



Relationships of Leader Power to Compliance and Satisfaction with Supervision: Evidence from a National Sample of Managers

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This study investigated the effectiveness of the bases of leader power, such as coercive, reward, legitimate, expert, and referent in influencing behavioral compliance with superior's wishes and satisfaction with supervision. Regression analyses of data from a national random sample of managers (N = 476), after demographic, job-related, and other extraneous variables were controlled for, showed that expert and referent power bases were positively associated with compliance and satisfaction and legitimate power base was positively associated with compliance but negatively associated with satisfaction.

Bertrand Russell (1938) described power as "the fundamental concept in social science . . . , in the same sense in which energy is the fundamental concept in physics" (p. 12). Dahl (1957) indicated that "the concept of power is as ancient and ubiquitous as any that social theory can boast" (p. 201). Power is certainly one of the major areas of study in management. Content analysis of syllabi on organizational behavior courses for MBA students indicated that "power and influence" was the eighth most frequently mentioned among 65 topics (Rahim, 1981).

Power is defined as the ability of one party to change or control the behavior, attitudes, opinions, objectives, needs, and values of another party. Several classifications of leader or supervisory power have been suggested (Kipnis, Schmidt, & Wilkinson, 1980; Patchen, 1974; Shukla, 1982). But the classic taxonomy of the bases or sources of power suggested by French and Raven (1959) still appears to be fairly representative and popular in application (Cobb, 1980; Pearce & Robinson, 1987). The five French-Raven power bases are as follows:

1. *Coercive power* is based on a subordinate's perception that a superior has the ability to punish him or her for failure to conform to the superior's influence attempt.

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2. *Reward power* is based on the perception of a subordinate that a superior can reward desired behavior.

3. *Legitimate power* is based on the belief of the subordinate that the superior has the right to prescribe and control behavior.

4. *Expert power* is based on the subordinate's belief that the superior has job experience and special knowledge or expertise in a given area.

5. *Referent power* is based on a subordinate's desire to identify with a superior because of admiration or personal liking of the superior.

There were attempts to expand this set to include "information" and other power bases. But Gaski (1986) has argued that, "these alleged power sources appear to be already captured by the French and Raven framework" (p. 62).

The literature on the bases of leader or supervisory power is deficient in several respects. Miner (1982) indicated that "theories have suffered badly from measurement failure that remains to this day" (p. 444). This is particularly true of the existing measures of supervisory power. A number of studies have used single-item instruments to measure power bases. Two such published instruments, which are currently available for measuring the five French and Raven power bases, were designed by Bachman, Smith, and Slesinger (1966) and Student (1968). These instruments were used in numerous studies (Podsakoff & Schriesheim, 1984).

Rahim's (1986) study showed that the two instruments were poor in face, content, and convergent validities. It is not clear whether the questionnaire items for coercive and reward power bases were designed to measure legitimate or illegitimate bases of these powers. The retest reliability coefficients of the subscales ranged between .27 and .47 for the Bachman et al. instrument and .35 and .52 for the Student instrument. Another problem with the published studies on power bases is that data were mostly collected from convenience samples. Results from these studies have limited generalizability.

The objective of the present study was to investigate the multivariate relationship between the five bases of leader power and self-reports of behavioral compliance with superior's wishes and satisfaction with supervision after correcting for the sampling and measurement deficiencies discussed above.

Leader Power Effectiveness

Behavioral Compliance

Ideally, a criterion variable in this study would be one that most directly linked to the outcome of power use. The most appropriate criterion measure to use, then, would be some measure of followers' compliance with leader's influence attempts. Early studies on French and Raven's power typology frequently touched upon subordinates' compliance with superior's wishes and effectiveness in relation to the supervisor's particular power bases (Bachman, 1968; Bachman, Bowers, & Marcus, 1968; Bachman, Smith, & Slesinger, 1966; Ivancevich, 1970; Student, 1968). The consensus among these studies was that subordinates perceive coercive power base as a weak reason for compliance with superior's wishes. Reward and legitimate power bases were considered important by the subordinates, but they showed no clear relationship with compliance and perfor-

mance. Expert power base and, in most cases, referent power base consistently correlated with performance. This lack of consistent relationships between power bases and compliance may be partly attributed to the measurement and sampling deficiencies discussed before.

Studies by Dunne, Stahl, and Melhart (1978) and Thamkain and Gemmill (1974) indicated that expertise, professional challenge, and formal authority were important reasons for compliance with the requests of project managers. These studies strongly suggested that legitimate power was effective in inducing compliance. In a major study Warren (1968) found that the *use* of five types of power by principals was positively associated with total conformity (behavioral and attitudinal) of teachers. The rank-order correlation between referent power and conformity was the highest.

These studies provide support to Weber's (1929/1947) emphasis of the importance of legitimacy in the use of power. He took compliance with an order of a superior with legitimate authority for granted. Pfeffer (1981) argued that "the exercise of authority, power which has become legitimated, is expected and desired in the social context . . . power, once it is transformed through legitimation into authority, is not resisted" (pp. 4-5).

The above literature review indicates that legitimate, expert, and referent power bases generally induce compliance from subordinates. Evidence seems to indicate that subordinates consider coercive and reward power bases as weak reasons for compliance.

Hypothesis 1: Legitimate, expert, and referent power bases positively influence behavioral compliance with superior's wishes.

Satisfaction with Supervision

A study by Busch (1980) indicated that expert and referent power bases were positively related to satisfaction with supervision of employees. Coercive power base was negatively correlated with their satisfaction with supervision in two of the three firms surveyed. Reward and legitimate power bases were not consistently related to satisfaction with supervision. This study used a modified version of the single-item instrument designed by Student (1968). Earlier studies on the power bases and satisfaction from work found similar relationships (Bachman, 1968; Bachman, Smith, & Slesinger, 1966; Bachman, Powers, & Marcus, 1968; Burke & Wilcox, 1971). It may be noted that low reliabilities of the power instruments used in the above studies may have attenuated relationships between the five power bases and satisfaction with supervision.

Studies on leadership by Sims and Szilagyi (1975), Keller and Szilagyi (1976), and Podsakoff, Todor, and Skov (1982) found that performance-contingent reward behavior of the leader was positively correlated with satisfaction with supervision. But the performance-contingent punishment behavior of the leader had no effects on the satisfaction with supervision.

The above literature review indicates that expert and referent power bases and probably reward power base are positively correlated with satisfaction with su-

pervision. Coercive and legitimate power bases were found to be ineffective in enhancing satisfaction from supervision.

Hypothesis 2: Reward, expert and referent power bases positively influence satisfaction with supervision.

Method

Instruments

The five French-Raven bases of supervisory power were measured by the Rahim Leader Power Inventory (RLPI) (Rahim, 1988). This 29-item instrument uses a 5-point Likert scale to measure the perceptions of subordinates regarding the supervisors' bases of power. The coercive and reward power subscales measure the perceptions of subordinates of the extent to which their superiors can provide rewards or administer punishment, respectively, contingent upon performance. A higher score indicates a greater base of a superior's power. The items of the instrument were selected on the basis of feedback from the Ss and colleagues of the author and an iterative process of factor analyses (principal-components analysis and varimax rotation) of data from six successive convenience samples and a random sample of organizational members ($N = 1,256$). The retest and internal consistency reliabilities ranged between .82-.93 and .72-.88, respectively. The subscales were free from faking or social desirability response set (Crowne & Marlowe, 1960).

Compliance was measured with five items (e.g., "I comply with the directives of my superior," "I do what my superior suggests," etc.) from the Compliance with Superior's Wishes (CSW) developed by Rahim (1988). Each item was cast on a 5-point Likert scale. Responses to the items were averaged to yield a measure of behavioral compliance. A higher score indicates greater compliance with the superior's directives and wishes. The scale has satisfactory construct and criterion validities and internal consistency reliability above .80 (Rahim & Buntzman, 1989).

Satisfaction with supervision was measured with the Job Descriptive Index (JDI) (Smith, Kendall, & Hulin, 1969). An S describes satisfaction by a "yes," "?," or "no" response to each of the 18 adjectives. The subscale was constructed by averaging the Ss' responses to the adjectives. The subscale ranged between 0 and 3. A higher score indicates greater satisfaction with supervision. A number of studies have reported high reliability and criterion and construct validities of this scale (Imparato, 1972).

Sample

An instrument was prepared with the above measure that asked the Ss to rate their superiors' power bases and their own compliance with their superiors' wishes and satisfaction with supervision. This instrument was sent to 2,000 executives other than the CEOs, presidents, and board chairs. A stratified random sampling was used to select the Ss from the *Standard and Poor's Directory of Executives and Directors*, which contained about 41,000 members (after elimination from the directory of some 30,000 CEOs, presidents, and board chairs).

The sample was based on the professionals, who were categorized as vice presidents, managers, engineers, treasurers, cashier, and management consultant. A cover letter explaining the purpose of the study and a self-addressed and stamped envelope accompanied the questionnaire. The Ss were informed that for returning the completed questionnaire they would be entitled to a free summary report of this study and their names would be entered in a lottery where they could win between one and four books on management. A follow-up letter was sent after 2 weeks to all the Ss. Four weeks after this, another follow-up letter, the questionnaire, and a return envelope were sent to the nonrespondents. Responses were received in two waves from 630 Ss, a response rate of about 32%. Out of this, 154 questionnaires were incomplete because some of the Ss were retired from their jobs, deceased, self-employed, had moved, or did not have any superior.

The behavioral and demographic variables of the first ($n = 350$) and second ($n = 126$) waves were compared with 13 One-Way ANOVAs and 7 Chi-Square tests. The results did not show any significant difference between the two groups of respondents at the .05 level. The data from the two waves were combined ($N = 476$) for further statistical analysis.

The Ss were from more than 45 different industries. The average annual sales and the number of employees of the respondents' organizations were greater than \$863 million ($SD = \3.34 billion) and 7,134 ($SD = 39,918$), respectively. The respondents represented different levels of educational attainment, such as some high school ($n = 2$), high school completed ($n = 12$), some college ($n = 67$), bachelor's degree ($n = 132$), some post-graduate work ($n = 84$), master's degree ($n = 88$), some post-graduate work ($n = 24$) and post-graduate degree ($n = 44$). There were 23 nonrespondents. Average work experience was more than 29, 28, and 27 years for top ($n = 316$), middle ($n = 128$), and lower level managers ($n = 28$), excluding 4 nonrespondents, respectively. Average work experience with the present superior and age of the Ss were more than 7.29 ($SD = 8.02$) and 52.49 ($SD = 10.03$) years, respectively. Comparisons of this sample to the population (i.e., *Standard and Poor's Directory*) indicated that the sample was representative in terms of the demographic characteristics.

Analysis

Construct Validity. Three separate factor analyses were run on the 29, 5, and 18 items of the RLPI, CSW, and JDI scales. The analyses were run with the principal-components analysis and varimax rotation. The selection of a factor and an item was based on the criteria: eigenvalue ≥ 1.00 and Scree plot and factor loading $\geq .40$, respectively.

The factor analysis of the RLPI items resulted in five significant factors that provided support to the five independent dimensions of the bases of leader power. The results are presented in Table 1.

The factor loadings of $\geq .40$ are underlined to indicate the items selected for the construction of five subscales. Table 1 shows that the loading for item number 23 was low on factor 5. As a result, the legitimate power subscale was constructed without this item.

The factor analysis of the CSW items resulted in a significant factor. The factor analysis of the JDI items resulted in three significant factors. It was beyond the

Table 1
Factor Structure Matrix for Varimax Rotated Factor Solution

Item No.	Power Bases/Items	Factors					h ²
		RF I	RE II	EX III	CO IV	LE V	
<i>I. Referent Power (RF)</i>							
1.	My superior has a pleasing personality.	.80	.02	.16	.03	.08	.68
12.	I don't want to identify myself with my superior.	.56	.19	.32	-.01	.01	.45
19.	I admire my superior because he (she) treats every person fairly.	.79	.07	.30	.06	.00	.73
21.	I like the personal qualities of my superior.	.86	.02	.20	.01	-.05	.79
24.	I want to develop a good interpersonal relationship with my superior.	.57	.09	.08	.04	.13	.35
25.	My superior is not the type of person I enjoy working with.	.83	.03	.28	.04	.05	.77
<i>II. Reward Power (RE)</i>							
4.	My superior can recommend me for a merit recognition if my performance is especially good.	.11	.69	.04	.12	.24	.56
11.	My superior can provide opportunities for my advancement if my work is outstanding.	.07	.73	.16	.22	.05	.62
15.	My superior cannot get me a pay raise even if I do my job well.	.08	.72	.17	.07	.01	.55
22.	If I put forth extra effort, my superior can take it into consideration to determine my pay raise.	.09	.72	.14	.27	.20	.67
27.	My superior can get me a bonus for earning a good performance rating.	.05	.69	.08	.22	.11	.55
28.	My superior can recommend a promotion for me if my performance is consistently above average.	.10	.80	.17	.19	.10	.72
<i>III. Expert Power (EX)</i>							
3.	I approach my superior for advice on work-related problems because she (he) is usually right.	.34	.09	.66	.12	.17	.60
5.	When a tough job comes up my superior has the technical "know how" to get it done.	.21	.17	.78	.10	.08	.69
7.	My superior has specialized training in his (her) field.	.33	.15	.54	-.12	.11	.45
10.	My superior does not have the expert knowledge I need to perform my job.	.09	.07	.75	.13	.03	.59
17.	I prefer to do what my superior suggests because he (she) has high professional expertise.	.37	.14	.73	.01	.11	.70
18.	My superior has considerable professional experience to draw from in helping me to do my work.	.25	.19	.78	-.04	-.01	.71
<i>IV. Coercive Power (CO)</i>							
2.	My superior can take disciplinary action against me for insubordination.	.01	.09	.03	.50	.31	.36
9.	My superior can fire me if my performance is consistently below standards.	.13	.22	.03	.78	.14	.70
14.	My superior can suspend me if I am habitually late in coming to work.	-.05	.22	.18	.69	.14	.58
16.	My superior can see to it that I get no pay raise if my work is unsatisfactory.	-.04	.31	.03	.46	.21	.36
20.	My superior can fire me if I neglect my duties.	.09	.25	-.04	.84	.07	.78

Table 1 (Continued)
Factor Structure Matrix for Varimax Rotated Factor Solution

Item No.	Power Bases/Items	Factors					h ²
		RF I	RE II	EX III	CO IV	LE V	
V. <i>Legitimate Power</i> (LE)							
6.	It is reasonable for my superior to decide what he (she) wants me to do.	.08	.18	.28	.21	.56	.48
8.	My superior is justified in expecting cooperation from me in work-related matters.	.29	.20	.00	.11	.62	.53
13.	My superior's position entitles him (her) to expect support of his (her) policies from me.	.18	.21	.02	.10	.66	.53
23.	My superior's position does not give him (her) the authority to change the procedures of my work.	-.02	.31	.31	.11	.30	.30
26.	I should do what my superior wants because he (she) is my superior.	-.27	-.07	.08	.10	.56	.41
29.	My superior has the right to expect me to carry out her (his) instructions.	.03	.14	.06	.21	.75	.63
		Factors					
		I	II	III	IV	V	Total
Eigenvalue		8.07	4.00	1.80	1.69	1.26	16.82
Percentage of trace		27.83	13.79	6.20	5.83	4.34	57.99

Note: Scales for items numbering 10, 12, 15, 23, and 25 were reversed before computing the factor analysis. Trace = 29.

scope of this present study to resolve the dimensionality problem of this subscale indicated by the factor analysis. It was decided to keep the 18 items of the subscale intact. It should be of interest to the future researchers that a factor analysis with the combined items of the RLPI, CSW, and JDI resulted in seven significant factors. In this analysis, the 18 JDI items loaded on a single factor. This possibly indicates that the 18 items will not load on a single factor unless all the JDI items together are factor analyzed.

Descriptive Statistics, Reliability and Correlation Coefficients. The means, standard deviations, internal consistency reliabilities, and Pearson correlations of the five independent and two dependent variables are shown in Table 2.

The standardized reliability coefficients, as assessed by Cronback (1951) alpha for the seven subscales, which ranged between .71 and .87, were satisfactory (cf. Nunnally, 1978). The positive intercorrelations among the five power bases were congruent with studies of Warren (1968), Ivancevich (1970), and others. These bases of leader power are not independent: that is, a change in one power base may affect other power bases (Greene & Podsakoff, 1981).

MANOVA and Multiple Regression Analyses. A multivariate test with Pillais criterion was conducted to check if the independent variables (five power bases) were significantly related to the dependent variables (compliance and satisfaction). After this, two stepwise multiple regression analyses were computed to test the relationships of the five power bases to each of the two criterion variables with the SPSS computer package. In the first and second regression analyses, the five power bases were regressed on the compliance and residualized satisfaction

Table 2
No. of Items, Means, Standard Deviations, and Reliability
Coefficients of Power and Other Subscales

Subscales	No. of Items	<i>M</i>	<i>SD</i>	Internal Consistency Reliability	Pearson Correlations*						
					1	2	3	4	5	6	7
1. Coercive	5	4.05	.7071	.77	1.00	.54	.45	.20	.12	.28	.14
2. Reward	6	4.02	.7760	.87		1.00	.37	.37	.25	.27	.27
3. Legitimate	5	4.08	.5434	.71			1.00	.26	.15	.47	.12
4. Expert	6	3.16	.9199	.87				1.00	.58	.32	.58
5. Referent	6	3.60	.8963	.87					1.00	.24	.78
6. Compliance	5	4.24	.5069	.83						1.00	.22
7. Satisfaction	18	2.23	.6540	.95							1.00

* $r \geq .11$, $p < .05$ (two-tailed test).

score, respectively. This score was obtained by removing from satisfaction variance in common with compliance. Predictor variables were entered into each regression equation in the following order. First, to control the influence of job-related and demographic variables, such as work experience with present superior, organizational level (top = 1, middle = 2, and lower = 3), and subordinate's and superior's education (some high school = 1, high school completed = 2, some college = 3, . . . post-graduate degree = 8) on the dependent variables, these were entered into each regression equation as a block. Second, the five power bases were entered into each equation as another block. The entry criterion for each variable in a regression equation was set at .05 level of significance.

Results

The results show that the multivariate test with Pillais criterion was significant (Approx. $F = 11.19$, $p < .0001$). This indicated that there were significant relationships between the two groups of variables. Table 3 presents the results of multiple regression analyses that investigated these relationships.

Results from the first regression analysis show that of the five power bases legitimate, expert, and referent power bases were positively associated with compliance. Coercive and reward power bases failed to enter in the regression equation, which indicates that they were not significantly associated with compliance. These results provided full support to Hypothesis 1. The three power bases together explained about 26% of the variance in compliance after the four individual and job-related variables were controlled for. Legitimate, expert, and referent power bases explained about 21%, 4%, and 1% of the variance in compliance, respectively.

Results from the second regression analysis indicate that referent and expert power bases were positively associated with satisfaction, but legitimate power base was negatively associated with the same. Coercive and reward power bases failed to enter in the regression equation, which shows that they were not significantly associated with satisfaction. These results provided partial support to Hypothesis 2. The three power bases together explained about 46% of the unique

(A) Table 3
Stepwise Regression Analysis

Predictor Variables	Beta	F	Compliance with Superior's Wishes			
			R ²	F	ΔR ²	F
Block 1						
Organizational level	.0582	2.11	.01	5.38*		
Block 2						
Legitimate	.4083	99.66****	.22	67.56***	.21	128.30****
Expert	.1477	8.64***	.26	55.63****	.04	24.93****
Referent	.0984	4.07*	.27	43.01****	.01	4.07*

(B) Stepwise Regression Analysis

Predictor Variables	Beta	F	Satisfaction with Supervision (Residual)			
			R ²	F	ΔR ²	F
Block 1						
Superior's Education	.0923	7.57**	.02	10.77***		
Block 2						
Referent	.5679	191.54****	.45	194.06****	.43	369.98****
Expert	.1786	18.03****	.47	137.36****	.02	13.62***
Legitimate	-.0978	7.97***	.48	106.54****	.01	7.97**

* $p < .05$. ** $p < .01$. *** $p < .005$. **** $p < .0001$.

variance in satisfaction after compliance and the four individual and job-related variables were controlled for. Referent, expert, and legitimate power bases explained about 43%, 2%, and 1% of the variance in satisfaction, respectively.

Discussion

The relationship between coercive power and the criterion variables was non-significant: that is, the managers found this power base of their superiors to be ineffective in enhancing their own compliance or satisfaction. The finding for compliance is consistent with the literature on power bases (Dunne, Stahl, & Melhart, 1978; Thamkain & Gemmill, 1974). The finding for satisfaction is incongruent with the literature on power bases (Burke & Wilcox, 1971; Busch, 1980), but is congruent with the literature on leader behavior (Keller & Szilagyi, 1976; Podsakoff, Todor, & Skov, 1982; Sims & Szilagyi, 1975). The literature on leader behavior shows that performance-contingent punishment behavior of the leader is not associated with satisfaction with supervision. This incongruence may be due to the failure of the researchers on power bases to distinguish between performance-contingent and performance-noncontingent coercive behavior of the leaders. The present study used a measure of performance-contingent base of coercive power.

The relationship between reward power and the criterion variables was non-significant: that is, like coercive power, the managers found this power base of their superiors to be ineffective in enhancing their own compliance and satisfaction. The relationships of reward power to compliance and satisfaction are consistent with the studies on supervisory power cited above. The relationship between reward power and satisfaction is inconsistent with the literature on leader behavior. The studies on leader behavior cited above show that performance-contingent re-

ward behavior of the leader is positively associated with satisfaction with supervision. This possibly indicates that the possession of reward power (power base) is different from the use of reward power (power behavior) of a leader. This power base may not be associated with compliance and satisfaction unless it is exercised contingent upon performance.

The relationship between legitimate power and compliance was positive and significant: as this base of a supervisor's power increased, subordinate compliance increased. The relationship between this power base and compliance was stronger than the other power bases. The relationship between legitimate power and satisfaction was negative and significant: as this base of a manager's power increased, satisfaction from supervision decreased. This negative correlation was probably caused by the presence of multicollinearity (i.e., high intercorrelations among the independent variables). The relationship between legitimate power and compliance was consistent with the studies of Dunne et al. (1978), Thamkain and Gemmill (1974), and Warren (1968), and Weber's (1929/1947) emphasis on authority. This study shows that legitimate power base is much more important than previously acknowledged. This relationship was quite inconsistent with the studies that used single-item instruments on power bases. These studies found the relationships of legitimate power base to compliance and satisfaction to be inconclusive.

The relationships of expert and referent power bases to compliance and satisfaction were positive and significant. In other words, as these power bases increased, compliance with supervisor's wishes and satisfaction with supervision increased. The relationship between referent power base and satisfaction was stronger than the relationships of the other power bases and satisfaction. These findings are fully consistent with the literature.

The implication of this study is that managers can be more effective in increasing their subordinates' compliance and satisfaction by enhancing their personal power bases, such as expert and referent. The legitimate power base may be effectively used by managers to gain compliance from subordinates, but enactment of this power base may lead to a slight reduction in the satisfaction with supervision. Because legitimate power base is negatively associated with satisfaction with supervision, the managers would be more effective if they depend on their personal power bases to enhance their subordinates' satisfaction with supervision and/or reduce the adverse influence of legitimate power on the same.

How does one enhance legitimate, expert, and referent power bases effectively? Yukl (1981, pp. 43-58) suggested a number of guidelines to build and exercise power bases. Subordinates are more likely to follow a leader's instructions if he or she provides instructions clearly and confidently, makes sure that instructions are legitimate, explains reasons for the instructions, follows channels of command, and insists on compliance and checks to verify it. Managers may be trained to follow these guidelines to acquire and make effective use of their legitimate power base. Supervisors may be provided appropriate education and training to overcome the deficiency in their expert power base. They may also need appropriate job experience to build on this power base. Supervisors may be provided human relations training to enhance their referent power base. The super-

visors can enhance their referent power base if they learn to be considerate to the subordinates' needs and feelings, treat them fairly, and defend their interests when acting as their representative.

It appears that the results of the present study were influenced by the psychometric properties of the measures of power bases, the sample characteristics, and conservative data analytic technique. It should also be remembered that the Ss in the national sample represented mainly the middle and top executive (94%). These executives, on the average, were more than 52 years old and had 29 years of work experience and were employed in large organizations. Therefore, the findings are particularly appropriate for senior executives in large organizations.

The limitations of this field study should be noted. The self-report measures of power bases, compliance, and satisfaction, which were taken from each of the 476 managers, present two problems. First, the relationships found in this study are correlational rather than causal. Second is the existence of the problem of common method variance (i.e., the lack of independence between criterion and predictor variables). The subject first assessed the leader's power bases and then went on to report compliance and satisfaction. Spector (1987) has provided empirical evidence to indicate that common method variance is not as much an alternative explanation of results as is commonly assumed. Third, even though a shortcoming of this study was the low response rate, the demographic characteristics of the respondents were not different from the population. Finally, the five power variables were significantly intercorrelated (which ranged between .12 and .58, each significant at the .01 level). Regression coefficients (*betas*) become unstable (i.e., change from one sample to another) when independent variables become significantly intercorrelated.

References

- Bachman, J.G. (1968). Faculty satisfaction and the dean's influence: An organizational study of twelve liberal arts colleges. *Journal of Applied Psychology, 52*, 55-61.
- Bachman, J.G., Bowers, D.G., & Marcus, P.M. (1968). Bases of supervisory power: A comparative study in five organizational settings. In A.S. Tannenbaum (Ed.), *Control in organizations* (pp. 229-238). New York: McGraw-Hill.
- Bachman, J.G., Smith, C.G., & Slesinger, J.A. (1966). Control, performance, and job satisfaction: An analysis of structural and individual effects. *Journal of Personality and Social Psychology, 4*, 127-136.
- Barke, R.J., & Wilcox, D.S. (1971). Bases of supervisory power and subordinate job satisfaction. *Canadian Journal of Behavioral Science, 3*, 183-193.
- Busch, P. (1980). The sales manager's bases of social power and influence upon the sales force. *Journal of Marketing, 44* (4), 91-101.
- Cobb, A.T. (1980). Informal influence in the formal organization: Perceived sources of power among work unit peers. *Academy of Management Journal, 23*, 155-161.
- Cronbach, L.J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika, 16*, 297-334.
- Crowne, D.P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology, 23*, 349-354.
- Dahl, R.A. (1957). The concept of power. *Behavioral Science, 2*, 201-215.
- Dunne, E.J., Jr., Stahl, M.J., & Melhart, L.J., Jr. (1978). Influence sources of project and functional managers in matrix organizations. *Academy of Management Journal, 21*, 135-140.
- French, J.R.P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in social power* (pp. 150-167). Ann Arbor, MI: Institute for Social Research, University of Michigan.

- Gaski, J.F. (1986). Interrelations among a channel entity's power sources: Impact of the exercise of reward and coercion on expert, referent, and legitimate power sources. *Journal of Marketing Research*, 23, 62-77.
- Greene, C.N., & Podsakoff, P.M. (1981). Effects of withdrawal of a performance-contingent reward on supervisory influence and power. *Academy of Management Journal*, 24, 527-542.
- Imparato, N. (1972). Relationship between Porter's need satisfaction questionnaire and the job descriptive index. *Journal of Applied Psychology*, 56, 397-405.
- Ivancevich, J.M. (1970). An analysis of control, bases of control, and satisfaction in an organizational setting. *Academy of Management Journal*, 13, 427-436.
- Keller, R.T., & Szilagyi, A.D. (1976). Employee reactions to leader reward behavior. *Academy of Management Journal*, 19, 619-627.
- Kipnis, D., Schmidt, S.M., & Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology*, 65, 440-452.
- Miner, J.B. (1982). *Theories of organizational structure and process*. Chicago, IL: Dryden.
- Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.
- Patchen, M. (1974). The locus and basis of influence on organizational decisions. *Organizational Behavior and Human Performance*, 11, 195-221.
- Pearce, J.A., II, & Robinson, R.B., Jr. (1987). A measure of CEO social power in strategic decision-making. *Strategic Management Journal*, 8, 297-304.
- Pfeffer, J. (1981). *Power in organizations*. Cambridge, MA: Ballinger.
- Podsakoff, P.M., & Schriesheim, C.A. (1984, August). *Measurement and analytic shortcomings in field studies of French and Raven's bases of social power*. Paper presented at the 44th annual meeting of the National Academy of Management, Boston.
- Podsakoff, P.M., Todor, W.D., & Skov, R. (1982). Effects of leader contingent and noncontingent reward and punishment behaviors on subordinate performance and satisfaction. *Academy of Management Journal*, 25, 810-821.
- Rahim, M.A. (1988). The development of a leader power inventory. *Multivariate Behavioral Research*, 23, 491-502.
- Rahim, M.A. (1986). Some psychometric properties of two measures of French and Raven bases of power. *Journal of Psychology*, 120, 465-472.
- Rahim, A. (1981). Organizational behavior courses for graduate students in business administration: Views from the tower and battlefield. *Psychological Reports*, 49, 583-592.
- Rahim, M.A., & Buntzman, G.F. (1989). Supervisory power bases, styles of handling conflict with subordinates, and subordinate compliance and satisfaction. *Journal of Psychology*, 123, 195-210.
- Russell, B. (1938). *Power: A new social analysis*. New York: W.W. Norton.
- Shukla, R.K. (1982). Influence of power bases in organizational decision making: A contingency model. *Decision Sciences*, 13, 450-470.
- Sims, H.P., Jr. & Szilagyi, A.D. (1975). Leader reward behavior and subordinate satisfaction and performance. *Organizational Behavior and Human Performance*, 14, 426-438.
- Smith, P.C., Kendall, L.M., & Hulin, C.L. (1969). *The measurement of satisfaction in work and retirement: A strategy for the study of attitudes*. Chicago: Rand McNally.
- Spector, P.E. (1987). Method variance as an artifact in self-reported affect and perceptions of work: Myth or significant problem? *Journal of Applied Psychology*, 72, 438-443.
- Student, K.R. (1968). Supervisory influence and work-group performance. *Journal of Applied Psychology*, 52, 188-194.
- Thamhain, H.J., & Gemmill, G.R. (1974). Influence styles of project managers: Some project performance correlates. *Academy of Management Journal*, 17, 216-224.
- Warren, D.I. (1968). Power, visibility, and conformity in formal organizations. *American Sociological Review*, 33, 951-970.
- Weber, M. (1947). *A theory of social and economic organization*. (A.M. Henderson & T. Parsons, Trans.) New York: Oxford University Press. (Original work published 1929)
- Yukl, G.A. (1981). *Leadership in organizations*. Englewood Cliffs, NJ: Prentice Hall.