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An Empirical Assessment of Organizational Commitment and Organizational Effectiveness

Harold L. Angle and James L. Perry The study attempts to relate the organizational commitment of lower-level employees to organizational effectiveness in organizations offering bus services. Organizational commitment was found to be associated with organizational adaptability, turnover, and tardiness rate, but not with operating costs or absenteeism. Two subscales were constructed to measure value commitment and commitment to stay in the organization. Few significant differences were found between the subscales, as they relate to various indicators of organizational effectiveness, and the overall pattern suggested the need to avoid simplistic assumptions about the impact of commitment on organizationally relevant behavior.•

In a widely accepted paradigm in organization theory, organizations and their members are seen in an exchange relationship. Each party makes certain demands on the other while providing something in return. March and Simon (1958) characterized such an exchange in terms of organizational inducements and individual contributions. They pointed out that employees' contributions to the organization take two general forms — production and participation — and they described some important differences in the antecedents of an employee's decision to produce in contrast to the decision to participate.

Students of organizational behavior have attempted to establish reliable linkages between employee attitudes and organizationally relevant behaviors, though with mixed results (Vroom, 1964). Substantial attention has been directed recently toward organizational commitment as the attitudinal component of this relationship (Hrebiniak and Alutto, 1972; Buchanan, 1974; Porter et al., 1974; Porter, Crampon and Smith, 1976; Steers, 1977a; Stevens, Beyer and Trice, 1978). Some have proposed that the concept of commitment may disclose reliable linkages between attitudes and behavior, because commitment is presumed to be a relatively stable employee attribute (Porter et al., 1974; Koch and Steers, 1978).

Commitment has been studied from so many different theoretical perspectives, however, that Hall (1977) remarked that we might better abandon the term altogether and deal instead with a set of concepts, each focused on one or another aspect of commitment. The term "commitment" has been used, for example, to describe such diverse phenomena as the willingness of social actors to give their energy and loyalty to social systems (Kanter, 1968), an awareness of the impossibility of choosing a different social identity or of rejecting a particular expectation, under force of penalty (Stebbins, 1970a), the binding of an individual to behavioral acts (Kiesler, 1971; Salancik, 1977), or an affective attachment to an organization apart from the purely instrumental worth of the relationship (Buchanan, 1974). Some commitmentlike concepts, such as organizational identification or organizational involvement, have also appeared in the literature (Patchen, 1970; Hall and Schneider, 1972).

The commitment framework adopted in the present research has been called the "organizational behavior approach" (Staw, 1977). This treatment of commitment has perhaps its most frequently cited origins in the work of Porter and his associates

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(Porter and Smith, 1970; Porter et al., 1974; Porter, Crampon and Smith, 1976; Steers, 1977a; Mowday, Steers and Porter, 1979) and a similar concept is found in other research by Hall, Schneider and Nygren (1970), Hall and Schneider (1972) and Buchanan (1974).

Organizational commitment as defined by Porter et al. (1974) has three major components: (1) a strong belief in and acceptance of the organization's goals, (2) a willingness to exert considerable effort on behalf of the organization, and (3) a definite desire to maintain organizational membership. Research conducted within this framework has indicated that commitment is not only a predictor of employee retention (Porter et al., 1974; Koch and Steers, 1978), but may also be a predictor of employee effort and performance (Mowday, Porter, and Dubin, 1974; Mowday, Steers, and Porter, 1979).

# Organizational Commitment and Organizational Effectiveness

Organizational theorists seem to agree that organizational effectiveness is multidimensional (Campbell et al., 1974; Steers, 1977b), and there is also reason to believe that the determinants of organizational effectiveness vary (Steers, 1977a; Stevens, Beyer, and Trice, 1978). Although general organizational theory holds that the structural features of an organization should fit the demands of environment and technology (Burns and Stalker, 1961; Woodward, 1965; Lawrence and Lorsch, 1967), organizational design, alone, will not ensure organizational effectiveness. Even where the structural prerequisites have been met, there remains a crucial requirement — that the members of the organization behave in a manner supportive of organizational goals.

Katz (1964) suggested three types of member behaviors, reminiscent of March and Simon's (1958) participation and production framework, essential for a functioning organization. Not only must the organization induce members to join and remain (i.e., participate), but it must also motivate two kinds of production: dependable role behavior, as prescribed by the organization, and spontaneous and innovative behaviors which go beyond explicit behavioral prescriptions.

Some parallels can be drawn between the elements of organizational commitment according to the organizational behavior school (Porter et al., 1974) and the motivational taxonomies of March and Simon (1958) and Katz (1964). A committed member's definite desire to maintain organizational membership would have a clear relationship to the motivation to participate. Willingness to exert considerable effort on behalf of the organization and the belief in and acceptance of the organization's goals, in combination, have implications for the member's motivation to produce for the organization — in accordance with explicit organizational mandates, as well as in terms of Katz's (1964) spontaneous and innovative behaviors.

#### **Expected Relationships**

In the present research, it had been anticipated that several measures of organizational effectiveness would be sensitive to differences in the levels of commitment of the members of the organizations studied. Thus, it was hypothesized that organizations whose members were strongly committed would have

both high participation and high production. Such organizations were therefore expected to show relatively low levels of absenteeism, tardiness, and voluntary turnover, and high levels of operating efficiency. In addition, in keeping with the view that committed employees will engage in spontaneous, innovative behaviors on behalf of the organization, it was anticipated that, within limits, organizational commitment among the members would facilitate the ability of an organization to adapt to contingencies. The adaptability-commitment relationship would not actually be expected to be monotonic over all possible levels of commitment. Extreme commitment would probably lead to fanatical behavior, suspension of individual judgment and the like, i.e., the syndrome that Schein (1968) termed "failures of socialization." However, the relationship was presumed to be positive and monotonic over the range of values actually encountered. While these outcomes are not exhaustive, they are typical of the measures of effectiveness that have appeared in the literature based on the goal model of organizations (Campbell et al., 1974; Steers, 1977b).

It was anticipated that the relative strength of the relationship between organizational commitment and organizational effectiveness might vary depending upon the behaviors to which the employees were committed. Harris and Eoyang (1977), building upon Steers' (1977a) notion of "active" and "passive" commitment, offered a fourfold typology of commitment as a construct having two bipolar dimensions: (1) commitment, or lack of commitment, to remain with the organization, and (2) commitment, or lack thereof, to work in support of organizational objectives. Within such a framework, turnover measures should be most sensitive to the extent to which employees were committed to remaining in the organization. Conversely, those measures that more nearly reflected a decision by organizational members to produce (March and Simon, 1958) should be more clearly related to their commitment to exert effort on behalf of the organization. The latter category of indicators includes not only such performance dimensions as service efficiency and adaptability, but absenteeism and tardiness, as well. Although the term "participation" in common usage includes employee behaviors opposite to absenteeism, as well as to turnover, March and Simon (1958) defined the term solely with respect to turnover.

#### **METHOD**

### Sample and Research Sites

A total of 24 organizations, which operated fixed-route bus services in western United States, participated in the study. Archival and transit manager questionnaire and interview data were collected at all participating organizations, and employee questionnaires were administered to members of the bus drivers' bargaining unit. Consequently, a majority (91 percent) of the respondents were bus drivers; however, at a few of the participating organizations, mechanics and/or clerical personnel were included in the drivers' bargaining unit and so were sampled along with the drivers. The total employee sample was 1244, while the transit manager sample was 96.

The nature of the bus driver's job was expected to provide a particularly sensitive test of the relationship between the commitment of rank-and-file employees and several indicators

of the effectiveness of their employing organizations. Driving a bus is one of the more controlled yet one of the more autonomous blue-collar occupations. On the one hand, drivers must adhere rigorously to minute-by-minute schedules keyed to a fixed route that must be followed exactly, and deviance from these schedules has a high probability of discovery. On the other hand, within the constraints of time and route, the bus driver is like a ruler of a minor kingdom. Whether intended by the organization or not, a great deal of the driver's behavior, with respect to passenger relations, is discretionary.

For the passengers, the driver is the organization. The network of drivers that the organization puts out on the road constitutes the organization's public face. Ultimately, public attitudes toward the organization, and public utilization and support of the transit operation, may come to depend in large part on how well the drivers represent the organization to the public. Thus, as a true boundary-role person (Adams, 1976), the bus driver may be in a unique position to influence organizational outcomes, by her or his job-relevant behaviors. If these behaviors are, in any way, a function of organizational commitment, then organizational commitment and organizational performance might be related.

#### Measures

Organizational commitment. Employee commitment was measured by the 15-item Organizational Commitment Questionnaire (OCQ) (Porter et al., 1974), which has demonstrated good psychometric properties and has been used with a wide range of job categories (Mowday, Steers, and Porter, 1979). In the present study, Cronbach's alpha was .90. Two subscales were also created, based on the results of a factor analysis: value commitment (alpha=.89) and commitment to stay (alpha=.72), which appear to differentiate between the respondents' commitment to support the goals of the organization and their commitment to retain their organizational membership.

Table 1 indicates the factor loadings and shows which items were included in each of the subscales. As Table 1 indicates, there was also a third factor extracted under the conventional rule that eigenvalues equal or exceed a value of one (Nunnally, 1978); however, only one item had its highest loading on that factor. Because single-item scales are notoriously unreliable, only the two subscales mentioned were used.

In order to assess the stability of the factor structure obtained, cross validation was achieved by randomly dividing the sample and conducting a new pair of factor analyses. The factor-loading patterns for these analyses were virtually identical with those for the overall sample; thus, the factor structure appears quite stable.

The observation that the items loading on factor 2 were all reverse-scored, while none of the reverse-scored items were loaded on factor 1, gave rise, initially, to the concern that the structure obtained might have resulted from an artifact of measurement. Although it is likely that such an artifact might have contributed to the separation of factors, the two clusters of questionnaire items appear to be conceptually distinct.

The value commitment scale includes items connoting pride in association with the organization (i.e., identification), willing-

Table 1

Rotated Factor Loadings from Factor Analysis for the Organizational Commitment Questionnair	
	*

			Factors*	*
ltem		1	2	3
1.†	I am willing to put in a great deal of effort beyond that normally			
	expected in order to help this organization be successful.	.594		
2. <b>†</b>	I talk up this organization to my friends as a great organization			
	to work for.	.716	.312	
3. <b>‡</b>	I feel very little loyalty to this organization (reversed).		.482	
4. <b>†</b>	I would accept almost any type of job assignment in order to keep	500		
	working for this organization.	.509		400
5. <b>†</b>	I find that my values and the organization's values are very similar.	.547	000	.483
6. <b>†</b>	I am proud to tell others that I am part of this organization.	.745	.336	
7. <b>‡</b>	I could just as well be working for a different organization as		007	
	long as the type of work were similar (reversed).		.327	
8. <b>†</b>	This organization really inspires the best in me in the way of	500		500
	job performance.	.586		.502
9.‡	It would take very little change in my present circumstances to		010	
40.1	cause me to leave this organization (reversed).		.610	
10. <b>†</b>	I am extremely glad I chose this organization to work for over	040		
	others I was considering at the time I joined.	.646		
11.‡	There's not much to be gained by sticking with this organization		000	
4.0	indefinitely (reversed).		.689	
12.	Often, I find it difficult to agree with this organization's		275	.532
40.4	policies on important matters relating to its employees (reversed).	FC0	.375	.532
13. <b>†</b>	I really care about the fate of this organization.	.569	.325	
14. <b>†</b>	For me, this is the best of all organizations for which to work.	.613	.323	
15. <b>‡</b>	Deciding to work for this organization was a definite mistake	400	ccc	
	on my part (reversed).	.409	.555	
Eigen	values	6.354	1.363	1.004

- \* Only factor loadings above .30 are shown.
- \*\* Factor 1 value commitment; Factor 2 commitment to stay.
- † Items included in value commitment subscale.
- ‡ Items included in commitment to stay subscale.

ness to perform for the organization, concern for the fate of the organization, and congruence of personal values with those of the organization. Although three of the nine items relate to attitudes toward organizational membership, their wording tends to imply that attachment is based on the member's positive regard for the organization. In the aggregate, these items indicate a form of organizational involvement, which Etzioni (1975) termed "moral" and which is clearly analogous to Stebbins' (1970b) notion of value commitment.

The commitment to stay scale includes a cluster of questionnaire items that pertain to membership in itself. Unlike the membership-related items that load on factor 1, these items do not connote an affective bond to the organization. On the contrary, the wording of this set of items conveys a general impression of Etzioni's (1975) ''calculative involvement.''

Organizational effectiveness. Several aspects of overall organizational effectiveness were tapped by the use of selected performance indicators. The rationale for the selection of the specific indicators is discussed in an earlier paper (Perry and Angle, 1980b).

Employee turnover (separation rate) was measured by compilation of statistics on voluntary termination during the preceding fiscal year. A second turnover measure was obtained by self-report of employees' intent to quit (Appendix), a measure which

has received substantial research support, as documented in a recent review by Muchinsky and Tuttle (1979).

Employee tardiness was computed as the ratio of recorded tardiness incidents to the mean number of employees during the preceding fiscal year. Unfortunately, adequate tardiness records had been maintained by only 14 of the 24 organizations for which other performance data were available.

Absenteeism was obtained by self-report (Appendix). Like tardiness, reliable absence statistics had not been maintained by several of the participating organizations, but the alternative measure was available through the employee questionnaire.

Operating expense was another measure of effectiveness. A general notion of efficiency seems to be common in most taxonomies of the dimensions of organizational effectiveness. The broad concept of efficiency involves the computation of ratios of inputs to outputs, or of costs to benefits. In public mass transit, efficiency may be defined in terms of the extent to which the organization is able to minimize operating costs, relative both to the amount of transit service provided and to the overall scope of the operation. Two performance indicators were, therefore, selected for this purpose: operating expense per revenue vehicle-hour, computed by dividing total operating expenses for the preceding fiscal year by the total number of operating hours for the revenue vehicles, and operating expense per employee, using the total number of employees as the measure of input.

Organizational adaptability was measured by self-report, using a modified version of Mott's (1972) questionnaire. A four-item scale was constructed and incorporated in both the employee questionnaire and the transit manager questionnaire (Appendix). The adaptability of each organization was thus measured two ways, i.e., by averaging the responses to the adaptability scale separately for transit managers and for other employees.

#### **Procedures for Data Collection**

Archival data and questionnaires. Archival data were collected and questionnaires administered during two-day site visits. Employees had been made aware of the survey in advance of each visit through the internal communication systems of the organizations. All questionnaires were presented directly to participating employees by a member of the research team. In most cases, completed questionnaires, which were filled out anonymously, were returned directly to one of the researchers before the conclusion of the site visit. In a few cases, respondents were unable to complete questionnaires in time, and so were furnished with preaddressed, postpaid envelopes for direct mail return to the university. In no case did persons in the chain of authority in the organization become involved in administering questionnaires. The response rate for the primary method of administration (i.e., on-site return) was 71 percent; however, the overall response rate dropped to 64 percent when persons who were provided mail-return envelopes were included in the computation. The response rate from mail returns alone was 32 percent.

Sampling goals were established separately for each site, in inverse proportion to organization size. At the smallest organizations, less than 30 eligible employees, for instance, the target

was 100 percent. At organizations having more than 1,000 eligible employees, the target was only 10 percent. In most cases, the targeted sampling objectives were achieved, the exceptions tending to be in those organizations for which the target was 100 percent sampling.

Since participation was voluntary, true random sampling was not possible. Researchers attempted judgmentally, however, to distribute questionnaires across categories of race and sex, and across the apparent range of age and tenure. Analysis of questionnaire returns, however, disclosed some discrepancies in proportional representation of certain groups. Blacks were underrepresented (14 percent in sample, 31 percent in population); as were employees having more than five years' tenure in the organization (30 percent in sample, 38 percent in population); women were overrepresented (18 percent in sample, 6 percent in population). Other groups matched sampling targets reasonably well. Retrospectively, it appeared that the deviations from ideal proportional representation may have resulted, at least in part, from population differences during the work shifts in which most of the sampling effort had been concentrated.

#### **RESULTS**

### Organizational Commitment: Subgroup Differences

Personal factors accounted for several subgroup differences. Commitment was positively correlated with age (r=.17, p<.001), but negatively related to educational level (p<.0001). The results for educational level were striking, showing a steady decline in commitment across eight ascending educational level categories. No significant differences were found, however, across racial-ethnic subgroups or between employees whose income was or was not the primary source of family support.

The relationships of age and of educational level with commitment were generally consistent with findings from related research (Sheldon, 1971; Hrebiniak and Alutto, 1972; Steers. 1977a; Stevens, Beyer, and Trice, 1978). The argument often used to explain these relationships is that increasing age and decreasing levels of education tend to reduce the feasibility of obtaining desirable alternative education and therefore tend to restrict the individual to the present organization.

Females were more strongly committed to their organizations than males (p < .001). While this finding was consistent with research that has treated commitment as an instrumental attachment to organizational membership (Hrebiniak and Alutto, 1972), it had not been expected in the present study, since the OCQ appears to tap a form of commitment that is conceptually very close to work involvement (Dubin, Champoux, and Porter, 1975) and, historically, women have been less involved than men in their work (Department of Health, Education, and Welfare, 1973; Taveggia and Ziemba, 1978). The rationale usually presented for such findings is that females enjoy less interorganizational mobility than males and, therefore, tend to become restricted to their present organizations. In the present research, demographic differences alone would have predicted higher commitment for males. Male employees

were older and had longer organizational tenure than females. There were no significant sex differences in educational levels.

### Measures of Organizational Effectiveness

Correlational analysis was the principal method used to assess organizational-level relationships. Pearson correlation coefficients were computed where marginal distributions were symmetrical and unimodal; however, for variables with skewed distributions, nonparametric correlations were substituted for Pearson correlations. Intercorrelations among the effectiveness indicators are provided in Table 2. All variables in Table 2 were measured at the organizational level; thus, the self-report measures consisted of the arithmetic mean of responses to questionnaires within each participating organization.

Table 2

Intercorrelations among Indicators of Organizational Effectiveness									
Indicators*	N	1	2	3	4	5	6	7	8
Manager-perceived adaptability	24	1	.23	.11	08	04	<b>–</b> .16	<b>-</b> .19	32
2. Employee-perceived adaptability	24		1	<b>-</b> .16	<del>48</del> ••	26	<del>53</del> •	19	<b>-</b> .18
3. Absenteeism	24			1	${25}$	26	.37	.50•	.67•••
4. Intent to quit	24				1	.64	.48•	.14	.02
5. Separation rate	24					1	.05	<b>-</b> .15	05
6. Tardiness	14						1	.42	.43
7. Operating expense/revenue vehicle hour	22							1	.43•
8. Operating expense/employee	20								1

<sup>\*</sup>Pearson correlation coefficients are underlined; all others are Spearman rho.

Two aspects of the intercorrelations shown in Table 2 seem noteworthy. First, the correlation between managers' and employees' organizational adaptability ratings was rather low (r=.23); thus, these two member groups appeared to perceive the same organization somewhat differently. Second, the two measures of turnover (separation rate, intent to quit) were negatively correlated with absenteeism, although neither coefficient was statistically significant. This is in keeping with March and Simon's (1958) view of participation, that is, that there is no consistent relationship between absenteeism and voluntary turnover.

### **Employee Commitment and Organizational Effectiveness**

Employees' organizational commitment scores, both for overall commitment and the two commitment subscales, were aggregated in the same way as the performance indicators. Table 3 shows the correlations between the effectiveness indicators and overall commitment, value commitment, and commitment to stay. Table 3 also shows the absolute differences between the correlations with value commitment and commitment to stay, for each performance indicator. The statistical significance of the difference between correlations was computed using a technique recommended by Steiger (1980) for testing the equality of two correlations having one index in common. This procedure, which utilizes the Fisher *r*-to-*z* transformation, is superior to Hotelling's *t* test, where sample sizes are small.

Three of the effectiveness indicators (employee-perceived

<sup>•</sup>p<.05; ••p<.01; •••p<.001.

#### Correlations between Commitment Variables and Indicators of Organizational Effectiveness\*

Indicator	N	Organizational commitment	Value commitment	Commitment to stay	Total difference between correlations for value commitment and commitment to stay†
Manager-perceived adaptability	24	16	15	17	.02
Employee-perceived adaptability	24	<u>.58</u> ••	52••	<u>.68</u> •••	.16
Absenteeism	24	.27	.26	.15	.11
Intent to quit	24	36•	<u>28</u>	<u>60</u> •••	.32•
Separation rate	24	<del>48</del> •	<u>44</u> •	64 ••	.20
Tardiness rate	14	48•	<u>46</u> •	35	.11
Operating expense/ revenue vehicle hour	22	<del>-</del> .28	<del>-</del> .34	<del>-</del> .06	.28•
Operating expense/ employee	20	21	<b>-</b> .35	.05	.40•

<sup>\*</sup> Pearson correlation coefficients are underlined; others are Spearman rho.

adaptability, absenteeism, and intent to quit) were derived from the same employee questionnaires as the commitment measures. In order to avoid the inherent single-source bias, an alternative technique was used for the correlations between these three indicators and the commitment measures. The sample of respondents was randomly divided so that, for each organization, the measures of employee-perceived adaptability, absenteeism, and intent to quit were obtained from half of the employees, while organizational levels of overall commitment, value commitment, and commitment to stay were obtained by taking the arithmetic means for the remaining half of the employees. Since the other performance measures were free of single-source bias, they were all correlated with commitment scores that were based on the entire employee sample.

Organizational commitment was significantly related to organizational adaptability, based on employee questionnaire data, but was not significantly related based on manager questionnaires. This disparity was consistent with the low correlation between the two adaptability measures (Table 2).

Turnover, that is, separation rate and intent to quit, was significantly related to organizational commitment, as was the archival measure of tardiness rate. However, neither absenteeism nor the two operating-expense ratios showed a statistically significant association with commitment.

When the two commitment subscales, value commitment and commitment to stay, were substituted for the 15-item measure of organizational commitment, turnover appeared to be more strongly associated with commitment to stay than with value commitment. This difference was statistically significant for the intent-to-quit measure (p < .05). The archival separation rate indicator showed a similar directional pattern; however, the difference fell short of the traditional level of statistical signifi-

<sup>†</sup> Statistical significance is indicated for the difference between correlations between value commitment and commitment to stay. All significance tests are one-tailed.

<sup>•</sup>*p*<.05; ••*p*<.01; •••*p*<.001.

cance (p < .07). Tardiness rate was negatively correlated with value commitment, as had been the case with organizational commitment, but was not significantly correlated with commitment to stay; however, the difference between the two correlation coefficients was not statistically significant (p > .20).

Other indicators tended to show stronger associations with value commitment than with commitment to stay, among them the two operating expense ratios. However, even though the difference between the correlations for both ratios was statistically significant, the correlations fell short of traditional levels of significance (p<.08, for both correlations).¹ Neither organizational adaptability nor absenteeism showed a differential strength of association with the two commitment subscales. In summary, although the overall pattern in Table 3 tends to suggest that the two subscales relate differentially to turnover and to such other types of measures as operating expense, the absence in some instances of statistically significant findings dictates caution in drawing conclusions.

#### DISCUSSION

This research was designed to find systematic relationships between members' commitment to their work organizations and several indices of organizational effectiveness. The results were rather mixed. The pattern of relationships shown in Table 3 for the two commitment subscales perhaps provides one clue as to why the overall commitment-effectiveness relationships were not as strong as had been anticipated. Although none of the relationships was statistically significant, the two operating expense ratios showed a tendency toward a stronger association with value commitment than with commitment to stay, whereas the turnover measures were more clearly related to commitment to stay. This pattern suggests that any impact of employee commitment on the organization may indeed depend on the specific kinds of behaviors to which the employees are committed and, of course, the effects of such behaviors on organizational outcomes.

In keeping with earlier research (Porter et al., 1974; Steers, 1977a; Koch and Steers, 1978), the clearest evidence provided by the present study is that there is an inverse relationship between organizational commitment and employee turnover. As Steers (1977a) pointed out, such a finding is not surprising, considering Porter's definition of commitment (Porter et al., 1974). However, a strong desire to remain a member of one's organization does not automatically imply that there is also an intention to be a dependable and hardworking employee. In terms of Harris and Eoyang's (1977) typology, organizational outcomes would probably vary, depending on which quadrant includes the preponderance of employees who are in a position to influence the performance of the organization. For instance, if most such employees had a strong intention to remain but low motivation to contribute their best efforts toward the mission (i.e., passive commitment), there would be no reason to expect a simple, linear relationship between organizational commitment and overall organizational effectiveness — particularly in cases where turnover appears to have little direct impact on other aspects of organizational performance. As Table 2 indicates, the turnover measures appeared virtually unrelated to

It is acknowledged that the significance of the difference between two correlation coefficients, neither of which is statistically significant, is difficult to interpret. However, the fact that a correlation could have occurred by chance does not mean that the correlation equals zero. In this instance, the larger of each pair of correlations related to operating expense is nearly significant (p < .08). Furthermore, the test for the equality of two dependent correlations takes into account, simultaneously, the size of each correlation and the degrees of freedom. Accordingly, there appears to be some justification for reporting statistical significance, when found. On the other hand, the issue is controversial, and the data are offered with due caution.

operating costs, and the probable reasons for this have been discussed in an earlier paper (Perry and Angle, 1980a).

The overall pattern in Table 3 seems consistent with Harris and Eoyang's (1977) notion that commitment to stay and commitment to work are independent constructs and, in combination, have complex implications for organizations. However, the table shows fewer statistically significant relationships than might be desired, and there are some anomalies. For instance, although there is no significant difference between the correlations for employee-perceived adaptability and the two commitment subscales, the trend is in a counterintuitive direction. Indeed, the largest correlation in Table 3 is between employee-perceived adaptability and commitment to stay.

It would seem unlikely that a linear relationship should exist between *any* form of commitment and organizational adaptability. At the extreme, commitment would appear to militate against the individual's (and therefore the organization's) ability to adapt to change (Salancik, 1977). It is more likely that, with respect to adaptability, there is some optimal level of commitment — sufficient to evoke needed employee behaviors beyond explicit role stipulations, but not so strong as to incur the suspension of individual judgment in favor of organizational precepts.

As an additional note on the number of nonsignificant relationships in Table 3, it should be recognized that this study represents an attempt to find systematic relationships in a "noisy system." As is often the case with field research, there are a number of uncontrolled variables. In particular, such performance measures as operating expense ratios are subject to many influences besides the motivation of lower-level employees. Management competence, structural and technological variables, and various contextual factors combine to place limits on any potential effort-performance relationship.

Two cautions are required. The first is about the cross-sectional nature of the research. To the extent that Table 3 does show relationships between commitment and indicators of organizational effectiveness, the directionality of the causal arrow has still not been established. For example, however logical a case might be made that some optimal level of employee commitment might foster organizational adaptability, there is the possibility that organizations that are adaptable either induce commitment in their members or tend to attract and retain a disproportionate share of committed types of employees.

The second caution is about occupational specificity. As Salancik (1977) pointed out, the impact of employee commitment on an organization depends, not only on what the employees are committed to do, but also on what the potential is for those specific behaviors to influence organizational outcomes. In the present research, for example, commitment to stay was shown to have a more clear-cut relationship to voluntary turnover than to such indicators as operating costs. This may reflect the ready availability of a replacement labor pool and relatively modest training costs in the transit industry. In an industry where labor-pool and technological considerations would combine to make turnover particularly expensive, commitment to stay might exert a more powerful impact on operating costs, though indirectly.

#### CONCLUSION

The present research offered an opportunity to uncover a commitment-performance relationship, if such a relationship exists, through cross-organizational comparison of commitment levels relative to performance measures within a single type of service organization. Furthermore, there were reasons to expect that the role of bus operator was such that a behavior-performance link might, indeed, exist.

What the research most clearly accomplished was a constructive replication of a relatively large body of earlier work, showing a definite negative relationship between organizational commitment and voluntary turnover. Beyond that issue, the results were rather mixed. The statistics that could most nearly be considered bottom-line indicators for the organizations that participated in the research were the two operating expense ratios, yet these aspects of organizational performance were not significantly associated with organizational commitment. Although employee-perceived organizational adaptability was associated with commitment, manager-perceived adaptability was not. The relationship between tardiness and commitment was significant; however, employee tardiness rate was not significantly associated with organizational operating costs.

The overall pattern of relationships between various performance indicators and the two commitment subscales, though inconclusive, suggests follow-up research. The relationship between commitment and behavior very likely depends on the form that commitment takes. Rather than assuming a simplistic relationship between commitment and positive performance outcomes, organizational researchers will have to begin to deal with more complex factors.

#### **REFERENCES**

### Adams, J. Stacy

1976 ''The structure and dynamics of behavior in organizational boundary roles.'' In Marvin D. Dunnette (ed.), Handbook of Industrial and Organizational Psychology: 1175–1199. Chicago: Rand McNally.

#### Buchanan, Bruce II

1974 "Building organizational commitment: The socialization of managers in work organizations." Administrative Science Quarterly, 19: 533–546.

Burns, Tom, and Graham M. Stalker 1961 The Management of Innovation. London: Tavistock.

# Campbell, John P., David A. Bownas, Norman G. Peterson, and Marvin D. Dunnette

1974 The Measurement of Organizational Effectiveness: A Review of Relevant Research and Opinion. NPRDC TR 75–1, Navy Personnel Research and Development Center, San Diego, CA.

# Department of Health, Education, and Welfare

1973 Work in America. Cambridge, MA: MIT Press.

# Dubin, Robert, Joseph E. Champoux, and Lyman W. Porter

1975 "Central life interests and organizational commitment of blue-collar and clerical workers." Administrative Science Quarterly, 20: 411–421.

#### Etzioni, Amitai

1975 A Comparative Evaluation of Complex Organizations: On Power, Involvement and Their Correlates, rev. ed. New York: Free Press.

### Hall, Douglas T.

1977 "Conflict and congruence among multiple career commitments as the career unfolds." Paper presented at annual meeting of Academy of Management, Orlando, Florida, August.

#### Hall, Douglas T., and Benjamin Schneider

1972 "Correlates of organizational identification as a function of career pattern and organizational type." Administrative Science Quarterly, 17: 340–350

#### Hall, Douglas T., Benjamin Schneider, and Harold T. Nygren 1970 "Personal factors in organizational identification." Adminis

tional identification." Administrative Science Quarterly, 15: 176–190.

# Harris, Rueben T., and Carson K. Eoyang

1977 ''A typology of organizational commitment.'' Working paper, Massachusetts Institute of Technology, Sloan School of Management, Paper No. 957–77, October.

#### Hrebiniak, Lawrence G., and Joseph Alutto

1972 "Personal and role-related factors in the development of organizational commitment." Administrative Science Quarterly, 17: 555–572.

#### Kanter, Rosabeth Moss

1968 "Commitment and social organization: A study of commitment mechanisms in utopian communities." American Sociological Review, 33: 499–517.

#### Katz, Daniel

1964 ''The motivational basis of organizational behavior.'' Behavioral Science, 9: 131–146.

#### Kiesler, Charles A.

1971 The Psychology of Commitment: Experiments Linking Behavior to Belief. New York: Academic Press.

# Koch, James L., and Richard M. Steers

1978 "Job attachment, satisfaction, and turnover among public sector employees." Journal of Vocational Behavior, 12: 119— 128.

# Lawrence, Paul R., and Jay W. Lorsch

1967 Organization and Environment: Managing Differentiation and Integration. Boston: Harvard University Press.

# March, James G., and Herbert A. Simon

1958 Organizations. New York: Wiley.

#### Mott, Paul E.

1972 The Characteristics of Effective Organizations. New York: Harper & Row.

# Mowday, Richard T., Lyman W. Porter, and Robert Dubin

1974 "Unit performance, situational factors and employee attitudes in spatially separated work units." Organizational Behavior and Human Performance, 12: 231–248.

# Mowday, Richard T., Richard M. Steers, and Lyman W. Porter

1979 'The measurement of organizational commitment.' Journal of Vocational Behavior, 14: 224–247.

#### Muchinsky, Paul M., and Mark L. Tuttle

1979 ''Employee turnover: An empirical and methodological assessment.'' Journal of Vocational Behavior, 14: 43–77.

#### Nunnally, Jum C.

1978 Psychometric Theory, 2d ed. New York: McGraw-Hill.

#### Patchen, Martin

1970 Participation, Achievement, and Involvement on the Job. Englewood Cliffs, NJ: Prentice-Hall.

### Perry, James L., and Harold L. Angle

1980a The Impact of Labor-Management Relations on Productivity and Efficiency in Urban Mass Transit: Employee Attitudes, Withdrawal Behavior, and Bargaining Unit Structure. Washington: Department of Transportation,

1980b Labor-Management Relations and Public Agency Effectiveness: A Study of Urban Mass Transit. New York: Pergamon Press.

# Porter, Lyman W., William J. Crampon, and Frank J. Smith

1976 "Organizational commitment and managerial turnover: A longitudinal study." Organizational Behavior and Human Performance, 15: 87–98.

# Porter, Lyman W., and Frank J. Smith

1970 "The etiology of organizational commitment." Unpublished paper, University of California, Irvine.

#### Porter, Lyman W., Richard M. Steers, Richard T. Mowday, and Paul V. Boulian

1974 "Organizational commitment, job satisfaction, and turnover among psychiatric technicians." Journal of Applied Psychology, 59: 603–609.

#### Salancik, Gerald R.

1977 ''Commitment and the control of organizational behavior.'' In Barry M. Staw and Gerald R. Salancik (eds.), New Directions in Organizational Behavior: 1–54. Chicago: St. Clair.

#### Schein, Edgar H.

1968 "Organizational socialization and the profession of management." Industrial Management Review, 9: 1–15.

#### Sheldon, Mary E.

1971 ''Investments and involvements as mechanisms producing commitment to the organization.'' Administrative Science Quarterly, 16: 142–150.

#### Staw, Barry M.

1977 "Two sides of commitment."
Paper presented at annual
meeting of Academy of Management, Orlando, Florida, August.

#### Stebbins, Robert A.

1970a Commitment to Deviance.
 Westport, CT: Greenwood.
 1970b "On misunderstanding the concept of commitment: A theoretical clarification." So-

#### Steers, Richard M.

1977a "Antecedents and outcomes of organizational commitment." Administrative Science Quarterly, 22: 46–56.

cial Forces, 48: 526-529.

1977b Organizational Effectiveness: A Behavioral View. Santa Monica, CA: Goodyear.

#### Steiger, James H.

1980 "Tests for comparing elements of a correlation matrix." Psychological Bulletin, 87: 245— 251.

# Stevens, John M., Janice M. Beyer, and Harrison M. Trice

1978 "Assessing personal, role, and organizational predictors of managerial commitment."
Academy of Management Journal, 21: 380–396.

# Taveggia, Thomas C., and Thomas Ziemba

1978 ''A study of the 'central life interests' and 'work attachments' of male and female workers.'' Journal of Vocational Behavior, 12: 305–320.

### Vroom, Victor H.

1964 Work and Motivation. New York: Wiley.

#### Woodward, Joan

1965 Industrial Organization: Theory and Practice. London: Oxford University Press.

#### **APPENDIX: Self-Report Performance Indicators**

Indicator Wording of item

Intent to quit What are your plans for staying with this organization?

- 1. I intend to stay until I retire.
- 2. I will leave only if an exceptional opportunity turns up.
- 3. I will leave if something better turns up.
- 4. I intend to leave as soon as possible.

#### Absenteeism Adaptability

How many workdays were you absent from work in the last year (do not count vacation)? \_\_\_\_\_\_days. A scale was constructed from the following four questions (Alpha=.80). Responses were obtained on a 7-point summated rating scale with anchor words ranging from "strongly disagree" (1) to "strongly agree" (7):

- 1. People in this organization do a good job anticipating problems.
- 2. People in this organization do a good job in keeping up with changes in new equipment and new ways of doing things.
- 3. When changes are made in routines and equipment, people adjust to these changes quickly.
- 4. People in this organization do a good job coping with emergency situations brought on by accidents, equipment and labor problems, or other factors that might cause temporary work overloads.

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### References

## **Review:** [Untitled]

Reviewed Work(s):

Prediction of Organizational Behavior by Norman Frederiksen; Ollie Jensen; Albert E. Beaton; Bruce Bloxom

Paul C. Buchanan

Administrative Science Quarterly, Vol. 19, No. 2. (Jun., 1974), pp. 287-289.

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## LINKED CITATIONS

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### **Personal Factors in Organizational Identification**

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http://links.jstor.org/sici?sici=0001-8392%28197006%2915%3A2%3C176%3APFIOI%3E2.0.CO%3B2-E

### Personal and Role-Related Factors in the Development of Organizational Commitment

Lawrence G. Hrebiniak; Joseph A. Alutto

*Administrative Science Quarterly*, Vol. 17, No. 4. (Dec., 1972), pp. 555-573. Stable URL:

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Administrative Science Quarterly, Vol. 16, No. 2. (Jun., 1971), pp. 143-150. Stable URL:

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Robert A. Stebbins

Social Forces, Vol. 48, No. 4. (Jun., 1970), pp. 526-529.

Stable URL:

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## Assessing Personal, Role, and Organizational Predictors of Managerial Commitment

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