

A PATH ANALYTIC INVESTIGATION OF JOB-RELATED TENSION: A CASE FOR SALES MANAGEMENT

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This study examined sources and outcomes of job tension and the mediating role of work-family conflict and job tension in linking role stressors with work affective constructs. Based on previous research, a theoretical model was developed and tested for 116 real estate sales agents. The data were analyzed using path analysis. Considerable support was found for the hypotheses. For example, results indicate that 1) higher levels of role conflict and work overload result in higher levels of family conflict; 2) job tension is a mediating construct linking role stressors and work-family conflict with work affective outcomes; 3) job tension has a direct impact on organizational commitment and intent to turnover; and 4) while conflicting work situations lead to job tension, ambiguous working conditions were conducive to job dissatisfaction.

INTRODUCTION

Over the past two decades, there has been an increasing focus on sources and outcomes of job tension experienced by employees. Organization behavior research on role stressors has emphasized three sources of job tension which employees may experience at work: role ambiguity, role conflict, and work overload (e.g., Jackson and Schuler 1985; Shaubroeck, Cotton and Jennings 1989). More recently, however, work-family conflict has been considered as a source of job tension (e.g., Bedeian, Burke and Moffett 1988; Bacharach, Bamberger and Conley 1991; Frone, Russell and Cooper 1992; Higgins and Duxbury 1992). The inclusion of work-family conflict as a source of job tension has been precipitated by such demographic trends in American society as the changing spousal roles, families facing the demands of elder care, single-parent families, a growing number of dual-income families, and more women with children joining the work force (e.g., Burke and Greenglass 1987; Frone, Russell and Barnes 1996; Wilson 1997). The purpose of this paper is to extend our understanding of sources and outcomes of job tension along with the addition of

work-family conflict as a mediating construct between role stressors on the one hand and job tension, job satisfaction, organizational commitment, and intent to turnover on the other.

HYPOTHESES DEVELOPMENT

Predictors of Work-Family Conflict

A number of previous studies have found that work-specific role stressors, such as role conflict and work overload, serve as predictors of work-family conflict (e.g., Bedeian, Burke and Moffett 1988; Bacharach, Bamberger and Conley 1991; Frone, Russell and Cooper 1992; Higgins and Duxbury 1992; MacEwen and Barling 1994; Williams and Alliger 1994). Studies by Bedeian, Burke and Moffett (1988) and by Frone, Russell and Cooper (1992) found that job stressors exert a direct positive influence on work-family conflict. However, both studies combined the measures of role conflict, role ambiguity, and work overload into a job stressor index. Hence, it was not possible to determine independent effects of job stressors on work-family conflict. Higgins and Duxbury (1992) found that role conflict positively affected work-family conflict for dual-career men. Bacharach, Bamberger and Conley (1991) examined independent effects of role conflict and role

overload on work-family conflict and found that they positively impacted work-family conflict. In addition, the hypothesis of a mediated effect of role conflict on work-family conflict via role overload was supported, i.e., the incompatible organizational demands (role conflict) result in higher work overload, which in turn, leads to higher work-family conflict. Accordingly, the following hypothesis concerning predictors of work-family is posited:

H₁: Role stressors (role ambiguity, role conflict and work overload) will have a positive effect on work-family conflict.

Predictors and Outcomes of Job Tension

The predictors of job tension are work-family conflict, role conflict, role overload and job involvement. With regard to job stressors and work-family conflict, we hypothesize that they are directly and positively related to job tension. Previous research lends strong support for this hypothesis (e.g., Bedeian, Burke and Moffett 1988; Bacharach, Bamberger and Conley 1991; Frone Russell and Cooper 1992).

A number of studies have provided strong support for the hypothesis that role conflict and work overload have a direct as well as indirect negative influence (via work-family conflict and job tension) on job satisfaction (e.g., Bacharach, Bamberger and Conley 1991).

As far as outcomes of job tension are concerned, ample evidence exists which links job tension to job dissatisfaction, low job performance, absenteeism, and turnover (e.g., Jackson and Schuler 1985; Shaubroeck et al. 1989). Thus, the following hypotheses were tested:

H₂: Role stressors and work-family conflict will have a positive effect on job tension.

H₃: Role stressors and work-family conflict will have direct and indirect negative effects on job satisfaction and organizational commitment.

H₄: Role stressors and work-family conflict will have direct and indirect positive effects on intent to turnover.

H₅: Job tension will have a negative effect on job satisfaction and direct and indirect negative effects on organizational commitment; job tension will have direct and indirect positive effects on intent to turnover.

H₆: Job satisfaction will have a positive effect on organizational commitment and direct and indirect negative effects on intent to turnover.

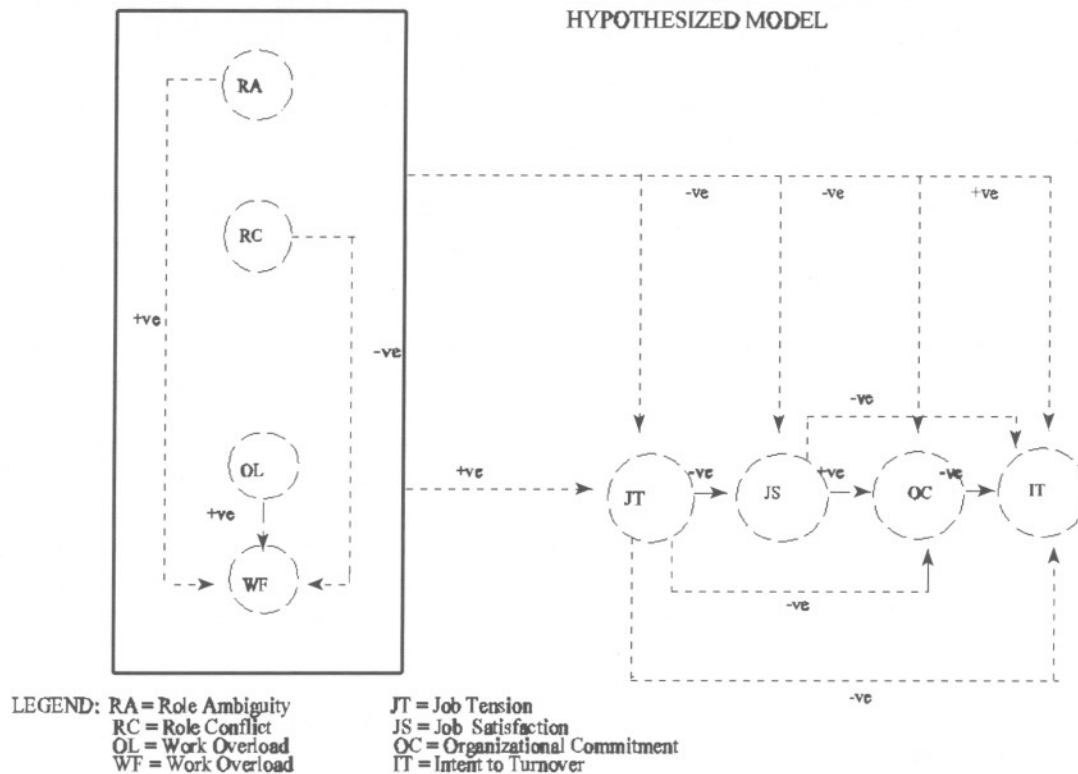
H₇: Organizational commitment will have a negative effect on intent to turnover.

The present research developed a conceptual model of the sources and outcomes of job tension. The model highlights the mediating role of job tension as well as that of work-family conflict in linking role stressors with job satisfaction, organizational commitment and intent to turnover. The model is presented in Figure 1.

METHODOLOGY

Sample and Data Collection

Mail surveys were used to collect data from a random sample of real estate sales agents located in a medium-sized city in the Southwestern region of the United States. The sampling frame consisted of real estate agents listed in the membership roster of a real estate professional association located in the city. A total of 400 questionnaires were mailed to addresses selected from the sampling frame. A total of 125 usable questionnaires were returned, providing a usable response rate of 33 percent. Since one of the objectives of this paper was to examine the role of work-family conflict, only married respondents were included in the data analysis. There were 116 such respondents.

FIGURE 1
HYPOTHESIZED MODEL

Measures

Role ambiguity (RA), role conflict (RC), work overload (OL), and job satisfaction (JS) were operationalized by adapting questions from a study by Quinn and Staines (1978). These measures have been widely used and tested in studies in personal selling performance and are known to have acceptable reliability and validity. Each of these constructs was measured through three items using 5-point Likert type scales. Role ambiguity, role conflict, and work overload were measured with three items each. Eight items, covering various aspects of the job (e.g., pay, promotion, etc.), were used to measure job satisfaction. All items used a 5-point scale (1=Very dissatisfied to 5=Very satisfied).

To measure work-family conflict (WF), three items from Greenhaus and Beutell (1985) were used. Each of these items was based on a 5-point Likert-type scale. Job Tension (JT) was assessed using eight items from the Maslach Burnout Inventory (Maslach and Jackson 1981). Each item utilized a 6-point scale that asked respondents to indicate the number of times they experienced certain job-related tensions (0=Never to 5=Almost every day). Job tension refers primarily to anxiety, burnout, and somatic complaints.

The measurement of organizational commitment (OC) was obtained by adapting a five-item version of the Porter scales (Porter 1978). It should be noted that one of the items was dropped due to its low correlation with the other items. These items

asked the respondents various questions relating to how they felt about working for their present real estate agency.

Intent to turnover (IT) is a measure of an individual's propensity to leave the organization. Two items from Schaubroeck, Cotton and Jennings (1989) were used to measure intent to quit. One item asked the respondents how often they thought of quitting (1=Rarely or never to 5=Very often), and the second item asked how likely they were to look for a new job during the next year (1=Very unlikely to 5=Very likely).

RESULTS

Preliminary Analysis

For each construct in Figure 1, an index was derived by summing items measuring that construct. For example, an index of job tension (JT) was obtained by adding raw scores of each respondent on the eight items measuring job tension. Table 1 presents the zero-order correlations, means, standard deviations, and Cronbach's alpha reliability coefficients of the constructs shown in Figure 1. The overall pattern of correlations tend to support the relationships highlighted in the research hypotheses. The magnitude of reliability coefficients ranged from .60 (work overload) to .89 (work-family conflict).

Testing of Research Hypotheses

To test the research hypotheses, a path analysis approach suggested by Pendhazur (1982) was used. Based on Figure 1, several multiple regression equations were estimated using SPSSX. In total, twenty-five paths were estimated. As recommended by Duncan (1975), path coefficients that were not significant at $p \leq .05$ were deleted from further analysis. Twelve paths were not significant at .05. The revised or trimmed multiple regression equations (without nonsignificant paths) were obtained. The estimated paths from the original and trimmed regression equations are shown in Table 2. Following the procedure recommended by Pendhazur (1982), the trimmed model was tested against the hypothesized model (Figure 1). The calculated Chi-square value was 3.13. The table value of Chi-square

statistic at p-level of .05 with 12 degrees of freedom was 21.03. Since the calculated value was less than the table value, one must not reject the null hypothesis (implying equality between the hypothesized and trimmed models). However, on the basis of parsimony, one must accept the trimmed model. The results of the regression analysis are shown in Table 2.

Hypothesis 1 deals with the predictors of work-family conflict. As proposed, the regression paths from role conflict and work overload to work-family conflict were statistically significant with positive signs; role ambiguity, however, did not significantly predict work-family conflict. It seems that incompatible job demands (e.g., demands from buyers and sellers of properties) and extensive time commitments at work (e.g., showing several houses to customers and negotiating sales contracts) may reduce the amount of time and energy sales agents can devote to family roles. In other words, job related stressors such as role conflict and work overload have a negative spill-over into the family domain, creating work-family conflict. The results from the present study lend empirical support to the models developed by Bacharach, Bamberger and Conley (1991), Frone, Russell and Cooper (1992); Higgins and Duxbury (1992).

Hypothesis 2 proposes that role stressors and work-family conflict will have a positive impact on job tension. Of the three role stressors (role ambiguity, role conflict, and work overload), only role conflict had a significant positive impact on job tension, both directly and indirectly through its impact on work-family conflict. On the other hand, work overload affected job tension indirectly through its impact on work-family conflict. In addition, as hypothesized, the path from work-family conflict to job tension was positive and statistically significant.

In Hypothesis 3, it was proposed that role stressors and work-family conflict would inversely impact job satisfaction and organizational commitment both directly and indirectly. As seen in Table 2, only role ambiguity and work-family conflict had a direct significant effect on job satisfaction. Both role ambiguity and work-family conflict affect job

TABLE 1
Descriptive Statistics, Correlations, and Reliabilities

	IT	OC	JS	JT	RA	RC	OL	WF
IT	<u>.66</u>							
OC	-.52	<u>.86</u>						
JS	-.54	.54	<u>.79</u>					
JT	.43	-.34	-.46	<u>.87</u>				
RA	.20	-.22	-.35	.16	<u>.86</u>			
RC	.02	-.03	-.19	.36	.03	<u>.61</u>		
OL	-.01	.09	-.15	.29	.15	.39	<u>.50</u>	
WF	.21	-.16	-.36	.39	.14	.36	.49	<u>.89</u>
MEAN	4.41	16.98	29.66	12.43	4.83	10.35	9.22	9.13
SD	2.36	2.84	5.32	8.36	2.13	2.64	2.16	3.23

Note: The underlined numbers along the main diagonal represent the Cronbach's alpha reliability coefficients. Decimals are omitted.

Legend: IT = Intent to Turnover OC = Organizational Commitment
 JS = Job Satisfaction JT = Job Tension
 RA = Role Ambiguity RC = Role Conflict
 OL = Work Overload WF = Work-Family Conflict

satisfaction inversely. Work overload affected job satisfaction negatively but only indirectly through work-family conflict and job tension. Similarly, role conflict inversely affected job satisfaction only indirectly through its impact on job tension.

As far as organizational commitment was concerned, role ambiguity, role conflict, and work-family conflict affected it only indirectly through their impact on mediating constructs. For example, role ambiguity had a negative effect on organizational commitment via job satisfaction; both role conflict and work-family conflict had a negative impact on organizational commitment through job tension and job satisfaction. However, the direct path coefficient from work overload to organizational commitment was positive. This finding was contrary to the

hypothesized relationship between work overload and organizational commitment. On the other hand, work overload affected organizational commitment negatively via its effects on such mediating constructs as work-family conflict, job tension, and job satisfaction. Thus, the relationship between work overload and organizational commitment is found to be more complex than suggested in previous research.

Hypothesis 4 proposes that role stressors and work-family conflict result in higher intent to turnover both directly and indirectly via mediating constructs. As seen in Table 2, role stressors and work-family conflict affected intent to turnover only indirectly via work affective outcomes such as job tension, job satisfaction, and organizational commitment.

TABLE 2
Regression Analysis: Full versus Trimmed Model

Dependent Variable	Explanatory Variable	Full Model	R-Square	Trimmed Model	
		Path Coefficient		Path Coefficient	
IT	OC	-.26a	0.42	-.30a	0.41
	JS	-.30a		-.29a	
	JT	.26a		.20a	
	RA	.01ns		-----	
	OL	-.12ns		-----	
	WF	.05ns		-----	
	INTERCEPT	12.71a		11.67a	
OC	JS	0.47	0.35	.49a	0.35
	JT	-.18b		-.18b	
	RA	-.06ns		-----	
	OL	.22b		.22a	
	WF	-.04ns		-----	
	INTERCEPT	37.07a		38.46a	
JS	JT	-.35a	0.33	-.35a	0.33
	RA	-.27a		-.26a	
	RC	-.01ns		-----	
	OL	.11ns		-----	
	WF	-.24a		-.19b	
	INTERCEPT	37.07a		38.46a	
JT	RA	.11ns	0.22	-----	0.21
	RC	.24a		.25a	
	OL	.04ns		-----	
	WF	.27a		.30a	
	INTERCEPT	-5.40ns		-2.78ns	
WF	RA	.07ns	0.28	-----	0.28
	RC	.20b		.20b	
	OL	.40a		.42a	
	INTERCEPT	.57ns		.89ns	

a = Significant at $p \leq .01$ b = Significant at $p \leq .05$ ns = Not Significant at $p \leq .05$

However, none of the direct paths from role stressors and work-family conflict to intent to turnover were statistically significant. These results are in line with previous studies (e.g., Schaubroeck, Cotton and Jennings 1989; Bacharach and Bamberger 1992).

In Hypothesis 5, it was posited that higher levels of job tension will result in lower levels of job satisfaction and organizational commitment and higher levels of intent to turnover, both directly and indirectly through various mediating constructs. The hypothesis is fully confirmed as indicated in Table 2. Both the direct and indirect paths from job tension to job satisfaction, organizational commitment, and intent to turnover were statistically significant with hypothesized signs. These results are consistent with Jackson, Schwab and Schuler 1986; Schaubroeck, Cotton and Jennings 1989; Bacharach and Bamberger 1992.

Examination of Hypotheses 6 and 7 indicates that job satisfaction has a significant positive impact on organizational commitment and both direct and indirect effects on intent to turnover. Again, these relationships support previous research.

DISCUSSION

The results revealed several interesting findings. One, the study highlighted the "spill-over" effect from the work place to the home; that is, higher levels of role conflict and work overload result in higher levels of interference in one's family life. This may be particularly true in case of real estate sales agents who work with potential home buyers and sellers for long or odd work hours. Perceived interference of role stressors with family activities not only leads to job tension but also to dissatisfaction with the job itself.

Two, the study highlighted the role of job tension as a mediating construct linking role stressors and work-family conflict with work affective outcomes such as job satisfaction, organizational commitment, and intent to turnover. Also, unlike previous studies, this investigation indicated that job tension can have a direct impact on organizational commitment and intent to turnover, in addition to its indirect effect via job satisfaction.

Finally, while conflicting work situations (role conflict and work-family conflict) lead to job tension, ambiguous working conditions were conducive to job dissatisfaction. The role of work overload was more complex. It seems that real estate sales agents perceive work overload (e.g., more listings, more contacts with property buyers/sellers, etc.) as an indication that his/her agency is concerned about financial and growth opportunities for its sales agents. Hence, its effect on organizational commitment was positive. However, work overload also interfered with a sales agent's family activities which, in turn, was perceived negatively, thus leading to higher levels of job dissatisfaction and lower levels of loyalty to the agency.

LIMITATIONS AND FUTURE RESEARCH

The findings presented cannot be offered without certain caveats. First, although the research hypotheses indicate putative causes and effects, one must recognize that the use of cross-sectional, correlational data weaken any causal inferences. Second, because the data were based on self-reports from the same questionnaire, the results are open to criticisms of method bias. A third limitation is the sample size, the population of interest, and the response rate. Clearly, the study would have more validity with a larger sample size. Both response rate and the population of interest limit the generalizability of the results to other populations.

Further research can extend the present study in many ways. Future modeling efforts on work-family conflict and job tension must include a wider variety of constructs to be examined in a multivariate context. Possible variables include: social support (supervisory, peer, and family), leadership styles, gender role, work values, quality and quantity of family involvement, and personality factors such as Type A behavior and negative affectivity. Future research should examine both mediating and moderating effects of these constructs on sources and outcomes of work-family conflict and job tension. Future research should also investigate the effects of family activities interfering with work activities. In addition, work-family conflict and job tension should be examined in light

of a broader set of outcomes such as job performance, absenteeism, actual turnover, and health-related problems. Finally, future research should employ longitudinal survey designs to allow stronger inferences concerning cause and effect relationships vis-a-vis sources and outcomes of work-family conflict and job tension.

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