

## OCCUPATIONAL ROLE STRESS WITHIN THE ROLE SET

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### INTRODUCTION

In the summer of 1973 100 secretaries of a major state university in the midwest were interviewed with a structured format regarding how they perceived their occupational role concerning self, co-workers, supervisors and the university as a whole. Indices were used to measure *role compatibility stress* (RCS), *job-related tension* (JRT), and *job satisfaction* (JS). The role analysis places secretaries in relation to role senders such as supervisors, co-workers and others in the role set context. The tested model in Figure 1 suggests the relation of stress-producing factors to job-related tension as antecedents of attitude formation regarding satisfaction or dissatisfaction in one's occupational role. The model indicates that feelings of satisfaction lead to desire for stability in the work setting. Dissatisfaction leads to desire for change in the job or in relations with role senders.

A process is shown from perception of factors conducive to stress through desire for change. Factors conducive to *role stress* such as ambiguity, strain, and conflict in role relations were suggested by previous research to include number and diversity of role senders for focal persons, incongruence of characteristics such as age, sex, and personality of focal persons vis-a-vis role senders, and communication problems in relations from the subordinate's viewpoint. These variables are specified as *organization, personality, and interpersonal relations*.

Kahn and his associates (Kahn 1964b) use role analysis to examine personal and organizational tensions which develop in large scale organizations from conflicting and ambiguous behavioral demands on workers. By case studies and a national survey they demonstrate how positions in organizations are influenced by three major sources of tension: 1) personality variables; 2) interpersonal relations with immediate associates; 3) individual position in the organization. Regarding *role conflict* they assume a sequence whereby contradictory role expectations give rise to role pressures which have effects on the emotional experience of the focal person. These include such factors as intensified internal conflicts,

increased tension related to the job, and decreased confidence in superiors and in the organization generally. The strain which occurs in these conflict situations leads to coping responses including social and psychological withdrawal (Kahn 1964b 71).

Merton's (1966) concept of *role set* includes a complement of role relations associated with a particular status. The status occupant has an array of role partners occupying various loci in the role set. Disturbances occur in role sets when one must respond differentially to role partners in different loci, such as boundary and non-boundary positions. When role partners do not share one's values and expectations, disparate and inconsistent evaluations complicate the task of coming to terms with all of them. Power, communication, reference groups, and established hierarchies of roles are important factors for such disturbances. Kahn and his associates (1964b) use the *role set* concept but substitute the term *role senders for role partners*. Differential influence of role senders alters role relations in the organizational structure. *Role strain*, or felt difficulty in job performance, is found to be related to highly diversified role sets.

The university secretary exemplifies the focal person likely to be in a role set with numerous and diverse role senders. She is often supervised by an academician, but is also accountable in the administrative bureaucracy, or her supervisor may have a background in management while her work requires coordination with academicians. She may also be responsible for supervising the work of underlings, meeting the public as receptionist, and performing services for faculty of the academic department.

This research emphasizes interpersonal and organizational factors, without denying the importance of personality factors. Secretaries were not asked to describe "personality" characteristics of themselves or others, but were asked: "Would you describe your personality and that of your supervisor as: 1) highly compatible; 2) somewhat compatible; 3) somewhat incompatible; 4) highly incompatible; or 5; unevaluated or irrelevant."

**ANALYSIS: MODEL AND INDICES**

Job satisfaction is taken as a major measure of organizational and interpersonal tensions. The general hypothesis is that measured job satisfaction will relate inversely to tension development and role stress. This research focuses on role expectations for the focal person as defined for self and as interpreted through her interaction with role senders. A cluster of factors related to perceived occupational role and job satisfaction concerns *congruence* of perception of appropriate role expectations on three important dimensions — *organizational, personality, and interpersonal variables*. Organizational variables include such things as required expertise, required amount of responsibility. Personality variables are used here only to refer to career orientation, work identification, and a measure of congruence of personality characteristics of the focal person with those of the principal role sender, such as the immediate supervisor.

Interpersonal variables include communication or barriers to communication, confidence in one's role senders, especially the immediate supervisor, and age and sex compatibility of role senders and focal persons. These are personal characteristics, but relate to interpersonal attitudes and actions. Felt pressure from the supervisor, or power, which is incongruent with expectations is included.

The secretary's position vis-a-vis others in the role set, and perceived congruence with with role senders on the cited organizational, interpersonal, and personality variables relates to scores on three indices: 1) the job-related tension (JRT); 2) job satisfaction (JS); (Kahn 1964b) and role compatibility stress (RCS). Change orientation is based on indicated desire to change content of job, change supervisors, to change supervisor behavior, or to take distance from one's role, or to transfer to another job.

Somatic ailments or other disruptive psychological conditions made up a self-report checklist for focal persons including nervousness, indigestion, moodiness, anger and others. Those who experience problems of role conflict, ambiguity and strain should feel stronger tensions, resulting in low job satisfaction, and in some cases, developing disruptive psychophysical conditions in an attempt

to reduce stress (Jackson 1962).

Figure 1 describes the model which tests the relation between perceived occupational role and job satisfaction through role set expectations, the three indices, and reactions toward change. Given the assumption of role stress, or presence of ambiguity, conflict, or strain in the role, some measure of stress was needed, and I developed a composite of questions used by Kahn and his associates (Kahn 1964b) to create an index for *role-compatibility stress* (RCS):

(Response scale: 1-5)

- 1 How clear are you about the limits of your authority in your present position?
- 2 How clear are you about what people around you expect of you?
- 3 Are you uncertain about what is expected of you by any particular person? Yes, 5; No, 1.
- 4 Have there ever been occasions when some of the people around you have different opinions about what you should be doing or how you should do it? Yes, 5; No, 1.
- 5 How often do you get conflicting orders or instructions from different people above you?
- 6 How much pressure do you feel toward better performance of your job?
- 7 How much pressure do you feel toward doing more work?

(Index scored by summation and division by number answered.)

The original *Job-related tension index* (JRT) (Kahn 1964b) was used unchanged. Secretaries selected fixed responses to 15 items scaled 1-5 from rarely to nearly always. The tension score (JRT) was calculated by summation and division by number of items answered:

- 1 Feeling that you have too little authority to carry out the responsibilities assigned to you.
- 2 Being unclear on just what the scope and responsibilities of your job are.
- 3 Not knowing what opportunities or advancement or promotion exist for you.
- 4 Feeling that you have too heavy a workload, one that you can't possibly finish during an ordinary work day.
- 5 Thinking that you'll not be able to satisfy the conflicting demands of various people over you.
- 6 Feeling that you're not fully qualified to handle your job.
- 7 Not knowing what your supervisor thinks of you, how he evaluates your performance.
- 8 The fact that you can't get enough information needed to carry out your job.
- 9 Having to decide things that affect the lives of individuals, people that you know.
- 10 Feeling that you may not be liked and accepted by the people you work with.
- 11 Feeling unable to influence your supervisor

FIGURE 1: TESTED MODEL OF RELATION BETWEEN OCCUPATIONAL ROLE AND JOB SATISFACTION

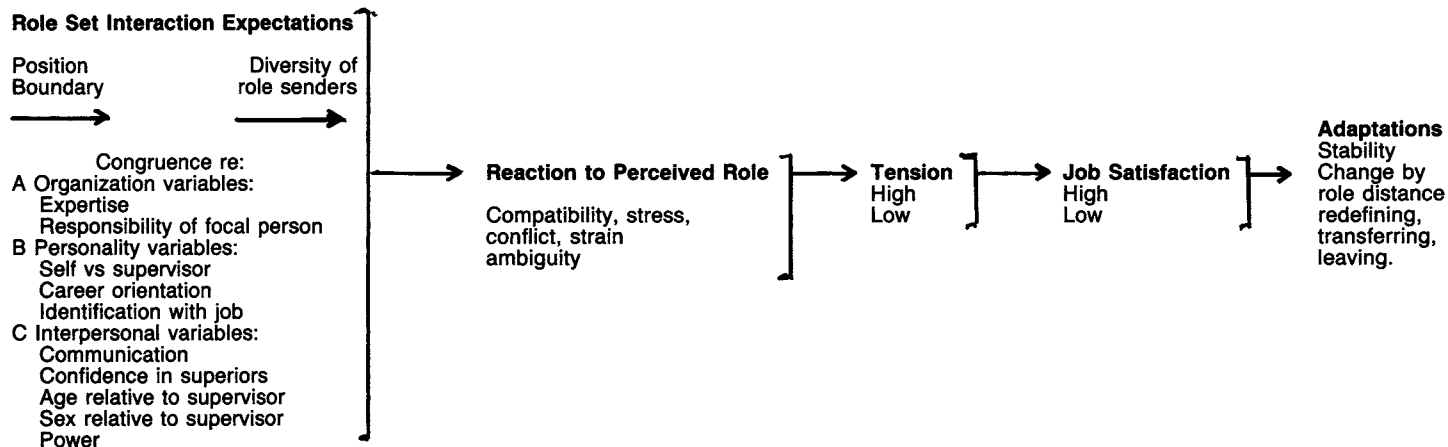
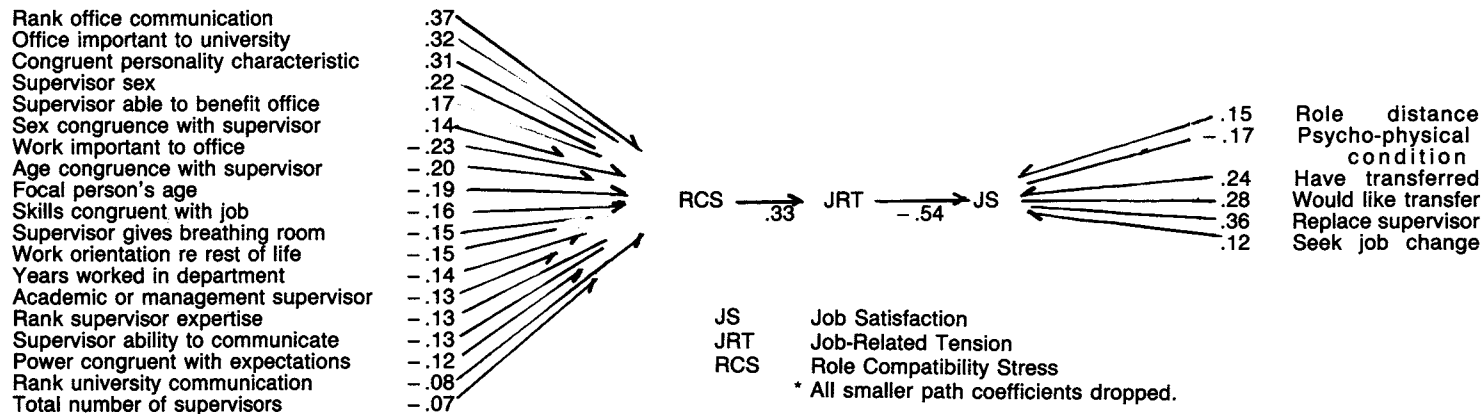


FIGURE 2: THE MODEL INTERPRETED THROUGH MULTIPLE REGRESSION\*



12 Not knowing just what the people you work with expect of you.

13 Thinking that the amount of work you have to do may interfere with how well it gets done.

14 Feeling that you have to do things on the job that are against your better judgment.

15 Feeling that your job tends to interfere with your family life.

*The Job satisfaction index (JS)* adapted from Kahn et al. (1964b) was presented as follows:

1 Is there some other work, either here or outside your company which you would like better than what you are now doing?

I would rather have some other job (1)

I would rather have my present job (5)

2 Which of the following statements best fits your view of how you like your job?

I dislike it very much, would prefer almost any other kind of work (1)

I don't like it very much, would prefer some other kind of work (2)

It's all right, but there are other kinds of work I'd like better (3)

I like it very much, but there are other kinds of work I like just as much (4)

It's exactly the kind of work I like best (5)

3 How do you feel about the progress you have made in this organization?

Little or no progress (1)

Some progress, but it should have been better (2)

Quite a bit of progress, but it should have been better (4)

A great deal of progress (5)

4. How much does your job give you a chance to do the things you are best at?

No chance at all (1)

Very little chance

Some chance (3)

Fairly good chance (4)

Very good chance (5)

5 Would you advise a friend to come and work for this corporation? Yes (1); No (2)

6 If you had a chance to do the same kind of work for the same pay but in another organization would you stay here? Yes (5);

No (1)

Questions 2 and 3 were reworded; questions 5 and 6 responses were abbreviated, and a question from the original index giving information about the company as a whole was dropped. These modifications did not alter the content, and helped to shorten the lengthy

questionnaire. Scoring by summation of variable scores and division by number of items answered.

Background variables included age, sex, marital status, number of years of education completed. In summary, the research instrument elicited information on these dimensions of worker and setting: 1) Orientation toward work as compared with other roles one plays. 2) Perception of one's responsibilities to the occupational role. 3) Perception of one's power vis-a-vis role senders. 4) Placement of self and office in an organizational milieu. 5) Number and relations of role senders vis-a-vis the focal person. 6) Causes of role stress, job related tensions, satisfactions and dissatisfactions. 7) Relation of communication to role relations. 8) Importance of congruent characteristics of role senders and focal persons for age, sex, and personality.

Interviews were taken in secretaries' offices or lounges at the work site except for 26 interviews in private homes because privacy could not be provided at the office. All respondents were women, though the sample was not set up to exclude male employees.

#### DATA ANALYSIS

A test of the model as shown in Figure 2 was made by multiple regression using the multiple mode procedure. Variables indicating orientation toward change in the work setting were used first as dependent variables, running each with 30 other variables of potential significance reflected in Figure 3. Working back, job satisfaction next became the dependent variable, then job-related tension, then role compatibility stress, each run with variables specified by the model as pertinent independent variables.

Figure 2 indicates the model with path coefficients as determined by results of a regression run sequence working with those variables expected to be most important causally for each level of analysis of the model. The change variables were each run with job satisfaction and all others assumed to be causally prior. Then job satisfaction and role compatibility stress were run with the variables presumed to be causally prior. Listwise deletion of cases was used.

A probability assumption of  $p = .05$  was selected for general application. It is highly

salient for desire to replace one's supervisor ( $p = .001$ ) and for the two transfer variables, "I would like to transfer" ( $p = .05$ ); and "I have transferred" ( $p = .01$ ). Its predictive capability drops considerably for the other variables.

For desire to make changes in the job, the multiple R, or correlation between actual results and those predicted by least squares is  $R^2$ , or the percentage of variation explained by all variables in the equation:  $R^2 = .79$  ( $p = .001$ ).

With comparison of job stress (JS) which does not contribute significantly, and other variables, it turned out that number of years spent in the department by the secretary ( $\beta = .48$ ) and boundary *different* role senders ( $\beta = .47$ ) are better predictors of desire for changes than is JS. For the change variable regarding desire to replace one's supervisor, JS does provide the best indicator (multiple  $R = .85$ ;  $R^2 = .73$ ;  $p = .05$ ). Applying these variables to regression with "I would like to transfer," JS is significant ( $p = .05$ ), but compared to other variables it is not the best predictor ( $\beta = .28$ ). Role compatibility stress (RCS) ( $\beta = .39$ ) and number of years in the department ( $\beta = .28$ ) head the list of useful predictors. For all variables, multiple  $R = .87$  ( $R^2 = .75$ ;  $p = .01$ ).

To predict development of psychophysical symptoms, such as headache and nausea, JS is not significant. One's assessment of personality congruence with supervisor ( $\beta = .77$ ) is best (multiple  $R = .85$ ;  $R^2 = .72$ ;  $p = .05$ ). The last of the change variables is a measure of social role distance in terms of how strongly one wishes others to identify one with the occupational role. Job stress (JS) is not significant. How the secretary evaluated the importance of her work to the office far surpassed other predictors ( $\beta = .98$ ); multiple  $R = .85$ ;  $R^2 = .72$ ;  $p = .05$ ). Evaluating the contributions of job satisfaction as a predictor of change, these data indicate that only for desire to replace one's supervisor does JS surpass other variables in predictive power. While the model supports dissatisfaction as a cause of change, other variables give a better explanation.

If the model is correct, the contribution made by job-related tensions (JRT) should best explain whether one is satisfied. There is a strong negative relation between tension and

satisfaction ( $\beta = -.54$ ). Congruence of personality characteristics is also salient ( $\beta = .38$ ; multiple  $R = .80$ ;  $R^2 = .64$ ;  $p = .01$ ). There is support for the model's specification of tension as a determinant of job satisfaction, but other factors are more indicative.

What leads to job-related tension? If the model is correct, the role compatibility stress index (RCS) should exceed the explanatory power of other variables, but while it is significant ( $\beta = .33$ ), it is surpassed in predictive power by the congruence of personality characteristics ( $\beta = .49$ ), which was also most salient for predicting development of psychophysical symptoms (multiple  $R = .84$ ;  $R^2 = .70$ ;  $p = .001$ ).

The role compatibility stress index (RCS) should be a predictor which channels a number of variables dealing with whole relations into a single predictor of tension, dissatisfaction and change. The variables assumed causally prior by the model should be highly related. But the multiple R for prior variables of .73 ( $R^2 = .54$ ; S.E. = .73;  $p = .05$ ) do not inspire strong confidence in this measure. Two of the best predictors of RCS (Figure 2), congruence of personality of focal person and role senders and importance of the office to the university, are shown in other regressions to be good predictors of other variables, such as desire for change.

The model does not do well in ordering causal antecedents, and alternative explanations must be considered. For that purpose, several other regressions were made using variables which had been shown in earlier cross-tabulation to have significant relations to other variables and to the major indices. The desire to make changes in supervisor behavior ( $\beta = .83$ ), ability of the supervisor to communicate ( $\beta = .57$ ) and work orientation ( $\beta = .46$ ) offered strong causal alternatives.

For the regression of variables presumed causally prior to job-related tension (multiple  $R = .86$ ;  $R^2 = .74$ ;  $p = .001$ ), RCS was the second best predictor among 21 variables ( $\beta = .37$ ). The last regression was to determine contributing variables to role compatibility stress (multiple  $R = .71$ ;  $R^2 = .51$ ;  $p = .01$ ). Assessment of office and university as good work places was most salient ( $\beta = .36$ ). Congruence of personality characteristics of such persons and their supervisors also had

**FIGURE 3: VARIABLES RELATED TO MAJOR FOCI OF THE MODEL BY MULTIPLE REGRESSION****Role Compatibility Stress:**

Office communication  
 Age congruence with supervisor  
 Importance of office to university  
 Supervisor prejudice  
 Personality congruence with supervisor  
 Attitude to office and univesity

**Job Related Stress:**

Congruence of personality characteristics  
 RCS  
 Years at the university  
 Work time perspective, career or otherwise  
 Supervisor communication with focal person  
 Supervisor power  
 Ability to disagree with supervisor  
 Boredom  
 Type of work  
 Chance to change supervisor's role  
 Number of supervisors  
 Supervisor prejudice  
 Age congruence with supervisor  
 Age of focal person

**Job Satisfaction:**

JRT  
 Amount of responsibility  
 Supervisor expertise ranking  
 Personality congruence with supervisor  
 Power congruence with expectations  
 Seek job changes  
 RCS  
 Work time perspective, career or otherwise  
 Work orientation re rest of life  
 Importance of office to university  
 Congruence of skills and responsibilities  
 Decision-making power  
 Number of supervisors  
 Supervisor communication with focal person  
 Anger  
 Boredom  
 Depression  
 Type of work  
 Desire to change supervisor's role  
 Supervisor power

**Change Orientation:****Seek job changes:**

See congruence with supervisor  
 RCS  
 Years in department  
 Years in university  
 Work time perspective, career or otherwise  
 Work orientation re rest of life  
 Importance of work to office  
 Office communication  
 Supervisor understanding  
 Supervisor gives breathing rom  
 Supervisor age  
 Supervisor sex  
 Total number of supervisors  
 Boundary role senders  
 Age congruence with supervisor

**Desire to Replace Supervisor:**

JS  
 Years in department  
 University communication  
 Personality congruence with supervisor

**Would like transfer:**

JS  
 RCS  
 Years in department  
 Congruence of skills and responsibilities  
 Office communication  
 Supervisor understanding

**Have Transferred:**

Sex congruence  
 JS  
 Years in department  
 Years in university  
 Work orientation re rest of life  
 Importance of work to office  
 Importance of work to university  
 Supervisor sex  
 Power congruence with expectations

**Development of psychophysical symptoms:**

Ability to transfer  
 RCS  
 Years in university  
 Importance of work to office  
 Office communication  
 Supervisor communication to focal person  
 Supervisor gives breathing room  
 Total number of supervisors  
 Personality congruence with supervisor  
 Age congruence with supervisor

**Role Distance:**

Age of focal person  
 Work orientation re rest of life  
 Importance of work to office  
 Amount of responsibility  
 Supervisor ability to benefit department  
 Supervisor gives breathing room  
 Supervisor sex  
 Total number of suspervisors  
 Boundary role senders  
 Power congruence with expectations  
 Age congruence with supervisor

explanatory power ( $\beta = .20$ ).

### CONCLUSION

Overlap is apparent among the variables as predictors of other variables as given in Figure 1 of the model. Figure 3 defines salient variables for these major dimensions. Congruence of personality between role senders and focal persons is an important variable throughout. It relates to role compatibility stress (RCS), job-related tension (JRT), and job satisfaction (JS), and desire to replace the supervisor. The number of role senders is important for JRT, JS, seeking changes in the job, taking role distance, and development of psychophysical problems.

Congruence of age is related to RCS, JRT, taking role distance, psychophysical problems and seeking changes in the job.

From change variables it appears that desire for change is related more to one's sense of place at three separate levels than are the other indicators. There is an interpersonal factor in problems of relating to supervisors, and there is more awareness of place within the larger university milieu. From these regression relations, I hypothesize that secretaries broaden their definition of the situation to evaluate their role locus in a larger perspective before commitment to change occurs. Several stress-related variables relate to the desire for change. It is noteworthy that major contributors to tension do not generally move beyond interpersonal relations with supervisors.

Job satisfaction has less predictive capacity for seeking job changes, taking role distance, and development of psychophysical conditions than for other change variables. These find commonalities in variables also associated with stress. While stress is related to tension and job satisfaction, it appears to act independently in terms of some kinds of change.

job-related tension factors and those associated with job satisfaction do not work through tension to determine job satisfaction, but relate to satisfaction regardless of tension.

Tension is strongly associated with problems with the supervisor, and stress with problems related to self, office and university. Job satisfaction seems more akin to tension since its effects relate more to personal and

interpersonal relations than to organizational characteristics of concern. Several psychophysical symptoms including anger, boredom and depression which may indicate stress are salient for job satisfaction.

The most salient factors for satisfaction and dissatisfaction are not identical, nor are they fully regulated by tension development as the original model suggests. Stress appears to have a partially independent relation to desire for change on selected dimensions not affected by job satisfaction or tension. Other variables appear to relate directly to change orientation, particularly those related to stress. Tension contributes to perceived job satisfaction, but only as one dimension. The relations are more complex than indicated in the original model.

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