

Role Perceptions, Satisfaction, and Performance: Moderating Effects of Self-Esteem and Organizational Level

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The moderating effects of organizational level and self-esteem on the relationships between role perceptions (i.e., role ambiguity and role conflict) and employee satisfaction and performance were examined. Previous research suggested that self-esteem, as an indicator of perceived self-competence, should act as a buffering element contingent upon an individual's organizational level. To test this possibility, data were collected from a sample of 161 hospital professional and support personnel. It was hypothesized that the negative effects of role ambiguity and conflict on satisfaction and performance would be attenuated by high self-esteem at lower organizational levels. Two of the four predicted interactions (ambiguity-satisfaction and conflict-performance) were obtained. The importance of considering the combined effects of both situational and individual difference variables as potential buffers against aversive role perceptions was discussed.

Considerable attention has focused on the negative impact of role stress in the form of role ambiguity and role conflict. These role perceptions have been associated with work dissatisfaction, lower performance, job-induced tension, and propensity to terminate employment (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964; Morris & Snyder, 1979; Szilagyi, 1977). Although role research has repeatedly confirmed a direct relationship between both role ambiguity and conflict and the above work-related outcomes, there exists evidence that certain moderating variables exist which may affect this linkage.

In response to this issue, several studies have concentrated on the moderating effects of situational variables. For example, Hamner and Tosi (1974) found support for the hypothesis that organizational level moderates the relationship between role ambiguity and job satisfaction. Their findings suggested that individuals at higher levels react more negatively to role ambiguity than those at lower levels. The work of Szilagyi, Sims, and Keller (1976) supported this result for satisfaction but not performance, reasoning that the greater ability of higher-level employees made employees less susceptible to performance decrements. Other re-

The authors wish to express their appreciation to Randall S. Schuler and Andrew Szilagyi for comments on an earlier draft of this manuscript. Send reprint requests to: Dr. Kevin W. Mossholder, Department of Management, Auburn University, Auburn, AL 36849.

searchers have attempted to determine if differences in individual need variables moderate role perception–outcome linkages. Lyons (1971) and Johnson and Stinson (1975) both have reported that variables such as need for clarity, need for achievement, and need for independence may moderate relationships between measures reflecting aspects of job satisfaction and both role ambiguity and conflict.

Although both individual differences and situational variables characteristics have been demonstrated to exhibit potential moderating influences on role perception–outcome relationships, only two studies have examined the *combined* moderating influence of such variables. In the more recent of these studies, Abdel-Halim (1980) reported finding that person (need for achievement, locus of control) and situational (job scope) attributes jointly moderated the effects of role ambiguity on affective outcomes. His results revealed that in comparison to individuals who register high on both attributes, persons scoring low on both react more negatively to role ambiguity. In the second of these studies, Schuler (1977) found that the moderating impact of employee ability on role ambiguity varied according to the organizational level to which an employee belonged. The nature of the moderating effect was such that high ability, operationalized by education and work experience, attenuated the negative effects of role ambiguity on satisfaction and performance at lower organizational levels only.

Stemming from the proposition that organizational behaviors are complexly determined, Schuler's (1977) hypotheses concerning the moderation of role ambiguity were predicated on two assumptions. First, greater ability was assumed to permit an employee to cope better with role ambiguity and conflict (Kahn *et al.*, 1964). Second, employee organizational level was presumed to interact synergistically with employee ability. This reasoning was based on the idea that at higher organizational levels, tasks are of a more discretionary variety allowing individuals to utilize more effectively their ability to counteract role strains. From a critical perspective, it is important to recognize that regardless of the theoretical soundness of these assumptions, more empirical evidence is required to reduce the uncertainty that the results reported were not due solely to the particular operationalizations used or the type of subjects employed (Webb, Campbell, Schwartz, & Sechrest, 1966). Thus, the purpose of the present study was, first, to examine further the joint moderating influence of ability and organizational level on role ambiguity and, second, to do so using a less situationally specific operationalization of employee ability.

From the standpoint of interactional psychology (Endler & Magnusson, 1976), it may be argued that casting person (ability) and situational (organizational level) attributes as joint moderators should yield a more accurate understanding of role perception–outcome relationships than

using either of these attributes as simple moderators. It should be noted, however, that although situationally specific ability (e.g., work experience) can be categorized as an individual difference variable, cross-situational generalizations concerning ability/level by role variable interactions are more reliable when ability is defined independently of any situation (cf. Mischel, 1968, p. 282). In research related to this matter, it has been suggested that while employee self-esteem is largely redundant with task-specific ability in the short run, it possesses considerable potential for explaining sustained task behavior in the long run (Terborg, Richardson, & Pritchard, 1980). It is noteworthy that as a self-perceived abstraction of individual ability, self-esteem has been shown to remain relatively stable across situations (Mischel, 1968). Based on this understanding, self-esteem was considered to be a theoretically efficacious abstraction of task-specific ability that should, in conjunction with organizational level, jointly moderate role perception–outcome relationships.

Broadly defined, self-esteem “expresses an attitude of approval or disapproval, and indicates the extent to which the individual believes self to be capable, significant, successful, and worthy” (Coopersmith, 1967, pp. 4–5). As an individual difference measure to be used in explaining role processes, self-esteem would seem to have certain practical advantages in that it reflects aspects of an individual’s continuing psychological state more than it reflects the circumstances of a particular work situation. More importantly, of course, the conceptualization of self-esteem as a potential moderator is based on theoretical considerations that emanate from research examining self-esteem and work activities. Such studies have found that high self-esteem individuals (as compared to those with low self-esteem) tend to rely less on their job environments and more on their own self-perceptions to guide their work behavior (Tharenou, 1979; Weiss, 1977). It is likely that such findings obtain because high self-esteem individuals generally perceive themselves as being relatively more competent and are thus less likely to feel the need to attend to work-related environmental performance cues. Since by definition (cf. Kahn *et al.*, 1964) role ambiguity and conflict are generated largely by environmental events or actions external to an individual (e.g., conflicting policies, ill-defined reporting relationships, insufficient feedback), high self-esteem individuals would be expected to be less vulnerable to the negative effects induced by such role pressures. Conversely, low self-esteem individuals would be expected to be more susceptible to the adverse effects of role ambiguity and conflict.

The amount of empirical research considering self-esteem as a moderator or even a correlate of role ambiguity and conflict is quite small. Sales (1970) and French and Caplan (1973) have demonstrated that both role overload, an aspect of role conflict, and role ambiguity are negatively

related to self-esteem. Additionally, Beehr (1976) has found role ambiguity to be associated with low self-esteem as well as depressed mood. Some authors (e.g., French & Caplan, 1973) have suggested that high self-esteem may serve to buffer the detrimental effects of role stress on affective and behavioral outcomes. Finally, others have shown that under conditions of high role stress, low self-esteem individuals perform less well as compared with those of high self-esteem (Wells & Marwell, 1976).

HYPOTHESES

Schuler (1975) and Szilagyi *et al.* (1976) postulated that greater employee ability was responsible for the nonnegative relationship between role ambiguity and performance at higher organizational levels. Schuler (1977) extended this ability/adaptability rationale to all organizational levels, hypothesizing that role perceptions would be related to satisfaction and performance depending on individual ability—"the higher employee ability, the lower the relationship between role perceptions and satisfaction and performance" (p. 105). To the extent that self-esteem can be conceptualized as a psychological surrogate for employee ability, the same buffering effect that was found for ability could be anticipated to occur with self-esteem. Because of research tying self-esteem to affective and behavioral outcomes (see Tharenou, 1979), self-esteem was expected to vitiate the negative effects of role perceptions on both kinds of outcomes. Furthermore, extrapolating from Schuler's (1977) finding that employee ability attenuates the negative effects of role ambiguity at lower organizational levels, it was anticipated that self-esteem would act similarly as a moderator of role perception-outcome relationships at lower organizational levels. Thus, it is hypothesized that the combined effect of organizational level and self-esteem on role ambiguity and conflict is such that differences in self-esteem will diminish the negative effects of these role perceptions at lower organizational levels.

METHOD

Subjects

Questionnaires were administered to 206 nursing employees at a 1100-bed hospital located in the Southeast. Respondents included employees working all three shifts of the hospital's six services and 24 wards. Although 193 usable questionnaires were returned, responses missing from scales relevant to the present study reduced the effective sample to 161. The reduced sample was divided into two organizational levels. The higher level included 64 administrators and professionals (registered nurses and nurse practitioners) and the lower level contained 97 staff and

supportive personnel (licensed practical nurses and nurse assistants). Checks on the representativeness of the sample indicated that respondents dropped from the study did not differ demographically (e.g., in age, education, tenure) from those included in the analyses. All measures except performance were gathered by using a survey questionnaire administered during work hours.

Measures

Role ambiguity and role conflict were measured using scales developed by Rizzo, House, and Lirtzman (1970). Six items comprised the role conflict scale while eight items comprised the role ambiguity scales. Internal consistency reliability (coefficient alpha) for the role conflict scale was .75 and was .87 for the role ambiguity scale. Sample items from the scales were as follows: for role conflict—"I work under incompatible policies and guidelines"; "I have to break a rule or policy in order to carry out an assignment"; for role ambiguity—"I know what my responsibilities are"; "There are clear, planned goals and objectives for my job."

Satisfaction was measured using five items taken from the Survey of Organizations questionnaire (Taylor & Bowers, 1972). The items employed gauged respondent satisfaction with work group, job, organization, and past and future progress in the organization. Coefficient alpha for the satisfaction measure was .73.

Employee performance was determined by supervisory ratings. Five performance dimensions were tapped: quantity of work, quality of work, knowledge of work, dependability, and overall performance (Porter & Lawler, 1968). Approximately 2 months after the survey questionnaire data were collected, nursing supervisors evaluated their immediate staff members across the five performance criteria. Supervisors were instructed to evaluate their subordinates by comparing each individual's performance to his/her co-workers' performance. It has been suggested (Steers, 1975) that by gauging performance relative to one's co-workers, less response bias would be obtained. Since all criteria were considered to be related, they were summed to create a global performance criterion. Coefficient alpha for this performance index was .95.

Self-esteem was measured using the self-confidence scale of Gough and Heilbrun's Adjective Check List (1965). Wells and Marwell (1976) note that the use of multiple item checklists permits a thorough sampling from the domain of self-esteem descriptors, which in turn increases validity and generality of measurement. Support for use of the Adjective Check List's self-confidence scale as a measure of self-esteem has been provided by Crandall (1973). Subject responses were standardized (*T* scores) in accordance with norms presented in the test manual.

Analyses

Moderated multiple regression analysis (Zedeck, 1971) was used to test for the hypothesized interactions effects. Essentially an analog to classical analysis of variance, this procedure has certain advantages over traditional ANOVA for treating field data (Hunt, Osborn, & Larson, 1975). By using full- and restricted-regression models, it is possible to determine the amount of variance owing to interaction effects beyond that amount explained by main effects alone. Standard statistical tests are available to determine if the interaction of interest contributes significantly to the variance explained by the full model. Following the analytical rationale of Schuler (1977), the moderated regression models were limited to three variables: role ambiguity, role conflict, and self-esteem. The moderating effects of organizational level were accounted for by splitting the sample into high and low subgroups and running the three variable regression models separately for each. Full- and restricted-regression models were compared within each subgroup to test for the combined interaction effects of organizational level and self-esteem.

The directionality of detected interaction effects was determined through subgroup correlational analyses since significant interaction effects in the moderated regression procedure are not directly interpretable. For any significant interactions within a given organizational level, high and low self-esteem subgroups (within that organizational level) were formed through median splits. Correlations between role perception variables and outcome variables were computed for the high and low subgroups and tested for equality by Fisher's z test of differences.

RESULTS

Descriptive statistics for the study variables are presented in Table 1. Zero-order correlations among these variables are also reported. Correlations among moderators and between moderators and independent/dependent variables revealed acceptable levels of independence. The results of the full- and restricted-regression models with satisfaction as the dependent variables are shown in Table 2. Although role perceptions and self-esteem generally explained more variance in satisfaction at higher organizational levels, a significant interaction effect occurred only at the lower organizational level. The addition of the role ambiguity X self-esteem term to the restricted-regression model contributed significantly to the variance explained by the model ($R^2 = .25$ vs $R^2 = .21$, $F(1,92) = 4.42$, $p < .05$). Subgroup correlations were computed to examine the nature of the interaction. The role ambiguity-satisfaction correlation was $-.19$ ($p < .10$) for the high self-esteem group and $-.48$ ($p < .001$) for the low self-esteem group. Although the difference in these subgroup correlations

TABLE 1
DESCRIPTIVE STATISTICS AND INTERCORRELATIONS OF STUDY VARIABLES

Variables	<i>M</i>	<i>SD</i>	<i>r</i>				
			1	2	3	4	5
Role variables							
1. Role ambiguity	2.34	.64	—				
2. Role conflict	2.62	.75	.30**	—			
Moderator variables							
3. Self-esteem	51.47	8.55	.07	-.04	—		
4. Org. level ^a	1.60	.49	-.08	.05	-.30**	—	
Dependent variables							
5. Satisfaction	3.78	.79	-.37**	-.42**	.01	.07	—
6. Performance	3.62	1.05	-.04	-.04	.09	.04	.11

Note. *n* = 161.

^a High organizational level was coded 1; low organizational level was coded 2.

** *p* < .01.

only approached statistical significance ($z = 1.56, p < .06$, one tail), the effect was in the predicted direction. Self-esteem attenuated the negative impact of role ambiguity on satisfaction.

Table 3 displays the full- and restricted-regression models with performance as the dependent variable. A comparison of the regression models presented in Table 2 with those in Table 3 indicates that role perceptions and self-esteem explained employee satisfaction more strongly than employee performance. Nevertheless, a significant role conflict-performance interaction occurred for employees operating at lower or-

TABLE 2
FULL- AND RESTRICTED-REGRESSION ROLE PERCEPTION MODELS FOR SATISFACTION AS MODERATED BY ORGANIZATIONAL LEVEL AND SELF-ESTEEM^a

	Organizational level					
	Lower			Higher		
	<i>R</i> ²	<i>F</i>	<i>df</i>	<i>R</i> ²	<i>F</i>	<i>df</i>
RA, RC, SE, RASE	.25 ^b	7.62*	4/92	.34	7.54*	4/59
RA, RC, SE, RCSE	.22	6.31*	4/92	.33	7.40*	4/59
RA, RC, SE	.21	8.38*	3/93	.33	10.01*	3/60
RA, RC	.21	12.70*	2/94	.32	14.37*	2/61

^a RA = Role Ambiguity; RC = Role Conflict; SE = Self-esteem; RASE = Role Ambiguity × Self-esteem; RCSE = Role Conflict × Self-Esteem.

^b Interaction term adds significantly to explained variance.

* *p* < .05.

TABLE 3
 FULL- AND RESTRICTED-REGRESSION ROLE PERCEPTION MODELS FOR PERFORMANCE AS
 MODERATED BY ORGANIZATIONAL LEVEL AND SELF-ESTEEM^a

	Organizational level					
	Lower			Higher		
	<i>R</i> ²	<i>F</i>	<i>df</i>	<i>R</i> ²	<i>F</i>	<i>df</i>
RA, RC, SE, RASE	.06	1.62	4/92	.00	<1	4/59
RA, RC, SE, RCSE	.10 ^b	2.68*	4/92	.01	<1	4/59
RA, RC, SE	.04	1.33	3/93	.00	<1	3/60
RA, RC	.01	<1	2/94	.00	<1	2/61

^a RA = Role Ambiguity; RC = Role Conflict; SE = Self-esteem; RASE = Role Ambiguity × Self-esteem; RCSE = Role Conflict × Self-esteem.

^b Interaction term adds significantly to explained variance.

* $p < .05$.

ganizational levels ($R^2 = .10$ vs $R^2 = .04$, $F(1,92) = 6.51$, $p < .05$). Within this organizational level, role conflict–performance correlations were computed for high and low self-esteem subgroups. The correlation was .14(*ns*) for the high self-esteem group and was $-.30$ ($p < .05$) for the low self-esteem group. These high and low subgroup correlations were significantly different ($z = 2.14$, $p < .02$, one tail), with the difference lying in the predicted direction. Self-esteem reduced the negative effects that role conflict had on performance at lower organizational levels.

DISCUSSION

The main objective of this study was to examine the main and interactive effects of role perceptions, organizational level, and self-esteem on satisfaction and performance and thereby increase available knowledge of the complex interrelationships that exist among these variables. A secondary objective was to conceptually extend the work of Schuler (1977) by determining the influence of a perceived ability variable, self-esteem, within the theoretical foundation which had been suggested. For employees working at lower organizational levels, it was hypothesized that self-esteem would attenuate the negative influence of role ambiguity and conflict on work outcome variables. This hypothesis was confirmed in two instances: High self-esteem was found to mitigate the detrimental impact of role ambiguity on satisfaction and of role conflict on performance for lower organizational level employees. Of course, it should be recognized that although the results of the moderator analyses are significant, they account for small amounts of variance in satisfaction and performance. As was the case in Schuler (1977), the presence of small effects and only partial confirmation of the present study's hypothesis suggests

that further investigation of the complex relationships among self-esteem, organizational level, and role perceptions is necessary.

Given the results of earlier research (Schuler, 1977), these findings thus suggest that an interactional view of role perception processes is warranted. The joint influence of particular (e.g., self-esteem, organizational level) person and situational attributes may magnify the stress-reducing qualities of these variables compared to when such variables are considered singly. Instead of controlling for the situation, research paradigms should attempt to determine the effect of situational variance on outcome variables (Terborg *et al.*, 1980). Indeed, recent models concerning role stress (e.g., Beehr & Newman, 1978) have suggested this line of research as being requisite for advancing an understanding of the long-term consequences of stress on employee health and organizational effectiveness.

Though self-esteem has been associated with both affective and behavioral outcomes (Tharenou, 1979), the present findings indicate that the particular moderating effect that it exerts on role perception–outcome relationships depends on the combination of variables involved as well as the environment in which this combination occurs. This is suggested by the nature of interaction effects found in the present study (ambiguity with satisfaction by self-esteem; conflict with performance by self-esteem). Several studies have found that role perceptions, especially ambiguity, are more consistently related to attitudinal rather than behavioral work outcomes (Schuler, 1975; Szilagyi, 1977; Szilagzi *et al.*, 1976). On this basis, self-esteem could be expected to have a higher probability of moderating the ambiguity–satisfaction relationship of the present study since these variables are more likely to be associated in a wider cross-section of work environments.

The moderating influence of self-esteem on the conflict–performance relationship, however, may have arisen partly because of the environment in which the study was conducted. It is plausible that role ambiguity would generally not affect performance in a hospital setting since in such environments professional ethics and performance standards are fixed by accrediting and professional bodies (Zald & Hair, 1972). Thus to some degree, employees working in the nursing field could rely on external guidelines to provide clarity in the face of role ambiguity. In contrast, conflict itself may be institutionalized in settings like hospitals where role conflict stems largely from the dual-authority system (administrative and professional) commonly present in such structures (Szilagyi, 1977). Given this condition, it is reasonable to assume that the performance of persons (i.e., high self-esteem individuals) who are generally less affected by negative or conflicting environmental stimuli should be better than the performance of persons (i.e., low self-esteem individuals) more susceptible to such stimuli.

Taking into account the nature of the conflict–performance relationship uncovered, the present results and those of Schuler (1977) agree and together suggest that ability, whether objectively (work experience) or subjectively (self-esteem) defined, may be an important consideration for employees contending with role ambiguity and conflict. With particular regard to self-esteem, the present findings offer several practical implications for coping with role ambiguity and conflict. Worker self-esteem has been found to be affected by such processes as performance appraisal, co-worker interaction, and supervisory support (Tharenou, 1979). In order to enhance self-esteem, organizations should, to the degree possible, shape these processes so that they contribute to an individual's sense of personal worth and competence. It should be noted, of course, that any systematic attempt to increase employee self-esteem should be considered a long-term process. However, nonthreatening performance appraisal interviews (French, 1963), cohesive co-worker interaction (Walton, 1975), and "considerate" supervision (Beehr, 1976) have all been identified as means for facilitating self-esteem growth and should be applicable in a wide range of organizations.

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RECEIVED: November 17, 1980