



Moderating effects of gender and organizational level between role stress and job satisfaction among hotel employees

BeomCheol Peter Kim^{*}, Suzanne K. Murrmann, Gyumin Lee

Virginia Polytechnic Institute and State University, 362 Wallace Hall, Blacksburg, VA 24061, USA

ARTICLE INFO

Keywords:

Role stress
Role conflict
Role ambiguity
Job satisfaction
Gender
Organizational level

ABSTRACT

This study investigates the moderating roles of gender and organization level in the relationship between role stress and job satisfaction for hotel employees. A survey instrument that included measures of job satisfaction, role stress (conflict and ambiguity) and demographic information was used to collect information from hotel employees in Republic of Korea. Data from 320 respondents, representing a 64% of response rate, were analyzed. Findings show that the effect of role stress on job satisfaction is significantly stronger for female employees and supervisory employees than male employees and non-supervisory employees. Research implications and suggestions for future research are provided.

© 2009-Elsevier Ltd. All rights reserved.

1. Introduction

In the contemporary hospitality industry where competition among firms is severe, customers' expectations for service have increased resulting in higher employee work expectations. In addition, employees in service organizations engage in a variety of service encounters with customers in their role as boundary spanners (Brownell, 1990) and are required to deal with uncertainty on the job. Consequently, it is inevitable that these employees experience work-related stress in their work environment.

Since the seminal study on organizational stress in role dynamics (Kahn et al., 1964), role stress has attained substantial research attention (e.g., Brown and Peterson, 1993; Jackson and Schuler, 1985; Orqvist and Wincent, 2006). Conceptually, role stress is thought to be derived from incompatible expectations (role conflict) as well as from vague expectations (role ambiguity) for individuals working in an organization. Numerous studies using role theory have demonstrated counterproductive consequences of role stress, which include low satisfaction, high turnover intentions, low commitment and poor performance (e.g., Orqvist and Wincent, 2006). The issue of role stress is particularly important in the hospitality industry where employees often take on multiple roles, often in conflict, as boundary spanners of both the company's and consumer's interests. They are often exposed to work situations without a clear standard and

asked to perform operational duties in dynamic circumstances with a variety of customers.

Job satisfaction has been one of the most subsequent job outcomes affected by role stress. Some researchers argued that role stress (role conflict/ambiguity) has stronger effects on job satisfaction for certain types of employees than others. Gender differences have been used as a moderator in the relationship between role stress and job satisfaction (Babin and Boles, 1998; Boles et al., 2003; Fogarty, 1996; Karatepe et al., 2006). In addition to gender differences, organizational level (managerial versus lower level position) was considered to have a moderating function in the relationship between role conflict/ambiguity and job satisfaction in a cumulative research (Fisher and Gitelson, 1983).

However, limited are understandings of the effect of these moderators on the relationship between role stress and employee job satisfaction. In addition, few efforts have been made to investigate these phenomena in the hospitality context where employees are frequently exposed to the roles stress. Building on and extending prior and recent work (Babin and Boles, 1998; Karatepe et al., 2006), the purpose of this study is to empirically examine the moderating roles of gender and organizational level in the relationships between role stressors and job satisfaction among hotel employees.

The following section reviews the literature on role stress and its detrimental effect on employees' job satisfaction, as well as the moderating effects of gender and organizational level on the role stress-job satisfaction relationship. The study's research hypotheses have also been included in this section. A description of the research methodology and empirical findings of the study are then

^{*} Corresponding author. Tel.: +1 540 922 3630; fax: +1 540 231 8313.
E-mail address: bckim@vt.edu (B.P. Kim).

provided. The final section offers a discussion of implications for future research and management practices.

2. Literature review and hypotheses

Stress in the workplace has been of growing concern for researchers and practitioners alike. Considering the amount of time that is spent and the fact that financial security and career success are contingent on work performance, the workplace may be a major source of stress for individuals (Faulkner and Patiar, 1997). Managing work-related stress is important since counter-productive consequences (e.g., job dissatisfaction, absenteeism) may occur when it remains unresolved. Kahn et al. (1964) conceptualized role stress as a composite construct comprised of two major role stressors: role conflict and role ambiguity. Role conflict is "the degree of incongruity or incompatibility of expectations associated with a role (Miles and Perreault, 1976, p. 2), while role ambiguity reflects an employee's uncertainty about others' expectation of the employee's job due to lack of information (Behrman and Perreault, 1984). The issue of role stress is of particular importance in the hospitality industry where employees often take on multiple roles, often in conflict, as boundary spanners of both the company's and consumer's expectations. Besides, hospitality employees are not only exposed to pressure of being requested to respond promptly (Dann, 1990), but also "subject to a mass of competing, often contradictory or conflicting demands and expectations from a multiplicity of sources" (Hales and Nightingale, 1986, p. 10). Although the issue of work-related stress seems to be overlooked in the hospitality literature, several studies have been documented to heighten its managerial implications.

A majority of studies pointed out the necessity of management interventions to control stress levels of employees. Brymer et al. (1991) reported that job-related stressors were associated with psychological, physiological and behavioral strains among 409 U.S. hotel managers, and their coping responses did not seem to be effective in lessening the strain. They argued that implementing stress management programs (e.g., empowerment) is necessary to lower levels of stress. Likewise, Zohar (1994) suggested that adopting empowerment programs may alleviate stress levels of Canadian hotel managers and employees in that role ambiguity and lack of decision latitude constituted the key stressors. In the context of restaurant industry, Ross and Boles (1994) called for appropriate management practices (e.g., work involvement, supervisory support) to reduce role conflict and role ambiguity both which have an adverse effect on job satisfaction, while Wetzels et al. (1999) contended that empowering service employees by giving them authority and responsibility decreases their sense of role stress as well as enhances job satisfaction. Recently, Gill et al. (2006) argued that transformational-leadership helped alleviate job stress perceived by Canadian hospitality employees (e.g., hotels, motels, restaurants, and pubs).

2.1. Role stress and job satisfaction

A common theme of role stress research is to identify its consequences which include job satisfaction (Babin and Boles, 1998; Hartline and Ferrell, 1996; Ross and Boles, 1994; Schwepker and Hartline, 2005), job performance (Babin and Boles, 1998), service quality (Hartline and Ferrell, 1996; Schwepker and Hartline, 2005) and turnover intent (Babin and Boles, 1998). Among these consequences of role stress, job satisfaction has been most frequently examined in the hospitality literature. For instance, Ross and Boles (1994) demonstrated detrimental effects of role conflict and role ambiguity on job satisfaction of tipped food servers at moderately priced restaurants. A negative relation of

role ambiguity with job satisfaction was also found among customer contact employees in nine hotel chains (Hartline and Ferrell, 1996). More recently, Mukherjee and Malhotra (2006) found out a significant positive effect of role clarity, a reverse construct of role ambiguity, on job satisfaction among employees of in-bound telephone call centers in United Kingdom.

In addition, meta-analytic studies have been conducted to examine the relationship between role stress (conflict/ambiguity) and job satisfaction (Brown and Peterson, 1993; Jackson and Schuler, 1985; Orqvist and Wincent, 2006; Tubre and Collins, 2000). They revealed that both role conflict and ambiguity have negative influences on job satisfaction. In particular, Jackson and Schuler (1985) identified 37 empirical studies investigating the relationship between role conflict and job satisfaction ($\rho = -.48$, S.D. $\rho = .13$), and 56 on the role ambiguity-job satisfaction relationship ($\rho = -.46$, S.D. $\rho = .19$). Given this, the following hypotheses were developed.

H₁₋₁. Role conflict has a negative effect on job satisfaction among the hotel employees.

H₁₋₂. Role ambiguity has a negative effect on job satisfaction among the hotel employees.

Whereas most researchers have been interested in the two main components of role stress, and their correlates, some scholars have investigated role stress, a composite construct comprised of role conflict and ambiguity with its consequences (e.g., Leigh et al., 1988; Lusch and Jaworski, 1991). As Edwards and Bagozzi (2000) discussed, there is a higher-order construct, (e.g., socio-economic status), role stress in this case, which is not directly measured but determined by a set of dimensions. This higher-order construct is defined as a formative construct, whereas other constructs that stem from a specific definition are considered reflective constructs (Edwards and Bagozzi, 2000). Leigh et al. (1988) adopted a regression analysis of job attitudes influenced by the confluence of two components (conflict and ambiguity) as well as by the isolated components of role stress. Besides an acceptable internal consistency for each sub-dimension of role stress, they reported the composite construct, role stress, also had a good reliability coefficient (Leigh et al., 1988). Therefore, an additional hypothesis was developed using role stress, the composite construct.

H₁₋₃. Role stress has a negative effect on job satisfaction among the hotel employees.

2.2. Moderating role of gender

Researchers have argued that gender differences moderate the effects of role stress on employee behavior (Babin and Boles, 1998; Boles et al., 2003; Fogarty, 1996; Karatepe et al., 2006). It is theorized that females possess a socializing-oriented *communal* behavior while males demonstrate a task-oriented *agentic* behavior (Eagly, 1987). Stated differently, women tend to be satisfied with their job when they can interact with others who understand their roles in the organization, while men tend to be satisfied when their performance itself is valued by others. As a result, females are more likely to experience dissatisfaction with their job than males unless role expectations are clearly specified to them. Besides, there are differences between males and females in terms of coping stress. According to Ptacek et al. (1994), stereotypes of females are portrayed as emotional, supportive and dependent, while those of males as independent, instrumental and rational. Research demonstrated that females tend to use behavioral coping (e.g., taking direct and positive actions to deal with problems) more actively than males (Fielden and Davidson, 2001), and women are more likely than men to use direct action

coping to deal with stress by working longer and harder (Gianakos, 2001).

Karatepe et al. (2006), in their study of the banking industry, demonstrated a significant moderating effect of gender differences on the relationship between role conflict and job satisfaction, but fail to show its moderating role between role ambiguity and job satisfaction. According to them and other researchers, inconsistent findings may occur because of cultural differences, and more efforts should be made to further investigate these constructs. Fogarty (1996) reported that the effects of both role conflict and role ambiguity have a significant negative influence on job satisfaction among female auditors as well as male auditors from the public accounting firms. Showing some coefficient differences between role conflict-job satisfaction and role ambiguity-job satisfaction, he surmised that the effect of role ambiguity might have a stronger effect on job satisfaction among female employees. Boles et al. (2003) however, found conflicting results when testing the moderating effect of gender differences on the relationship between role stress and different facets of job satisfaction with a sample consisting of business-to-business salespersons. Specifically, they found negative relationships between both role conflict and role ambiguity and some dimensions of job satisfaction (e.g., satisfaction with work, satisfaction with coworkers) among male salespeople but not among female employees (Boles et al., 2003). Though research results have been mixed, the following hypotheses coincide with common thinking about the moderating role of gender.

H₂₋₁. The negative effects of role conflict on job satisfaction are significantly stronger among female employees than among male employees.

H₂₋₂. The negative effects of role ambiguity on job satisfaction are significantly stronger among female employees than among male employees.

H₂₋₃. The negative effects of role stress on job satisfaction are significantly stronger among female employees than among male employees.

2.3. Moderating role of organizational level

As with gender differences, researchers have reported inconsistent results among studies investigating a moderating role of

organizational rank in the relationships between role stress and employee behavioral outcomes. Early empirical work by Hamner and Tosi (1974) argued that role ambiguity had a deteriorating effect on job satisfaction but role conflict was not associated with job dissatisfaction among managerial employees. They postulated that role conflict did not affect job satisfaction among managers since they consider it as one of the inevitable by-products of carrying out their job duties. Managers may have a higher standard regarding their role than other non-managerial workers. However, using meta-analysis, Fisher and Gitelson (1983) showed a stronger negative relationship between role conflict and job satisfaction in management jobs than in lower level jobs and a stronger negative association between role ambiguity and job satisfaction in lower level jobs than in management jobs. One explanation put forth for this moderating role is that employees in higher positions tend to manage their role ambiguity well since they have affluent resources (e.g., power, autonomy, decision latitude) to cope with unclear situations, while the other explanation is that the adverse effect of role conflict may be more salient for managers since they have higher expectations on their work-role involvement.

Considering unique characteristics of organizational context, in the hospitality industry where managers frequently interact with customers as boundary spanners, role stress may have a more serious impact on job satisfaction among managers when compared to similar managers in other industries. They do not merely direct their employees who interact with customers. While performing their job, they are also required to interact with different kinds of customers: guests, subordinates, co-managers, and bosses. In addition, according to Hales and Nightingale (1986), hospitality managers perceived themselves to have unclear and too diversified role expectations. Brymer et al. (1991) alarmed that most hotel managers were stressed out and experienced a variety of strains as a consequence of perceived work-related stressors. Zohar (1994), in particular, demonstrated that mean scores of workplace stressors (role conflict/ambiguity, workload and lack of decision latitude) were higher for managerial employees than for line employees in Canadian hotels. Consequently, role stress can play a key role in deteriorating job satisfaction for supervisory employees in the hotel industry. Therefore, the following hypotheses have been developed.

H₃₋₁. The negative effects of role conflict on job satisfaction are significantly stronger among supervisory employees than among non-supervisory employees.

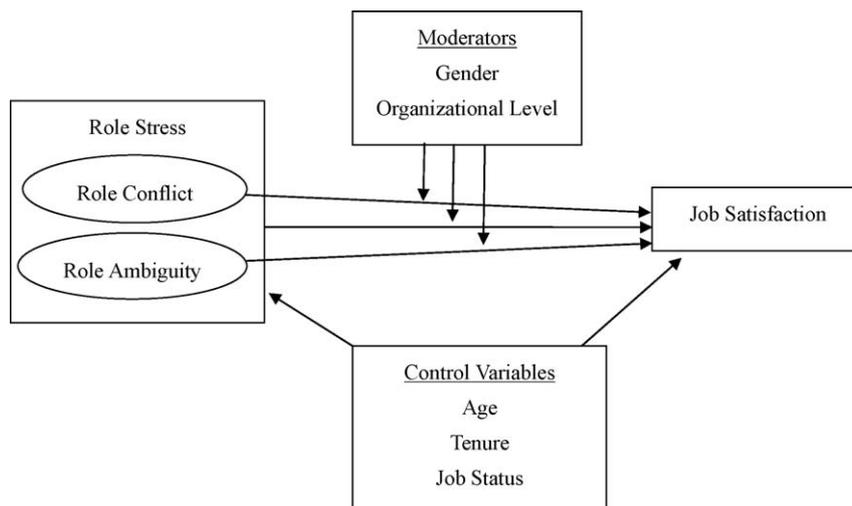


Fig. 1. Conceptual framework.

H₃₋₂. The negative effects of role ambiguity on job satisfaction are significantly stronger among supervisory employees than among non-supervisory employees.

H₃₋₃. The negative effects of role stress on job satisfaction are significantly stronger among supervisory employees than among non-supervisory employees.

Fig. 1 illustrates the study's conceptual framework: both gender and organizational level moderate the negative effects of role stress (role conflict/ambiguity) on job satisfaction perceived by hotel employees.

3. Methods

3.1. Sample and procedures

Customer contact employees working in full service hotels in Seoul, Republic of Korea comprised the population for this study. These are properties with more than 250 bedrooms that provide a comprehensive range of services such as restaurants, banquet, and fitness facilities. Eight properties agreed to ask their employees and middle-level managers to participate in this study voluntarily during their department meetings. The employee group included both supervisory and non-supervisory employees. Participants were asked to complete a self-reported questionnaire distributed by senior managers.

A cover letter explaining the purpose of this research was attached, assuring participants of the confidentiality of their responses, and instructing them to complete the questions, seal and return the completed questionnaires using an attached return envelope. In addition, a one dollar-valued lottery was given to each employee who completed and returned the questionnaire in order to improve the response rate. Questionnaires were distributed to 350 non-supervisory employees with 232 usable questionnaires returned, and 150 supervisory employees with 88 usable questionnaires were returned, in sum yielding a response rate of 64%.

3.2. Measures

Based on a review of the literature role stress was measured using the 14-item scale developed by Rizzo et al. (1970). The use of this scale measuring its subdimensions of role conflict and role ambiguity has an extensive history and has been employed by numerous organizational researchers (Jackson and Schuler, 1985). Responses were measured using a 6-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (6). A composite construct, role stress showed an acceptable internal consistency (Cronbach $\alpha = .78$). Job satisfaction was measured using the Job Satisfaction Survey (JSS) developed by Spector (1985). This 36-item scale has been employed in numerous behavioral studies (Blau, 1999; Bruck et al., 2002; Takalkar and Coovert, 1994). Responses were measured using a 6-point Likert scale ranging from "very uncertain" (1) to "very certain" (6) and demonstrated an acceptable internal consistency (Cronbach's $\alpha = .83$).

Gender and organizational level were employed as moderating variables in the relationship between role stress and job satisfaction. Respondents were asked to indicate their gender and organizational position (employee, supervisor, assistant manager or manager). These variables were then dummy-coded for analysis; 0 indicating female and non-supervisory employees; 1 indicating male and supervisory/management employees. Age, tenure, and employment status were employed as control variables. These variables were selected because they have been shown to affect the study variables significantly and confound the relationships in the model. In particular, Jackson and Schuler

(1985) reported significant detrimental relationships between both age and tenure, and role ambiguity. Similarly, Acker (2004), by using age and employment status as control variables for the relationship between role stress and job satisfaction, reported significant correlations among these variables for both. Respondent were asked to report their age, tenure in the current hotel and employment status (regular full-time or temporary part-time). Temporary part-time employees were dummy-coded as zero and regular full-time employees coded as one.

In order to maintain equivalence, a survey instrument which is translated from one language into another is required be back-translated into the original language (Adler, 1983; Sekaran, 1983). According to Adler (1983), a proper back-translation requires the use of individuals who are familiar with both languages and cultures, and the usage of the concepts and their meanings in the both countries. Therefore, the survey instrument was translated and back-translated from English to Korean by researchers fluent in both languages. In addition, it was administered to a pilot sample of hotel employees for verification.

3.3. Data analyses

The confirmatory factor analysis was performed, using LISREL (Version 8.30), in order to verify two underlying dimensions of role stress, role ambiguity and role conflict, and assess the salience of these constructs. Individual's role stress and job satisfaction scores were calculated by averaging the response items. Pearson correlation analysis was also performed to identify the relationships between the independent variables, the moderating variables, the control variables, and the dependent variable. In order to test the research hypotheses, a series of hierarchical multiple regressions were performed. The Statistical Package for Social Science (SPSS) version 13th was employed to analyze the data for this study.

4. Results

4.1. Profile of sample

The 320 respondents were composed of 165 men (51.6%) and 153 women (47.8%), with a mean age of 31.0 years (see Table 1). They had been working for an average of 6.1 years in the current hotel, with 45.9% having been with their current organization for more than 5 years. Twenty-eight percent ($N = 88$) of respondents indicated that they held a supervisory (or managerial) position and 72% ($N = 232$) a non-supervisory position. Regarding the employment status, almost 72% of respondents ($N = 231$) were regular employee. Most respondents belonged to restaurant and room departments, consisting of 55.6% ($N = 178$) and 21.2% ($N = 68$), respectively.

4.2. Confirmatory factor analysis for role stress

The confirmatory factor analysis was performed to verify two underlying dimensions of role stress: role ambiguity and role conflict. While all measurement items showed significant loadings, the initial measurement model yielded a marginal goodness of fit to the data, $\chi^2 (75, N = 311) = 208.02$, RMSEA = 0.076, GFI = 0.91, AGFI = 0.88, NFI = 0.88, and CFI = 0.92. However, the modification indices reported that one measurement item of role conflict showed significant cross-loading on role ambiguity. By deleting that item, the goodness of fit of the measurement model was significantly improved, $\chi^2 (63, N = 311) = 139.30$, RMSEA = 0.062, GFI = 0.94, AGFI = 0.91, NFI = 0.92, and CFI = 0.92. As shown in Table 2, all measurement items showed statistical significant loadings at the alpha level of .001. Cronbach's α and composite

Table 1
Profile of respondents.

	Total (N = 320)	
	N	Percentage (%)
Gender		
Males	165	51.6
Females	153	47.8
No response	2	.6
Age		
20 years old and below	3	.9
21–30 years old	171	53.4
31–40 years old	104	32.5
41–50 years old	23	7.2
51 years old and above	4	1.3
No response	15	4.7
Tenure		
5 years and below	173	54.1
6–10 years	80	25.0
11–15 years	46	14.4
16 years and above	15	4.6
No response	6	1.9
Organizational level		
Employee	232	72.4
Supervisor	88	27.6
Employment status		
Regular	231	72.2
Temporary	88	27.5
No response	1	.3
Department		
Room	68	21.2
Food and beverage	178	55.6
Administration	13	4.1
Sales/promotion	38	11.9
Others	20	6.3
No response	3	.9

reliability (CR) of each measurement scale exceeded the minimum requirement of 0.70, indicating its internal consistency and unidimensionality to corresponding construct, respectively.

4.3. Descriptive statistics and correlations among variables

Means, standard deviations, reliabilities and correlations for the study's variables are presented in Table 3. The negative relationships of job satisfaction with role conflict ($r = -.21, p < .01$), role ambiguity ($r = -.25, p < .01$) and role stress ($r = -.33, p < .01$) were found to support the study's first hypotheses (H_{1-1}, H_{1-2} , and H_{1-3}). Gender exhibited significant relationships with some variables. Particularly, its positive relationships with role conflict ($r = .23, p < .01$) and role stress ($r = .11, p < .05$) indicate that male employees reported higher scores on role conflict and role stress

Table 3
Means, standard deviations, reliabilities and correlations.

	Mean	S.D.	1	2	3	4	5	6	7	8
1. Role conflict	3.12	.91	(.80)							
2. Role ambiguity	2.71	.92	-.010	(.88)						
3. Role stress	2.92	.64	.70**	.71**	(.78)					
4. Job satisfaction	3.51	.46	-.21**	-.25**	-.33**	(.83)				
5. Gender	.49	.50	.23**	-.07	.11*	.08				
6. Organizational level	.27	.45	.01	-.23**	-.16**	.17**	.23**			
7. Age	30.97	6.56	-.21**	-.19**	-.28**	.02	.12*	.39**		
8. Employee status	.71	.45	-.10	.11	.01	.10	.17**	.27**	.19**	
9. Tenure	6.11	4.59	-.02	-.17**	-.14*	.06	.12*	.56**	.64**	.48**

Note: Coefficient alphas in parenthesis.

* $p < .05$.

** $p < .01$.

Table 2
Internal consistency and properties of the measurement model.

Constructs and indicators	Completely standardized loading	t-value	Cronbach's α	Composite reliability (CR)
Role ambiguity			.88	.89
RA 1	.70	–		
RA 2	.82	13.12		
RA 3	.77	12.35		
RA 4	.84	13.37		
RA 5	.71	11.45		
RA 6	.68	11.03		
Role conflict			.80	.81
RC 1	.38	–		
RC 3	.67	5.95		
RC 4	.59	5.69		
RC 5	.82	6.22		
RC 6	.74	6.11		
RC 7	.61	5.77		
RC 8	.50	5.35		

than their counterparts. Organizational level also demonstrated significant relationships with other variables. Its negative relationships with role ambiguity ($r = -.23, p < .01$) and role stress ($r = -.16, p < .01$) indicate that non-supervisory employees tend to report higher levels of role ambiguity and role stress than supervisory employees. In addition, the positive relationship between organizational level and job satisfaction ($r = .17, p < .01$) suggests that supervisory employees are more likely to be satisfied with their job than non-supervisory employees. In addition, negative relationships between both age and tenure and role stress variables implies that younger employees with less job tenure seem to perceive higher levels of role stress.

4.4. Hypotheses test for moderators

Table 4 provides the results of hierarchical regression analyses that test the hypotheses for the moderating role of gender between role stress and its components (role conflict and role ambiguity), and job satisfaction. Step 2 of the role conflict regression model shows that role conflict and gender were significant predictors of job satisfaction ($\beta = -.27, p < .01$; $\beta = .19, p < 0.1$ respectively), together explaining 7% of the variance after controlling for the variables of age, tenure and employment status. When an interaction term (role conflict \times gender) was entered into step 3, after partialing out the effects of control variables as well as role conflict and gender, the interaction variable had a significant influence on job satisfaction ($\beta = -.21, p < .05$) adding 2% to the explained variance. Therefore, H_{2-1} was supported.

As seen in the step 2 of the role ambiguity model, role ambiguity had a significant detrimental effect on job satisfaction ($\beta = -.23,$

Table 4
Hierarchical Regression analysis for moderating role of gender.

	Role conflict			Role ambiguity			Role stress		
	Step			Step			Step		
	1	2	3	1	2	3	1	2	3
Beta									
Age	-.08	-.18*	-.13	-.08	-.11	-.11	-.08	.20**	-.18*
Job status	.19**	.19**	.18**	.19**	.22**	.21**	.19**	.20**	.19**
Tenure	.20*	.23**	.21*	.20*	.18*	.18*	.20*	.21*	.20*
Role variables		-.27**	-.11		-.23**	-.19*		-.35**	-.23**
Gender		.19**	.24**		.11	.08		.17**	.17**
Role variable × gender			-.21*			-.07			-.17*
R ²	.03	.10	.12	.03	.09	.10	.03	.16	.17
ΔR ²		.07**	.02*		.06**	.003		.13**	.014*
ΔF	3.17	12.41**	5.46*	3.17	10.87**	.89	3.17	22.72**	5.20*
df	3, 309	2, 307	1, 306	3, 309	2, 307	1, 306	3, 309	2, 307	1, 306

Note: Dependent variable = job satisfaction.

* $p < .05$.

** $p < .01$.

$p < .01$) but gender was not a significant antecedent of job satisfaction ($\beta = .11, p > .05$). In addition, the interaction variable (role ambiguity × gender) in step 3 was not a significant predictor of job satisfaction ($\beta = -.07, p > .05$). Thus, H₂₋₂ was not supported. In step 2 of the final role stress model, role stress and gender were significant antecedents of job satisfaction ($\beta = -.35, p < .01$; $\beta = .17, p < .01$ respectively) together explaining 13% of the variance after controlling for age, tenure and employment status. The interaction term (role stress × gender) that was entered into step 3 had a significant impact on job satisfaction ($\beta = -.17, p < .05$) adding 1.4% to the explained variance. Hence, H₂₋₃ was supported.

Table 5 reports the results of hierarchical regression analyses used to test the hypotheses for the moderating effects of organizational level between role stress and its two components (role conflict and role ambiguity) on job satisfaction. The overall results of this analysis shows that role conflict, role stress and organizational level have a significantly detrimental effect on job satisfaction after controlling for age, tenure and employment status, but role ambiguity was not a significant predictor of job satisfaction.

The interaction terms (role conflict × organizational level; role ambiguity × organizational level; role stress × organizational level) were entered into step 3 for each regression model. As seen in step 3 of the analyses for role conflict and stress, the two interaction variables (role conflict × organizational level; role

stress × organizational level) had significant detrimental influences on job satisfaction ($\beta = -.38, p < .05$; $\beta = -.35, p < .05$ respectively) with significant increments in R² ($\Delta R^2 = .02, p < .05$; $\Delta R^2 = .02, p < .05$ respectively). Therefore, H₃₋₁ and H₃₋₃ were supported. On the other hand, opposed to our expectations, the interaction variable (role ambiguity × organizational level) was not a significant predictor of job satisfaction ($\beta = -.27, p > .05$). Hence, H₃₋₂ was not supported.

5. Discussion

Overall, this research provides empirical evidence for the moderating roles of gender and organizational level in the role stress–job satisfaction relationship. Although male employees reported higher levels of role stress and role conflict, it is for female employees that there are stronger detrimental effects of role stress and role conflict on job satisfaction. These results are similar to those of a previous study (Karatepe et al., 2006) which also found that gender moderates the role conflict–job satisfaction relationship but is not a moderator for the role ambiguity–job satisfaction relationship. A distinction from Karatepe et al.'s is that the current study presents a composite variable, role stress, and provides empirical support for the more salient detrimental effect of role stress on job satisfaction for females. This implies that role stress mainly caused by incompatible expectations would be a more important issue for female workers thought to develop emotional,

Table 5
Hierarchical regression analysis for moderating role of organizational level.

	Role conflict			Role ambiguity			Role stress		
	Step			Step			Step		
	1	2	3	1	2	3	1	2	3
Beta									
Age	-.08	-.17*	-.15*	-.08	-.11	-.11	-.08	-.19*	-.18*
Job status	.18**	.16*	.18**	.18**	.19**	.19**	.18**	.17**	.18**
Tenure	.21*	.13	.14	.21*	.16	.12	.21*	.13	.14
Role variables		-.23**	.13		-.22**	.02		-.32**	.01
Organizational level		.20**	.26**		.14*	.08		.16*	.13*
Role variables × organizational level			-.38*			-.27			-.35*
R ²	.03	.10	.12	.03	.10	.11	.03	.10	.16
ΔR ²		.07**	.02*		.07**	.01		.12**	.013*
ΔF	3.19	11.58**	4.78*	3.19	11.01**	1.92	3.19	20.32**	4.55*
df	3, 301	2, 299	1, 298	3, 301	2, 299	1, 298	3, 301	2, 299	1, 298

Note: Dependent variable = job satisfaction.

* $p < .05$.

** $p < .01$.

supportive and dependent relationships with others (Ptacek et al., 1994). On the other hand, it seems that both males and females are equally concerned with role clarity, reverse construct of role ambiguity, given that gender differences failed to show a moderating effect on the relationship between role ambiguity and job satisfaction.

It was also revealed that organizational level moderates the role stress-job satisfaction relationship. Importantly, this study demonstrates that a moderating role of organizational level is, as hypothesized, different from previous studies. Despite the fact that past researchers (e.g., Beehr and Drexler, 1986; Westman, 1992) argued that role stress has a more serious impact on job satisfaction for lower level employees than for managerial employees, this study demonstrates the reverse. The results show that for the sample of hotel employees there is a stronger effect of role stress on job satisfaction for managerial employees. Given the nature of the hotel industry, where management personnel must frequently provide services for customers and have continuous interactions with different departments, it is not surprising that the impact of role stress on job satisfaction is stronger for supervisory employees than for non-supervisory employees.

It is also interesting to note that organizational level was not a significant moderator for the role ambiguity-job satisfaction relationship. Even though there is a significant negative association between role ambiguity and organizational level ($r = -.23, p < .01$), implying that non-supervisory employees are more likely to experience role ambiguity, the effect of role ambiguity on job satisfaction is not different regardless of an employee's position. One possible explanation could be that unlike non-supervisory workers managers, embracing the notion of a higher standard for their job, may attribute role ambiguity not to external factors (such as the nature of the job, or others in the organization) but to their own ability to clarify vague expectations. And, supervisors may be more likely than their subordinates to ascribe role conflict to external factors rather than their capabilities to handle incompatible expectations for their roles. This could be why the results of this study demonstrate that the effects of role conflict on job satisfaction were more critical among managerial employees than frontline personnel.

5.1. Managerial implications

Hospitality professionals can benefit from the findings of this study. We found that role stress and role conflict negatively affected the job satisfaction of female employees. This was not the case for male employees even though they reported higher levels of role stress and role conflict. These findings suggest that managers may need to consider gender differences when implementing HR techniques such as employee empowerment. Previous studies have consistently argued that employee empowerment is one of the most effective methods for lowering role stress by delegating authority to frontline employees (Brymer et al., 1991; Wetzels et al., 1999; Zohar, 1994). Effectively empowered employees can more easily solve problems when first reported by a customer.

As noted earlier in the review of the literature, females are more likely to seek interaction with others in the work environment (Eagly, 1987). For female employees to be empowered, a close communication system with their supervisors must be established (Karatepe et al., 2006). While communication networks are important for all employees regardless of gender, managers need to be especially open to accepting feedback from their female subordinates. On the other hand, male employees are more likely to seek autonomy or decision latitude in the work setting, since their stereotypes are depicted as independent, instrumental and rational (Ptacek et al., 1994). Therefore, when empowering male

employees, one should reexamine if these employees genuinely have no conflict with others in the workplace. Although males report higher levels of role stress, they may not report the negative influences of role stress in an effort to gain additional responsibility. However, this may result in counterproductive work outcomes such as low performance.

This study also has practical implications regarding a serious effect of role stress, and more specifically role conflict among supervisors and middle-level managers. In the hotel industry, these employees have a diverse group of customers. Their external customers include both individual and corporate clients. This is particularly true in large full service hotels providing conference services. They also serve a number of internal customers including individuals in other units and/or departments, their suppliers and their subordinates. Therefore, they often confront situations requiring them to satisfy the conflicting expectations of diverse constituencies.

For example, when middle managers are required by their boss to act in the ways that contradict standard organizational policies and procedures by which they train their subordinates, they often encounter frustration. For instance, in the hotel industry where inter-departmental collaboration frequently occurs (e.g., communication between front desk and F/B outlets upon check-out), middle managers are frequently forced to sacrifice their own departmental policies and procedures when working with other departments, particularly when the head of those departments hold a higher organizational position. It is also possible for them to experience excessive role conflict when dealing with customer complaints. When hotel managers handle customer complaints which were not resolved by their subordinates, they are frequently frustrated if they find themselves to have limited options to solve the problem.

Managerial support and consideration should be given to middle-level managers so that they can avoid excessive role stress in the organization. As Weatherly and Tansik (1993) pointed out, efforts should be made to lessen role stress by reorganizing jobs and developing managerial skills for line managers. The use of inter-departmental workshops that promote active communication between departments, and cross-functional training for both non-supervisory and supervisory employees may help to alleviate the detrimental effect of role stress perceived by supervisory employees. As early studies (e.g., Brymer et al., 1991; Zohar, 1994) argued, a close attention should be paid to the issue of managerial stress, since unsatisfied managers may easily quit the job and managerial turnover may cause much serious problems on businesses (Ghiselli et al., 2001).

5.2. Limitations and future research

It is acknowledged that this study has limitations which open up the opportunity for additional studies. First, the generalizability of the findings is restricted since the study employed a sample of employees of the conveniently selected hotels. Replication would be warranted for the proposed conceptual framework in different work settings such as restaurants, clubs, or other service firms to enhance generalizability. Second, common method bias could be a concern in this research because all items were assessed using a common instrument administered to respondents at one point in time. To limit this potential bias, we ensured that measures of the constructs used clear and unambiguous language. However, it would be recommended for future research to collect data in different time periods to avoid common method effects (Podsakoff et al., 2003). It should also be noted that self-report bias (e.g., social desirability) could have influenced the results since all information collected in the study was based on the participants' self-report. A qualitative approach (e.g., in-depth interviews) would be useful to

examine the extent of adverse effects of role conflict and ambiguity for different types of employees in terms of gender and organizational level.

In addition, culture may play a role in the study's findings. Karatepe et al. (2006) suggested that their dissimilar findings from previous studies could be ascribed to the cultural uniqueness of the study sample. Thus, it is desirable to test our conceptual framework in different countries, as Jackson et al. (2003) argued that the role of cultural diversity in the relationships between organizational variables is a promising avenue for future research. Finally, previous research in other sectors has demonstrated that in addition to job satisfaction, there are a number of constructs related to role stress. The present study exclusively examined the moderating effects of gender and organizational level on the role stress-job satisfaction relationship within the hospitality industry. Thus, investigating the association of role stress with those constructs is called for future studies. In particular, it is worthwhile to test whether gender and/or organizational level moderate(s) the relationship between role stress and voluntary turnover which is the bottom-line and driving concern in the hospitality industry.

References

- Acker, G.M., 2004. The effect of organizational condition (role conflict, role ambiguity, opportunities for professional development, and social support) on job satisfaction and intention to leave among social workers in mental health care. *Community Mental Journal* 40 (1), 65–73.
- Adler, N.J., 1983. A typology of management studies involving culture. *Journal of International Business Studies* 14, 29–47.
- Babin, B.J., Boles, J.S., 1998. Employee behavior in a service environment: a model and test of potential differences between men and women. *Journal of Marketing* 62 (2), 77–91.
- Beehr, T.A., Drexler Jr., J.A., 1986. Social support, autonomy, and hierarchical level as moderators of the role characteristics-outcome relationship. *Journal of Occupational Behavior* 7 (3), 207–214.
- Behrman, D.N., Perreault, W.D., 1984. A role stress model of the performance and satisfaction of industrial salespersons. *Journal of Marketing* 48, 9–21.
- Blau, G., 1999. Early-career job factors influencing the professional commitment of medical technologists. *Academy of Management Journal* 42, 687–695.
- Boles, J.S., Wood, J.A., Johnson, J., 2003. Interrelationships of role conflict, role ambiguity, and work-family conflict with different factors of job satisfaction and the moderating effects of gender. *Journal of Personal Selling & Sales Management* 23 (2), 99–113.
- Brown, S., Peterson, R.A., 1993. Antecedents and consequences of salesperson job satisfaction: meta-analysis and assessment of causal effects. *Journal of Marketing Research* 30 (1), 63–77.
- Brownell, J., 1990. The symbolic/culture approach: managing transition in the service industry. *International Journal of Hospitality Management* 9 (3), 191–205.
- Brymer, R.A., Perrewé, P.L., Johns, T.R., 1991. Managerial job stress in the hotel industry. *International Journal of Hospitality Management* 10 (1), 47–58.
- Bruck, C.S., Allen, T.D., Spector, P.E., 2002. The relation between work-family conflict and job satisfaction: a finer-grained analysis. *Journal of Vocational Behavior* 60, 336–353.
- Dann, D., 1990. The nature of managerial work in the hospitality industry. *International Journal of Hospitality Management* 9 (4), 319–334.
- Eagly, A.H., 1987. *Sex Differences in Social Behavior: A Social-Role Interpretation*. Hillsdale, NJ.
- Edwards, J.R., Bagozzi, R.P., 2000. On the nature and direction of relationships between constructs and measures. *Psychological Methods* 5, 155–174.
- Faulkner, B., Patiar, A., 1997. Workplace induced stress among operational staff in the hotel industry. *International Journal of Hospitality Management* 16 (1), 99–117.
- Fielden, S.L., Davidson, M.J., 2001. Stress and gender in unemployed female and male managers. *Applied Psychology* 50 (2), 305–334.
- Fisher, C.D., Gitelson, R., 1983. A meta-analysis of the correlates of role conflict and ambiguity. *Journal of Applied Psychology* 68 (2), 320–333.
- Fogarty, T.J., 1996. Gender differences in the perception of the work environment within large international accounting firms. *Managerial Auditing Journal* 11 (2), 10–19.
- Ghiselli, R., La Lopa, J.M., Bai, B., 2001. Job satisfaction. Life satisfaction & turnover intent of food service managers. *Cornell Hotel & Restaurant Administration Quarterly* 42, 28–37.
- Gianakos, I., 2001. Predictors of career decision-making self-efficacy. *Journal of Career Assessment* 9 (2), 101–114.
- Gill, A.S., Flaschner, A.B., Shachar, M., 2006. Mitigating stress and burnout by implementing transformational-leadership. *International Journal of Contemporary Hospitality Management* 18 (6/7), 469–482.
- Hales, C., Nightingale, M., 1986. What are unit managers supposed to do? *International Journal of Hospitality Management* 5 (1), 3–11.
- Hammer, W.C., Tosi, H.L., 1974. Relationship of role conflict and role ambiguity to job involvement measures. *Journal of Applied Psychology* 59 (4), 497–499.
- Hartline, M.D., Ferrell, O.C., 1996. The management of customer-contact service employees: an empirical investigation. *Journal of Marketing* 60, 52–70.
- Jackson, S.E., Joshi, A., Erhardt, N.L., 2003. Recent research on team and organizational diversity: SWOT analysis and implications. *Journal of Management* 26, 801–830.
- Jackson, S.E., Schuler, R.S., 1985. A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings. *Organizational Behavior & Human Decision Processes* 36 (1), 16–78.
- Kahn, R., Wolfe, D., Quinn, R., Snoek, J., Rosenthal, R., 1964. *Organizational Stress: Studies on Role Conflict and Ambiguity*. John Wiley, New York.
- Karatepe, O.M., Yavas, U., Babakus, E., Avci, T., 2006. Does gender moderate the effects of role stress in frontline service jobs? *Journal of Business Research* 59 (10–11), 1087–1093.
- Leigh, J.H., Lucas Jr., G.H., Woodman, R.W., 1988. Effects of perceived organizational factors on role stress-job attitude relationships. *Journal of Management* 14 (1), 41–58.
- Lusch, R.F., Jaworski, B.J., 1991. Management controls, role stress, and retail store manager performance. *Journal of Retailing* 67 (4), 397–419.
- Miles, R.H., Perreault Jr., W.D., 1976. Organizational role conflict: its antecedents and consequences. *Organizational Behavior and Human Performance* 17, 19–44.
- Mukherjee, A., Malhotra, N., 2006. Does role clarity explain employee-perceived service quality? A study of antecedents and consequences in call centres. *International Journal of Service Industry Management* 17 (5), 444–473.
- Ortqvist, D., Wincent, J., 2006. Prominent consequences of role stress: a meta-analytic review. *International Journal of Stress Management* 13 (4), 399–422.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology* 88, 879–903.
- Ptacek, J.T., Smith, R., Dodge, K.L., 1994. Gender differences in coping with stress: when stressor and appraisal do not differ. *Personality and Social Psychology Bulletin* 20, 421–430.
- Rizzo, J.R., House, R.J., Lirtzman, S.I., 1970. Role conflict and ambiguity in complex organizations. *Administrative Science Quarterly* 15 (2), 150–163.
- Ross, L.E., Boles, J.S., 1994. Exploring the influence of workplace relationships on work-related attitudes and behaviors in the hospitality work environment. *International Journal of Hospitality Management* 13 (2), 155–171.
- Schwepker, C.H., Hartline, M.D., 2005. Managing the ethical climate of customer-contact service employees. *Journal of Service Research* 7 (4), 377–397.
- Sekaran, U., 1983. Methodological and theoretical issues and advancements in cross-cultural research. *Journal of International Business Studies* 14, 61–73.
- Spector, P.E., 1985. Measurement of human service staff satisfaction: development of the job satisfaction survey. *American Journal of Community Psychology* 13, 693–713.
- Takalkar, P., Coovert, M.D., 1994. The dimensionality of job satisfaction in India. *Applied Psychology: An International Review* 43, 415–426.
- Tubre, T.C., Collins, J.M., 2000. Jackson and Schuler (1985) revisited: a meta-analysis of the relationships between role ambiguity, role conflict, and job performance. *Journal of Management* 26, 155–169.
- Weatherly, K.A., Tansik, D.A., 1993. Tactics used by customer-contact workers: effects of role stress, boundary spanning and control. *International Journal of Service Industry Management* 4 (3), 4–17.
- Westman, M., 1992. Moderating effect of decision latitude on stress-strain relationship: does organizational level matter? *Journal of Organizational Behavior* 13 (7), 713–722.
- Wetzels, M., de Ruyter, K., Lemmink, J., 1999. Role stress in after-sales service management. *Journal of Service Research* 2 (1), 50–67.
- Zohar, D., 1994. Analysis of job stress profile in the hotel industry. *International Journal of Hospitality Management* 13 (3), 219–231.