not have much effect through her coordinate role on whether member activity will become translated into *decision-making* activity. The coordinative function of the leader, therefore, is not likely to have a very strong bearing on effectiveness in this way.

SUMMARY

An earlier study suggested that member activity may not lead to organizational effectiveness unless it gets translated into control. It was thought that coordinative behavior of the leader might help to achieve this translation. The hypothesis that this leader behavior might help to channel member activity in the direction of effective control is not clearly supported. However, we have some clues suggesting that other aspects of leader behavior might serve this purpose, although the dynamics are not clear. Coordinative leader behavior does relate to effectiveness, apparently supplementing the control function. Together these two functions account for a significant part of league effectiveness.

REFERENCES

- BASS, B. M. (1960). *Leadership, psychology, and organizational behavior*. New York: Harper.
- BROWNE, C. G. & COHN, T. S. (1958). *The study of leadership*. Danville, Ill.: The Interstate.
- CATTELL, R. B. (1951). New concepts for measuring leadership in terms of group syntality. *Hum. Relat.* **4**, 161-84.
- GIBB, C. A. (1954). Leadership. Chapter 24 in G. Lindzey, (Ed.), *Handbook of social psychology*. Cambridge, Mass.: Addison-Wesley.
- GOULDNER, A. W. (1950). *Studies in leadership*. New York: Harper.
- HEMPHILL, J. K. (1949). *Situational factors in leadership*. Columbus, Ohio: Ohio State University, Bureau of Ed. Research.
- KAHN, R. L. & KATZ, D. (1953). Leadership practices in relation to productivity and morale. In D. Cartwright & A. Zander (Eds.), *Group dynamics*. Evanston, Ill.: Row, Peterson; London: Tavistock Publications.

- KAHN, R. L., MANN, F. C. & MORSE, NANCY (Eds.) (1951). Human relations research in large organizations. *J. soc. Issues* 7, 3, 74.
- KAHN, R. L., MANN, F. C. & SEASHORE, S. E. (Eds.) (1956). Human relations research in large organizations. *J. soc. Issues* 12, 2.
- KATZ, D. (1951). Survey research center: an overview of the human relations program. In H. Guetzkow (Ed.), *Groups, leadership, and men: research in human relations*. Pittsburgh: Carnegie Press.
- KATZ, D. & KAHN, R. L. (1952). Some recent findings in human relations research in industry. In G. E. Swanson, T. M. Newcomb & E. Hartley (Eds.), *Readings in social psychology*. (Rev. edn.) New York: Holt.
- THE LEAGUE OF WOMEN VOTERS OF THE UNITED STATES (1959). Report V. Organizational Phase, Part 2. Factors in League Effectiveness. Survey Research Center, Institute for Social Research, The University of Michigan.
- LIKERT, R. (1961). *New patterns of management*. New York: McGraw-Hill.
- MORRIS, R. & SEEMAN, M. (1950). The problem of leadership: an interdisciplinary approach. *Amer. J. Sociol.* 56, 149-55.
- MORSE, N. C., REIMER, E. & TANNENBAUM, A. S. (1951). Regulations and control in hierarchical organizations. *J. soc. Issues* 7, 41-8.
- OLMSTED, D. W. (1954). Organizational leadership and social structure. *Amer. sociol. Rev.* 19, 273-81.
- PELZ, D. C. (1951). Leadership within a hierarchical organization. *J. soc. Issues* 7, 49-55.
- SMITH, C. G. & BROWN, M. E. (1963). Communication structure and control structure in a voluntary association. Unpublished mimeograph. Ann Arbor: Institute for Social Research.
- SMITH, C. G. & TANNENBAUM, A. S. (1963). Organizational control structure: a comparative analysis. *Hum. Relat.* 16, 299-316.
- STOGDILL, R. M. (1950). Leadership, membership and organization. *Psychol. Bull.* 471, 1-14.
- TANNENBAUM, A. S. (1956a). Control structure and union functions. *Amer. J. Sociol.* 61, 536-45.
- TANNENBAUM, A. S. (1956b). The concept of organizational control. *J. soc. Issues* 12, 50-68.
- TANNENBAUM, A. S. (1961). Control and effectiveness in a voluntary organization. *Amer. J. Sociol.* 67, 33-46.
- TANNENBAUM, A. S. & GEORGOPOULOS, B. (1957). The distribution of control in formal organization. *Soc. Forces* 36, 44-50.
- TANNENBAUM, A. S. & KAHN, R. L. (1957). Organizational control structure: a general descriptive technique as applied to four local unions. *Hum. Relat.* 10, 127-40.
- TANNENBAUM, R., WESCHLER, I. R. & MASSARIK, F. (1961). *Leadership and organization*. New York: McGraw-Hill.
- WHYTE, W. F. (1953). Leadership and group participation. New York State School Indust. Lab. Relat., Bulletin 24. Ithaca, New York.

BIOGRAPHICAL NOTES

Notes on both authors appeared in *Human Relations*, Vol. 16, No. 4, 1963, p. 316.