Role theory has been used to conceptualize the findings regarding job stress, suggesting that the source of job stress is one’s co-workers. If this is so, individuals in stressful jobs are likely to be especially dissatisfied with their co-workers. In interviews with 651 employees of five Midwestern work organizations, it was shown that three role stresses (role ambiguity, role overload, and underutilization of skills) were related to five employee outcomes: overall job dissatisfaction, life dissatisfaction, low self-esteem, depressed mood, and fatigue. As hypothesized, each stress was most strongly correlated with dissatisfaction with the stress itself, second most strongly correlated with dissatisfaction with co-workers, and least strongly correlated with dissatisfaction with the nonsocial aspects of the work role. It was concluded that people who experience job stress blame the social system in the organization, resulting in their dissatisfaction with co-workers, who are the elements of that system.

Role stress is any facet of a role that is linked to role strain, i.e., physiological or psychological conditions that cause the role incumbent to view the role aversively (Kahn & Quinn, 1970). Role stress can affect anyone: white males (Kahn, Wolfe, Quinn, Snoek, & Rosenthal, 1964), females (Chassie & Bhagat, 1980), and minorities (Ford & Bagot, 1978). In a number of studies (Beehr, Walsh, & Taber, 1976; Caplan & Jones, 1974; French & Caplan, 1973; Hamner & Tosi, 1974; Kahn et al., 1964; Lyons, 1971; Margolis, 1974; Richardson & Stanton, 1973; Sales, 1970), role

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ambiguity, role overload, and underutilization of skills have been shown to be related to a number of role strains, e.g., dissatisfaction with the job (role), dissatisfaction with life, low self-esteem, depressed mood, fatigue, anxiety, and increased blood pressure and heart rate.

Mettlin and Woelfel (1974) have noted that there are several theories (reference-group theory, cognitive-dissonance theory, role theory, and interaction theory) to explain the relationship between role stress and interpersonal processes such as the sending of role messages. Of these theories, role theory is the most prominent in the research literature on stress among employees of work organizations.

Role theory focuses on the social system as the source of role definitions, i.e., people receive role messages from the members of their role sets. These role messages contain role expectations, the essence of role requirements (Katz & Kahn, 1966; Parson, 1960; Sarbin & Allen, 1969). Because interpersonal processes, especially influence attempts (e.g., sending role expectations), are primary features of role theory, some of the consequences of role stress should be related to the social system that creates the stress.

If role theory is a good framework for the conceptualization of organizational stress, and if role stress is a product of the social system, individuals may blame the other people within the system for the stress they feel. People under stress therefore might engage in coping behaviors aimed specifically at the people in the organization, i.e., withdrawing from contact with co-workers in order to reduce the strains that are perceived as resulting from this contact.

Withdrawal can take several forms. Previous studies have shown that organizational members experiencing role ambiguity have a higher turnover rate than others (Lyons, 1971; Paul, 1974). Another form of physical withdrawal is absenteeism—staying out of a role is an obvious way to avoid the stress inherent in it. Aside from physical separation from the role, however, there are other ways of withdrawing in order to cope with role stress. Reducing communication with role senders is one alternative. If role expectations are not communicated, they have less impact on the stressed person. Another possibility is that the person may receive communication but decrease the importance that he or she places on it. By psychologically defining the communicated expectations as unimportant, role occupants can be protected from the stress, since it does not matter to them whether or not they comply with unimportant expectations. All of these forms of withdrawal, while they protect the individual from stress, are dysfunctional for the organization.

But such withdrawal behaviors are attractive only if stress is a function of the social system. The use of role theory as a tool for conceptualizing stress is based on this assumption. Because the social system, i.e., people in their organizational roles, is responsible for stress, then the stressed person would feel justified in blaming co-workers for the situation. The present study examines the occurrence of this phenomenon.
This study was based on two general hypotheses. The first was that role ambiguity, role overload, and underutilization of skills should be related positively to five role strains: job dissatisfaction, life dissatisfaction, low self-esteem, depressed mood, and fatigue. By definition, role stress is related to role strain (Kahn & Quinn, 1970), and if the three stresses in this study were not related at least to some of these, the result would be so inconsistent with previous research that the validity of the measures should be questioned.

The second general hypothesis was that the role stresses should be related positively to dissatisfaction with co-workers. Since it is likely that a general dissatisfaction with the role results from the experience of role stress, simply finding a statistically significant relationship would not be enough. That might indicate only that an overall negative affect resulting from the stresses had generalized to all of the specific facets of the role. Therefore, the following more specific hypotheses were offered.

1. Role ambiguity should be related most strongly to dissatisfaction with role clarity, related less strongly to dissatisfaction with co-workers, and related still less strongly to dissatisfaction with nonsocial facets of the job.

2. Role overload should be related most strongly to dissatisfaction with the work load, related less strongly to dissatisfaction with co-workers, and related still less strongly to dissatisfaction with nonsocial facets of the job.

3. Underutilization of skills should be related most strongly to dissatisfaction with skill utilization, related less strongly to dissatisfaction with co-workers, and related still less strongly to dissatisfaction with nonsocial facets of the job.

The negative affect most strongly associated with a role stress should be directed toward the stress itself. Aside from that, however, dissatisfaction with co-workers should have the strongest relationship to role stress, because role senders (co-workers) are the sources of the stress.

METHOD

Sample

The sample was very diverse, comprising 651 respondents employed full-time (thirty-five hours or more per week) by five Midwestern work organizations: a printing company, a small research and development company, two automotive supply companies, and the four services departments of a hospital. All supervisors were included in the sample, and nonsupervisors were systematically sampled at rates varying from 25 percent to 100 percent. The response rate was 72.9 percent.

The mean age of the respondents was thirty-five. Seventy-three percent of them had finished high school at least; 51 percent were male, 79.8 percent were white, and 68.5 percent were married.


Measures

Data were collected during a ninety-minute structured interview in the respondent’s home. Interviews were conducted by The University of Michigan Survey Research Center’s professional interviewers, and the data provided by individual respondents were anonymous.

Role Stresses. Role ambiguity ($M = 1.92, SD = .64$, reliability $= .69$) was measured by a four-item index (Beehr, 1976). A sample item was “I am clear about what others expect of me on my job,” rated by the respondent as “very true,” “somewhat true,” “a little true,” or “not at all true.” Three of the items were taken from the 1972-1973 Quality of Employment Survey (Quinn & Shepard, 1974).

The role-overload index (Beehr, 1974) was the mean of two items ($M = 1.90, SD = .85$, reliability $= .47$):

- I am given enough time to do what others expect of me.
- I am able to complete the work I start.

Both items were reversed before they were combined into the index. The response categories were the same as for the role-ambiguity index.

Underutilization of skills ($M = 2.72, SD = 3.75$) was measured by three items. First, people were asked how much education their jobs required and how much education they had:

- What is the level of school or college you feel is needed by a person in your job?
- What was the highest grade of school or year of college you completed?

Respondents were grouped into the following eight categories on each item:

- None
- Some grade school (grades 1-7)
- Completion of grade school (grade 8)
- Some high school (grades 9-11)
- Graduation from high school (grade 12)
- Some college (grades 13-15)
- College degree (grade 16)
- Graduate or professional training (17 +)

If the job required less education than the individual had, that person’s skills were not utilized fully; therefore, a discrepancy score was computed by subtracting the number of years of education required by the job from the number of years of education the employee had. This score indicated the extent to which the employee’s educational skills were underutilized at work. Higher scores indicated a greater lack of utilization. Negative scores indicated that the person’s education was not sufficient to do the job.

The third item used to measure underutilization of skills was the following question:
Through your previous experience and training, do you have some skills that you would like to be using in your work but can’t use on your present job?

This question asked about skills acquired through experience rather than through formal education.

Because there were eight categories of education, the range of possible values for the discrepancy score was minus seven through plus seven. The third item was coded plus seven for a “yes” answer, and zero for a “no” answer and was added to the discrepancy score. A score of seven on the third question indicated that the individual’s skills were underutilized. A score of zero indicated that the person’s skills were not underutilized, but did not indicate that they were overutilized. Therefore, the codes on the third question were designed to match the codes on the discrepancy score. The correlation between the discrepancy score and the third item was low ($r = .09, p < .01, 649$ d.f.), indicating that underutilization of two different types of skills (education and experientially acquired skills) may have been measured. Because previous research has led to the conclusion that each type of underutilization would be similarly stressful, the items were combined into the index described here. A measure of internal consistency reliability would not be appropriate for this type of index, however. All three items were taken from Quinn and Shepard (1974).

Role Strains. Overall job dissatisfaction ($M = 3.94, SD = .97$, reliability = .80) was measured by four items on a five-point scale. A sample item is “All in all, how satisfied would you say you are with your job—very satisfied, somewhat satisfied, not too satisfied, or not at all satisfied?” The items were a subset of the five-item index in Quinn and Shepard (1974).

Life dissatisfaction ($M = 4.83, SD = 1.25$, reliability = .79) was measured by a nine-item index consisting of seven, seven-point, semantic-differential items, e.g., “enjoyable-miserable,” and two other items, e.g., “In general, how satisfying do you find the ways you’re spending your life these days? Would you call it completely satisfying, pretty satisfying, or not very satisfying?” The items were a subset of the ten-item index in Quinn and Shepard (1974).

Low self-esteem ($M = .99, SD = 1.05$, reliability = .68) was measured by three items, e.g., “important-not important,” on a seven-point semantic-differential scale in response to the question “How do you see yourself in your work?” The items were a subset of the four-item index in Quinn and Shepard (1974).

The depressed-mood index ($M = 1.85, SD = .47$, reliability = .71) consisted of a ten-item index taken from Quinn and Shepard (1974). A typical item was, “I feel downhearted and blue,” which was rated “often,” “sometimes,” “rarely,” or “never.”

Fatigue ($M = 2.56, SD = 1.21$, reliability = .71) was measured by a four-point index consisting of: (1) three items such as “In the last year, how often did you feel completely worn out at the end of the day?” and rated “often,” “sometimes,” “rarely,” or “never”; and (2) one item asking the respondents to choose a rung on a picture of a ladder to represent how
much pep and energy they had. The top rung was labeled “always full of pep and energy” and the bottom rung was labeled “never have any pep or energy.” All of these items were from Quinn and Shepard (1974).

**Facet Dissatisfaction.** The facet-dissatisfaction indices were rated on the following four-point scale: “very satisfied,” “somewhat satisfied,” “a little satisfied,” or “not at all satisfied.” All items in these indices were taken from Quinn and Shepard (1974).

Dissatisfaction with role clarity ($M = 2.00$, $SD = .76$, reliability = .67) was measured by two items, one of which was “How satisfied are you with how clearly (your) responsibilities are defined?”

Dissatisfaction with the work load ($M = 2.09$, $SD = .88$) was measured by the following item: “How satisfied are you with (your) not being asked to do excessive amounts of work?”

Dissatisfaction with skill utilization was measured by a two-point index ($M = 2.14$, $SD = .90$, reliability = .79), one item of which was “How satisfied are you with the extent to which your job gives you a chance to do the things you do best?”

The dissatisfaction-with-co-workers index ($M = 1.86$, $SD = .59$, reliability = .86) consisted of eleven items such as “How satisfied are you with the friendliness of the people you work with?” The items included references to both supervisors and co-workers, because both could be members of the role set.

Dissatisfaction with two nonsocial facets of the job, comfort and pay, also was measured. Dissatisfaction with comfort was measured by three single-item indices, each measuring a separate aspect of comfort.

Dissatisfaction with travel ($M = 1.11$, $SD = .99$) was measured by the item “How satisfied are you with the convenience of travel to and from work?”

Dissatisfaction with hours ($M = 1.85$, $SD = .99$) was measured by the item “How satisfied are you with (your) hours that you work?”

Dissatisfaction with physical surroundings ($M = 2.10$, $SD = 1.03$) was measured by the item “How satisfied are you with the physical surroundings on your job?”

The dissatisfaction-with-pay index ($M = 2.02$, $SD = .82$, reliability = .60) consisted of two items, including “How satisfied are you with your pay?”

**Analyses**

The data from respondents in all five organizations were pooled, and product-moment correlations were computed as a measure of the relationship between each role stress and each role strain or facet dissatisfaction. Using the nonindependent-samples test suggested by McNemar (1969), we computed the significance of the differences between correlations in order to test the hypotheses specifying the relative strengths of the different relationships.
RESULTS

Role Stresses and Role Strains

Table 1 shows the correlations between each role stress and the accompanying role strains. All fifteen correlations were in the expected direction (positive), and all but one were significant (p<.01), supporting the first hypothesis. The correlations between the role stresses and job dissatisfaction appeared to be the strongest, and the correlations between the role stresses and life dissatisfaction were the weakest.

Table 1. Correlations Between the Role Stresses and The Role Strains
(N = 621)

<table>
<thead>
<tr>
<th>Role Strain</th>
<th>Correlation with Role Ambiguity</th>
<th>Correlation with Role Overload</th>
<th>Correlation with Underutilization of Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall job dissatisfaction</td>
<td>.23*</td>
<td>.27*</td>
<td>.27*</td>
</tr>
<tr>
<td>Life dissatisfaction</td>
<td>.10*</td>
<td>.10*</td>
<td>.06</td>
</tr>
<tr>
<td>Low self-esteem</td>
<td>.19*</td>
<td>.18*</td>
<td>.14*</td>
</tr>
<tr>
<td>Depressed mood</td>
<td>.16*</td>
<td>.16*</td>
<td>.14*</td>
</tr>
<tr>
<td>Fatigue</td>
<td>.12*</td>
<td>.18*</td>
<td>.12*</td>
</tr>
</tbody>
</table>

*p<.01

Role Stresses and Facet Dissatisfactions

Table 2 shows the correlations between each role stress and the facet dissatisfactions. As hypothesized, role ambiguity was most strongly correlated with dissatisfaction with role clarity, second most strongly correlated with dissatisfaction with co-workers, and least strongly correlated with dissatisfaction with the non-social facets of the work role—pay and comfort. All the hypothesized differences between correlations were significant (p<.05).

The correlations between role overload and the facet dissatisfactions were rank-ordered as hypothesized except for one tie; role overload was correlated equally strongly (r = .35) with satisfactions with work load and with satisfaction with co-workers. All other hypothesized differences between correlations of the facet dissatisfactions with role overload were significant (p<.05).

The correlations between underutilization of skills and the facet dissatisfactions also were rank-ordered as hypothesized, and all the
Table 2. Correlations Between the Role Stresses and the Facet Dissatisfactions
(N = 608)

<table>
<thead>
<tr>
<th>Dissatisfaction with:</th>
<th>Correlation with Role Ambiguity</th>
<th>Correlation with Role Overload</th>
<th>Correlation with Underutilization of Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role clarity</td>
<td>.52**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work load</td>
<td></td>
<td>.35**</td>
<td></td>
</tr>
<tr>
<td>Utilization of skills</td>
<td></td>
<td></td>
<td>.38**</td>
</tr>
<tr>
<td>Co-workers</td>
<td>.44**</td>
<td>.35**</td>
<td>.21**</td>
</tr>
<tr>
<td>Pay</td>
<td>.17**</td>
<td>.16**</td>
<td>.09*</td>
</tr>
<tr>
<td>Comfort:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Travel</td>
<td>.06</td>
<td>.12**</td>
<td>.01</td>
</tr>
<tr>
<td>Hours</td>
<td>16**</td>
<td>.18**</td>
<td>.11**</td>
</tr>
<tr>
<td>Physical surroundings</td>
<td>.20**</td>
<td>.22**</td>
<td>.16**</td>
</tr>
</tbody>
</table>

*p<.05

**p<.01

hypothesized differences were significant (p<.01) except one. Underutilization of skills was not correlated with co-worker dissatisfaction significantly more strongly than it was correlated with dissatisfaction with physical surroundings.

DISCUSSION

It is apparent that role stress has a particularly strong effect on attitudes toward the social aspects of work. The fact that the rankings of the correlations of the facet dissatisfactions with each role stress were as hypothesized strongly supports this viewpoint. Role stress is a function of the social organization, and it probably has an aversive effect on the attitudes that members of a role set develop toward one another. This can be an indication that people who experience stressful role expectations blame their role senders. Indeed, it would be only logical for them to do so if the role senders were the sources of the stress.

If role stress does foster negative attitudes toward the members of a role set, it probably also affects their interpersonal processes and behaviors. If severe and persistent, it could disrupt attempts at cooperative action and even could cause members to leave the role set. Kahn et al. (1964) have concluded that role ambiguity and role overload (a part of their role-conflict measure) are widespread among American male wage-and-salary workers. They found that about one-third of their sample reported being

208
disturbed or distressed about ambiguity in their work roles and were even more disturbed or distressed about role overload. It should be noted that these figures include only those people bothered by the role stresses. Therefore, it appears that relatively severe role ambiguity and role overload are experienced by a large proportion of American male wage-and-salary workers. It is reasonable to assume that this widespread existence of role stress results in similarly widespread negative affect toward co-workers.

It has been shown elsewhere that work-role stress is related to extreme types of employee withdrawal such as absenteeism and turnover (Gupta & Beehr, 1979; Lyons, 1971), but this type of stress also may be related to less extreme forms of employee withdrawal such as avoidance of co-workers. Examples of these types of withdrawal might include being late for meetings, failure to return phone calls, and poor group processes in meetings. Future research should be directed toward the issue of whether such withdrawal and lack of cooperative work behaviors result from this affect. If they do, role stress may cause employees to view their jobs with aversion, with negative consequences for the organization, even if the employees experiencing the stress are physically present at the work site.

REFERENCES


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