-521 252/

Bases of Supervisory Power:

A Comparative Study in Five Organizational Settings\*

Jerald G. Bachman, David G. Bowers, and Philip M. Marcus

The University of Michigan

#### Abstract

This paper treats two interrelated problems: Why do people comply with the requests of organizational "superiors"? And how are these various reasons related to organizational effectiveness? Several bases of power were studied in five types of organizations, ranging from factories to colleges. Expert and Legitimate Power were rated the most important reasons for compliance; however, only the former was consistently correlated with measures of organizational effectiveness. Coercive Power was rated the least prominent reason for compliance, and was usually negatively correlated with the criterion variables. In addition, the over-all amount of supervisory power correlated positively with effectiveness criteria.

<sup>\*</sup>This article was prepared as part of a program of research on control in social organizations under a grant from the Carnegie Corporation of New York to the Survey Research Center, The University of Michigan. Most of the data were obtained through several larger projects conducted at the Survey Research Center and supported by the participating companies. The collection of data in colleges was supported by the grant from the Carnegie Corporation.

Bases of Supervisory Power:

A Comparative Study in Five Organizational Settings

Jerald G. Bachman, David G. Bowers, and Philip M. Marcus

## The University of Michigan

This paper deals with two interrelated problems: Why do people comply with the requests of organizational "superiors"? And how are these various reasons related to organizational effectiveness? Stated another way, we are interested in the bases of supervisory power, and the effects of that power.

French and Raven (1960, pp. 612-613) describe five bases for the social power which an agent, O, can exert over a person, P:

(a) Reward power, based on P's perception that 0 has the ability to mediate rewards for him; (b) coercive power, based on P's perception that 0 has the ability to mediate punishments for him; (c) legitimate power, based on the perception by P that 0 has a legitimate right to prescribe behavior for him; (d) referent power, based on P's identification with 0; (e) expert power, based on the perception that 0 has some special knowledge or expertness.

These five bases of power represent a useful framework for studying supervisory power over subordinates. It should be noted that each basis of power depends upon some perception or cognition on the part of the person, P. Thus one approach to measuring bases of supervisory power is to ask

the subordinates why they comply with supervisory wishes. This approach has been used in a number of studies recently carried out by the Survey Research Center. The present paper summarizes the findings from five of these studies.

## METHOD

#### Respondents and Organizational Settings

The organizational settings for this research are described below and summarized in Table 1. Data were obtained from a total of 2840 respondents in 148 different organizational units.

# Insert Table 1 about here

- 1. <u>Salesmen in Branch Offices</u>. Respondents were 656 salesmen in 36 branch offices of a national firm selling intangibles. These salesmen solicit and open new accounts, service existing accounts, and provide clients with information and expertise. The salesmen work under the supervision of an office manager, who has sole responsibility for the conduct of the office. (For a more extensive description see Bachman, Smith and Slesinger, 1966.)
- 2. Faculty in Liberal Arts Colleges. Respondents were 658 full-time faculty members in 12 liberal arts colleges belonging to a regional association of colleges. Faculty are not ordinarily considered to be "supervised" in the same sense as other subjects in this study; nevertheless, the relationship between faculty and the academic dean may usefully

be studied in this manner. In many respects the academic dean's role is similar to "middle management" positions; he represents the faculty viewpoint to the president and trustees, and also represents higher administration to the faculty. (See Bachman, 1965, for a detailed description of the study of college faculty.)

- 3. Agents in Life Insurance Agencies. Respondents were 860 full-time agents in 40 agencies of a life insurance mutual company. Agents work under the general supervision of regional managers, selling policies and maintaining the insurance programs of clients. (A more detailed description of these agencies appears in Bowers, 1964.)
- 4. <u>Production Workers in an Appliance Firm</u>. Respondents were 486 production workers in 40 work groups of a firm manufacturing electric appliances. Each work group is supervised by a production foreman and performs either line assembly or parts fabricating tasks.
- 5. Workers in a Utility Company. Respondents were 180 semi-skilled workers in 21 work groups of a large mid-western utility company. These workers install and repair new equipment in customers' homes, and maintain service in central plants.

To summarize, our subjects are drawn from a variety of occupations, ranging from college professor to factory worker. Yet all of them do their work in organizational settings; and all are subject to some degree of influence by others in the organization.

#### Measures

Five different questionnaires were used, each tailored to fit the organizational setting in which it was used. Among the items which all of the questionnaires had in common were a measure of the five bases of power, and one or more measures of satisfaction with the supervisor (or with the job as a whole).

Bases of Power. The salesmen in branch offices were asked why they do the things their office manager asks or suggests. They ranked the importance of the following five reasons:

Legitimate power: "He has a legitimate right, considering his position, to expect that his suggestions will be carried out."

Expert power: "I respect his competence and good jugment about things with which he is more experienced than I."

Referent power: "I admire him for his personal qualities, and want to act in a way that merits his respect and admiration."

Reward power: "He can give special help and benefits to those who cooperate with him."

Coercive power: "He can apply preasure or penalize those who do not cooperate."

The college faculty ranked a nearly identical list of reasons to indicate why they do the things their academic dean suggests or wants them to do.

The workers in the utility company used a very similar set of items to rank their reasons for complying with the wishes of their foreman. Similar items were also used by the insurance agents and by the appliance production workers in rating their immediate supervisors. A major difference, however, was that these respondents did not rank the five different reasons; they made an independent rating of importance for each, using a five-point response scale.\*

Satisfaction. In four of the organizational settings the respondents were asked to indicate their general level of satisfaction with the way their supervisor was "doing the job." Workers in the utility company were asked a series of questions which were combined to yield an overall job satisfaction index.

Performance. The measure of performance by salesmen was based on dollar productivity, with a correction for length of service in the company (Bachman, Smith and Slesinger, 1966). The overall performance effectiveness of insurance agencies was ranked by company officials on the basis of objective measures modified by subjective judgment. Performance in the appliance manufacturing firm was assessed using four objective measures: indirect labor costs, supplies costs, quality of output, and scrap rate.

<sup>\*</sup> It should be noted that both the ranking and the rating procedures for assessing bases of power have special advantages. The ranking procedure forces the respondent to discriminate among all the bases of power, rather than giving prominence to only one or two. Moreover, it may help the respondent to avoid confusing the extent of his compliance with the reasons for doing so. The rating procedure, on the other hand, has the advantage of permitting each basis of power to be independent of the others (whereas the ranking procedure is relative, and permits the emphasis of one basis of power only at the expense of the others). Since both forms of assessment are included in the present paper, we are in a position to use the advantages of both.

#### RESULTS

## Relative Importance of the Five Bases of Power

Table 2 presents the mean rating of the five bases of power for each type of organization. The most important reasons for complying with organizational superiors were legitimate and expert power. Of lesser importance were referent and reward power. In every case coercive power was the least likely reason for compliance.

Insert Table 2 about here

#### Bases of Power Correlated with Criteria of Organizational Effectiveness

The correlations presented below treat the organizational unit ( a single work group, office, or college) as the basic unit of analysis.

Some performance measures were originally collected for the organizational unit as a whole. In all other cases, the score for a unit consisted of the mean of the scores for all respondents in that unit.

<u>Satisfaction</u>. Table 3 presents the correlations between the five bases of power and measures of satisfaction with the supervisor or with the job as a whole. Expert and referent power provide the strongest and most consistent positive correlations with satisfaction. Coercive power shows the most negative relationship with satisfaction.

The pattern for legitimate and reward power is less clear; correlations with satisfaction are negative when we consider the data for the salesmen and college faculty, but predominantly positive when the insurance agents and production workers are considered. This finding is less puzzling when we note that the ranking method used by the salesmen and college faculty

makes it impossible for all five bases of power to be correlated in the same direction with any single criterion variable. It seems likely that the positive correlations with expert and referent power "caused" negative correlations with the other bases of power, particularly legitimate and reward power.\*

Insert Table 3 about here

Performance. The correlations between the bases of power and measures of performance, available in three of the five organizational settings, are presented in Table 4. Expert power again shows the most consistently positive correlations with this second criterion variable. Referent power is positively related to performance in two cases, and unrelated to it in the third case. The correlations between reward power and performance are predominantly positive, particularly if we note that the one negative correlation may be due largely to the ranking method used by the salesmen. Legitimate and coercive power show no clear relationship, positive or negative, with performance criteria.

Insert Table 4 about here

<sup>\*</sup> Of course, the reverse explanation (that the negative correlations "caused" the positive ones) is also possible; but it is much less compelling in the light of the overall pattern of findings.

### DISCUSSION

This summary of data obtained in five organizational studies has provided a number of fairly consistent findings: (a) Legitimate power was rated one of the two most important bases of power; however, it did not appear to be a consistent factor in organizational effectiveness.

(b) Expert power was the other very prominent basis of power; and it was strongly and consistently correlated with satisfaction and performance.

(c) Referent power was of intermediate importance as a reason for complying with a supervisor's wishes; but in most cases it was positively correlated with criteria of organizational effectiveness. (d) Reward power was also of intermediate importance; in this case the correlations with organizational effectiveness were not consistent. (e) Coercive power was clearly the least prominent reason for compliance; moreover, this basis of power was often negatively related to criteria of effectiveness.\*

This paper has dealt only with the <u>bases</u> of supervisory power. It may also be of interest to consider the overall <u>amount</u> of supervisory power as it related to organizational effectiveness. Tannenbaum and his colleagues have found that relatively high control exercised at <u>all</u> organizational echelons, including supervisors, is associated with higher performance and increased satisfaction (Tannenbaum, 1962; Smith and Tannenbaum, 1963; Marcus and Cafagna, 1965). It should be added that

<sup>\*</sup> These findings no doubt reflect the influence of fairly pervasive cultural values. For example, there may be a widespread value in the United States that supervisors should, whenever possible, avoid coercion in dealing with subordinates. This may actually lead supervisors to avoid coercion. However, it may also make subordinates unwilling to admit compliance based upon a fear of sanctions; if so, our data may underestimate the actual use of coercive power.

similar findings were obtained in several of the studies reported in this paper; measures of overall influence by office managers, deans, regional managers, and production foremen, all correlated positively with criteria of effectiveness (see Bachman, Smith, and Slesinger, 1966; Bachman, 1965; Bowers, 1964).

One limitation of the results reported here is that they are based heavily upon relationships between questionnaire responses. Such relationships might indicate simply that persons who do a good job and are satisfied in their work tend to favor the "nice" bases of power when rating their reasons for compliance in the organization. This problem of "phenomenological effects" has been discussed in detail elsewhere (see especially Tannenbaum and Smith, 1964; and Tannenbaum and Bachman, 1964). It is sufficient for our present purposes to note that extensive analyses have dealt directly with this issue in the branch offices and the colleges; these analyses indicate that our present findings cannot be explained simply in terms of phenomenological effects. (Bachman, Smith, and Slesinger, 1966; Bachman, 1965.)

Given a comparative study based on five different organizational settings, it is tempting to look for more subtle differences, as well as overall similarities in the use and effects of power. Such differences must certainly exist; for example, our findings imply that college faculty and insurance agents are somewhat more impressed by expertise than by sheer legitimacy of authority, whereas the opposite seems true for salesmen and utility workers. Unfortunately, our data are not adequate to support many such distinctions. Our example of organizations is varied, but far too

small; our measures are fairly consistent from study to study, but the differences remain a problem.

At this stage of our efforts, then, we must limit our conclusions to those findings which are of sufficient generality to appear in most or all of the organizations studied. These findings provide the following tentative answers to the questions with which we began: People say that they comply with the requests of organizational superiors primarily because of legitimate and expert power, and least of all because of coercive power. Organizational effectiveness seems positively related to expert power and also to referent power, and negatively related to coercive power.

### References

- Bachman, J. G. Faculty satisfaction and the dean's influence: an organizational study of twelve liberal arts colleges. Unpublished manuscript, The University of Michigan, 1965.
- Bachman, J. G., Smith, C. G., and Slesinger, J. A. Control, performance, and satisfaction: an analysis of structural and individual effects.

  Journal of Personality and Social Psychology, 1966, in press.
- Bowers, D. G. Organizational control in an insurance company. Sociometry, 1964, 27, 230-244.
- French, J. R. P., Jr. and Raven, B. The bases of social power. In Cartwright, D., and Zander, A., Eds. <u>Group Dynamics</u>, Evanston, Ill.: Row, Peterson & Co., 1960, 607-23.
- Marcus, P. M., and Cafagna, Dora. Control in modern organizations. <u>Public</u>

  <u>Administration Review</u>, 1965, 25, 121-127.
- Smith, C. G., and Tannenbaum, A. S. Organizational control structure: a comparative analysis. Human Relations, 1963, 16, 299-316.
- Tannenbaum, A. S. Control in organizations: individual adjustment and organizational performance. <u>Administrative Science Quarterly</u>, 1962, 7, 236-57.
- Tannenbaum, A. S., and Bachman, J. G. Structural versus individual effects. American Journal of Sociology, 1964, LXIX, 585-95.
- Tannenbaum, A. S., and Smith, C. G. The effects of member influence in an organization: Phenomenology versus organizational structure.

  <u>Journal of Abnormal and Social Psychology</u>, 1964, 69, 401-410.

TABLE 1
SUMMARY OF ORGANIZATIONAL SETTINGS

## ORGANIZATION

	1	2	3	4	5
	Branch offices	Colleges	Insurance agencies	Production work units	Utility company work groups
Number of units	36	12	40	40	20
Supervisory role	office manager	academic dean	regional manager	production foreman	first line foreman
Respondent's role	salesman (opening and servicing accounts; providing expert information)	faculty member (teaching and related activities)	insurance agent (selling and servicing insurance policies)	production worker (routine production of electric appliances)	semi-skilled worker (installing and main- taining equipment)
Number of respondents	656	658	860	486	180
Response rate	95%	60%	83%	66%	99%

TABLE 2

MEAN RATINGS OF BASES OF POWER

BASES OF POWER		ORGANIZATION			
	1	2	3	4	5
	Branch offices	Colleges	Insurance agencies	Production work units	Utility company work groups
Legitimate	4.1	3.6	3.3	3.4	4.7
Expert	3.5	4.1	3.8	3.4	3.0
Referent	2.9	3.5	2.5	2.7	2.1
Reward	2.7	2.3	2.8	2.8	2.7
Coercive	1.9	1.6	1.8	2.3	2.5

NOTE: All ratings have been adjusted so that a value of 5.0 represents the highest possible rating, 1.0 represents the lowest possible rating. Respondents in organizational settings 1, 2 and 5 used a ranking procedure; those in settings 3 and 4 used a procedure that permitted independent ratings of the five bases of power.

TABLE 3

CORRELATIONS WITH SATISFACTION MEASURES

BASES OF POWER		ORGA	ORGANIZATION		
	1	2	3	4	5
	Branch offices	Colleges	Insurance agencies	Production work units	Utility company
	(N=36)	(N=12)	(N=40)	(N=40)	work groups (N=20)
Legitimate	57**	52	.04	.40*	35
Expert	.69**	.75**	.88**	.67**	. 30
Referent	.75**	.67*	.43*	.57**	.11
Reward	<b></b> 57**	80**	.48**	.27	<b>12</b>
Coercive	31	70*	52**	.01	23

١ -

<sup>\*</sup> p < .05 \*\* p < .01 two-tailed

CORRELATIONS WITH PERFORMANCE MEASURES

TABLE 4

BASES OF POWER		ORGANIZATION		
	1	3	4	
	Branch . offices (N=36)	Insurance agencies (N=34)1	Production work units (N=40) <sup>2</sup>	
Legitimate	17	.26	.06	
Expert	.36*	.48**	.22	
Referent	.41*	19	.31*	
Reward	55**	.54**	.21	
Coercive	31	.03	.08	

\* p < .05
\*\* p < .01
two-tailed

- 1. Six of the 40 insurance agencies were considered to be too new to permit accurate ratings of performance effectiveness, thus the correlations in this table are based on the remaining 34 agencies.
- 2. Each cell in this column reports the mean (using the Z-transformation) of four correlations, corresponding to the four objective measures of performance in the appliance manufacturing firm (see text).