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STRUCTURAL INFLUENCES ON ORGANIZATIONAL COMMITMENT: A RESEARCH --ETC(U)
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Structural Influences on Organizational Commitment:

A Research Note

James H. Morris
Graduate School of Business
The University of Santa Clara

Richard M. Steers
Graduate School of Management
University of Oregon



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Abstract

Relationships of several aspects of organization structure with organizational commitment were examined within a multiple correlation framework for 262 public sector employees. As a set, the six structural variables accounted for over 20% of the variation in organizational commitment for the vocationally heterogeneous sample studied. Decentralization, functional dependence, and formalization each made significant* ($p < .05$), independent contributions to explained variation in organizational commitment. Overall, these results suggest that future model-building efforts should take organization structure into account as one potentially important dimension of influences on organizational commitment.*

Structural Influences on Organizational Commitment:

A Research Note

During the past several years, increased attention has been focused on identifying the major antecedents and outcomes of organizational commitment. Fairly consistent evidence suggests that organizational commitment is closely related to such important behavioral outcomes as employee turnover (Koch & Steers, 1978; Porter, Crampon, & Smith, 1976; Porter, Steers, Mowday, & Boulian, 1974; Steers, 1977). However, less is known about the antecedents of commitment, despite a number of studies on the topic (Buchanan, 1974; Stevens, Beyer, & Trice, 1978). In general, these previous findings have suggested that commitment is influenced by several major categories of variables, including personal characteristics, job-related characteristics, and work experiences. What has been largely overlooked in this research, however, is an examination of the effects of variations in organization structure on organizational commitment.

The role of organization structure on job attitudes (particularly job satisfaction) has long been of interest to social scientists (Cummings & Berger, 1976; Porter & Lawler, 1965). A rich literature suggests how structural variations can affect job satisfaction and employee behavior. Based on this literature, it is logical to argue that structural variations may also affect other work-related attitudes such as organizational commitment. To date, however, only one study (Stevens, et al. 1978) appears to have addressed this argument. In that study, four structural variables (organizational size, union presence, span of control, and centralization of authority) were found to be unrelated to commitment (with r 's ranging from $-.03$ to $.03$). Stevens et al. concluded that role-related factors (and not structural variables) represented the most impor-

tant predictors of commitment, with a multiple R^2 , based upon all of the study variables, of .13 ($df = 7, 602$).

These singular findings are disconcerting in view of the many studies that have shown significant structure-satisfaction relationships. In an effort to reconcile this apparent discrepancy, the present study sought to examine the relationship of structural variables with commitment. The structural variables included in the study were: 1) decentralization, 2) formalization, 3) supervisory span of control, 4) span of subordination (the number of supervisors who initiate work for a given employee), 5) functional dependence, and 6) work group size.

From an operational standpoint, structural variables such as these constitute a system of potential influences on employees' perceptions and responses. Accordingly, the major aim of the study was to examine the relationship of these variables--as a set-- with organizational commitment. Multiple correlation analysis was thus selected as the principal data-analytic technique since it would help to fulfill this aim and provide a means by which to move beyond the statement and testing of more limited bivariate hypotheses regarding isolated structural variables. A multiple correlation framework can also provide a better indication of the unique variance accounted for by each structural variable than would bivariate analyses. However, it is important to emphasize that the nature of theoretical interrelationships among these structural properties is not as yet well understood. Thus, attempts to draw inferences about the relative importance of each of these variables vis-a-vis organizational commitment should be made with restraint (if at all) until more is known about linkages among the structural variables that constitute a system of influences on employee responses.

METHOD

Subjects and Data Collection

The sample for this study consisted of 262 non-faculty employees of a major U.S. university. Participants were selected from a frame of university employees and represented virtually all specific non-faculty job classifications as defined by the university. From this frame, a stratified random sample was drawn with the intent of securing a net return representative of 22% of the total work force.

Questionnaires were distributed to selected individuals through campus mail and a return envelope was included. Given the potentially sensitive nature of the dependent variable, participants were told of the voluntary nature of the study and were assured of complete anonymity and confidentiality of their responses. The 262 usable questionnaires that were returned represented a response rate of 64%. No major response rate differences were evident among the various job classifications. The final sample had a mean age of 37, with a mean position tenure of 3.5 years. Organization tenure averaged 7.5 years, education 13 years, 40% of the respondents were male and 60% were female.

Instruments

Functional dependence (the degree to which the respondent was directly dependent upon the work of others as inputs to and/or influences upon his or her own work) was measured with a three-item scale developed for this study. Coefficient alpha was .73. Decentralization was measured with a six-item scale adapted from Vroom (1960). Coefficient alpha was .85. Formalization was a measure of the extent to which written rules and procedures were available concerning the respondent's job. This was measured with a single-item Likert scale. Supervisory span of control was measured as a single-item "count",

as were span of subordination (the number of persons who assigned work to a given respondent) and work group size. Additional information about these measures is available from the authors.

Organizational commitment, the dependent variable, was measured using a 15-item scale developed by Porter (Mowday, Steers, & Porter, 1979). As used in this study, organizational commitment constitutes the relative strength of an employee's involvement in and identification with the particular organization (Porter et al., 1974). Such commitment can generally be characterized by at least three factors: 1) a strong belief in and acceptance of the organization's goals and values; 2) a willingness to exert considerable effort on behalf of the organization; and 3) a definite desire to maintain membership in the organization. Multiple-sample psychometric data are available for this instrument (see Mowday et al., 1979). Coefficient alpha for the present study was .88.

RESULTS AND DISCUSSION

Initial attention focused on the relative independence among the various study variables. As is shown in Table 1, the intercorrelations between the various structural measures ranged from $-.11$ to $.23$, with a median $r = .08$. The comparatively small amounts of variance shared among the structural variables suggested that their use in a multiple correlation analysis would not likely be at the risk of problems related to multicollinearity. Again, however, in spite of the relative independence that obtained among these structural variables, an emphasis on attempting to infer their relative contributions to explained variation in organizational commitment should be minimized at this point. Demographic variables and the structural measures also shared comparatively small amounts of variance, with intercorrelations ranging from $-.17$ to $.22$.

 Insert Table 1 About Here

Results presented in Table 1 also show statistically significant (but individually, small) bivariate correlations between organizational commitment and three structural variables: decentralization ($r = .33$), functional dependence ($r = .25$), and formalization ($r = .18$). In order to examine the combined relationship of these and the other structural variables with organizational commitment, a stepwise multiple correlation analysis was conducted with organizational commitment as the dependent variable. The results, shown in Table 2, are consistent with the bivariate analyses. Decentralization, functional dependence, and formalization each made significant independent contributions to predicting levels of organizational commitment. However, the combined model, representing the six structural variables as a set, was able to explain a substantial portion of variation in organizational commitment within this vocationally heterogeneous sample (multiple $R = .46$, adjusted $R^2 = .20$, $F = 11.65$, $p < .001$).

 Insert Table 2 About Here

The present findings indicate that aspects of organization structure do influence employee commitment levels for the present sample. This conclusion is important for at least two reasons. First, it suggests that commitment, as an attitude, reacts in a similar fashion to satisfaction, (another attitude) vis-a-vis structure. That is, the manner in which employees are organized for task accomplishment does appear to be related to affective responses that develop on the job. This is consistent with earlier studies summarized by Porter and Lawler (1965) and Cummings and Berger (1976).

Second, the findings here provide useful information for better understanding the relative influence of different sets of variables on commitment. Stevens et al. (1978) concluded that structural variables were of little consequence in determining commitment. However, comparing their results with the present ones suggests that the earlier study might have focused on less potent structural variables. For example, Stevens et al. did not measure functional dependence or formalization, both of which were found to be related to commitment in the present study. (Both studies did find supervisory span of control to be unrelated to commitment, however). Moreover, the multiple R^2 in the present study, using only six structural variables, accounted for more variance (20%) in commitment than did an array of personal, role-related, and structural variables in the earlier study (13% of the variance explained). Hence it appears that structural properties may indeed represent important variables in future model-building efforts involving organizational commitment.

Using post hoc analysis, it is possible to offer plausible but tentative explanations for the emergence of the three structural variables that made significant, independent contributions to explained variation in commitment. First, the literature on decentralization and participative decision making consistently points to increased employee involvement and attachment resulting from decentralization (Hall, 1977). Vroom (1960) suggests that greater participation in decision making leads to employees becoming more ego involved in their work and work-related outcomes. A logical case can also be developed for the effects of functional dependence on commitment. When functional dependence is high, one might expect employees to be more aware of the importance of their own contribution to the organization as well as to their immediate work group. Such clarity about the particular nature and importance

of one's contribution also facilitates ego involvement and the development of positive affect toward the organization (Sheldon, 1971; Steers, 1977).

Finally, increased formalization may influence commitment to some extent by facilitating both job and role clarity. Since highly committed employees are, by definition, desirous of working hard to accomplish organizational goals, the presence of written rules and procedures may help to ameliorate otherwise ambiguous situations and thereby provide means to achieve those goals. In addition, the presence of operationally useful rules and procedures should help to enhance employee perceptions of the organization's dependability, a characteristic that Buchanan (1974) has shown to be related to commitment.

Although these explanations concerning the ways in which structure may influence commitment appear to follow from theory and research, the findings here must be considered tentative. They are offered in this research note as a means of stimulating more systematic analyses of such relationships as part of larger studies of commitment processes. It would appear, based on these data, that structural variations do represent an important influence on organizational commitment. The task of future research is to attempt to build more complex models relating to the development of commitment in work organizations.

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Footnotes

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TABLE 1
Descriptive Characteristics and Correlations for Study Variables

Variable	M	SD	Correlations											
			1	2	3	4	5	6	7	8	9			
1. Organizational commitment	4.64	1.30	---											
2. Decentralization	4.09	2.06	.33	---										
3. Span of subordination	3.26	1.51	-.03	.19	---									
4. Span of control	3.36	5.06	.06	.23	.05	---								
5. Work group size	2.58	3.28	-.07	-.11	-.01	.11	---							
6. Functional dependence	4.65	1.73	.25	-.02	.01	.12	.20	---						
7. Formalization	4.07	2.07	.18	.01	-.07	.09	.08	.16	---					
8. Age	37.30	12.12	.30	.07	-.07	.22	.00	.17	.18	---				
9. Education	13.21	1.92	-.24	.18	.12	.07	.07	-.15	-.17	-.16	---			
10. Sex	---	---	.08	.00	.14	-.05	-.13	.03	.04	.03	.06	---		

Note. $N = 262$. Correlations in this table $> .13$ are significant at the .05 level (two-tailed test).

TABLE 2
 Stepwise Multiple Regression of Organizational Commitment
 On Structural Variables

Independent variable	Beta	Partial F-ratio
1. Decentralization	.35	36.02**
2. Functional dependence	.27	21.21**
3. Formalization	.14	6.01*
4. Work group size	-.10	2.80
5. Span of subordination	-.09	2.41
6. Span of control	-.05	.82

Multiple \underline{R} = .46

\underline{R}^2 = .22 (degrees of freedom = 6, 255)

Adjusted \underline{R}^2 = .20 (\underline{F} = 11.65, $p < .001$)

Note. \underline{N} = 262. Variables are listed in their respective order of entry into the equation.

* $p < .05$

** $p < .001$

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College of Business and Administration
Southern Illinois University
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Seattle, Washington 98195

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Department of Political Science
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East Lansing, Michigan 48824

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