



An Empirical Investigation of the Impact of Supervisory Power Bases on Subordinates

Kim Lian Lee (Corresponding author)

Faculty of Management & Information Technology, University College Sedaya International

No. 1, Jalan Menara Gading, UCSI Heights, 56000 Kuala Lumpur, Malaysia

E-mail: kllee@ucsi.edu.my

Abstract

The study seeks to explore the relationships between superior's bases of power and subordinates' satisfaction with supervision in Malaysian corporations. The non-coercive bases of social power (i.e. expert, referent, reward and legitimate) showed positive relationships with satisfaction with supervision. In terms of rank ordering, referent power scored the highest among other power exercises. This was followed by expert power and reward power. The ranking of intercorrelation was somewhat similar to the study of Rahim and Buntzman in 1989 which they concluded that referent and expert power as the most favorable and legitimate power the lowest among the non-coercive power bases in eliciting subordinates' acceptance.

Keywords: Managerial Supervision Power, Satisfaction, Organizational Behavior

1. Introduction

This research examines the social power relationships upon subordinates' satisfaction with supervision. Power is said to be a "part of the larger study of the determinant of human behavior" (Cartwright, 1965, p.3). We are likely to consider the reality of power at some point in the analysis of organizational phenomena. Role differentiation in the organization involves power differences. Organizational change and control may be viewed from a power perspective. The main concern is then the interpersonal relationships that occur across organizational level characterized by the phrase "superior-subordinate relationships". Differences in the perceptions of power possess implications in its own right because superiors' use of power may be reinforced by subordinates' response or the superiors may anticipate subordinates' reaction to the use of power. It would be helpful for the superiors to be aware of the existence of various sources of power in work situations and how they affect employees' satisfaction since dissatisfied subordinates could lead to organizational dysfunction (Churchill, Ford & Walker, 1976; Rahim & Buntzman, 1989).

There are two main sources of power in the organization (Bass, 1990). The first is related to one's position (positional power) to influence others who are lower in status. The other source is associated with the extent to which the wielder of power can grant affection, consideration, sympathy, recognition and secure relationships to others (personal power) which are normally acquired through personal attributes such as expertise, abilities, charisma or contacts a person might have.

The relevance of supervisory satisfaction in an organizational study needs no further elaboration. Job satisfaction is a collection of feelings or affective responses of the organizational members which are associated with the job situation within the organization. Clearly, from human relations perspectives, supervisory satisfaction is related to the personality traits of the superior which as his/her temperament, openness, industriousness, pleasantness etc. The positive side of all of these traits can enhance satisfaction. Related to the personal resourcefulness, supervisory satisfaction is also dependent on the superior's distinguishing qualities and abilities such as intelligence and knowledge.

1.1 Objectives of this Study

This study focused on the effect of superior's power bases on subordinates' satisfaction with supervision in Malaysian work environment. Hopefully, this will provide an opportunity for comparing the consequences of social power relationship in this region with those reported in the West.

The applicability of this research is limited to only superior-subordinate dyadic relationships in Malaysian manufacturing companies. This industry is selected for the reason that it represents the fastest growing industry. It also typifies an industry of high economic activities where productivity, job innovation and effectiveness are of central concern. Knowledge gained in this area may be useful toward a more effectual industrial management.

1.2 Scope of the Study

The framework of this study is to analyze the interaction among major variables as depicted in Figure 1 (Note 1). The primary data used in this study is secured through survey questionnaire. Cross-sectional data of respondents from Malaysian corporations is subjected to quantitative analysis to test the supervisory power bases model.

2. Literature Review

Many power theoreticians (Dahl 1957; Emerson, 1962; Kornberg & Perry, 1966; Nagel, 1968; Wrong, 1968) stressed that power should be conceptualized as a relationship between or among persons and not an attribute or possession of a person or group. Within organizational context, theorists largely agree that individual power in organization is the ability to control others, to exercise discretion, to get one's own way.

Differences among definitions given by many researchers (Kanter, 1977; Scott, 1981; House, 1984) appear to be a function of differences on three basic issues about power. First of all, definitions given by researchers often reflect individual orientation and arena of interest (e.g. sociological, political, organizational, etc.). Secondly, theorists tend to focus their definitions on different systemic levels which include the individualistic, the dyadic and systemic. A third divisive element among power theorists has to do with which variables are most central to a conception of power. Despite the irregularities in the conception of power, certain cumulative character appeared from this large body of research in terms of the description of power relations.

From this description of power relation, it is obvious that the notion of influence is particularly important to the concept of power. In short, leadership and influence are a function of power. Power is the potential to influence. It is the probable rate and amount of influence of a person or the occupant of a position. In order to analyze the power dependence relations adequately, we need to separate the holding of power because its dependence on one's person, one's office, the willingness to exercise it, and the tendency to do so can change the nature of influence.

2.1 The Bases of Power

A number of classifications have been used in differentiating bases of social power in organizations (Peabody, 1961; Etzioni, 1964; Patchen, 1974; Twomey, 1978; Kipnis, Schmidt & Wilkinson, 1980; Shukla, 1982; Rahim, 1989). Bases of power typology suggested by French and Raven (1959) are among the most popularly applied in research (Cobb, 1980; Frost & Stahelski, 1988; Rahim, 1989; Rahim, Antonioni, Krumov & Illieva, 2000). French and Raven defined bases of power as below:

2.1.1 Coercive Power

Coercive power involves the concept of influence based upon "the expectation of punishment for failure to conform to an influence attempt". The strength of coercive power depends on the magnitude of the "negative valence of the threatened punishment multiplied by the perceived probability that a power recipient can avoid the punishment by conformity". One of the key elements is that people subject to coercive power are either indifferent to, or opposed to the wielder of authority. As a consequence, the wielder of authority must have some way of observing the actions of the people being "coerced". At a minimum, coercive power depends on the likelihood of intervention and direct surveillance of behavior to be effective.

2.1.2 Expert Power

This power usually manifests in information, knowledge and wisdom, in good decision, in sound judgment and in accurate perception of reality. Expert power is restricted to particular areas as the "expert" tends to be specialized. The extent of expert power is not clearly a function of the face-to-face interaction or the personal quality of that interaction between role partners. It may be a function of the knowledge possessed by the power wielder, not of his presence. Because of the climate of "trust" implicit in the role of expert, his influence (in French and Raven's (1959) term) is not "dependent" – i.e., it may become internalized by the power recipient. This is characteristic of supervisory personnel interacting with less experienced or newly arrived organization members in such settings as social work, medicine, teaching and other professions.

2.1.3 Reward Power

Reward power is derived from the ability to facilitate the attainment of desired outcomes by others. In a sense, this form of social power is closely related to coercive power. If one conforms to gain acceptance, reward power is a work. However, if conformity takes place to forestall rejection, coercive power has to be exercised. In accordance to French and Raven, reward power depends on the power wielder (individual or group) administering "positive valences and reducing or removing negative valences". If reward power is to have its maximum impact, the user must be able to demonstrate the desirability of the benefit as well as a high probability that the reward will be dispensed upon determination that the assignment is complete. To the extent that one of these conditions is absent, reward power is less potent.

2.1.4 Referent Power

This involves the concept of “identification”, which French and Raven (1959) define as “a feeling of oneness or a desire for such an identity”. If referring to a group, then an individual seeks membership in such group or has a desire to remain in an association already established. Referent power reflects the idea of “attractiveness” for a social setting or the individuals within it. Identification is expressed by the behavior, beliefs and perceptions of the power recipient and the power wielder. This base of power usually has a tremendous impact on interpersonal relationships.

2.1.5 Legitimate Power

Closely tied to the Weberian concept of “legitimate authority”, legitimate power is induced by norms or values of a group that individuals accept by virtue of their socialization in the group. By the French-Raven, definition, this power “stems from internalized values which dictate that there is a legitimate right to influence and an obligation to accept this influence”. They emphasize that legitimacy is dependent upon relationships between social positions, not on the personal qualities of role incumbents. Legitimate power does, however, involve the perceived rights of the person to hold office and usually there is little or no question about whether its use is considered proper.

2.2 Satisfaction with Supervision

Smith, Kendal and Hulin (1969), in their well documented measure, the Cornell JDI (Cornell Job Descriptive Index) described five areas of satisfaction: the work itself, the supervision, the co-workers, the pay, and the opportunities for promotion on the job. Since the present study is on the superior-subordinate relationships, the job-facet satisfaction is most relevant to satisfaction with supervision.

The “style” which superiors in an organization follow in supervising their subordinates can have a broad impact on the subordinates’ attitude toward work, how structured their activities are, and the kind of relationships they have with the superiors. One aspect of supervising style is simply the amount of supervision and direction given to the subordinates; how closely their job activities are structured, monitored, and directed. Many studies recorded that supervision to the extent that the superior is “breathing down one’s neck” is found to have a negative impact the worker’s satisfaction (Fleishman & Harris, 1962; Kahn, Wolfe, Quinn, Snoeck, & Rosenthal, 1964; Likert, 1967).

The other aspect of supervising style is the quality and frequency of communication between the superiors and their subordinates. This includes the superior’s ability to communicate effectively his/her demands and expectations, company’s policies and procedures especially those concerning evaluation and compensation, informing of the subordinate’s performance as well as verbal and non-verbal rewards.

3. Hypotheses to be tested

The following hypotheses were formulated for the study.

H1a: Superiors’ non-coercive bases of social power (expert, referent, reward and legitimate) are positively associated with the subordinates’ satisfaction with supervision.

H1b: Superiors’ coercive base of social power is negatively associated with the subordinates’ satisfaction with supervision.

4. Research Methodology

4.1 Sampling Design

The sample for this study comprises of the technical and non-technical staff in the manufacturing companies who were assuming middle to upper supervisory role. This sample was selected for two reasons. First, measurement of perceptions on construct such as power bases and work autonomy requires some abstract and deliberate thinking which is certainly helped by having a higher level of education. Second, this represents the group of more educated people who were more conscious of the kind of power relation with superiors and normally hinge more on the non-traditional organizational-based kind of relationship to sustain their interest in the organizations. In addition to the above, limitation was imposed on the size of the organization (as reflected by the number of the staff employed) from which sample was drawn. Stratified random sampling technique was used to select companies with a number of employees more than 25. This number was arbitrarily chosen but the intention here was to include only establishments where a more formal organizational structure and system of supervision more likely to exist and function.

The factories that met the above criteria were selected from the registry of members of the Federation of Malaysian Manufacturers. Data from subjects were secured through survey questionnaires. A cover letter explaining the purpose of the study and a self-addressed and stamped envelope accompanied each questionnaire. It was also requested in the cover letter that the questionnaires were to be distributed to the technical staff of the company. It was emphasized that questionnaire responses were confidential, anonymity of respondents was guaranteed, and participation was voluntary. A follow up letter was sent after two weeks to all of the companies. In order to reduce the pitfalls of inexact sampling, no

more than two questionnaires were administered to the same factory and no two questionnaires were administered to a same level of organizational hierarchy or unit.

Finally, it must be clarified that the purpose of the research based upon this sample is not to determine or describe norms of organizational members. Rather, the primary intent is to discover relationships among variables; such relationships are likely to appear even if the set of subjects departs somewhat from an accurate probability sample drawn from the universe of industries' member.

4.2 Research Instrument

All data used in the study consist of responses to questionnaire items. Measures of relevant constructs were discussed here.

4.2.1 Bases of Supervisory Power

The five French-Raven bases of supervisory power were measured by using the Rahim Leader Power Inventory (RLPI) (Rahim, 1988). This multi-item instrument uses a 5-point Likert scale to measure perceptions of subordinates regarding their superiors' bases of power. The instrument comprises of 29 items. The order of items was randomized in the questionnaire to avoid response bias. Also some items were phrased positively and others negatively to overcome the problems of acquiescence, i.e., "yea" or "nay" saying tendencies. The scores for negatively phrased items were reversed before analysis. The indices of the five power bases were constructed by averaging the subject's responses to the selected items belonging to each power base. This resulted in the creation of five continuous subscales. There was substantial evidence of the criterion-related validity of the inventory when tested against the measure of compliance with superior directives and wishes (Rahim, 1988). The test-retest and internal consistency reliabilities of the subscales ranged from .77 to .91 and .70 to .86 respectively.

4.2.2 Satisfaction with Supervision

The instrument used to measure satisfaction with supervision is the updated version of the original Job Descriptive Index (JDI; Smith et al., 1969) which was later revised by Roznowski (1989). The revised scale was shown to be more internally consistent than the original scale with the alpha coefficient of .912. The unweighted sum of the individual item score was used as a measure of satisfaction with supervision. The instrument is made up of 18 items.

4.3 Data Analysis Techniques

Reliability and factor analysis was used to check the consistency and dimensionality of the scale items. Multiple regression analysis is performed to check the criterion-related validity of the scale items. Pearson Intercorrelation was used to measure the associations among the social power bases and satisfaction with supervision.

5. Research Results and Discussions

5.1 Sample Characteristics

Data from 230 respondents were received out of total 1432 questionnaires sent. Only 210 data were usable. The highest number of respondents is from Chinese ethnic group. A mere 7% female respondent reflects the male domination in the industrial sector. More than 60% of the respondents were from factories located in the Klang Valley. The highest proportion of respondents fell into the 31-40 years age group. On the whole, the education level of the respondents was high. Nearly 61% of the respondents had education up to university in technical field while 15% received university education in non-technical field. Only 24% of the respondents had no tertiary education. The high educational level was reflected in the position or the type of occupation held by the majority of the respondents i.e. 5 Assistant General Managers, 54 Divisional Manager and Assistants, 74 Engineers and Assistants, 11 Chemists, 32 Supervisors, 12 Plant Operators and the rest comprised of System Analysts, Draughtsmen, Quality Control Inspectors etc. The average salary of the respondents was higher than the population's average. On average, the respondents had worked in the present company for 7 years.

The survey also revealed the information about the respondent's superiors. Almost all of the superiors reported in the survey were males. A majority of them were holding medium to high management positions. On average, the superiors had worked in the organization for 11 years – far longer than the subordinates' average. Most of the superiors were holding high positions in the company with 36% of them in the first hierarchical level. Their educational level was also strikingly high, with 70% of them having had tertiary education in technical fields.

5.2 Validating the Scales

The data on the 29 power items from the sample of 210 respondents were factor-analyzed. This was done to test the earlier postulation that the underlying set of data contains 5 distinct dimensions or factors (Steward, 1981). The initial factors were derived through the maximum likelihood analysis and the terminal solution was reached through Varimax Rotation using the SPSS. The analysis extracted seven factors. The selection of a factor and an item was guided by the criteria: Eigenvalue > 1.0 and Scree Plot and factor loading > 0.4, respectively (Ford, MacCallum & Tait, 1986).

Based on these criteria, the first five factors were selected. The results are presented in Table 1 (Note 2). The order of items was altered to show the clustering of items more clearly. The factor loading of $> .4$ is underlined to indicate the items finally selected to represent the five subscales.

Three of the factor extracted which represented expert, legitimate and coercive power bases contained all items as earlier included in the scale. Factor which represented referent power base contained 5 items as against 6 items earlier included in the scale. Item "I like to develop a good interpersonal relationship with my superior" was found to be poorly correlated with the rest of the referent power items. It also loaded more on the reward power base. A closer examination of the responses to this item indicated that respondents tend to overstate their intention (mean score of 4.0) to have a good superior-subordinate relationship. The reason for this could be that most individuals especially the subordinates wished for harmony at work and would make an effort to maintain a good working relationship with their superiors despite differences between them. Item that mirrors inner intention of individual rather than the objective behavior response may not be suitable for inclusion here. Item "Superior cannot get me a pay raise even if I did my job well" of the reward power item failed to meet the selection criteria and was thus dropped from the scale.

Considering that the result as a whole supported the a priori grouping of items, it can be concluded that the power scale developed by Rahim (1988) was suitable for application to the present data although some purification was necessary to improve its accuracy. The indices of the five power bases were computed by averaging the samples responses to the items in each factor. This resulted in the creation of five continuous subscales.

The standardized Cronbach Alpha for each subscale is provided in Table 2 (Note 3). The internal consistency reliability coefficients for all the scales were satisfactory (Nunnally, 1978). All the scales had coefficient Cronbach Alpha greater than .70.

A multiple regression analysis was run to test the relationship between the five bases of leader power and the subordinates' satisfaction with supervision. The results are presented in Table 3 (Note 4). The results showed that the referent, expert, and reward power bases positively influenced satisfaction with supervision. The five power bases together explained about 45% of the variance in satisfaction. The relations between the five power bases and the "theoretically-related" dependent variable supported the criterion related validity of the power scale. Testing of Hypotheses

H1a & H1b: Power Bases and Supervisory Satisfaction

The correlational results in Table 4 (Note 5) provided good support for H1a. The non-coercive bases of social power (expert, referent, reward and legitimate) showed positive relationships with satisfaction with supervision. Referent power ranked highest among other power exercises (coefficient .64). This was followed by expert power and reward power which both had coefficients of correlation of 0.47. The ranking of intercorrelation was somewhat similar to the study of Rahim and Buntzman (1989) conducted on respondents with post graduate working experiences. It was expected that referent and expert power represent a high level of internalization or inner acceptance. In the exercise of referent power, internalization derived from the identification of power recipient with the wielder of referent power – a personalized commitment to the group or its representative. As Raven (1974) found out, the exercise of referent power tends to encourage a more satisfied, cooperative and prolonged relationships between superiors and subordinates.

Expert power benefits from an umbrella of authority which may go beyond superiors' specialized skills. Among technical staff, expertise emerges as a very important cue for acceptance and recognition of the superiors' direction as reflected in the present result. It most likely gains their compliance and least likely to provoke their resistance (Podsakoff & Schriesheim, 1985). Similarly, greater satisfaction with supervision among subordinates may lead to greater cooperation and heightened dependence.

Both referent and expert power were labeled by Yukl (1981) as "personal" form of power. The present results supported the general view that "personal" power has a positive effect on the leader-subordinate relationship. The high degree of intercorrelations among the referent, expert and reward power bases served to temper the previous discussions and tended to suggest that while referent power emerged as the dominant explanatory power base, its effective utilization might be tied, to some extent, to the superiors' exercise of a combination of other power bases i.e. in this case, expert and reward power bases.

Although earlier findings (Warren, 1968) acknowledged that reward power shows less inner acceptance, the present correlational results indicated a high level of satisfaction with supervision. This power derives from control over positive or rewarding outcomes for subordinates is expected to be an effective means of influence to increase productivity in the organization. Schopler and Layton (1974) held that the use of reward power is likely to increase the attraction between the manager and subordinate while coercive power is likely to decrease it. Too much emphasis of this power base, however, should be guarded against, since the withdrawal of positive sanctions is apt to result in the subordinates' reversion to their previous behavior. Further, the effect of the inducement, even if continued, is subject to diminishing utility.

The legitimate power showed relatively lower correlation with the satisfaction with supervision. In the exercise of legitimate power, subordinates' responses tended to be dependent on the normative acceptance of the position and prerogatives of the organization at large including its leadership. The present result concurred with the conclusion made by Yukl (1981) that "position" power such as legitimate and coercive are less effective means of influence attempt.

The result for coercive power was not exactly consistent with hypotheses H1b. The study indicated that the amount of coercive power perceived to be held by a superior was not associated with supervisory satisfaction when it was earlier hypothesized to have negative association. However, the result failed to reach statistical significance. Past researchers also had mixed results with regard to this correlation. For example, Rahim and Buntzman (1988) – weak positive; Busch (1980), Hinkin and Schriesheim (1989) – negative. The coercive power which is derived from control over negative or punishing outcomes for other does not appear to be a suitable power base for dealing with subordinates. The traditionalists believed that punishment is ineffective and can lead to discontinuation of social interaction. The present results however, neither confirmed nor disproved the effectiveness of punitive treatments to get things done but it was obvious that this power exercise should not lead to subordinates' satisfaction. Moreover, people could not be coerced into a deep-seated acceptance of organizational requirements.

6. Conclusion

In general, the results of this study in relation to the administration of industrial people were quite consistent with our hypotheses based upon other organizational studies involving qualified and professional people. The instruments used in the study were tested and found to be applicable to our work environment. The results provided some tentative, but hopefully useful guidance for industrial administrators.

Intercorrelations among the five power bases showed that French and Raven (1959) power bases are not mutually exclusive. Reward and referent power bases were the most closely related followed by expert and referent power bases. The results revealed that referent power, expert power and to some degree reward power and legitimate power are found to be in association with each form of power. On the other hand, coercive power was the least correlated with all other power bases and most often stands alone. Among all of the power bases, coercive power was most related to reward power. It indicates that reward and coercive power tend to be used interchangeably. Though not considered as a serious disadvantage, notable intercorrelations among the five power bases denote the difficulty of finding power typology which is both exhaustive and conceptually distinct.

In assessing the effectiveness of the various influence attempts, the results suggested that referent, expert and reward power should be emphasized to ensure subordinate acceptance. Coercive power should be minimized in any influence attempt except in situation that call for such approach (e.g. time of crisis, low performance etc). The position of legitimate power was the lowest among the non-coercive power bases in influencing subordinates' behavior for the case of management of technical and professional staff. Comparative studies revealed an interesting difference in the rank ordering of bases of the superiors' influence attempts. The present study and Rahim and Buntzman (1989) study ranked referent and expert power as the most favorable and legitimate power the lowest among the non-coercive power bases in eliciting subordinates' acceptance.

Most of the predictive relationships found in this research are in agreement with previous research findings conducted in the western work setting and support their external validity. Considering that the only differences noted are in terms of degree of sophistication (and not the pattern of relationships) it is not tenable to regard the power relationships as cultural-bound. Moreover, the present study was not designed for direct cross cultural comparison.

References

- Bass, B.M. (1990). *Handbook of Leadership: Theory Research and Managerial Applications*. The Free Press, London.
- Busch, P. (1980). The sales managers' bases of social power and influence upon the sales force. *Journal of Marketing*, 44(4), 91-101.
- Churchill, G.A., Ford, N.M., Jr., and Walker, O.C., Jr. (1976). Organizational climate and job satisfaction in the sales force. *Journal of Marketing Research*, 13, 323-332
- Cobb, A.T. (1980). The sales managers' bases of social power and influence upon the sales force. *Journal of marketing*, 44 (4), 91-101.
- Dahl, R.A. (1957). The concept of power. *Behavioral Science*, 2, 201-218.
- Emerson, R.M. (1962). Power-dependence relations. *American Sociological Review*, 27, 31-41.
- Etzioni, A. (1964). *Modern Organizations*, Englewood Cliffs, New Jersey: Prentice Hall, 58-64.
- Fiorelli, J.S. (1988). Power in work groups: Team member's perspectives. *Human Relations*, 41(1), 1-12.
- Fleishman, E.A., and Harris, E.F. (1962). Patterns of leadership behavior related to employee grievances and turnover. *Personnel Psychology*, 15.

- Ford, J.K., MacCallum and Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology*, 39, 291-314.
- French, J.R.P. and Raven, N. (1959). The bases of social power. In D. Cartwright (Ed.), *Studies in Social Power*, Ann Arbor: University of Michigan Press, pp.150-167.
- Frost, D.E. and Stahelski, A.J. (1988). The systematic measurement of French and Raven's bases of social power in workgroups. *Journal of Applied Social Psychology*, 18, 375-389.
- Hinkin, T.R. and Schriesheim, C.A. (1989). Development and application of new scales to measure the French and Raven (1959) bases of social power. *Journal of Applied Psychology*, 74(4), 561-567.
- House, R.J. (1984). Power in organizations: A social psychological perspective. Toronto: University of Toronto. *Unpublished Manuscript*.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoeck, J.D., and Rosenthal, R.A. (1964). *Organizational stress. Studies in role conflict and ambiguity*, New York: Wiley.
- Kanter, R.M. (1977). *Men and women of the corporation*. New York: Basic Books.
- Kipnis, D., Schmidt, S.M., and Wilkinson, I. (1980). Intraorganizational influence tactics: Explorations in getting one's way. *Journal of Applied Psychology*, 65, 440-452.
- Kornberg, A., and Perry, S.D. (1966). Conceptual models of power and their applicability to empirical research in politics. *Political Science*, 18(3), 52-70.
- Nagel, J.H. (1968). Some questions about the concept of power. *Behavioural Sciences*, 13(3), 129-137.
- Nunnally, J.C. (1978). *Psychometric Theory*, New York: McGraw-Hill.
- Patchen, M. (1974). The locus and basis of influence on organizational decisions. *Organizational Behavior and Human Performance*, 11, 195-221.
- Peabody, R.L. (1961). Perceptions of organizational authority: A comparative analysis. *Administrative Science Quarterly*, 6(4), 463-482.
- Podsakoff, P.M., and Schriesheim, C.A. (1985). Field studies of French and Raven's bases of power: Critique, reanalysis and suggestion for future research. *Psychological Bulletin*, 97, 387-411.
- Rahim, M.A., (1988). The development of a leader power inventory. *Multivariate Behavioral Research*, 23, 491-502.
- Rahim, M.A. (1989). Relationships of leader power to compliance and satisfaction with supervision, evidence from a national sample of managers. *Journal of Management*, 15, 545-557.
- Rahim, M.A. and Buntzman, G.F. (1989). Supervisory power bases, styles of handling conflict with subordinates, and subordinate compliance and satisfaction. *Journal of Psychology*, 123, 95-210.
- Rahim, M.A., Antonioni, D., Krumov, K., and Illieva, S. (2000). Power, conflict, and effectiveness: a cross-cultural study in the United States and Bulgaria. *European Psychologist*, 5 (10), 28-33.
- Raven, B.H. (1974). The comparative analysis of power and influence. In J.T. Tedeschi (Ed.), *Perspective on Social Power*, Chicago: Aldine.
- Roznowski, M. (1989). Examination of the measurement properties of the job descriptive index with experimental items. *Journal of Applied Psychology*, 74(5), 805-814.
- Schopler, J., and Layton, B. (1974). Attributions of interpersonal power. In J. Tedeschi, (Ed.), *Perspectives on Social Power*. Chicago: Aldine.
- Scott, W.R. (1981). *Organizations: Rational, natural and open systems*. Englewood Cliffs. NJ: Prentice Hall.
- Shukla, R.K. (1982). Influence of power bases in organizational decision making: A Contingent Model. *Decision Sciences*, 13, 450-470.
- Smith, P.C., Kendall, L.M., and Hulin, C.L. (1969). *The Measurement of Satisfaction in Work and Retirement: A Strategy for the Study of Attitudes*, Chicago: Rand McNally.
- Twomey, D.F. (1978). The effects of power properties on conflict resolution. *Academy of Management Review*, 21, 144-150.
- Warren, D.I. (1968). Power, visibility, and conformity in formal organizations. *American Sociological Review*, 33, 951-970.
- Weber, M. (1947). *The theory of social and economic organization*. New York: Oxford University Press.
- Wrong, D.H. (1968). Some problems in defining social power. *American Journal of Sociology*, 73(5), 673-681.

Yukl, G.A. (1981). *Leadership in Organizations*. Englewood Cliffs, N.J.: Prentice Hall.

Notes

Note 1. Supervisory Power Bases and Satisfaction with Supervision

Note 2. Factor Structure Matrix for Varimax Rotated Factor Solution

Note 3. Reliability of Scales: Power Bases and Satisfaction with Supervision

Note 4. Multiple Regression Analysis: Power Bases and Satisfaction with Supervision

Note 5. Pearson Intercorrelations of Main Variables of Interest

Table 1. Factor Structure Matrix for Varimax Rotated Factor Solution

Item No	Power Bases/Items	Factors					
		EX I	RE II	RF III	CO IV	LE V	h
I. <u>Expert Power</u> (EX)							
3.	I approach my superior for advice on work-related problems because he/she is usually right.	<u>.46</u>	.10	.12	-.08	.15	.28
5.	When a tough job comes up my superior has the technical “know how” to get it done.	<u>.73</u>	.09	.14	.00	.08	.57
7.	My superior has specialized training in his/her field.	<u>.65</u>	.26	.13	.13	.11	.54
10.	My superior <u>does not</u> have the expert knowledge I need to perform my job.	<u>.62</u>	.07	.11	.05	.10	.50
17.	I prefer to do what my superior suggests because he/she has high professional expertise.	<u>.65</u>	.10	.16	-.01	.14	.56
18	My superior has considerable professional experience to draw from in helping me to do my work.	<u>.78</u>	.19	.19	-.02	.07	.70
II. <u>Reward Power</u> (RE)							
4.	My superior can recommend me for merit recognition if my performance is especially good.	.19	<u>.53</u>	.17	.11	.22	.42
11.	My superior can provide opportunities for my advancement if my work is outstanding.	.20	<u>.64</u>	.19	.10	.08	.56
15.	My superior <u>cannot</u> get me a pay raise even if I do my job well.	-.05	.39	.24	.18	.00	.39
22.	If I put forth extra effort, my superior can take it into consideration to determine my pay raise	.24	<u>.68</u>	.20	.13	.06	.60
24.	I want to develop a good interpersonal relationship with my superior.	.16	.20	.16	.18	.17	.20
27.	My superior can get me a bonus for earning a good performance rating.	.07	<u>.74</u>	.23	-.02	.01	.63
28.	My superior can recommended a promotion for me if my performance is consistently above average.	.18	<u>.82</u>	.15	.10	.06	.74
III <u>Referent Power</u> (RF)							
1.	My superior has a pleasing personality.	.15	.17	<u>.68</u>	.06	-.06	.54
12.	I don’t want to identify myself with my superior.	.12	.19	<u>.67</u>	.04	.16	.54

Table 1 (Continued)

Item No	Power Bases/Items	EX	RE	Factors			h
				RF	CO	LE	
		I	II	III	IV	V	
19.	I admire my superior because he/she treats every person fairly.	.33	.32	<u>.70</u>	.02	.07	.71
21.	I like the personal qualities of my superior.	.24	.20	<u>.66</u>	.11	.05	.56
25.	My superior is not the type of person I enjoy working with.	.26	.26	<u>.52</u>	.02	.11	.63
VI. Coercive Power (CO)							
2.	My superior can take disciplinary action against me for insubordination/disobedience.	.03	.08	.07	<u>.48</u>	.21	.30
9.	My superior can fire me if my performance is consistently below standards.	-.03	.00	.00	<u>.78</u>	.10	.62
14.	My superior can suspend me if I am habitually late in coming to work.	.05	.13	.07	<u>.44</u>	.08	.34
16.	My superior can see to it that I get no pay raise if my work is unsatisfactory.	-.08	.17	.00	<u>.65</u>	.00	.47
20.	My superior can fire me if I neglect my duties.	.06	.00	.09	<u>.77</u>	.00	.60
V. Legitimate Power (LE)							
6.	It is reasonable for my superior to decide what he/she wants me to do.	.26	.04	.05	.00	<u>.48</u>	.43
8.	My superior is justified in expecting cooperation from me in work related matters.	.04	.11	.18	.20	<u>.54</u>	.42
13.	My superior's position entitles him/her to expect support of his/her policies from me.	.12	.10	.14	.12	<u>.68</u>	.57
23.	My superior's position does not give him/her the authority to change the procedures of my work.	.13	.11	-.13	.12	<u>.45</u>	.35
26.	I should do what my superior wants because he/she is my superior.	.16	-.13	-.05	-.15	<u>.54</u>	.47
29.	My superior has the right to expect me to carry out his/her instructions.	.07	.10	.04	.09	<u>.60</u>	.39
Eigenvalues		6.7	2.4	2.0	1.2	1.2	
Percentage of variance explained		23.1	8.1	6.8	4.3	4.1	

Note: Scores for items numbering 10, 12, 15, 16, 2, and 25 were reversed before computing for factor analysis

Trace = 29

Table 2. Reliability of Scales: Power Bases and Satisfaction with Supervision

Scales	Cronbach Alpha
Expert	.84
Reward	.85
Referent	.84
Coercive	.76
Legitimate	.73
Satisfaction with Supervision	.86
SDS	-

Table 3. Multiple Regression Analysis: Power Bases and Satisfaction with Supervision
Dependent variable: Satisfaction with supervision

Predicted Variables	b	Standard Error	Beta	T Value
Legitimate	-.348	.451	-.043	-.772
Coercive	-.049	.323	-.008	-.152
Referent	2.689	.359	.486	7.486*
Expert	1.055	.350	.188	3.020**
Reward	.818	.364	.142	2.248**

F = 34.749 Significance F < 0.0001

R (adjusted) = .447

Intercept: a = - 1.738

* p < .0001

** p < .05

Table 4. Pearson Intercorrelations of Main Variables of Interest

	Variables	1	2	3	4	5	6
1	Expert Power	1.000	.41	.48	.07	.33	.47
2	Reward Power		1.000	.53	.21	.21	.47
3	Referent Power			1.000	.14	.20	.64
4	Coercive Power				1.000	.16	.09
5	Legitimate Power					1.000	.15
6	Satisfaction with supervision						1.000

Note: r's > .11 is significant at p < .05

r's > .21 is significant at p < .001

Bases of Supervisory Power

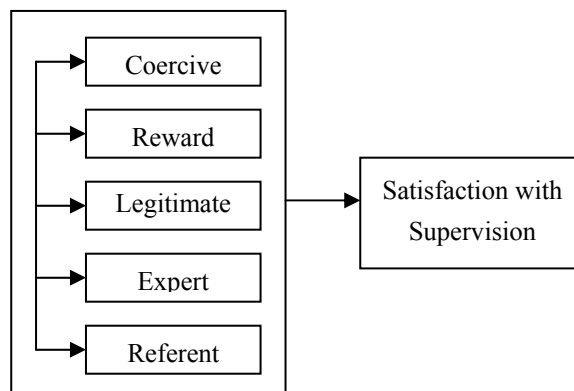


Figure 1. Supervisory Power Bases and Satisfaction with Supervision