Organizational Commitment and Psychological Attachment: The Effects of Compliance, Identification, and Internalization on Prosocial Behavior

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Previous research on organizational commitment has typically not focused on the underlying dimensions of psychological attachment to the organization. Results of two studies using university employees (N=82) and students (N=162) suggest that psychological attachment may be predicated on compliance, identification, and internalization (e.g., Kelman, 1958). Identification and internalization are positively related to prosocial behaviors and negatively related to turnover. Internalization is predictive of financial donations to a fund-raising campaign. Overall, the results suggest the importance of clearly specifying the underlying dimensions of commitment using notions of psychological attachment and the various forms such attachment can take.

In the past decade, the construct of organizational commitment has occupied a prominent place in organizational behavior research (Mowday, Porter, & Steers, 1982; Salancik, 1977; Staw & Ross, 1978). Unfortunately, as Morrow (1983, p. 486). has pointed out, "the growth in commitment related concepts has not been accompanied by a careful segmentation of commitment's theoretical domain in terms of intended meaning of each concept or the concepts' relationships among each other." By her count, there are over 25 commitment-related concepts and measures. Staw (1977), for instance, has noted that the value of commitment as a separate construct distinct from other psychological concepts such as motivation, involvement, or behavioral intention remains to be demonstrated. What is needed are theoretical and operational definitions that clearly differentiate commitment and its components from other related constructs (Gould, 1979; Kanungo, 1979; Scholl, 1981; Wiener, 1982).

This lack of consensus is manifested in a remarkable variation in how commitment is defined and measured. In addition, different terms have been used to describe the same basic phenomenon. Porter and his colleagues (Mowday, Steers, & Porter, 1979; Porter, Steers, Mowday, & Boulian, 1974), for instance, have defined commitment as "the strength of an individual's identification with and involvement in a particular organization" (Porter et al., 1974, p. 604). Their measurement included assessments of motivation, intent to remain, and identification with the values of the organization. Identification and involvement have also been seen by other researchers as the basis for psychological attachment (e.g., Brown, 1969; Hall & Schneider, 1972; Lee, 1971; Sheldon, 1971). Buchanan (1974, p. 533) saw commitment as "a partisan, affective attachment to the goals

and values of an organization, to one's role in relation to the goals and values, and to the organization for its own sake, apart from its purely instrumental worth [italics added]." Others have made a similar point and differentiated a type of attachment based on calculative involvement or an exchange of behavior for specific extrinsic rewards from a moral attachment where involvement is predicated on a congruence of values (Becker, 1960; Etzioni, 1961; Gould, 1979; Hall, Schneider, & Nygren, 1970; Kidron, 1978; Meyer & Allen, 1984).

Although numerous differences in the approach to commitment research exist, a central theme that continues to appear is the individual's psychological attachment to an organization the psychological bond linking the individual and the organization. Although the term commitment is broadly used to refer to antecedents and consequences, as well as the process of becoming attached and the state of attachment itself, it is the psychological attachment that seems to be the construct of common interest. The lack of consensus in previous research can be attributed, in part, to a failure to differentiate carefully among the antecedents and consequences of commitment on the one hand, and the basis for attachment on the other. For instance, some investigations have explored the processes through which one becomes committed (e.g., Galanter, 1980; Salancik, 1977; Staw & Ross, 1978) or the impact of individual and organizational influences on this process (Angle & Perry, 1983; Steers, 1977). Other studies have explored the consequences of commitment manifested in attitudes and behaviors such as proximity seeking and long tenure (Hom, Katerberg, & Hulin, 1979; Rusbult & Farrell, 1983; Werbel & Gould, 1984), expressions of positive affect and loyalty (Kanter, 1972; O'Reilly & Caldwell, 1980), motivation and involvement (Mowday et al., 1982; Scholl, 1981), and behaviors such as performance and obedience to organizational policies (Angle & Perry, 1981; Galanter,

But what is the basis for one's psychological attachment to an organization? One important mechanism in the development of psychological attachment is the process of identification (e.g., Bowlby, 1982; Sanford, 1955; Stoke, 1950; Tolman, 1943). From this perspective, attachment to an individual, object,

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group, or organization results from identification with the attitudes, values, or goals of the model; that is, some of the attributes, motives, or characteristics of the model are accepted by the individual and become incorporated into the cognitive response set of the individual (Kagan, 1958). The degree to which an individual identifies with a model can, of course, vary, as can the reasons for this attachment and manifestations of it. Thus, although organizational commitment has often been used in a global way to encompass antecedents, processes, and consequences of attachment, for purposes of this study, organizational commitment is conceived of as the psychological attachment felt by the person for the organization; it will reflect the degree to which the individual internalizes or adopts characteristics or perspectives of the organization. This approach calls attention to the fact that the underlying dimensions or bases for attachment may vary within and across individuals. It also differentiates the state of attachment from both its antecedents and its consequences.

Kelman (1958), in an investigation into the basis for attitude change, constructed a taxonomy of this sort, noting that individuals can accept influence in three conceptually distinct ways: (a) compliance or exchange, (b) identification or affiliation, and (c) internalization or value congruence. Compliance occurs when attitudes and behaviors are adopted not because of shared beliefs but simply to gain specific rewards. In this case, public and private attitudes may differ. Identification, in Kelman's terms, occurs when an individual accepts influence to establish or maintain a satisfying relationship; that is, an individual may feel proud to be a part of a group, respecting its values and accomplishments without adopting them as his or her own. Internalization occurs when influence is accepted because the induced attitudes and behaviors are congruent with one's own values; that is, the values of the individual and the group or organization are the same. Thus, the basis for one's psychological attachment to an organization may be predicated on three independent foundations: (a) compliance or instrumental involvement for specific, extrinsic rewards; (b) identification or involvement based on a desire for affiliation; and (c) internalization or involvement predicated on congruence between individual and organizational values. These differences may represent separate dimensions of commitment.

The importance of having organizational members whose psychological attachment is based on more than simple compliance has recently been underscored by Smith, Organ, and Near (1983) in a study of organizational citizenship behavior. They note that many critical behaviors in organizations rely on acts of cooperation, altruism, and spontaneous unrewarded help from employees. Katz (1964) also observed that one class of essential behaviors for a functioning organization consisted of those innovative behaviors that go beyond role prescriptions. Mowday et al. (1982, p. 15) addressed this directly, claiming that, "There are many instances where organizations need individual members, especially those in critical positions, to perform above and beyond the call of duty for the benefit of the organization." The motivational basis for such extrarole behavior is likely to require more than simple compliance. A failure to develop this psychological attachment among members may require the organization to bear the increased costs associated with more detailed and sophisticated control systems. Having a membership that shares the organization's goals and values can ensure that individuals act instinctively to benefit the organization (Ouchi, 1980; Williamson, 1975). Without a psychological attachment predicated on more than simple material exchange, higher turnover is also possible.

The purpose of this investigation is twofold. First, it is to attempt to develop measures of the dimensions of organizational commitment predicated on compliance, identification, and internalization. On the basis of previous research (e.g., Etzioni, 1961; Gould, 1979; Kelman, 1958), we propose that these are independent constructs. Second, following Smith et al. (1983), we propose two classes of dependent variables: (a) in-role or prescribed behaviors expected of all job holders (e.g., punctuality), and (b) extrarole or prosocial acts that are not directly specified by a job description but which are of benefit to the organization and which are not of direct benefit to the individual. Furthermore, it is postulated that commitment rooted in identification and internalization will be related to extrarole or prosocial behaviors whereas compliance-based commitment will not be. Role behaviors should be predicted by all forms of commitment. Turnover should be lower among employees whose commitment is based on identification and internalization.

General Method

Two studies were undertaken to investigate relations among the dimensions of commitment and prescribed and extrarole activities. The first investigation used responses from 82 university employees involved in a survey of office automation equipment. The second study involved 162 graduating business students at both the undergraduate and MBA level.

Study 1

Method

Subjects. Respondents were employees who, as a part of an office automation grant to the university, had been given access to various word-processing and electronic mail facilities. Employees were drawn from five academic units and ranged from clerical and secretarial to administrator level. No faculty respondents were included in the sample. A total of 82 of 127 questionnaires were returned, generating a response rate of 65%. The average age of respondents was 31–40, and the average tenure was 9 years. Over 65% of the sample had college degrees. Twenty-seven percent had at least some college education.

Independent variables. Twenty-one items thought to represent compliance, identification, and internalization were either generated by the authors or drawn from previous studies (e.g., Buchanan, 1974; Hall & Schneider, 1972; Hall et al., 1970; Mowday et al., 1979). For example, 7 compliance items were developed based on Kelman's (1958) original formulation of compliance as behavior engaged in to obtain specific rewards (e.g., "Unless I'm rewarded for it in some way, I see no reason to expend extra effort on behalf of this organization" and "In my job here, I sometimes have to act in ways that are not completely consistent with my true values"). Seven items were also included to reflect identification with the organization (e.g., "I talk up the university to my friends as a great organization to work for" and "This organization has a tradition of worthwhile accomplishments"). A final set of 7 items was chosen to assess internalization (e.g., "I find that my values and the university's values are very similar" and "Since joining this organization, my personal values and those of the organization have become

Table 1 Varimax Factor Loadings for Commitment Dimensions

	Varimax factor loadings						
	Study 1(N = 82)			Study 2(N = 162)			
Item ^a	1	2	3	1	2	3	
1. If the values of this organization were different, I							
would not be as attached to this organization.	.61	.27	21	.65	.16	16	
Since joining this organization, my personal values and those of the organization have become more	· ·						
similar.	.57	.17	04	.43	.19	.10	
3. The reason I prefer this organization to others is				145			
because of what it stands for, its values.	.88	.23	23	.58	.39	12	
 My attachment to this organization is primarily based on the similarity of my values and those represented 	. 			4 			
by the organization.	.83	.33	21	.73	.21	46	
What this organization stands for is important to me.	.83 .74	.34	25	. <u>.73</u> .53	.53	19	
6. I am proud to tell others that I am a part of this				0.000			
organization.	.40	.66	19	.39	.57	18	
7. I talk up the university to my friends as a great					-		
organization to work for.	.27	.90	08	.31	.89	.04	
8. I feel a sense of "ownership" for this organization		-					
rather than being just an employee.	.45	.61	06	.47	.47	30	
9. Unless I'm rewarded for it in some way, I see no reason							
to expend extra effort on behalf of this organization.	.29	38	.77	06	33	.47	
10. How hard I work for the organization is directly linked			O transport			-	
to how much I am rewarded.	06	08	.78	.18	.07	.32	
11. My private views about the university are different						77-77	
than those I express publicly.	21	10	.10	07	00	.36	
12. In order for me to get rewarded around here, it is						-	
necessary to express the right attitude.	11	.01	.33	13	12	.33	
Percentage of variance explained	76	14	11	78	12	10	

Note. Item loadings defining factors are underlined.

more similar"). Respondents indicated, on a 7-point scale, the degree to which they agreed or disagreed with each statement. The 21 items were randomly ordered and embedded in a larger questionnaire.

Dependent variables. On the basis of Smith et al.'s (1983) study, a set of 11 self-report items were included. These items asked respondents how frequently, on a 5-point scale from never (1) to always (5), they engaged in prescribed or in-role behaviors (e.g., "I complete my assigned duties on time" and "I do what my boss says without complaint") and extrarole or prosocial behaviors (e.g., "I attend functions that are not required but that help the university's image" and "I help new people even though it is not required").

In addition, tenure intentions and actual turnover were also assessed. At the time of the survey, subjects responded to four items used in previous research (e.g., Kraut, 1975; O'Reilly & Caldwell, 1981) to assess tenure intentions (e.g., "If you have your own way, will you be working for this organization three years from now?"). Sixteen months after the survey data were collected, personnel records were checked to ascertain if the respondent was still employed. Of the original 82 respondents, 14 had left and 68 remained, a turnover rate of approximately 18%.

Results

In the first research question, we postulated that three independent dimensions of commitment existed. To investigate this, a principal component analysis with a varimax rotation was performed on the 21 items developed to assess compliance, identification, and internalization. Initial results showed four interpretable factors defined by 12 of the 21 items. This reduced set was again analyzed and the results are shown in Table 1.

Three clear factors emerged. The first factor, clearly defined by five items, is based on value similarity and was labeled Internalization. The second factor has three items with factor loadings greater than 0.4. These items appear to reflect pride in affiliation and the factor was designated Identification. The third factor is defined by two items with loadings greater than 0.7 and one loading of 0.33 for an item that does not load on either of the other two factors. These three items all reflect Compliance. To ensure orthogonality among the three commitment dimensions, factor scores were computed and used in subsequent analyses. Correlations among the factors ranged from r = -.01 to r = -.06.

The 11 self-report items designed to assess intrarole and extrarole behaviors were postulated to reflect two underlying dimensions: (a) intrarole behaviors or behaviors expected as a part of the job, and (b) extrarole or prosocial acts beyond what was specified in the job description. These 11 items were also subjected to a principal component analysis with a varimax rotation. Seven of the items showed unambiguous loadings on the two factors extracted. These 7 items were again analyzed and the results are shown in Table 2.

^a Minor changes in item wording were made to reflect the different sample in Study 2.

Table 2 Varimax Factor Loadings for Intrarole and Extrarole Dimensions (N = 82)

	Varimax factor loadings		
Item	1	2	
I participate in planning and organizing social			
events at work (e.g., staff parties).	0.48	012	
2. I make suggestions to improve the organization.	0.77	-0.28	
3. I attend functions that are not required, but			
that help the university's image.	0.61	-0.08	
4. I volunteer for tasks that are not required.	0.46	0.09	
5. I work a full eight-hour day (or a full shift if			
part-time).	-0.02	0.35	
6. I complete my assigned duties on time.	-0.20	0.51	
7. I comply with the rules and regulations of this			
organization.	0.03	0.81	
Percentage of variance explained	65	<u>0.81</u> 35	

Note. Item loadings defining factors are underlined.

As hypothesized, the two factors appear to represent in-role and extrarole behaviors. The four items defining the extrarole dimension are actions for which the individual receives no immediate reward and which benefit the larger organization. The second factor is defined by three items characteristic of behaviors required by the job description; that is, being on time, working a full 8-hr day, and complying with rules and regulations. These results are consistent with those reported by Smith et al. (1983). Again, factor scores were computed to ensure orthogonality of the variables used in subsequent analyses.

The four questions assessing tenure intentions were also factor analyzed. Results showed a single underlying dimension (Cronbach $\alpha = .81$), so the four items were summed to form an index scored so that a high value represents a strong intent to remain with organization. The correlation between the tenure intentions index and actual turnover 16 months later was r = -.41 (p < .001).

To examine relations among the bases of attachment and selfreported behavior, correlations among the measures were computed and are reported in Table 3. Several patterns are worth noting. First, commitment based on internalization, or similarity of individual and organizational values, is significantly related to intrarole and extrarole behavior, very strongly related to an intent to remain with the organization, and negatively related to actual turnover 16 months later. Attachment based on identification, or pride in affiliation with the university, is also related to extrarole behavior, tenure intentions, and turnover. Compliance-based commitment is not significantly related to intrarole or extrarole behavior or turnover but is negatively related to an intent to remain with the university. Although not shown in Table 3, the correlations among the outcome variables are modest. Tenure intentions, for example, are correlated only r = .14 (ns) with extrarole behaviors and r = .24 (p < .05) with in-role behavior. Thus, partialling out in-role and extrarole behaviors from associations between commitment and turnover intentions or turnover has little effect.

Table 4 presents regressions for three of the four outcome

variables. Results are generally consistent with those shown in Table 3. Internalization and identification are positively related to intent to stay with the organization, whereas compliance-based commitment is negatively associated with this outcome. Because ordinary least squares regression with a dichotomous dependent variable does not permit accurate estimation of the significance levels for coefficients, a discriminant analysis performed with turnover as the dependent variable. A single significant function (p < .04) was obtained with the standardized coefficients for internalization and identification strongly predictive of respondents remaining with the organization. Similar analyses including tenure with the university as a control variable did not alter the pattern of results; that is, independent of length of service, commitment predicated on internalization and identification is associated with lower propensities to exit. Contrary to expectations, neither internalization nor compliance is related to the in-role or extrarole variables, although identification is significantly associated with extrarole behavior.

To further explicate the differences in commitment shown in Tables 3 and 4, correlations between tenure and commitment were examined. Compliance was negatively related to tenure; that is, employees with longer tenure showed significantly lower levels of commitment based on compliance (r = -.31, p < .001). Identification was positively related to length of service (r = .25, p < .001), suggesting that commitment rooted in pride in affiliation with the organization is associated with length of service. Interestingly, internalization or value-based commitment was not significantly correlated with tenure (r = .11, ns) suggesting that value similarity may result from factors other than simple exposure to the organization.

Study 2

Method

Subjects. Respondents for the second study were 162 of 321 graduating business students surveyed in the last two weeks of the term (a 50% response rate). A total of 89 of 189 undergraduates (47%) and 73 of 132 MBA students (55%) responded to short questionnaires. Fifty percent of the undergraduate respondents and 44% of the MBA students were female.

Independent variables. The 21 items developed to assess compliance, identification, and internalization were, with suitable modifications in wording, administered to the student sample. Questions were randomly ordered and administered as a part of a "graduating student survey" and assessed commitment to the school of business.

Dependent variables. Undergraduate surveys included seven questions designed to tap in-role and extrarole behaviors as suggested by Smith et al. (1983). Several of the questions used in Study 1 were not relevant for student respondents and could not be used. Other questions were reworded to apply to student activities (e.g., "I help in the orientation of new students even though it is not required" and "I attend school functions that do not help me directly, but help the school's image").

In addition to these self-report measures, undergraduate students were also asked to indicate whether they had participated in any of 10 student clubs or activities (e.g., "Have you been a member of the academic affairs council?" and "Did you hold office in any student organizations?"). These activities constituted a comprehensive list of extracurricular opportunities associated with the school that were available to all students.

MBA students were not asked for any self-report measures. Instead,

Table 3
Correlations Between Commitment and Outcome Variables

Basis for commitment					Study 2		
	Study 1 (N = 71)				Undergraduates $(n = 89)$		140.4 400
	Intrarole prescribed behaviors	Extrarole prosocial behaviors	Intent to remain with the organization	Turnover	Extrarole prosocial behaviors	Participation in extrarole activities	MBAs (n = 73) Dollar amount pledged
Internalization Identification Compliance	.20** .10 .14	.17* .28***	.62*** .25** 35***	19** 23** .13	.36*** .50*** 14	.21** .39*** 02	.28*** .04 16

^{*} p < .10. **p < .05. ***p < .01.

data were obtained from the fund development office on the contributions pledged by each student to the school during the annual fundraising campaign. The amount pledged for a 3-year period was coded for each respondent (average pledge was \$175). The amount pledged by 25 students who did not participate in this study was also obtained and compared to the gifts pledged by study participants. The amounts pledged by both groups were similar. This suggests that no self-selection bias exists in terms of donations between respondents and nonrespondents.

Results

Using the sample of 162 students, the 21 commitment items were subjected to a principal component analysis and varimax rotation. The same 12 items identified in Study 1 appeared to define three interpretable factors. These 12 items were again factor analyzed and the results are shown in Table 1. The findings were highly comparable to those of the first study. Three clear factors emerged with the same items loading on the appropriate factors of internalization, identification, and compliance. Again, to ensure orthogonality among commitment indices, factor scores were computed for use in subsequent analyses.

A factor analysis of the seven items used to assess in-role and extrarole behaviors revealed a single interpretable underlying factor defined by five of the seven questions. These five items, all with factor loadings greater than 0.65, included assessments

of willingness to help plan social events, participation in extracurricular activities of the school, doing things to help the school without explicit reward, helping to orient new students, and attending school functions that help the school but not necessarily the individual. These results are very similar to those shown in Table 2. The responses to these five questions were summed to form an index of extrarole behavior (Cronbach $\alpha = .86$).

To ascertain the dimensionality of the 10 dichotomous questions asking about participation in clubs and activities, a Guttman scaling procedure was used. Ghiselli, Campbell, and Zedeck (1981) suggest that a coefficient of reproducibility greater than .85 is indicative of a unidimensional scale. Results for the 10 school activities revealed a coefficient of reproducibility of .90; hence, responses were aggregated to form a scale scored so that higher scores represent increasing levels of extrarole activity.

Bivariate associations between dimensions of commitment and outcome measures are shown in Table 3. Consistent with the results of Study 1, commitment based on internalization of values is significantly associated with both indices of extrarole behavior for the undergraduates and with the amount of money pledged to the school by the MBA students. Similar findings for extrarole behaviors are shown for identification, but no significant associations with contributions are present. No significant correlations between compliance and extrarole activities are ev-

Table 4
Regression Results

				Study 2 ^a			
		Study 1ª		Undergraduates		MBAs	
Independent variables	Extrarole behaviors	Intrarole behaviors	Intent to leave the organization	Participation in student organization	Extrarole behaviors	Contribution to fund raising	
Internalization	.16	.20	.60***	.13	.25**	.28**	
Identification	.27**	.10	.20**	.36***	.45***	.03	
Compliance	.07	.15	34***	00	11	15	
F	2.55*	1.62	20.70***	5.30***	12.6***	2.69*	
Adjusted R ²	.06	.03	.51	.13	.31	.07	

^a Entries are standardized regression coefficients.

^{*} p < .10. ** p < .05. *** p < .01.

ident. These findings are consistent with the general hypotheses that there exist different dimensions of commitment to an organization, and that the more internalized the commitment, the more prosocial the behavior of the individual.

Table 4 presents the regression results of Study 2. Again, the findings are similar to those of Study 1. Internalization is significantly related to extrarole behaviors and to financial contributions, but not to participation in student organizations and activities. Identification predicts both participation and extrarole behaviors for undergraduates but not donations by MBAs. Compliance is unrelated to any extrarole variables. Across both studies, the standardized regression coefficient for internalization is significant in three equations, that for identification is significant in five, and that for compliance is significant in only one. Internalization and identification are also strongly inversely related to actual turnover. The nature of these relations suggests that commitments based on internalization and identification are important correlates of subjects' willingness to expend time, effort, and money on behalf of the organization. Compliance is significantly related only to an intent not to stay with the organization. In sum, prosocial behaviors requiring the expenditure of personal time and effort on behalf of the organization are most strongly related to commitment based on value similarity or pride in affiliation, and not to involvement rooted in instrumental exchange of behavior for rewards.

Discussion

Overall, the results presented from both studies offer support for the central research questions addressed. First, the similarity of the factor structures shown in Table 1 suggests that there may be at least three dimensions underlying one's psychological commitment to an organization. These findings are consistent with the moral-calculative distinction drawn by Etzioni (1961) and others (e.g., Gould, 1979; Kanter, 1972; Kidron, 1978). Second, results from both studies also suggest that there are strong links between commitment based on internalization and identification and prosocial behaviors. Commitment based on compliance is, with the exception of a significant association with intent to leave, unrelated to extrarole behaviors or actual turnover. It appears that, for this study, critical voluntary behaviors that are not specified by job descriptions are largely a function of identification and internalization rather than instrumental involvement.

Several limitations with the studies reported here deserve note. First, the university employee sample (Study 1) data are, in part, self-reported and cross sectional, making a determination of causality problematic. It may be that respondents are either consistently misreporting their behavior or that, having once engaged in extrarole activities, they cognitively re-evaluate or justify these behaviors by reporting increased identification and internalization. The associations between internalization and identification and turnover are useful in mitigating the potential for consistency bias, but cannot rule out this interpretation. The second study also attempts to reduce the responseresponse bias by using dependent variables based on actions rather than on self-reports (participation in student organizations and donations). Although some ambiguity may exist, the finding that internalization predicts actual donations to the

school is clearly not a methodological artifact. Determining causality, however, still is problematic. Again, it is possible that actions may result in changed attitudes, rather than vice versa (Salancik, 1977).

Previous research on organizational commitment has been criticized for failing to investigate commitment as a construct distinct from other psychological concepts. For instance, studies have often measured commitment as a combination of belief in an organization's goals and values, a willingness to exert considerable effort on behalf of the organization, and a desire to maintain organizational membership (Mowday et al., 1979). Whereas the first component is focused on the psychological basis for attachment, the latter two are likely consequences of commitment, not antecedents. One's commitment to an organization can result from value congruence, financial investments, effective reward and control systems, or a simple lack of opportunity to move (e.g., Becker, 1960; Mobley, Griffeth, Hand, & Meglino, 1979; Pfeffer & Lawler, 1980; Rusbult & Farrell, 1983). Previous failures to develop clear operational definitions of the basis for commitment may have contributed to the lack of strong findings explicating the components of commitment and linking these to outcomes such as absenteeism, effectiveness, and prosocial behaviors (Angle & Perry, 1981; Steers, 1977).

Although the results of the two studies are seen as consistent and complementary, additional research into the development of psychological attachment to organizations clearly is needed. Three general areas of research seem useful. First, the processes through which commitment is established need to be examined. The significant negative correlations between compliance and tenure, the positive correlation of tenure and identification, and the lack of any significant association between internalization and tenure may be revealing. New employees appear to base their commitment on compliance, exchanging behavior for extrinsic rewards. Over time, it may be that as one comes to understand and appreciate the goals and values represented by the organization, identification or pride in affiliation may develop. Internalization may involve the more psychodynamic process suggested by Bowlby (1982), Sanford (1955) and others in which a person imitates a model or adopts characteristics and values of the model. Previous research on commitment suggests that this process may occur as a result of a combination of clear role models, self-selection processes, social pressures, justification, and retrospective rationalization (e.g., Brown, 1969; O'Reilly, 1983; O'Reilly & Caldwell, 1981; Pfeffer & Lawler, 1980; Salancik, 1977).

Second, further investigation into the actual psychological dimensions of commitment is needed. Although the evidence presented here clearly shows three distinct foundations for psychological bonding, there may be others. For instance, although compliance or instrumental attachment is not strongly linked to the dependent variables used here, it is obvious that almost all organizational participants necessarily receive extrinsic rewards for their efforts. Why is it that compliance or instrumental commitment appears less important for longer tenured employees? Several possible explanations exist. There may be a threshold effect above which instrumental commitment ceases to be important. Alternatively, it may be that instrumental or extrinsic factors are reinterpreted over time as symbolic re-

wards, become less salient, or are objectively less important (e.g., Caldwell, O'Reilly, & Morris, 1983). In a similar vein, internalization or identification may become much more important when crisis situations force members to question what it is that the organization represents. For example, the Bhopal disaster for Union Carbide or the financial scandal at E. F. Hutton may lead organizational members to consider the nature of their psychological attachment to the organization (e.g., Alpert & Whetten, 1985).

Finally, the relation between psychological commitment to an organization and consequent attitudes and behaviors should be considered. The evidence presented here suggests that the basis for one's commitment may be related to positive manifestations of involvement such as voluntary participation and contributions beyond those narrowly required by the job, as well as a reduced tendency to leave the organization. Previous research reveals two broad categories of dependent variables that seem to be relevant. First are the types of positive involvement suggested by Kanter (1972). These may include motivation, a willingness to expend effort beyond what is required by the job, a concern for the welfare of the organization, and an acceptance of organizational dictates manifested through obedience, flexibility, and conformity. Variables such as job involvement, satisfaction, and motivation would be examples of this class of outcomes. A second type of consequent outcome may be proximity-seeking behaviors of the sort described by Bowlby (1982) and others. These might include participation in organizational social activities such as those investigated here, loyalty, persistence of employment, lower absenteeism rates, and so forth.

Overall, the sizeable literature on commitment supports its importance as a useful construct for understanding a range of critical behaviors in organizations. The study reported here has examined three forms of psychological attachment and argued that they constitute the bases for organizational commitment. The results suggest that, as postulated, the nature of one's attachment may vary, and that these variations can be differentially associated with important organizational attitudes and behaviors.

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Psychological Documents to Resume Operation

On June 16, 1986, the on-demand publication system *Psychological Documents*, published by the American Psychological Association from 1971 through 1985, was sold to Select Press. Select Press will begin publishing new volumes this year and, as of June 16, 1986, began fulfilling orders for documents accepted into the system while it was published by APA.

Peer-reviewed documents were published by APA under the experimental system (formerly Journal Supplement Abstract Service) for 15 years. A catalog containing synopses of each document accepted into the system was published on a subscription basis. Those wishing to have a copy of the full-text of a document could order a copy in either microfiche or paper.

During periodic evaluation of the service, however, APA found that as a result of low volume, the difficulties of providing service within existing systems, the expenses related to fulfilling orders, and the cost of maintaining an editorial office, it was extremely difficult for APA to maintain service that was both timely and economical. After an extensive review of the history of the system and intensive evaluation of the expenses related to it, the APA Council of Representatives voted in 1985 to discontinue publication of *Psychological Documents* with publication of the December 1985 catalog. APA was to continue to fulfill orders for individual copies of documents until December 1986, assuming that no alternative publisher could be found. Possible alternative publishers included APA divisions, individuals, and commercial publishers. In mid-1985, Select Press approached APA and negotiations were begun.

Select Press will continue to operate the system as a peer-reviewed "journal" or document service. It will continue to feature specialized documents suitable for individual circulation such as technical reports, annotated and technical bibliographies, original data sets, test instruments, test manuals, and papers that would ordinarily be too long to be considered for regular journals. Select Press expects to expand the system to cover a broader range of documents including interdisciplinary content and possibly brief, early announcements of new findings. Select Press also publishes the interdisciplinary *Journal of Social Behavior and Personality*. Further information about *Psychological Documents* may be obtained from Select Press at P.O. Box 9838, San Rafael, CA 94912.