

Awareness of Hospital Environment and Organizational Commitment

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ABSTRACT. This research examined possible differences between physicians and nurses in their commitment to their hospital and the relationship of their organizational commitment to their awareness of both the internal and the external environments of the organization. Data came from a public hospital in India. Questionnaires were developed for the measurement of the two predictor variables (awareness of the organization's internal environment and awareness of the organization's external environment) and the one predicted variable (organizational commitment). The results indicated significant differences in organizational commitment across hierarchies. The nurses' organizational commitment was predicted by their awareness of internal environment; the physicians' organizational commitment was predicted by their awareness of external environment.

PRIOR STUDIES OF PREDICTORS of organizational commitment (Marsh & Mannari, 1977; Martin, 1978; Porter, Steers, Mowday, & Boulian, 1974) identified the following predictors: personal characteristics (age, education, gender, race, and various personality traits); job characteristics; and role-related variables. No attention was paid to awareness of changes in the organization's internal and external environments as an antecedent of organizational commitment. Therefore, in this study we investigated whether organizational commitment could be predicted by awareness of the hospital's internal and external environments. We emphasized the data from a hospital, whereas earlier researchers collected data mainly from industrial organizations.

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This study had its origin in earlier studies of organizational awareness. In the first, Chatterjee and Dutta Roy (1991) explored the relation of employees' awareness of the organization's internal and external environments to their mental health. Internal environment of the organization refers to its goals, processes, strengths, and limitations. In the second, Duncan (1979) investigated external environment, which refers to changes in the attitudes of consumers, shareholders, and competitors, as well as changes in sociopolitical and technological circumstances. In both studies, the researchers concluded that awareness provides some meaning that leads employees to feel more secure in the organization.

Other researchers investigated the effects of organizational awareness on various employee behaviors (Adam, 1975; Lichtman, 1970). Lichtman observed that awareness of organization is significantly related to the workers' productivity and achievement. Adam suggested that awareness contributes to (a) the development of an organizational image, (b) the enhancement of economic consciousness, and (c) decisiveness in matters of cost and waste control. Awareness of the internal and external environments of the organization affects the employees' satisfaction with both the professional and personal aspects of their lives (Dutta Roy, 1989). Lichtman postulated that insight into the organization helps in reducing role-related tensions among organizational hierarchies. According to these researchers, employees are more committed to the organization when they are knowledgeable about changes in its internal or external environment.

Organizational awareness varies with organizational hierarchies (Lichtman, 1970; Mukerjee, Chatterjee, & Dutta Roy, 1993). It was postulated that (a) higher ranking employees would be more interested in goals (organizational and departmental objectives) and (b) lower level employees would be more concerned with daily operations. Because an organization's goals may be affected by changes in the external environment, we assumed that employees at the higher level, if apprised of changes in the external environment and its impact on the organization, would feel more commitment to the organization than would those at the lower level. This reasoning led us to formulate the following hypotheses:

1. Organizational commitment could be predicted by awareness of internal and external environments of the organization.
2. Among different hierarchies of the organization (physicians and nurses), awareness of both the internal and external environments could predict organizational commitment differentially.

Method

Sample

We used stratified random sampling to collect data from a government-managed postgraduate hospital in Calcutta. We collected data from 18 physicians

(29% of the total physicians) and 39 nurses (64% of the total nurses). The participants were individually interviewed with the structured questionnaire developed for this study.

Development of the Questionnaires

Awareness of internal environment. We initially framed a 5-point Likert-type scale with eight items to measure the participants' awareness of the hospital's goals, the quality of its instruments, its processes for patient care, each department's contribution to the organizational objectives, and the organization's financial strengths and limitations. With a prior scale as our guide (Dutta Roy, 1989), we developed the following items:

1. The overall objectives of the hospital are not clearly defined ($r = .53$).
2. Employees are aware of the nature of raw materials used here ($r = .72$).
3. Employees are not aware of the goals of their own departments ($r = -.78$).
4. The tasks and responsibilities related to each job are not amply clear to employees ($r = -.87$).
5. The hospital's total patient care process is known to the employees ($r = .88$).
6. Here, employees are well aware of each department's contribution to the hospital's objectives ($r = .89$).
7. Hospital authorities try to ensure that the employees understand about the yearly profit-and-loss account ($r = .30$).
8. Patient care may be disrupted at any time, and employees do not know the reasons behind disturbances ($r = -.20$).

In these items, "employees" refers to average employees in the same hierarchy as the respondent. We tested item validity by correlating each item with the total score. Of eight items, only two (Items 7 and 8) were rejected because of their low relationship with the total score. Cronbach's alpha for the six-item scale was .87. For each item, the r value within parentheses is the correlation coefficient between the item and the total score. Negative r values indicate a reverse relationship between the item and the total score.

Awareness of external environment. We initially framed a 5-point Likert-type scale to measure the participants' awareness of the effects on the organization of various changes in the external environment. Again, we developed items based on the earlier scale (Dutta Roy, 1989):

1. Employees do not understand how the change in disease patterns in the larger society affects this hospital's performance ($r = -.70$).
2. Employees appreciate the changes to be made in the hospital as a result of changes in the country's patient-care policies ($r = .84$).

3. Employees are not aware that several technological advancements may bring many changes to the hospital ($r = -.41$).
4. Employees are kept informed about the patient-demand variations in the hospital ($r = .84$).
5. Employees are aware of the effect on the hospital of world economic and social changes.

In these items, too, "employees" refers to average employees in the same hierarchy as the respondent. Of five items, only one (Item 5) was rejected because of its low relationship to the total score. Cronbach's alpha for the remaining four items of the scale was .99. In each item, the r value within parentheses is the correlation coefficient between the item and the total score. Negative r values indicate a reverse relationship between the item and total score.

Organizational commitment. Organizational commitment refers to (a) a strong desire to remain as a member of the particular organization, (b) a willingness to exert effort on behalf of the organization, and (c) a definite belief in and acceptance of the organization's values and goals. We measured organizational commitment by a 5-point Likert-type scale with the following items:

1. Employees take personally the organization's problems ($r = .43$).
2. The patient care at this hospital is not remarkable ($r = -.64$).
3. Employees do not place the hospital's interest above their own ($r = -.82$).
4. Employees do not feel a sense of pride in working for this hospital ($r = -.077$).
5. Hospital activities affect the community at large ($r = -.55$).

Cronbach's alpha for the scale was .67. Once again, "employees" denotes average employees at the same level of the organizational hierarchy as the respondent. For each item, the r value within parentheses is the correlation coefficient between the item and the total score. Negative r values indicate a reverse relationship between the item and the total score.

Results

The results of this study supported our two hypotheses. See Table 1 for the significant relationships among the two predictors (awareness of internal environment and awareness of external environment) and the one predicted variable (organizational commitment). Awareness of internal environment and awareness of external environment were significantly related ($r = .75, p < .01$) to each other. Organizational commitment was more closely related to awareness of external environment ($r = .78, p < .01$) than to awareness of internal environment ($r = .76, p < .01$). Standardized partial regression analysis (Table 2) indicated that awareness of external environment (beta = .48, $t(56) = 4.07, p < .01$) was a stronger

TABLE 1
Means, Standard Deviations, and Correlation Coefficients ($N = 57$)

Variable	<i>M</i>	<i>SD</i>	1	2	3
1. Organizational commitment	15.42	4.24	1.00*		
2. Awareness of internal environment	18.12	6.91	0.76 [†]	1.00*	
3. Awareness of external environment	12.75	4.46	0.78*	0.75*	1.00*

* $p < .01$

TABLE 2
Standardized Partial Regression Analysis in Predicting Organizational Commitment Across Two Hierarchies

Variable	Nurses ($n = 39$)		Physicians ($n = 18$)		Total sample ($N = 57$)	
	Beta	<i>t</i>	Beta	<i>t</i>	Beta	<i>t</i>
Awareness of internal commitment	0.63	4.13*	0.25	1.22	0.39	3.33 [†]
Awareness of external environment	0.22	1.42	0.64	3.16 [†]	0.48	4.07*

* $p < .01$

predictor of organizational commitment than was awareness of internal environment (beta = .39, $t(56) = 3.33$, $p < .01$).

Our second hypothesis also was supported in this study. Prediction of organizational commitment by the two predictors varied significantly, $F(3, 51) = 3.65$, $p < .02$, across hierarchies. In analyzing the nurses' data, we found that awareness of internal environment alone accounted for a 50% variance in their organizational commitment, whereas awareness of external environment accounted for a meager 15% variance in their organizational commitment. On the other hand, in the physicians' data, awareness of external environment alone accounted for 52% variance in organizational commitment, and awareness of internal environment accounted for 17% variance of organizational commitment.

Discussion

In general, our results indicated the effects of both awareness of internal environment and awareness of external environment on the organizational com-

mitment within the hospital. These two roles were overlooked in prior studies about predictors of organizational commitment (Marsh & Mannari, 1977; Martin, 1978; Porter et al., 1974; Steers, 1977). In hospital surroundings, awareness of both internal and external environments significantly predicted organizational commitment. This finding suggests that physicians and nurses feel more commitment to their hospital when they are abreast of changes in the organization's internal and external environments.

Predictability of organizational commitment varies among organizational hierarchies. Awareness of internal environment alone predicted the organizational commitment of nurses; in contrast, awareness of external environment alone predicted the organizational commitment of physicians. This means that awareness of internal environment was a significant element in nurses' organizational commitment, whereas awareness of external environment was the greater influence in physicians' organizational commitment.

The results can be explained in terms of positional need theory (Dutta Roy, Mukerjee, & Chatterjee, 1993), which suggests that employees need to know the relation of their positions to the organizational hierarchy as a whole. Physicians in hospitals make decisions about better management of patient care. In this capacity, they must be conversant with the development and application of the latest technologies for patient care in other hospitals, the nation's policies affecting patient care, and the pattern of changes for various diseases. Familiarity with these matters strengthens their commitment to the organization. These are possible reasons that awareness of external environment alone was a significant predictor of physicians' organizational commitment.

Nurses assist physicians in patient care before, during, and after treatment. In order to give better assistance to the physicians, they want to know what their job responsibilities are, what is happening in other hospital departments, and how the activities of different departments are related to the hospital's overall goals. These are possible reasons that awareness of internal environment alone was a significant predictor of nurses' organizational commitment.

According to our research with both physicians and nurses, knowledge that enables employees to enhance their job performance may also increase their commitment to their organization.

REFERENCES

- Adam, E. E., Jr. (1975). Behavior modification in quality control. *Academy of Management Journal*, 1(4), 662-679.
- Chatterjee, A., & Dutta Roy, D. (1991). Awareness of external environment, environmental satisfaction and mental health. *Indian Journal of Applied Psychology*, 29(2), 74-77.
- Duncan, R. S. (1979). Characteristics of organizational environments and perceived environmental uncertainty. In M. Zey-Ferrell (Ed.), *Readings on dimensions of organizations*. California: Goodyear Publishing Company.
- Dutta Roy, D. (1989). *A study of organizational health and its effect on quality of working life*. Unpublished dissertation, Indian Institute of Technology, Kharagpur.

- Dutta Roy, D., Mukerjee, M. & Chatterjee, A. (1993). Application of correspondence analysis in understanding organizational awareness pattern. *Journal of Psychometry*, 6(2), 11-18.
- Lichtman, C. M. (1970). Some interpersonal response correlates of organizational rank. *Journal of Applied Psychology*, 54(1), 71-81.
- Marsh, R. M. & Mannari, H. (1977) Organizational commitment and turnover: A prediction study. *Administrative Science Quarterly*, 22, 57-75.
- Martin, J. E. (1978). State employee affiliation and attitude differences. *The Journal of Applied Psychology*, 63, 654-657.
- Porter, L. W., Steers, R. M., Mowday, R. T. & Boulian, P. U. (1974). Organizational commitment, job satisfaction and turnover among psychiatric technicians. *The Journal of Applied Psychology*, 19, 475-479.
- Steers, R. M. (1977) Antecedents and outcomes of organizational commitment. *Administrative Science Quarterly*, 22, 107-115.

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