

## **Role Perception-Outcome Relationships: Moderating Effects of Situational Variables<sup>1</sup>**

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*Supervisory interaction, peer-group interaction, and organizational work facilitation were examined as moderators of relationships among facets of role ambiguity and role conflict and the outcomes, job performance, job satisfaction, and propensity to leave for 193 respondents at 5 levels in the nursing service of a large medical center. Supervisory interaction was found to moderate the relationships between (i) intersender-role conflict and job performance, (ii) person-role conflict and job satisfaction, and (iii) ambiguity concerning behavioral outcomes and propensity to leave. Moderator effects for peer-group interaction involved the relationships of (i) intersender-role conflict with job performance and (ii) ambiguity regarding behavioral consequences with propensity to leave. Finally, organizational work facilitation was found to moderate the relationships among intersender-role conflict and the outcome variables, job performance, and propensity to leave, as well as the relationships between person-role conflict and job satisfaction and between predictability of behavioral outcomes and propensity to leave. The direction of the above interactive effects was examined using subgroup analyses. Based on these results, other situational variables deserving investigation are identified, and it is suggested that future researchers would be wise to consider situationally relevant contextual factors that may influence the effects of role stress.*

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## INTRODUCTION

Much effort has been directed toward understanding the effects of role ambiguity and role conflict on such work-related outcomes as job-induced tension, job satisfaction, and the perceived desirability of leaving (or staying in) an organization. In this regard, it has been generally concluded that role ambiguity and conflict increase the probability that individuals will experience job-induced tension. In turn, it has been argued typically that the occurrence of tension in the performance of job duties results in decreased job satisfaction and, consequently, an increase in the likelihood of terminating employment (cf. Bedeian & Armenakis, 1981).

While advances have been made in understanding the direct relationships of role ambiguity and conflict on work-related outcomes; comparatively less attention has been given to assessing factors that may moderate the relationships between these variables (Van Sell, Brief, & Schuler, 1981). One line of research addressing this issue consists of several studies that have examined the impact of individual need differences (e.g., variation in need for achievement or need for autonomy) on role perception–outcome relationship (Behrman, Bigoness, & Perreault, 1981; Johnson & Stinson, 1975; Miles & Petty, 1975). While these studies generally suggest that individual differences may exert some degree of moderating influence, at least one recent study refutes this idea. Morris and Snyder (1979) found that need for achievement and need for autonomy functioned better as independent predictors of work-related outcome and had little practical value as moderators.

Initial studies in another line of research, that dealing with situational characteristics as potential moderators of the impact of role ambiguity and conflict, offers to be more promising. For instance, Abdel-Halim (1978) has shown that job enrichment characteristics moderate the relationships among role ambiguity and both job involvement and satisfaction. La Rocco and Jones (1978) reported only weak evidence that situational variables moderated role stress and various job outcomes; however, their measure of role stress encompassed macro-organizational components (e.g., job design, interdepartmental cooperation, communication) not usually included in more restricted conceptualizations of role ambiguity and conflict. Finally research conducted by Axelrod and Gavin (1980) suggests that an individual's job function (white collar vs. blue collar) can buffer the impact of role conflict on psychosomatic symptoms.

The basic premise of the present study, that situational variables should moderate role perception–outcome relationships, flows from both logical and empirical considerations. Logically, roles fix behavioral expectations for individuals occupying specified positions functioning in specifically circumscribed situations. The import of situational factors in the demarcation and interpretation of individual roles parallels the broader

influence of context upon individual perception. Simply put, role performance is determined not only by role familiarity and motivation, but by a plethora of situational parameters regulating the process of role enactment (Sarbin & Allen, 1968). Empirically, research has emphasized that any theory of role ambiguity and conflict should include assessment of the job context in which an individual operates (see, e.g., Abdel-Halim, 1980; Randolph & Posner, 1981). Studies have examined task aspects and found that job scope and job category do interact with role stress in direct and indirect ways.

Studies examining situational effects involving role stress have tended to focus more on the task being performed rather than other situational processes that may have as much impact. To address this shortcoming, the purpose of the present study was to extend understanding in the area of role perception–outcome relationships by testing the influence of three potential nontask moderators. Van Sell, Brief, and Schuler (1981, pp. 60-61) suggest that process factors such as interpersonal and organizational relationships should be important considerations in such an effort. Thus, three variables describing individual–other relationships at three levels of analysis (individual, group, and organizational) were selected for study. At the individual level, supervisory interaction was hypothesized as a moderator because of reports that role ambiguity and conflict may be suppressed by supportive relationships with superiors (Van Sell et al., 1981). Research in this area generally suggests that supportive behavior on the part of role senders (e.g., supervisors) vitiates one's perceptions of role ambiguity and conflict. For example, Beehr (1976) has demonstrated that situational factors such as supervisory support tend to reduce the relationship between role ambiguity and role strain.

Similarly, at the group level, it was hypothesized that peer-group interaction would serve to moderate role perception–outcome relationships. Van Sell et al. (1981) also maintain that group cohesiveness moderates the effects of role ambiguity and conflict and research supports their contention. For example, Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964), in a study involving 53 managerial-level employees drawn from six major corporations, reported finding that reactions to role ambiguity and conflict are attenuated by the quality of one's interpersonal relations. Similarly, French and Caplan (1972), based on a study of 205 research scientists, engineers, and administrators, suggested that social support in the form of good relations with one's peer group is one of the most effective means for diminishing the negative effects of role stress.

Though peer and supervisory interaction appear to have moderating potential, both variables concern the immediate work context. The larger context of the organization as a whole could also be expected to influence the impact of role perceptions in a more pervasive, yet analogous, manner. Thus, organizational work facilitation was also proposed as a potential

moderator. As used here, organizational work facilitation corresponds to what Payne, Fineman, and Wall (1976) have termed a "perceived organizational characteristic." That is, individual responses are the unit of analysis, the organization as a whole is the element of analysis involved, and the nature of measurement is descriptive. Although there is little empirical evidence supporting the moderating potential of organizational work facilitation, it may be argued that organization-wide policies and procedures that serve to facilitate work flow activities reduce ambiguities and conflict by defining role-related expectations. Consistent with this reasoning, French and Caplan (1973) concluded that negative responses of individuals to role ambiguity may be reduced by the extent to which they are able to utilize their administrative skills. French and Caplan interpreted this result to suggest that employees are often unable to contribute fully to an undertaking due to the fact that organizational workflow patterns and administrative channels are frequently unclear or ambiguous. Notable, they contend that under such circumstances employees are likely to experience increased role strain as a result of being unable to manifest their capabilities fully.

In summary, while numerous investigations have examined the effects of individual difference variables as moderators of various role perception–outcome relationships, only a limited number of studies have explored the impact of situational characteristics as moderators in the role stress model. The present study extended progress in this area by focusing on the moderating influences of supervisory interaction, peer group interaction, and organizational work facilitation on three work-related outcomes, namely, job performance, job satisfaction, and expressed intentions to remain with or to leave an organization, i.e., propensity to leave. It was expected that the moderating impact of each of the above variables would act to reduce the effect of role ambiguity and conflict on these outcomes. Although the direction of the moderating effects of individual, group, and organizational variables is not clear for all cases, there does seem to be a trend in studies examining *supportiveness* that shows a reduction in the negative influences associated with stress when support (regardless of level of analysis) is present.

## METHOD

### *Sample and Research Site*

Questionnaires were administered to 206 nursing employees at a large medical center located in the southeastern United States. Respondents

included personnel serving on all three shifts of the center's six services and twenty-four wards. A total of 13 questionnaires were unusable leaving the actual sample of 193 (response rate = 94%). Respondents included 9 nurse administrators, 8 nurse practitioners, 54 registered nurses, 31 licensed practical nurses, and 86 nursing assistants. Due to missing values on a number of variables, study statistics were based on  $n$ 's ranging from 166 to 188. Compared to the center's total nursing population ( $N = 460$ ), the 193 respondents released to participate in the study were judged by the director of nursing services as not being significantly different with regard to age, work experience, or years of education. Thus, the respondents appear to be representative of their total population. A majority (57.5%) of respondents were female. The mean and median age of the sample was 39, with a range of 22 to 59 years. Average length of service was 13.7 years.

### *Research Instruments*

*Role Perception Variables.* Role ambiguity and role conflict were measured using the scales developed by Rizzo, House, and Lirtzman (1970). These scales were selected because of their established psychometric properties (Schuler, Aldag, & Brief, 1977; House, Levanoni, & Schuler, Note 1). Following Rizzo et al. (1970), two specific dimensions were isolated within the role ambiguity measure—uncertainty about behavioral requirements or expectations serving to define a role (four items) and uncertainty about the outcome or responses to one's behavior (two items). Similarly, intersender (three items) and person–role conflict (two items) were identified as specific subdimensions of role conflict, as again suggested by Rizzo et al. (1970). Intersender conflict occurs when a role incumbent perceives that requests from one role sender are incompatible with requests from one or more other senders. Person–role conflict is defined as perceived incongruence between a role incumbent's internal standards or values and expected role behavior. Finally, it should be noted that although the ambiguity subscales tend to intercorrelate, as do the conflict subscales (cf. Morris & Synder, 1979), they have been treated in the literature as conceptually separate. Both methodological and theoretical justifications for making such distinctions have been noted by Behrman et al. (1981) and reviewed by Latack (1981).

*Dependent Variables.* The three criterion variables operationalized in the present study were job satisfaction, perceived likelihood of leaving the job and job performance. Job satisfaction was measured by the most commonly used facet-free global indicator: "All in all, how satisfied are you with your job?" (cf. Near, Rice, & Hunt, 1978; Weaver, 1978). Perceived likelihood or propensity to leave was gauged by a 3-item instrument developed by Lyons (1971) specifically for use with nursing personnel.

Approximately two months after the respondents completed the survey questionnaire, all nurse supervisors were requested to evaluate the performance of their immediate staff members. Five performance criteria examined were quantity of work, quality of work, dependability, knowledge of work, and overall performance (Porter & Lawler, 1968). In making the necessary assessments, supervisors were asked to rate each individual subordinate by "comparing his/her performance in *terms of his/her co-workers.*" By assessing performance relative to one's co-workers, it was believed (following the logic of Steers, 1975) that more accurate evaluations (less response bias) would be obtained.

*Moderator Variables.* The moderator variables used in the study were identified from the Survey of Organization Questionnaire (SOQ; Taylor & Bowers, 1972). The SOQ consists of 15 subscales dealing with a variety of work-related areas. For purposes of the present study, only the 52 items comprising the leadership, organizational climate, satisfaction, and group process dimensions were utilized. In that other studies (e.g., Schriesheim & Kerr, 1977) have shown that the factor structure first reported in the SOQ manual is not necessarily stable, an independent factor analysis of the item responses was conducted. Using the replies of the 193-subject sample, a principal components factor analysis of the 52 items was performed. The decision rule used for the final inclusion of an item defining a factor was a loading of .50. Four factors were extracted, three of which (supervisory interaction, 12 items,  $\alpha = .95$ ; peer-group interaction, 18 items,  $\alpha = .96$ ; and organizational work facilitation, 9 items,  $\alpha = .85$ ) were interpretable, accounting for 95.1% of the common variance. Additionally, a plot of the eigenvalues confirmed that three factors should be retained for scoring.

The stability of the three factors was determined by randomly dividing the total nursing sample in half and using the coefficient of congruence technique (Korth & Tucker, 1975) to compare the similarity of the factor structures of the two groups. This technique yields a matrix of factor cosines which can be interpreted as correlation coefficients. The three coefficients found were .96, .97, and .95 (all  $p$ 's < .05), indicating a high similarity of factor structures for the statistically split groups. This finding suggests that the content of the derived factors cross-validated.

A sample item for each of the three factors is as follows: supervisory interaction ("To what extent is your supervisor willing to listen to your problems?"); peer-group interaction ("To what extent do persons in your work group offer each other new ideas for solving job-related problems?"); and organizational work facilitation ("To what extent are work activities sensibly organized in this organization?")

With the exception of three items on the SOQ questionnaire employing a 5-option Guttman scale, all responses were interpreted using 5-point Likert-type formats. Descriptive statistics and coefficient alpha

Table I. Descriptive Characteristics and Correlations for Study Variables<sup>a</sup>

Variable	Coefficient $\alpha$	M	SD	<i>r</i>									
				1	2	3	4	5	6	7	8	9	
Dependent variables													
1. Job performance	.96	3.62	1.04	-	-	-	-	-	-	-	-	-	-
2. Job satisfaction	<i>b</i>	4.18	1.03	.05	-	-	-	-	-	-	-	-	-
3. Propensity to leave	.79	2.19	.91	-.06	-.48	-	-	-	-	-	-	-	-
Role variables													
4. Role ambiguity - expectations	.79	2.24	.70	-.05	-.29	.34	-	-	-	-	-	-	-
5. Role ambiguity - outcomes	<i>c</i>	2.51	.93	-.06	-.24	-.25	-.65	-	-	-	-	-	-
6. Role conflict - intersender	.78	2.50	.83	.00	-.24	-.28	.22	.27	-	-	-	-	-
7. Role conflict - person-role	<i>c</i>	2.82	.87	-.16	-.23	-.34	.37	.37	.56	-	-	-	-
Potential moderator variables													
8. Supervisory interaction	.95	3.42	.99	.07	.32	-.30	-.47	-.46	-.32	-.42	-	-	-
9. Peer group interaction	.96	3.29	.80	-.11	.38	-.32	-.32	-.32	-.28	-.28	.56	-	-
10. Organizational work facilitation	.85	2.91	.76	.03	.38	-.40	-.36	.37	-.46	-.35	.58	.48	-

<sup>a</sup>Correlations in this table  $\geq .16$  are significant at the .05 level (two-tailed test).

<sup>b</sup>Single item.

<sup>c</sup>Two-item scales. Each item pair is significantly correlated beyond the .001 level.

reliability estimates for the study's independent and dependent variables are presented in Table I. Zero-order correlations are also reported. The proportion of variance shared by any of the hypothesized moderator variables and of the study's independent and dependent variables ranged from 0% to 22%, with an average of 11%. Since a few of the relationships are above .40 in magnitude, it is apparent that the variables being investigated were not completely independent. However, given that the study was not meant to be prescriptive and because of the overall moderate pattern of interrelationships in Table I, the variables were each maintained as separate dimensions in the present study (cf. Ivancevich & Smith, 1981).

### Method of Analyses

The moderating effects of the selected potential situational moderator variables were assessed using both moderated multiple regression and subgroup analyses. This method of analysis is especially suitable for the present study since it partially controls for collinearity among variables. In the moderated regression procedure (Saunders, 1956; Zedeck, 1971), each dependent variable (job performance, job satisfaction, propensity to leave) was regressed stepwise on a set of predictor variables including (i) a single role perception variable, (ii) an hypothesized moderator variable, and (iii) a cross-product of the preceding terms, giving the formula  $y = a + bx + cz + dxz$ , where  $y$  is the dependent variable,  $x$  a role perception variable,  $z$  a purported moderator, and  $xz$  the resulting multiplicative interaction term. This analysis was repeated for each of the role perception-outcome relationships being investigated, thus yielding 36 moderated regression coefficients. For each regression, the interaction term was then tested to determine if its addition significantly increased the variance explained by the regression equation (Cohen, 1968).

Because the multiplicative terms yielded in moderated regression are not directly interpretable, the directionality of detected interactive effects was examined using a subgroup technique. Upper and lower quartiles of the total sample were established on the basis of scores on each of the moderator variables and subgroup correlations between the role variables and the criterion measures in question were tested for equality using Fisher's  $z$  test of differences (McNemar, 1969).

## RESULTS

The results for the moderated regression analyses for supervisory interaction are presented in Table II. Three statistically significant

**Table II.** Results of Moderated Multiple Regression Analysis for Supervisory Interaction<sup>a</sup>

Dependent/independent variables	$r^2$	$R^2$ adding in		
		Supervisory interaction	Interaction term	
			$R_1^2$	$R_m^2$
Job performance and role ambiguity				
Expectations	.03	.03	.04	1.15
Outcomes	.02	.03	.03	.10
Role conflict				
Intersender	.00	.02	.09	11.88 <sup>c</sup>
Person-role	.05	.05	.06	1.40
Job satisfaction and role ambiguity				
Expectations	.08	.14	.14	.08
Outcomes	.06	.13	.14	2.25
Role conflict				
Intersender	.09	.15	.15	.66
Person-role	.08	.14	.16	4.31 <sup>d</sup>
Propensity to leave and role ambiguity				
Expectations	.14	.16	.16	.55
Outcomes	.11	.15	.17	4.17 <sup>d</sup>
Role conflict				
Intersender	.13	.17	.17	.75
Person-role	.13	.15	.16	.88

<sup>a</sup> $R_1^2$  = linear multiple correlation;  $R_m^2$  = moderated multiple correlation.

<sup>b</sup>Significance of increase ( $R_m^2 - R_1^2$ ).

<sup>c</sup> $p < .01$ .

<sup>d</sup> $p < .05$ .

moderating effects were detected. Specifically, supervisory interaction was found to moderate the relationships between (i) intersender-role conflict and job performance, (ii) person-role conflict and job satisfaction, and (iii) ambiguity concerning behavioral outcomes and propensity to leave. An examination of the nature of these interactive effects using the subgroup technique previously described revealed job performance to be correlated  $-.31$  ( $p < .10$ ) with intersender-role conflict in situations of low supervisory interaction and  $.26$  ( $p < .10$ ) in conditions of high supervisory interaction ( $z = 2.45$ ,  $p < .05$ ). This suggests that intersender-role conflict is inversely related to performance in circumstances of low superior-subordinate interchange. As hypothesized, it also suggests that the negative effects of intersender-role conflict are counteracted by a high degree of

supervisor-subordinate interaction. Unexpectedly, the buffering effect is absent with regard to the relationships between person-role conflict and job satisfaction and between predictability of behavioral outcomes and propensity to leave. Job satisfaction was found to be correlated  $-.07$  (*ns*) with person-role conflict in situations of low supervisory interaction and  $-.34$  ( $p < .05$ ) in conditions of high supervisory interaction ( $z = 1.19$ , *ns*).<sup>3</sup> Similarly, propensity to leave was found to correlate  $.07$  (*ns*) with ambiguity concerning behavioral outcomes for the low supervisory interaction group and  $.58$  ( $p < .01$ ) for the high supervisory interaction group ( $z = 2.95$ ,  $p < .01$ ). Indeed, these two comparisons suggest that as role occupants experience higher levels of person-role conflict and increased uncertainty concerning the outcomes or responses to their behavior, they may be expected to (i) experience decreasing job satisfaction and (ii) to exhibit a greater propensity to terminate employment in situations of *high* instead of *low* superior-subordinate exchange.

The increments in the percentage of variance explained due to the additive and multiplicative effects of peer-group interaction are reported in Table III. Significant effects involved the relationships of (i) intersender-role conflict with job performance and (ii) ambiguity regarding behavioral consequences with propensity to leave. Inspection of the direction of the differences in the correlation pairs indicated that peer-group interaction had a buffering effect on both the relationship between intersender-role conflict and performance, and on the relationship between propensity to leave and predictability of outcomes. Job performance was correlated  $-.22$  (*ns*) with intersender-role conflict for the low and  $.33$  ( $p < .05$ ) for the high peer-group interaction subsample ( $z = 2.35$ ,  $p < .05$ ), thus indicating that the effect of intersender-conflict on performance is a function of the degree of supportive peer-group interaction experienced. This suggests that intersender-role conflict has a negative impact on performance in the absence of peer-group interaction that serves to define role-related expectations. It, however, also suggests that the detrimental effects of intersender-role conflict are counteracted by peer-group interaction. With regard to the relationship between propensity to leave and ambiguity about the outcomes of behavior, the correlations were  $.13$  (*ns*) in circumstances of low peer-group interaction and  $.51$  ( $p < .05$ ) in conditions of the high peer-group interaction ( $z = 1.75$ ,  $p < .10$ ), suggesting that the negative influence of uncertainty concerning behavioral outcomes actually increases under conditions of peer-group interaction.

<sup>3</sup>It should be noted that because of the loss of information (dichotomization of continuous variables) associated with subgroup-based techniques, findings of subgroup analyses may not parallel those resulting from moderated multiple regression.

**Table III.** Results of Moderated Multiple Regression Analysis for Peer Group Interaction<sup>a</sup>

Dependent/independent variables	$r^2$	$R_g^2$ adding in		
		Group interaction	$R_m^2$	Interaction term
Job performance and role ambiguity				
Expectations	.03	.03	.03	.21
Outcomes	.02	.03	.03	.60
Role conflict				
Intersender	.00	.02	.09	11.95 <sup>c</sup>
Person–role	.05	.05	.06	.23
Job satisfaction and role ambiguity				
Expectations	.08	.17	.18	2.51
Outcomes	.06	.15	.15	.10
Role conflict				
Intersender	.09	.18	.18	.47
Person–role	.08	.18	.18	.33
Propensity to leave and role ambiguity				
Expectations	.14	.18	.18	.48
Outcomes	.11	.15	.19	6.99 <sup>c</sup>
Role conflict				
Intersender	.13	.17	.17	.26
Person–role	.13	.17	.17	.14

<sup>a</sup> $R_1^2$  = linear multiple correlation;  $R_m^2$  = moderated multiple correlation.

<sup>b</sup>Significance of increase ( $R_m^2 - R_1^2$ ).

<sup>c</sup> $p < .01$ .

Finally, Table IV presents the increases in explained variance that can be attributed to the additive and multiplicative effects of organizational work facilitation. As noted, the analyses yielded four statistically significant incremental validities. Organizational work facilitation was found to moderate the relationships among intersender–role conflict and the outcome variables, job performance, and propensity to leave. Furthermore, organizational work facilitation was also found to moderate the relationships between person–role conflict and job satisfaction and between predictability of behavioral outcomes and propensity to leave. The correlation between intersender–role conflict and performance under circumstances of low organizational work facilitation was  $-.22$  compared to  $.07$  under conditions of high organizational work facilitation. Although a significant interaction was indicated by the moderated regression, in the subgroup analysis neither subgroup correlation approached traditional

**Table IV.** Results of Moderated Regression Analysis for Organizational Work Facilitation<sup>a</sup>

Dependent/independent variables	$r^2$	$R^2$ adding in		
		Organizational work facilitation $R_1^2$	Interaction term $R_m^2$	$F^b$
Job performance and role ambiguity				
Expectations	.00	.00	.00	.30
Outcomes	.01	.01	.02	2.07
Role conflict				
Intersender	.90	.00	.03	5.00 <sup>c</sup>
Person–role	.04	.04	.04	.58
Job satisfaction and role ambiguity				
Expectations	.08	.14	.14	1.13
Outcomes	.06	.12	.14	3.01
Role conflict				
Intersender	.05	.11	.12	.72
Person–role	.06	.12	.15	5.22 <sup>c</sup>
Propensity to leave and role ambiguity				
Expectations	.12	.20	.20	.00
Outcomes	.06	.17	.20	4.79 <sup>c</sup>
Role conflict				
Intersender	.07	.18	.20	4.22 <sup>c</sup>
Person–role	.11	.20	.21	1.56

<sup>a</sup> $R_1^2$  = linear multiple correlation;  $R_m^2$  = moderated multiple correlation.

<sup>b</sup>Significance of increase ( $R_m^2 - R_1^2$ ).

<sup>c</sup> $p < .05$ .

significance levels and magnitude differences were, therefore, not tested. Nevertheless, the signs of the subgroup correlations were consistent with the buffering effect found in connection with both supervisory and peer-group interaction.

Further subgroup results indicated that although no relationship existed between person–role conflict and job satisfaction under conditions of low work facilitation ( $r = .09$ , *ns*), there was a significant negative correlation ( $r = -.45$ ,  $p < .01$ ) between these variables under conditions of high work facilitation ( $z = 2.63$ ,  $p < .01$ ). Likewise, results suggest that organizational work facilitation also has a one-sided impact on potential turnover. Propensity to leave correlated  $-.09$  (*ns*) with ambiguity concerning the outcomes of behavior for the low and  $.35$  ( $p < .05$ ) for the high organizational work facilitation subsamples ( $z = 1.87$ ,  $p < .10$ ). Similarly, propensity to leave was found to correlate  $-.09$  (*ns*) with

intersender–role conflict under conditions of low work facilitation and .46 ( $p < .01$ ) in circumstances of high work facilitation ( $z = 2.52, p < .01$ ). In perspective, these findings indicate mixed backing for the supportiveness hypothesis. While work-related policies and procedures may be introduced in an effort to increase job performance by alleviating one form of role pressure, the anticipated benefits must be weighed against possible increases in job dissatisfaction and propensity to terminate employment as a result of corresponding increases in other forms of experienced role strain.

## DISCUSSION

The focus of this investigation has been on the identification of situational moderators which contribute to explained variance in dependent outcomes through their interaction with different measures of role stress. The moderator analysis produced a relatively large percentage of significance differences (i.e., 25% at  $p < .05$ ). The probability of this number of differences occurring by chance is less than .0003 (Feild & Armenakis, 1974). Perhaps the most important implication of this result is that organizations can influence the extent of experienced role strain and, in turn, affect work-related outcomes by modifying situational characteristics.

The finding that supervisory interaction has an effect on several pairs of role perception–outcome relationships is conceptually consistent with a variety of previous findings. Indeed, perhaps the primary conclusion of the earliest work in the role theory area was that within a hierarchical organization, an effective supervisor is “one who is able to and motivated to meet the role expectations of relevant peers, supervisors, and subordinates” (Jacobson, Charters, & Lieberman, 1951, p. 26). The negative effects of intersender–role conflict on job performance are substantially buffered by a high degree of supervisor-subordinate interaction. Paradoxically, this buffering effect is absent with regard to the relationships between job satisfaction and person–role conflict and between propensity to leave and predictability of outcomes. In partial explanation, it is plausible that while superior–subordinate interaction is necessary for successful performance, the nature of the exchange itself may contribute to job dissatisfaction and potential attrition. The greater negative relationships noted for the high supervisory interaction group may well reflect inconsistent supervisory behavior. The results obtained may have been a function of supervisor behaviors that were judged appropriate by subordinates in some settings but inappropriate in others. If so, as La Rocco and Jones (1978) speculate, it is possible that inconsistency in supervisor behavior may render it more difficult for subordinates to develop coping strategies that reduce the impact of stress and thereby negatively affect job satisfaction and one’s tendency to remain in an organization. A buffering effect for job performance may have occurred since all the roles sampled were at least

semiprofessional in nature. In that professional ethics and performance standards in fields such as nursing are determined by accrediting agencies and professional societies, it is likely that institutionalized avenues for minimizing role pressures may have developed such that performance was not hampered (Zald & Hair, 1972).

Peer-group interaction was also found to have an effect on the extent to which role perceptions are related to certain outcome variables. As was the case with supervisory interaction, peer-group interaction was found to positively moderate the relationship of intersender-role conflict with job performance and negatively moderate the relationship of ambiguity concerning behavioral consequences with propensity to leave. Unlike supervisory interaction, however, peer-group interaction did not have a negative moderating influence on the association between person-role conflict and job satisfaction. This suggests that one's peers may have a more positive impact on satisfaction with work than one's supervisor. Viewed as a social process, it may be argued that peer-group interaction is accomplished through the sharing of role expectations. Seen from an even broader perspective, group theorists, such as Bales (1953), long ago concluded that interaction among group members develops "in order to reduce the tensions growing out of uncertainty and unpredictability in the action of others" (pp. 32-33). Both laboratory (e.g., Raven & Rietsema, 1957; Smith, 1957; Steiner & Dodge, 1956) and field studies (e.g., Beehr, 1976, Caplan, Cobb, French, Van Harrison, & Pinneay, 1975; French & Caplan, 1972) have documented the validity of this observation, not only as it relates to satisfaction but to a variety of other work-related outcomes. Together these results lead to the speculation that peer-group interaction is comparatively more instrumental than supervisory behavior in achieving job satisfaction.

Finally, organizational work facilitation was found to be the most consistent moderator of the role perception-outcome relationships studied. Four significant interactions occurred in connection with this variable. The results presented indicate that while efforts intended to facilitate workflow activities serve to buffer the impact of conflicting role demands, and thus have a positive influence on performance, this benefit must be balanced against potential increases in job dissatisfaction and propensity to leave associated with a too rigidly and extensively defined system of organizational procedures and practices. This conclusion qualifies somewhat the popular management prescription that organizations suffering the negative effects of role ambiguity and conflict need only increase the structure of their members' work environment. Consistent with this reasoning, it has been suggested elsewhere that job characteristics which contribute to independence, freedom from control, and discretion over work methods may diminish the aversive effects of role stress (Abdel-Halim, 1978; Beehr, 1976).

Certain limitations inherent in the present analyses should be noted. First, caution is necessary in describing the purported moderators as strictly

“situational,” since they were assessed as perceived situational characteristics. As used in the present study, the hypothesized moderators may be colored by individual perceptions of the situation. This fact underscores the need to identify methods which objectively measure the impact of situational variance on behavior. Second, with the exception of the job performance scale, the measurement instruments entailed self-report data.

Overall, the present analyses suggest that the relationships of variables such as job performance, job satisfaction, and propensity to leave with role ambiguity and conflict may depend upon differences in situational characteristics. Future investigators would be wise to consider the influence of situationally relevant contextual factors that might mediate the effects of role stress. Studies are clearly needed to assess the impact of such situational factors as adequacy of communication flow, degree of social influence and/or interpersonal attraction among group participants, the structure of formal and informal authority patterns, and the nature of task demands on the intricate relationship between work-related outcomes and role pressures. The discovery of other situational moderators would unquestionably contribute to a more complete understanding of role behavior.

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