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ABSTRACT

Behavior in organizations was conceptualized to be based on self-perceived power and perceived organizational climate. Power and climate perceptions were investigated as a function of three dimensions of organizational environment. The 2 x 2 x 3 (level of participation, profit or service orientation, and position level, respectively) design (N = 120) was carried out in a laboratory setting. Five dimensions of power and 4 dimensions of climate were assessed as dependent variables. Climate and power perceptions were not strongly related to each other. Level of participation is the main contributor to self-perceived power both as a main effect and in interaction with profit/service orientation and position level. Profit/service orientation is the main contributor to climate perceptions, generally in interaction with one or the other of the environmental variables but also as a main effect. Two strong findings were that participative decision making seems to result in decreased self-perceived power for occupants of higher positions and that a service orientation combined with participative decision making leads to positive climate perceptions. Implications for change toward increased participation in organizations are discussed. (Author)

THE EFFECT OF ORGANIZATIONAL ENVIRONMENT ON PERCEIVED POWER AND CLIMATE: A LABORATORY STUDY

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ABSTRACT

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THE EFFECT OF ORGANIZATIONAL ENVIRONMENT ON PERCEIVED POWER AND CLIMATE: A LABORATORY STUDY [1]

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The behavior of individuals in organizational settings may be conceptualized as a response to the organizational environment. The organizational environment consists of all the organizationally relevant information received, processed and stored by the individual. The sources of the information are varied across sense modalities but all provide material concerned with the organization. There are two types of information available to the individual about the organizational environment: formal and informal information. In the present study, the organizational environment is defined as the formal, stated, policies of the organization. These are in contrast to informal norms or attitudes which may be thought of as hearsay or information which is of unknown sources.

Given the assumption that individuals behave as a function of their organizational environment, one is faced with the problem of explaining the process by which the larger environment becomes translated into individual behavior. We suggest that individual behavior in organizations is a function of two kinds of perceptions: a self-perception and a perception of the organization, both of which are in turn a function of the organizational environment. Figure 1 presents this framework schematically.

Insert Figure 1 about here

Figure 1 suggests that individual behavior (performance) is a function of the individual's perception of his power and his perception of the climate in which he works. Further, Figure 1 suggests that an individual's behavior may be a result of the interaction of self-perceived power and perceived climate. For example, given a particular hierarchical position in an organization characterized by high structure, the individual may behave dramatically different from when he occupies the same position in a low structure situation. Thus, while the formal position and sense of power derived from the position may be the same, the perceived climate for exercising the power may be different.

Why do individuals have a self-perception and a perception of the climate? We assume that these perceptions are necessary as a background against which individuals estimate the appropriateness of their planned behavior. By assessing only their power or only their climate prior to behaving would be equivalent to sailors estimating their position at sea without assessing the capabilities of their craft prior to deciding on how far they can sail. Thus, we speak of the power and climate assessments as locationary perceptions, perceptions which help an individual to "fix" himself within the larger environment prior to behaving.

Research on perceptions of the organization's climate as a function of the formal organizational environment is rare. The studies that do exist show a relationship between the formal policies of the organization and climate perceptions. In one study, Litwin & Stringer (1968) manipulated the type of presidential approach used in directing an experimentally created organization.

Three approaches were created: conservative-rules oriented, competitive-innovation oriented and participative-group decision oriented. The type of presidential approach was found to result in perceived differences in climate as measured by the Litwin and Stringer measure. In a field study, Payne, Pheysey and Pugh (1971) reported the effect of overall company structure on organization climate as assessed by a modification (Payne & Pheysey, 1971) of the Stern (1970) measure of college environments. They, too, found an effect on perceived climate attributable to the organizational environment. Indeed, in one company a high degree of standardized procedures and documentation was associated with a climate characterized as innovative and challenging.

There have been a series of studies relating organizational environment variables to attitudes, particularly job or need satisfaction. This literature has been summarized by Porter and Lawler (1965) and Campbell, Dunnette, Lawler and Weick (1970). However, a distinction will be maintained in the present paper, tenuous as it may be, between satisfaction and climate. Climate is conceptualized as an evaluation of experiences; climate is a component of satisfaction that is not as contaminated by the individual's value system. Thus, measures of climate perceptions must be oriented toward the perception of external events, while items assessing satisfaction should be oriented toward the assessment of internal feelings, i.e., evaluations of events and experiences.

While some evidence exists regarding the relationship between the organizational environment and climate perceptions, relationships between climate perceptions and behavior are not clear and will not be pursued in the present paper. Suffice it to say that perceived climate has been conceptualized as

an intervening variable, caused by organizational events and experiences and in turn causing behavior (c.f., Likert, 1961; Litwin & Stringer, 1968; Schneider, 1973; Schneider & Hall, 1972).

Perceived power is also related to the organizational environment, especially formal position (Katz & Kahn, 1966) and degree of participation in decision-making (Tannennbaum, 1968). Less clear is the link between perceived power and behavior. As with climate perceptions, those studies that manipulate (or describe) the organizational environment predict directly to behavior without examining the cognitive processes that we hypothesize precede behavior. Campbell, et. al. (1970) correctly state that "Perceptions of climate and independent measures of organizational characteristics just do not operate on the same level of explanation. Obviously, a systematic study of the relationships between levels must begin on several fronts if any sense is ever to come of this" (pp. 399-400).

The present study represents an attempt to examine the impact of three levels of organizational environment variables on two levels of perceptions. The three levels of environment variables are: level of formal position, degree of participation in decision-making, and goal of the organization: profit or service. Each level of the environment variables is conceptualized as being more macro in inclusiveness, organizational goals having less immediate impact on short-run individual behavior than level of position.

The two levels of perception which served as the dependent variables were: self-perceptions of power and perceptions of the climate of the organization. Perceived power was assessed along the French and Raven (1959) bases of power:

1. Reward power - the ability to provide positive inducements and remove negative inducements to improve the environment of the member.

2. Coercive power - the ability to manipulate inducements so that negative or painful consequences will follow if the member does not respond correctly.

3. Legitimate power - the accepted power inherent in the position held as prescribed by organizational policy and the groups members.

4. Expert power - the special abilities and knowledge of a given member that can be used to advantage to attain the group objectives.

5. Referent power - the personal qualities that a member has which includes other members' desire to identify with the member.

Climate was assessed on four dimensions as summarized by Campbell, et. al. (1970) after their review of the climate literature:

1. Individual autonomy - freedom of the employee to be his own boss and reserve considerable decision-making power for himself.

2. Position structure - the degree to which the objectives of, and methods for, the job are established and communicated to the individual by superiors.

3. Reward orientation - degree to which the company is production or profit oriented and rewards effort.

4. Consideration, warmth and support - the support and stimulation received from an employee's superior.

No specific hypotheses were formulated in this exploratory study. The single general hypothesis was that different facets of the organizational environment would interact with each other in their effects on power and

climate perceptions. This hypothesis was based on the simple notion that perceptions, and ultimately behavior, are not undimensionally determined.

Method

The organizational environment was conceptually reduced to three dimensions which constituted the independent variables for this study. The three dimensions manipulated were position level, type of supervision and organizational orientation. Position level within the organization varied across three job designations: manager, loan officer, and loan clerk. Each of these positions represented a level of management within the credit department of a large hypothetical department store, titled Danken and Spraks. Organizational orientation represented the stated primary goal of the company. The company was either service oriented or profit oriented. This orientation was experimentally manipulated by informing the subjects that the underlying concern of the organization was to maintain efficiency for the purpose of (1) improving profits or for (2) providing better customer service. The third dimension, decision-making orientation was divided into two broad types, participative and non-participative. In the participative condition employees were told that they would be consulted before the supervisor changed a decision they had previously made. In the non-participative condition subjects were told that the supervisor could change employee decisions without consulting them or even informing them.

The study was therefore a 2 x 2 x 3 design with a total of twelve groups of ten subjects each. The subjects used were undergraduate students taking the introductory psychology course at the University of Maryland. They vol-

unteered and were paid two credit points for completing both sessions. Each subject reported to a "personnel office" and completed three forms: a job application, Wonderlic Test, and the Allport Study of Values in a mock job selection situation. They then selected another day to work at the job. The job consisted of a 90 minute session in which a series of 30 credit applications were reviewed for acceptability to the company. The applications contained one page of information with the normal credit application data (Buel, 1968).

Subjects were randomly assigned to one of the twelve groups and received a personalized packet of material addressed to them upon entering the second session. Each subject received a packet of material containing a letter from the company president, a letter from their department supervisor, and the 30 credit applications. The letters contained the environmental dimension manipulations in terms of different information. There was also an indication in the letter that the level of job assigned the subject was determined on the basis of the application materials completed at the "selection" site. A department organization chart was provided to indicate the level and location of the position the subject was placed in. All subjects worked alone on the task. At the end of the 90 minutes the materials were collected and the subjects were requested to complete a job survey which contained statements relevant to the five power dimensions and the four climate dimensions (seven questions for each dimension).[3] Respondents were asked to indicate their agreement (1 = strongly disagree, 5 = strongly agree) with the statement as a perception of themselves in their job (power) and their perceptions of their job and company (climate). All climate items were worded as descriptions of external

events; all power items were worded in the first person. The five power and four climate dimensions represented the nine dependent variables of this study.

After the subjects completed the questionnaires they were debriefed and given their credit slips.

Results

A series of analysis of variance (ANOV) tests were performed on each dimension of power and climate. The dimensions were treated separately in this study since they were developed as independent dimensions of a single variable rather than dependent dimensions of a variable (Tatsuka, 1971). The model adopted was a mixed one with organizational orientation and type of supervision defined as fixed factors while position level was considered a random factor (Winer, 1962). The University of Maryland Computer Science Center was used to produce the ANOV with the BMD02V program.

Table 1 and 2 show the scale intercorrelations for climate and power, respectively, with internal consistency reliability estimates of the dimension indicated in the diagonal. The reliability was computed from the average item correlation with the total score (Guilford, 1965). The reliability of the climate dimensions ranges from .64 (reward orientation) to .86 (consideration). The reliability of the power dimensions range from .67 (referent power) to .75 (legitimate power). The interdimension correlations range from .02 to .44 for the climate dimensions and .23 to .52 for the power dimensions. Both measures are reasonably reliable with the climate dimensions being more independent of each other than the power dimensions. The scale scores used as dependent variables were obtained by assigning unit weights (-1 to negatively worded items) to all items and summing.

Insert Tables 1 and 2 about here

Impact of Organization Environment on Perceived Power

The results of the ANOV for the power dimensions are shown in Table 3. There were no significant Fs obtained for either referent or legitimate power. The interactions of Organizational Orientation and Level of Participation (A x B) on perceived expert power indicate that for a service oriented organization expert power is higher when the type of supervision is participative while as a profit-oriented organization moves from non-participative to participative there is a slight drop in perceived expert power. This interaction is shown in Figure 2.

Insert Table 3 about here

Insert Figure 2 about here

Figure 3 shows that in a non-participative situation expert power increases as position level increases while in the participative situation expert power decreases as position level increases (B x C interaction).

Insert Figure 3 about here

With coercive power (Figure 4) the interaction between level of participation and position level indicates that in the participative condition coercive power decreases as position level increases while in the non-participative condition the reverse holds. This result parallels the same interaction found with expert power between position level and level of participation.

Insert Figure 4 about here

In the case of reward power the effect of organizational orientation with type of supervision is illustrated in Figure 5. Reward power is higher in the participative condition. The data also indicate that a service oriented organization with participative supervision has the highest perceived power (the interaction is significant at $p<.10$). The main effect of level of participation indicates that in the participative situation higher perceived power is obtained ($\bar{X} = 16.0$) than in the non-participative situation ($\bar{X} = 12.7$).

Insert Figure 5 about here

The results along the power dimensions indicate that the three aspects of organizational policy affect each power dimension in a different manner. The interaction of two policy dimensions produce the greater perceived differences while a triple interaction does not. Referent power which is by definition strongly dependent upon individuals and their interaction in groups, and legitimate power which is established strongly by policy and supported by worker consent did not show any significant differences in perceived power in this study.

Impact of Organization Environment on Perceived Climate

The results for the ANOV of climate dimensions are shown in Table 4. There was a significant effect of the organizational environment for each of the climate dimensions.

The main effect of organization orientation is significant for the climate dimension of individual autonomy. The service orientation produces higher per-

ceived individual autonomy ($\bar{X}$ = 18.6) than the profit orientation ($\bar{X}$ = 17.4). The climate dimension of individual autonomy shows two interactions: that between organizational orientation and level of participation and level of participation and position level ($F = 2.56$, $p < .10$). Figure 6 shows that under the service oriented condition perceived individual autonomy is highest in the participative condition while in the profit orientation condition it decreases in the participative situation.

Insert Figure 6 about here

Figure 7 shows that under the non-participative condition individual autonomy is about the same for the position of clerk and officer but increases for the position of manager. However, in the participative condition perceived autonomy decreases as position level increases.

Insert Figure 7 about here

The climate dimension of position structure demonstrates a marginally significant main effect with type of supervision ($F = 3.20$, $p < .10$). In the participative condition the perceived position structure is higher ($\bar{X}$ = 20.0) than in the non-participative condition ($\bar{X}$ = 18.5). There exists a significant interaction between level of participation and position level. Figure 8 shows that in the participative condition perceived position structure decreases as position level increases. In the non-participative condition position structure increases from the position of clerk to officer but remains relatively constant from officer to manager.

Insert Figure 8 about here

The climate dimension of reward orientation shows a significant main effect of organizational orientation. In a service oriented organization the perceived reward orientation is higher ($\bar{X}$ = 14.8) than in the profit oriented organization ($\bar{X}$ = 14.3). The interaction between type of supervision and position level shown in Figure 9 indicates that the reward orientation is lowest for clerks and highest for officer position in the participative condition. In the non-participative condition it is highest for manager and lowest for officer position.

Insert Figure 9 about here

The climate dimension of consideration shows an interaction between organizational orientation and level of participation (see Figure 10). In the service oriented organization consideration is highest in the participative condition, while in the profit oriented organization it is highest in the non-participative condition. This reversal effect indicates that perceived consideration is affected by the organizational orientation and level of participation.

Insert Figure 10 about here

Discussion

Power

One important finding in this research was that for every significant impact of the organizational environment on power perceptions, level of participation was one of the independent variables. Thus, high perceived expert power is an interaction of either a service orientation or a low (clerk) position and participatory decision-making. High perceived coercive power is also a function of a low (clerk) position and participatory decision-making. The service, parti-

cipatory decision-making interaction is evident again as a correlate of high perceived reward power. The only main effect for perceived power is attributable to participatory decision-making where participation leads to high perceived reward power.

These data suggest that at least two organizational characteristics, the orientation of a company and the position level of people, should be considered when discussing the potential impact of participatory decision-making on worker perceptions. Indeed, the only type of perceived power directly affected by a participatory decision-making style is reward power. This cautions further that discussions of "power" require specification of the particular dimension of power under consideration.

The fact that company orientation interacts with participation to determine perceived expert power has interesting implications for studies that manipulate degree of participation but fail to show positive outcomes. For example, the discrepancy between the initial Coch and French (1948) study and the attempted replication by French, Israel and As (1960) may be attributable to an inconsistency between organizational orientation and participation rather than differences in cultural value systems or idealogy. This finding would also support the conclusion Lowin (1968) reached after reviewing leterature related to the effects of participative decision-making: the mixed results obtained in the area are possibly due to some uncontrolled mediating factors. The data presented earlier in this report support the contention that organizational environment type may play an important role in determining potential impacts to be expected as a result of the introduction of participative management in an organization.

Perceived expert power is also a function of position and participation. This finding suggests that participation, while it may increase the perceived power and productivity of lower level employees (Tannenbaum, 1968), may have deleterious effects on upper level employees. This finding would agree with verbal reports obtained by Jaques (1951) who indicated that middle management felt it had been displaced by the participative decision system.

A similar interaction between position level and participation is found with the dimension of coercive power. The subjects in the participative situation showed a decrease in perceived coercive power as position level increases while in the non-participative group only the manager perceives a high degree of coercive power. The effect of type of participation on expert and coercive power is a reduction in perceived power as position increases. The long-term implications of these findings in ongoing organizations has not received the attention these data suggest is necessary.

Turning to perceived reward power, the data indicate that participation produces higher perceived power for both types of orientations: service and profit. This indicates that persons working in a participative situation perceive their reward power to be greater than those working in a non-participative situation. Thus, participative supervision will enhance the perception of reward power and expert power in a service organization but for a profit oriented organization it only enhances the perception of reward power.

In summary, participation tends to have its most substantial impact on perceived power in interaction with the organization's orientation and/or the position level of the employee. Participation does not always result in higher perceived power. This is especially true when considering the perceived expert and coercive power of managerial personnel. Two other important findings re-

quire comment: (1) we know little about service organizations but, at least in the present laboratory study, they do not lead to the same perceptions as profit organization. The impact of organizational orientation will become clearer in our discussion of climate. (2) the failure of organizational orientation to have an effect on referent power is understandable since this power is founded by definition more in the individual and his interactions with other employees than the organization. However, this logic does not extend conceptually to legitimate power. Perhaps the lack of interaction among group members accounts for this failure and suggests that in the absence of actual group interaction expert power is more a function of role (position level) than is legitimate power.

Climate

A cursory examination and comparison of Tables 3 and 4 reveals some similarity in the organizational conditions related to various power and climate dimensions. For example, high perceived expert power and a climate perceived as high on individual autonomy are both a function of organizational orientation and level of participation. In addition, perceived coercive power, a function of level of participation and position level, is determined in the same manner as position structure and reward orientation.

One questions whether perceived power and perceived climate were measuring essentially the same thing. Table 5 reports the scale intercorrelations for perceived power and perceived climate. Generally speaking, the power dimensions are independent of the individual autonomy and position structure climate dimensions. However, Table 5 shows there is a consistent relationship between a climate perceived high on reward orientation and people perceiving themselves to be high on referent, expert and legitimate power. In addition, a climate

perceived as high on consideration tends to be associated with people perceiving themselves high on all the power dimensions. The magnitude of these relationships, however, is not very strong (r's ≅ .30) and suggests that people were making a distinction between self-perceptions and organizational perceptions. Indeed, the strongest interrelationships between power and climate perceptions are no higher than the interpower correlations.

Insert Table 5 about here

For power, level of participation was the dominant variable. For climate, organizational orientation was either a main effect or invloved in a significant interaction for all climate perceptions except position structure. Organizational orientation, a characteristic of the organization seemingly quite removed from the individual at work, has a definite impact on perceptions of individual autonomy and reward orientation.

In some way there seems to be a shared belief or set of experiences that suggests (at least to introductory psychology students) that service organizations are more oriented to autonomy of indivlduals and to rewarding effort. Schneider (1973) has argued that the climate created for employees has an impact on the climate employees create for customers. Perhaps the present data lend some credibility to this hypothesis. If people perceived the organization as one which permits autonomy and rewards effort then both the theory Y (McGregor, 1960) view of man with emphasis on autonomy and the expectancy theory view of man (Dachler & Mobley, 1972; Porter & Lawler, 1968; Vroom, 1964) with emphasis on rewarding effort would predict high levels of individual performance.

Level of participation interacts with organizational orientation to affect perceived individual autonomy and perceived consideration. Both climate char-

acteristics are highest in the service, participatory case. These interactions suggest that the effect of any one of the three formal policy dimensions measured cannot be projected linearly without considering the other dimensions. Thus, a strong profit orientation seems somehow inconsistent with high participatory decision-making. Such inconsistencies, if found to exist in field settings, may be useful to know when attempting to change organizations to the participatory supervision style.

Position structure and reward orientation perceptions are a function of level of participation and position level. In both cases, changes in job level under participation result in changes in perceived climate. However, for position structure the effects are linear (high job level, participation equals decreased position structure) while for reward orientation the effects are curvilinear (see Figure 9).

In summary, climate perceptions seem to be attributable to the profit or service orientation of the company and to two kinds of interaction: organizational orientation with level of participation and level of participation with position level. As with power, there were no significant interactions attributable to organizational orientation and position level and no significant triple interactions.

The major implications of the climate findings for ongoing organizations seem to be the idea that the orientation of the organization is a cause of climate perceptions. This suggests that perceived climate is more than a simple function of what happens to employees as Likert (1961, 1967) and Schneider (1973) have argued. These data suggest that climate perceptions are partially dependent upon the stance the organization takes with reference to people outside the organization's boundaries, i.e., to customers. Perhaps

organizational employees infer the way they will be treated from the way they see an organization treat its customers.

Conclusion

An abstraction of our data suggests the importance of participatory decision-making strategies for perceived power but caution that this style of decision-making may have deleterious effects on higher level people and in profit oriented organizations. The climate data reveal an unexpectedly strong impact of organization orientation on climate perceptions and suggest that in ongoing organizations strategies employed for dealing with the public may have an impact on the way employees perceive the organization.

Position level had no significant main effects but interacted with level of participation as correlates of both power (expert and coercive) and climate (position structure and reward orientation). This finding supports numerous studies showing differences in perceptions as a function of position and suggests that these studies also include degree of participation in decision-making as a moderator variable.

The model proposed in the introduction was only partially explored in this study. The effect of the individual's perceptions of climate and power in establishing a locationary fix within the organization was only indirectly attacked. However, the data do indicate that different environments produce different perceptions of power and climate even in the highly restricted situation studied. It can therefore be logically inferred that the differential locationary fix might result in differential outcome behavior. The prediction of behavior within an organization is therefore dependent upon the locationary fix established by the individual through perceptions of the organiza-

tional environment along the two variables studied: perceived power and perceived climate.

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Footnotes

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2. Reprint requests should be sent to Major Duncan L. Dieterly who is now at The Air University, Wright-Patterson Air Force Base, Ohio. The opinions expressed herein are those of the author and do not necessarily reflect the position of the United States Air Force.

3. Copies of the two measuring instruments are available from either of the authors.

TABLE 1

Climate Dimension Intercorrelations

(N = 120)

	IA	PS	RO	C
Individual Autonomy (IA)	(.7654)	-.1672	.3665	.4175
Position Structure (PS)		(.7612)	.0200	.1578
Reward Orientation (RO)			(.6446)	.4438
Consideration (C)				(.8657)

Note: Diagonals contain reliability coefficients; see text for calculation.

TABLE 2

Power Dimension Intercorrelations

(N = 120)

	REF	E	L	C	R
Referent (Ref)	(.6765)	.5244	.5616	.2449	.2366
Expert (E)		(.7466)	.4922	.3056	.3244
Legitimate (L)			(.7564)	.4004	.2738
Coercive (C)				(.7184)	.3917
Reward (R)					(.7434)

Note: Diagonals contain reliability coefficient; see text for calculation.

TABLE 3

Analyses of Variance: Power Dimensions

Source	df	Expert MS	Expert F	Coercive MS	Coercive F	Reward MS	Reward F
Organizational Orientation (A)	1	7.01	n.s.	12.03	n.s.	2.41	n.s.
Level of Participation (B)	1	66.01	n.s.	.53	n.s.	343.41	25.95**
Position Level (C)	2	18.33	n.s.	18.16	n.s.	5.63	n.s.
A X B	1	126.08	14.45**	20.83	n.s.	75.21	n.s.
A X C	2	5.16	n.s.	18.66	n.s.	13.23	n.s.
B X C	2	138.06	3.32*	130.66	5.14**	96.93	n.s.
A X B X C	2	8.72	n.s.	21.46	n.s.	27.03	n.s.

*p<.05

**p<.01

TABLE 4

Analyses of Variance: Climate Dimensions

Source	df	Individual Autonomy MS	F	Position Structure MS	F	Reward Orientation MS	F	Consideration MS	F
Organizational Orientation (A)	1	45.63	4.21**	4.03	n.s.	9.08	4.78*	.08	n.s.
Level of Participation (B)	1	1.63	n.s.	64.53	n.s.	4.41	n.s.	.41	n.s.
Position Level (C)	2	7.23	n.s.	6.83	n.s.	3.33	n.s.	24.63	n.s.
A X B	1	50.70	10.35**	4.80	n.s.	12.68	n.s.	130.21	29.37**
A X C	2	10.83	n.s.	18.01	n.s.	1.90	n.s.	15.60	n.s.
B X C	2	65.23	n.s.	70.66	3.50*	84.23	9.53**	46.23	n.s.
A X B X C	2	4.90	n.s.	6.78	n.s.	8.10	n.s.	4.43	n.s.

*p<.05

**p<.01

TABLE 5

Scale Intercorrelations for Power and Climate Dimensions

(N = 120)

	Climate Perceptions			
Power Perceptions	Individual Autonomy	Position Structure	Reward Orientation	Consideration
Referent	.2146	-.0023	.3938	.4857
Expert	.2377	.1482	.2798	.4046
Legitimate	.1994	.0217	.3450	.4352
Coercive	.0637	.2341	.1928	.2761
Reward	.1856	.1347	.1757	.3601

Figure Captions

Fig. 1. Individual perception of environmental variables.

Fig. 2. Expert power interaction between organizational orientation and level of participation.

Fig. 3. Expert power interaction between position level and level of participation.

Fig. 4. Coercive power interaction between position level and level of participation.

Fig. 5. Reward power interaction between organizational orientation and level of participation.

Fig. 6. Individual autonomy interaction between organizational orientation and level of participation.

Fig. 7. Individual autonomy interaction between level of participation and position level.

Fig. 8. Position structure interaction between level of participation and position level.

Fig. 9. Reward orientation interaction between level of participation and position level.

Fig. 10. Consideration interaction between organizational orientation and level of participation.

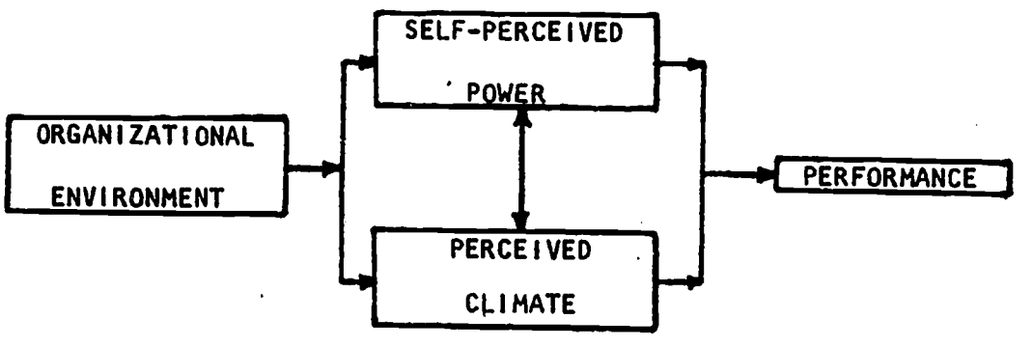

Figure 1. Individual perception of environmental variables.

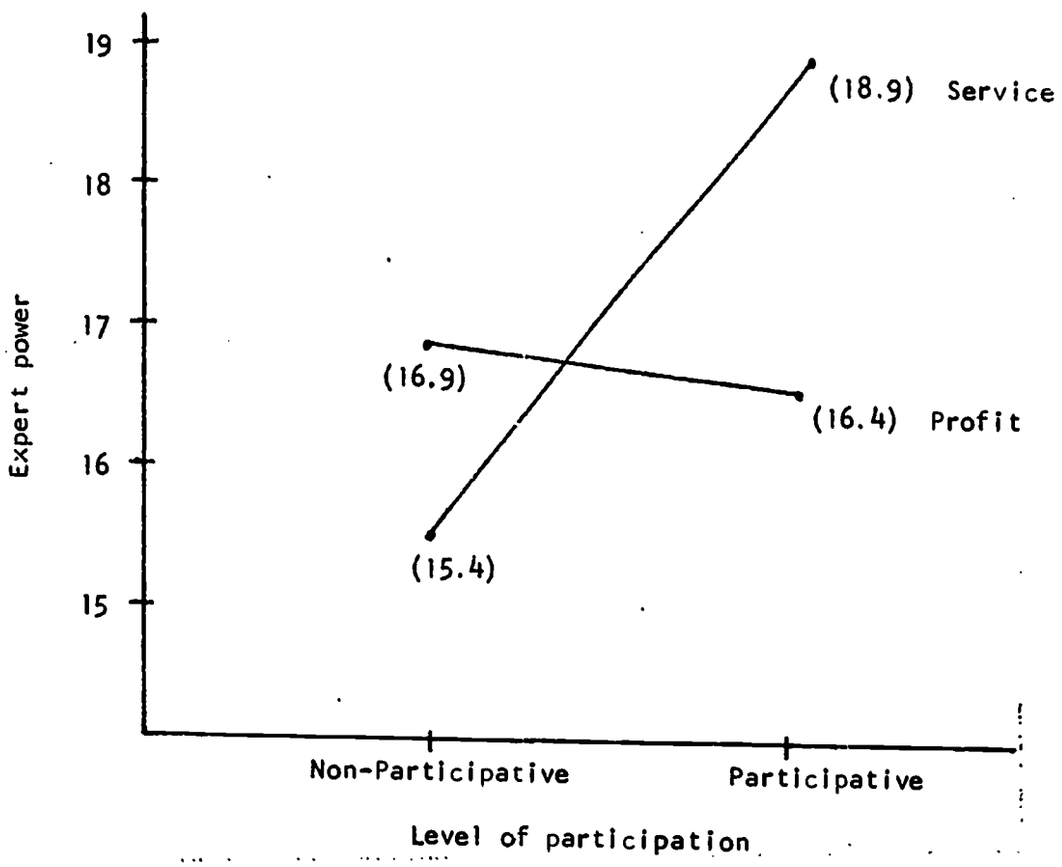

Figure 2. Expert power interaction between organizational orientation and level of participation.

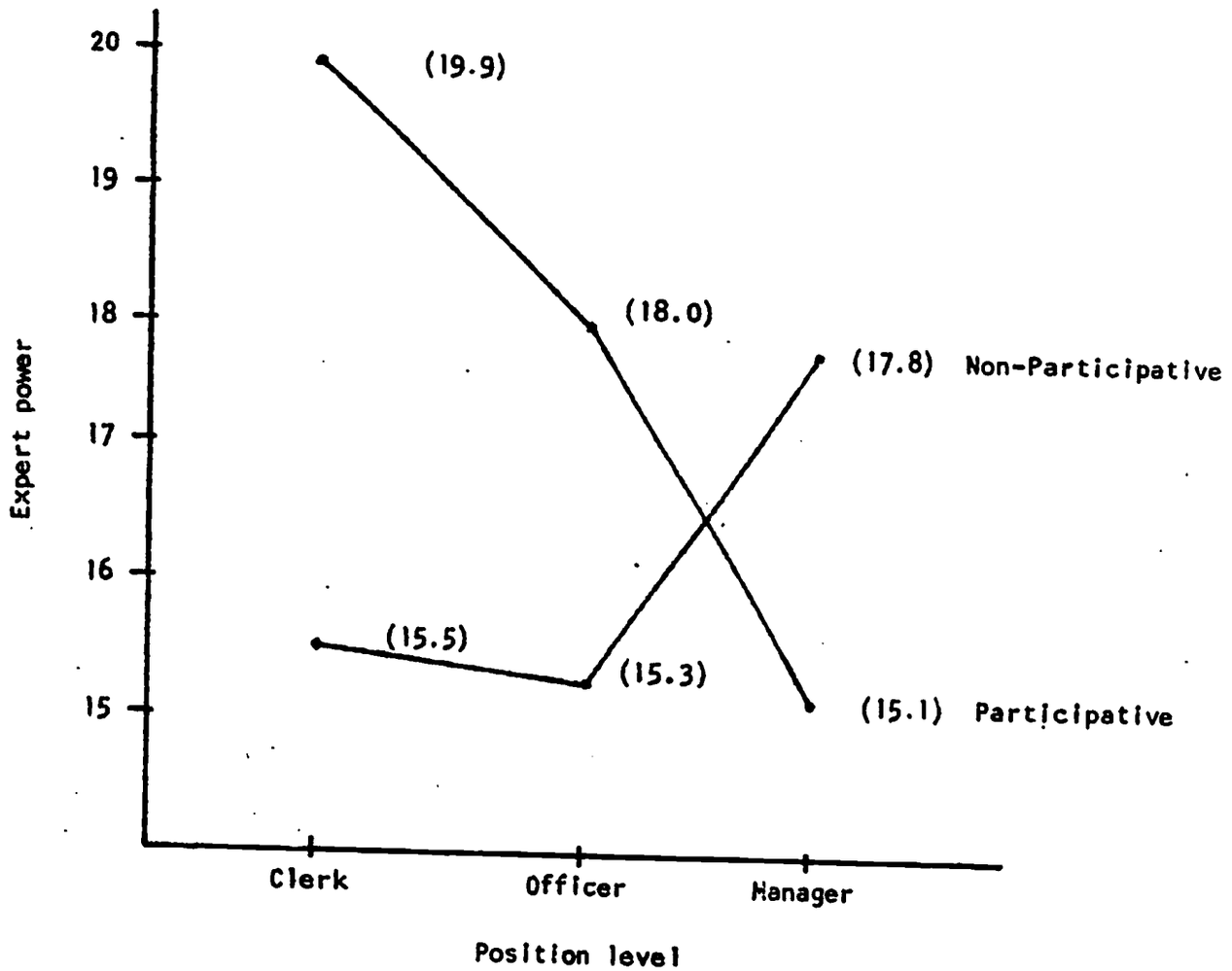

Figure 3. Expert power interaction between position level and level of participation.

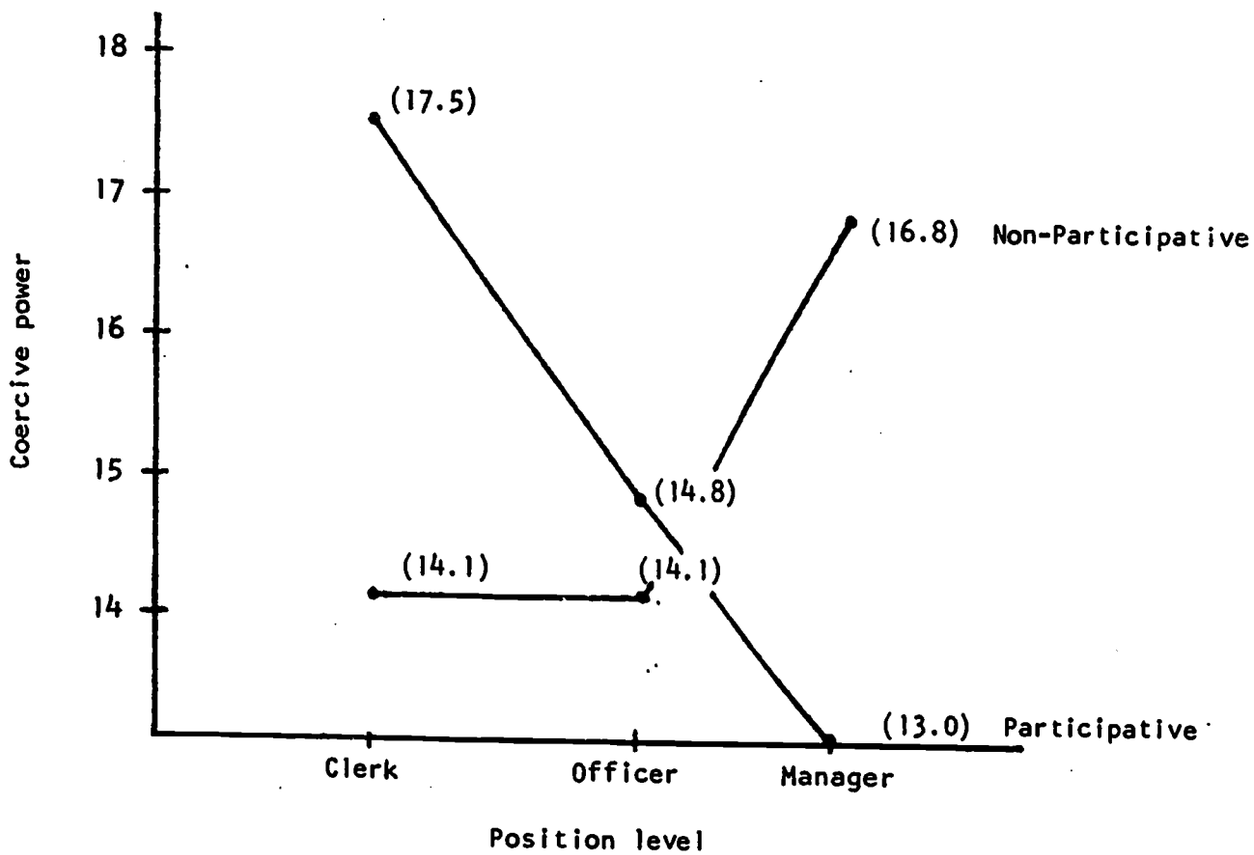

Figure 4. Coercive power interaction between position level and level of participation.

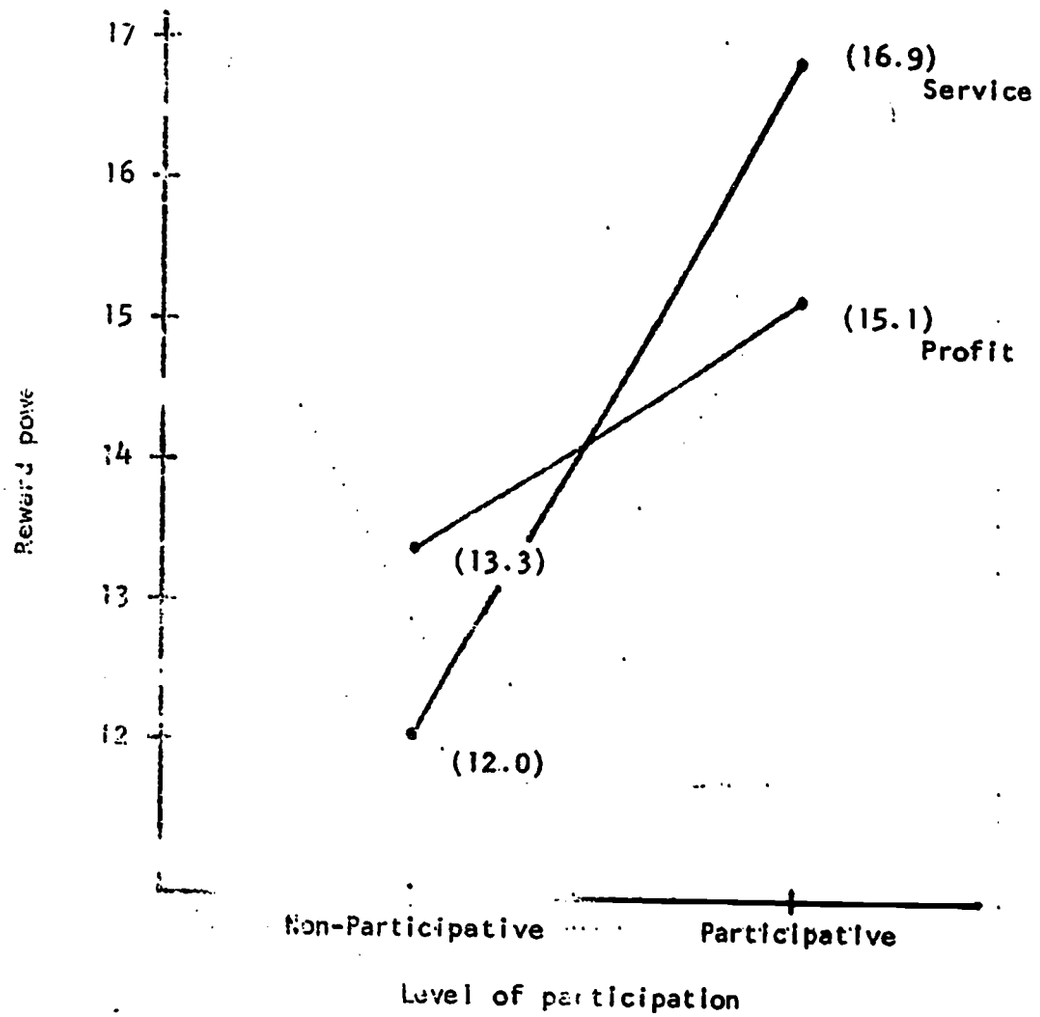

Figure 5. Reward power interaction between organizational [illegible] and level of participation.

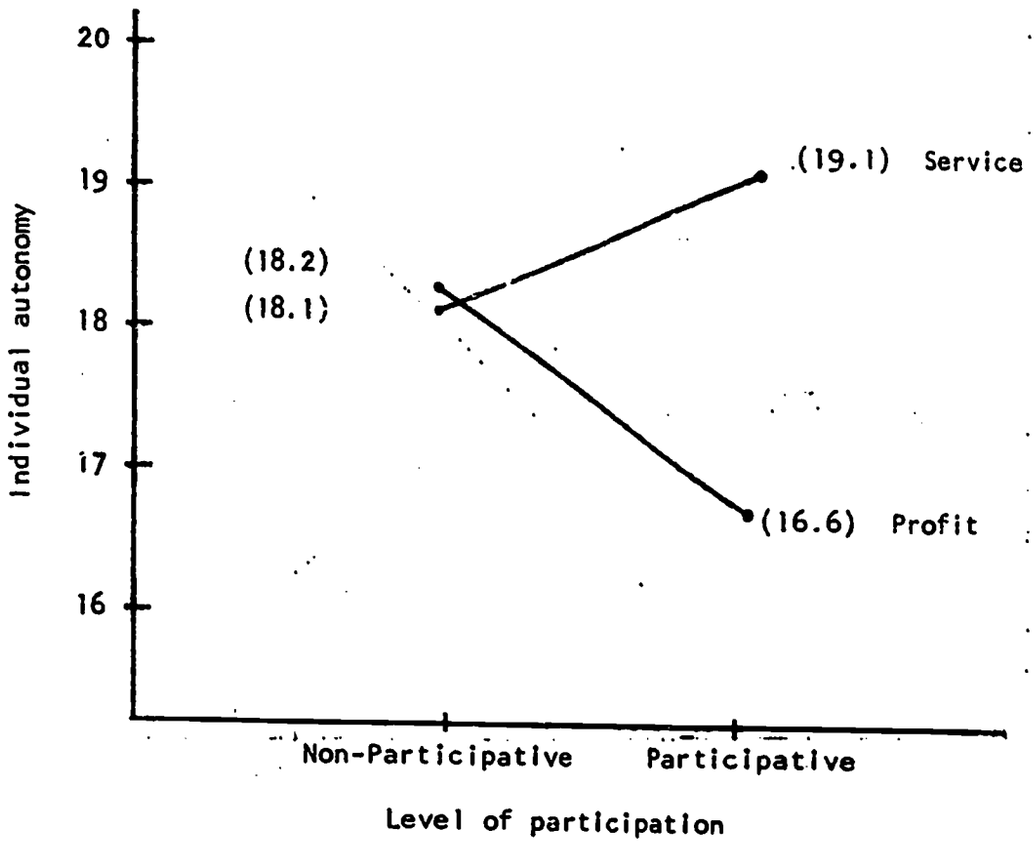

Figure 6. Individual autonomy interaction between organizational orientation and level of participation.

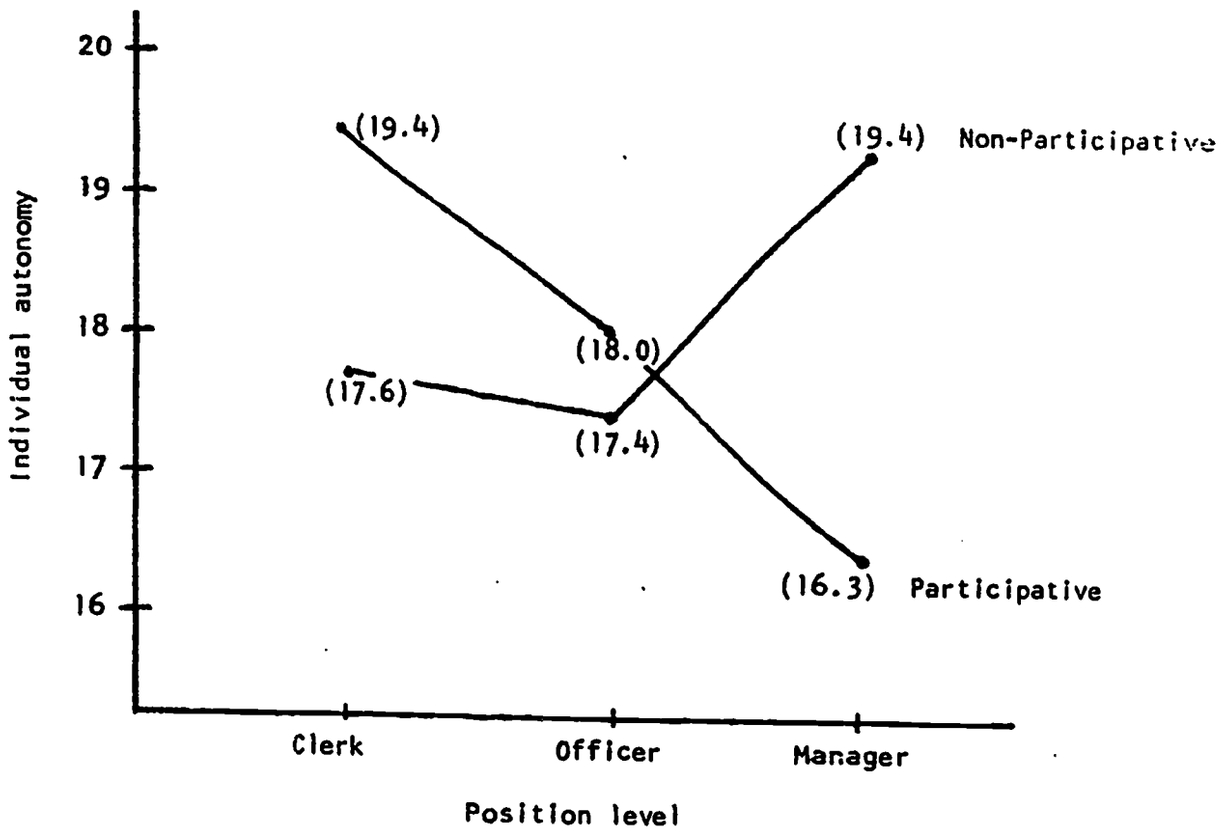

Figure 7. Individual autonomy interaction between level of participation and position level.

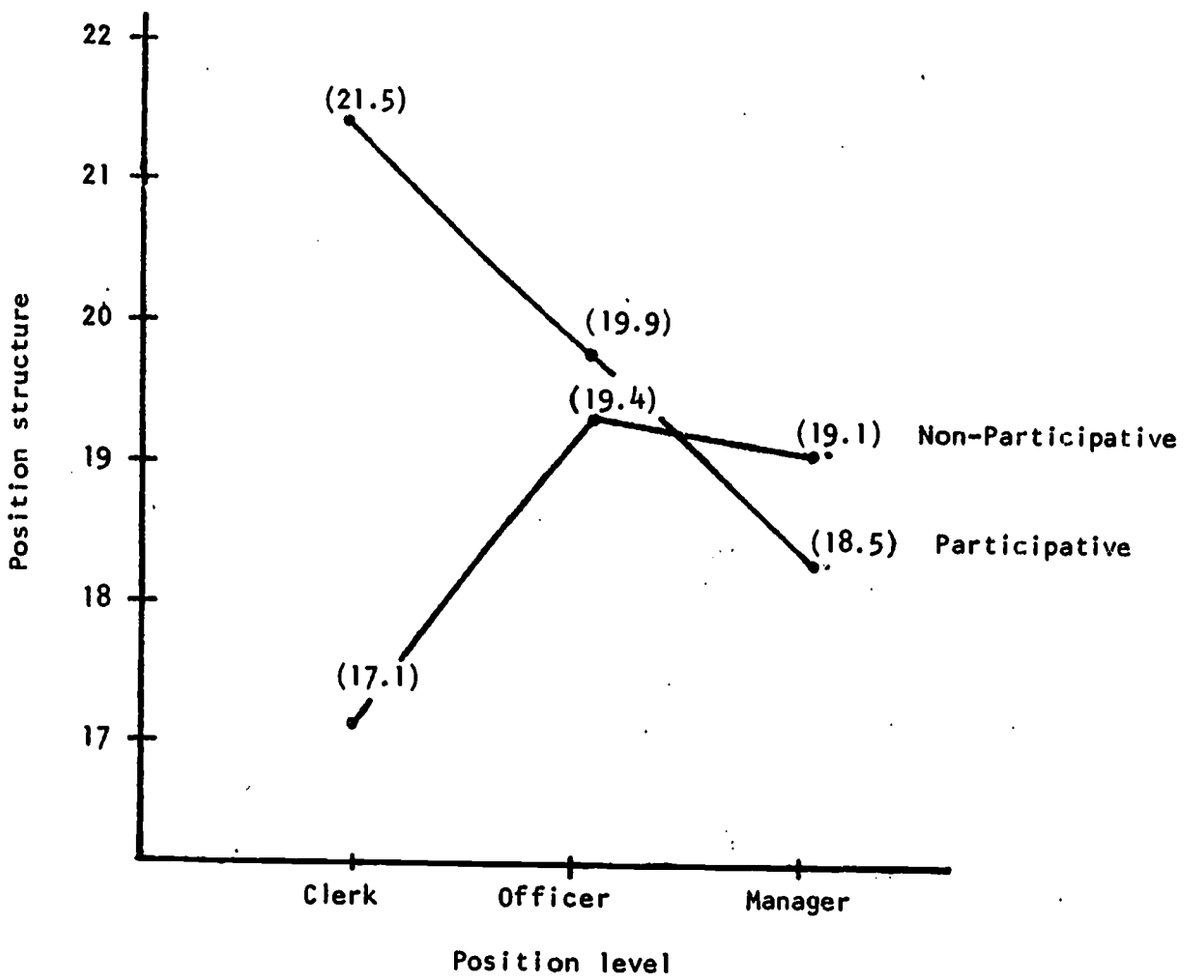

Figure 8. Position structure interaction between level of participation and position level.

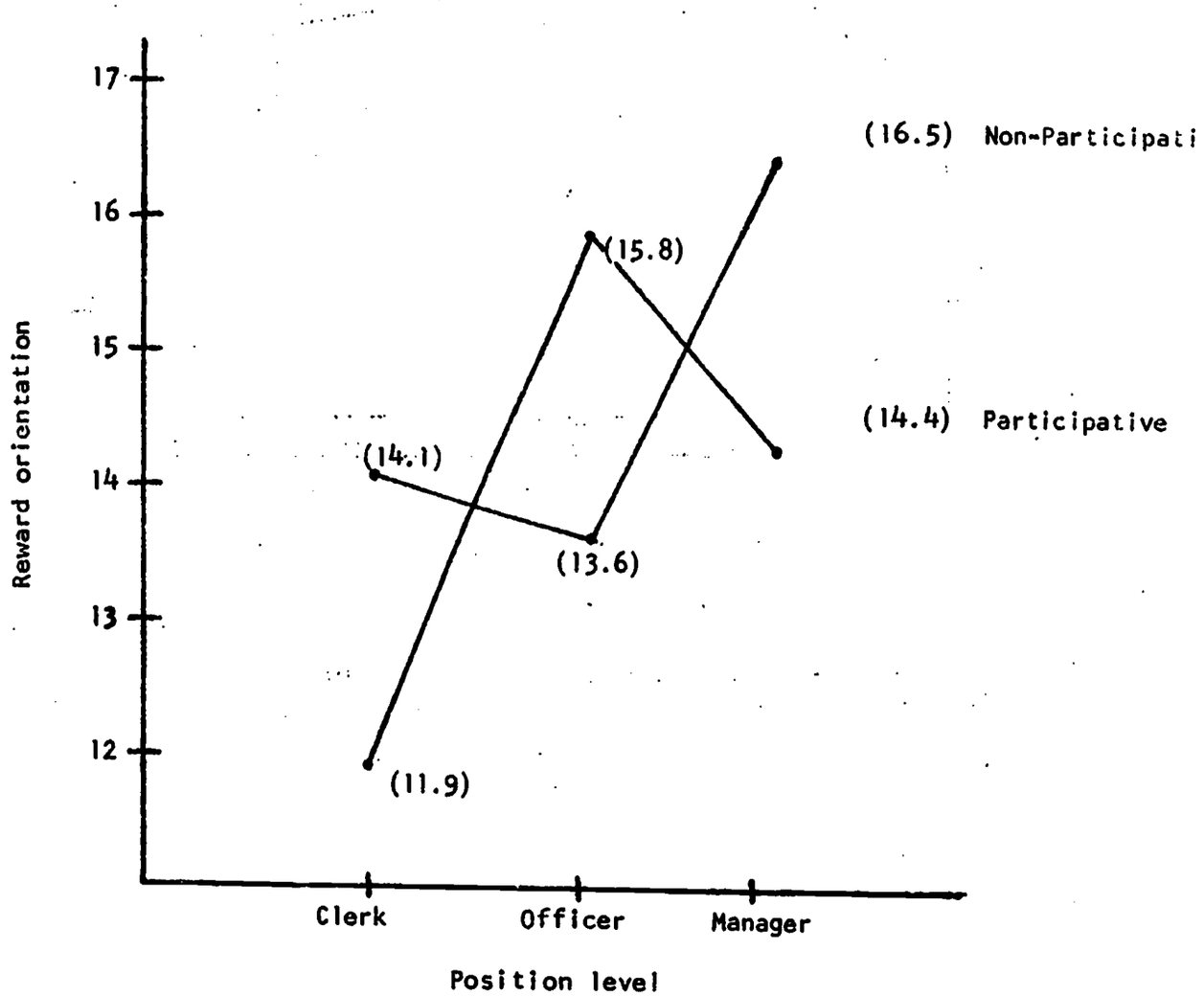

Figure 9. Reward orientation interaction between level of participation and position level.

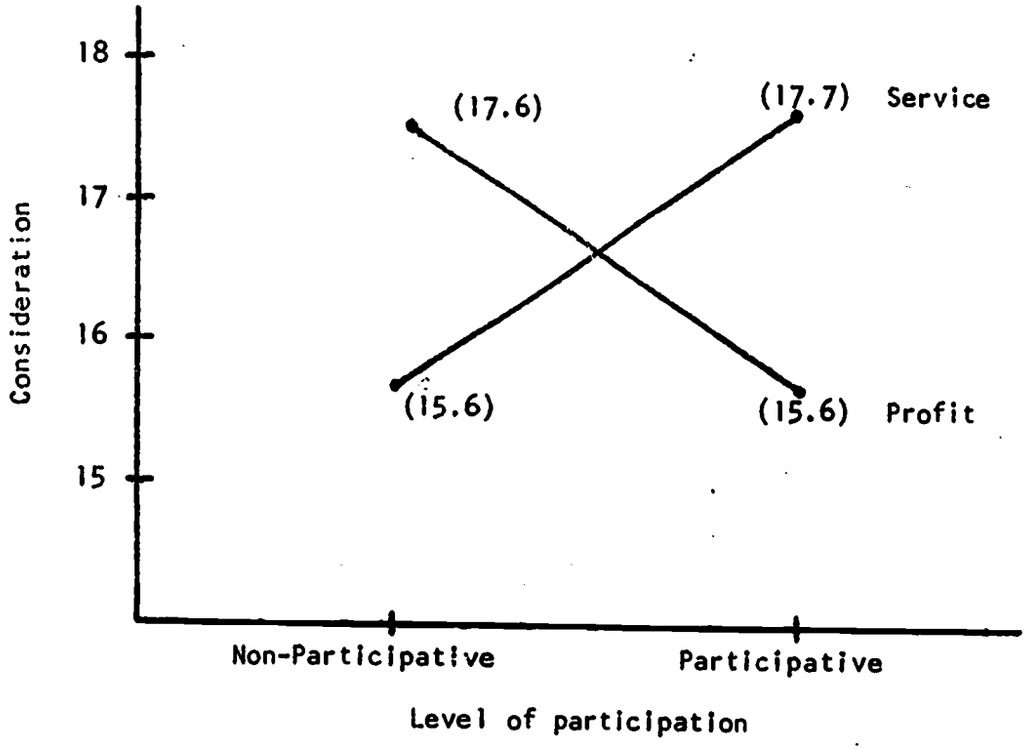

Figure 10. Consideration interaction between organizational orientation and level of participation.

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