

Role conflicts, emotional exhaustion and health problems: a study of police officers in Taiwan

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Summary

This study focused on the role conflicts faced by police officers in Taiwan and investigated the relationship between role conflicts, emotional exhaustion and health problems based on the job demands and resources model (JD-R model). Firstly, in addition to work–family conflict, an inter-role conflict, this study identified an intrasender role conflict for police officers called uncompromising-friendly conflict. Secondly, according to the JD-R model, it was hypothesized that emotional exhaustion has a complete mediation effect on the relationships between role conflicts and health problems. The survey data in Huang's study were analysed. A total of 672 police officers at Kaohsiung, Taiwan provided completed data for analysis. Correlation analysis showed that role conflicts, emotional exhaustion and health problems were positively correlated. Results of the structural equation model further suggested that the positive effect of role conflicts on health problems was partially mediated by emotional exhaustion. Copyright © 2009 John Wiley & Sons, Ltd.

Key Words

role conflict; exhaustion; burnout; job demands; police

Introduction

Policing is one of the most stressful jobs. Police work is usually associated with high demand, low control and frequent contact with the public, job characteristics that are often referred to as 'high-stress' (Sauter & Murphy, 1995). As indicated by Collins and Gibbs (2003), police officers usually expose themselves to confrontation, violence,

traumatic incidents, human misery and even the possibility of being seriously injured or killed. In addition to physical danger, several organizational factors also impose stress on them, such as shift work, work overload and organization structure (e.g. authoritarian) (Golembiewski & Kim, 1990). Studies on self-perceived occupational stress for police officers also indicated that most stressors are related to organization and management factors, such as perceptions of staff shortages, inadequate resources, poor management, reorganization, bureaucratic interference, long work hours and social undermining (Biggam, Power, MacDonald, Carcary, & Moodie, 1997; Brown & Campbell, 1990; Collins & Gibbs,

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2003; Duffy, Ganster, & Pagon, 2002; Kop, Euwema, & Schaufeli, 1999). Therefore, it is not surprising that previous studies have indicated that police officers have poor quality of life and higher depression rates (Chen et al., 2006) and that organization-related stressors can lead to burnout or other psychological illness among police officers (e.g. Collins & Gibbs, 2003; Gaines & Jermier, 1983; Gershon, Lin, & Li, 2002; Golembiewski & Kim, 1990).

However, in addition to the stressors coming from organizational factors, police officers also face role conflicts when doing their duties, another stressor in their police lives. As role theory posits, persons are members of social positions and hold expectations for their own behaviours and those of other persons (Biddle, 1986). It is particularly true for the position of police officer. Police officer is an important social position that corresponds to a set of expectations, such as maintaining public order, investigating crimes, serving the community, keeping the peace through enforcement of laws and societal norms, and ensuring the rights of all to liberty, equality and justice, and these duties can result in role conflict for police officers (Regoli & Poole, 1980). Police officers should be worthy of the public trust because they are people of integrity. Thus, they should behave in a professional manner, and their conduct must always be exemplary to maintain a position of respect in the community. However, the role of police officer may conflict with other roles that a person plays. The purpose of this twofold study was aimed at discussing the role conflicts faced by police officers and investigating the relationship of role conflicts to burnout and health problems among police officers.

In the existing studies, work–family conflict has been identified as a role conflict faced by police officers (Alexander & Walker, 1996; Burke, 1993, 1994, 1997; Burke & Deszca, 1986; Goodman, 1990). Because of the long working hours, shift work and cancelled leave, police officers usually have difficulty successfully playing the role of a husband/wife and father/mother simultaneously. This conflict is a form of inter-role conflict resulting from two incompatible roles from different positions (Van sell, Brief, & Schuler, 1981). For example, Alexander and Walker (1996) surveyed 409 spouses of police officers by questionnaire to assess the impact of police work on the family life. Their results showed that a quarter of participants claimed that their police partners were ‘considerably’ or

‘extremely’ stressed by their work. In addition, participants also reported that stress of police work impaired family relationships and other personal relationships outside the home. This stress also had a detrimental effect on marriage, spouses’ health, spouses’ relationship with children and on their spouses’ social life. This work–family conflict causes not only problems within the family (e.g. higher divorce rate; Abdollahi, 2002) and unhealthy behaviours (e.g. drank; Alexander & Walker, 1996) but also burnout at work. In Burke’s (1993, 1994, 1997; Burke & Deszca, 1986) and Goodman’s (1990) studies, work–family conflict has been identified as a factor that had a significant and positive effect in predicting burnout among police officers.

However, there is another role conflict that was not identified in past studies for police officers. This conflict is associated with the dual image imposed on police officers: uncompromising and friendly. This conflict is a form of intrasender role conflict resulting from incompatible expectations from a single role sender (Van sell et al., 1981). Specifically, these two images come from different sources of expectations of police officers, i.e. the police and law system and public opinion. On the one hand, the expectation from the police and law system is that police officers maintain justice and, thus, they should be dedicated to enforcing laws and cannot let personal feelings, animosities or friendships influence official conduct in carrying out their responsibilities. On the other hand, the expectation from the public is that police officers serve communities (see Fielding, 2005) and, thus, they should be friendly and maintain good relationships with people.

This dual expectation of police officers becomes especially more salient in Taiwanese society. Mon (2003) analysed interviews of 36 police officers and quotations from the director of the National Police Agency in Taiwan after 1987 (the year for lifting of martial law in Taiwan). The results showed that serving communities gradually has become an important police work in recent years. Moreover, Mon (2003) also conducted a survey of 40 police officers who were chief of a police district over four periods: 1987–1991 (10 persons), 1992–1996 (10 persons), 1997–2001 (10 persons) and 2002–2003 (10 persons). In this survey, the 40 police officers were asked to identify the three most important values of police work and the three most important tasks of police work during their periods of being the chief. The results showed that, prior to 1997, values and

tasks related to law enforcement were identified as being more important than those related to community services. However, after 1997, values and tasks related to law enforcement and community services were identified as having the same level of importance. It can be seen that as Taiwan gradually became democratic after 1987 (e.g. repealing restrictions on political parties and the media and having direct legislative and presidential elections), different roles were imposed upon police officers. This dual expectation of police officers imposed pressure on them as they attempted to play their roles, and police officers usually felt they were misunderstood by the public.

From the perspective of a job demands and resources model (JD-R model), the role conflicts faced by police officers can be regarded as job demands for them. Job demands are defined as 'those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (i.e., cognitive or emotional) effort and are therefore associated with certain physiological and/or psychological costs' (Schaufeli & Bakker, 2004, p. 296). According to this definition, role conflicts can be regarded as job demands that are imposed and caused by different role expectations. According to the JD-R model, when job demands require high effort, they may become stressors and elicit negative consequences such as burnout (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Schaufeli & Bakker, 2004). Moreover, the JD-R model further proposed that burnout can lead to health problems such as psychosomatic health complaints including headaches, cardiovascular problems and stomach aches (Schaufeli & Bakker, 2004). This phenomenon has been observed among police officers (e.g. Burke, 1994; Burke & Deszca, 1986; Stearns & Moore, 1993). This sequential process linking job demands with health problems via burnout was called the energetic process by Schaufeli and Bakker (2004), which was used to illustrate that high job demands exhaust employees' energy back-up.

Hence, the purpose of this study was to investigate the relationship between role conflicts, emotional exhaustion and health problems among police officers based on the energetic process proposed in the JD-R model. In the research model, two role conflicts—work–family conflict and uncompromising–friendly conflict—were included. Emotional exhaustion was selected as the sole indicator for burnout because: (a) it is the

central or core dimension of burnout (Gaines & Jermier, 1983; Maslach & Jackson, 1981); and (b) job demands are closely associated with the emotional exhaustion component of burnout (Demerouti et al., 2001). Finally, health problems associated with psychosomatic health complaints were also included in the model. According to the JD-R model proposed by Schaufeli and Bakker (2004), it was hypothesized that role conflicts have a direct effect on emotional exhaustion, and emotional exhaustion has a direct effect on health problems. It is a complete mediation model that links role conflicts with health problems via emotional exhaustion. The theoretical research model is displayed in Figure 1.

Method

Participants and procedure

In this study, the survey data from Huang's (1999) study were analysed. Using a proportional stratified sampling technique, we selected 1100 police officers from a total of 2700 police officers at five branches of the Kaohsiung City Government Police Bureau in Taiwan based on the name list in the personnel office at Kaohsiung City Government Police Bureau. Questionnaires were administered and completed at the selected offices. A total of 867 police officers returned the survey (return rate = 78.8 per cent). For the current study, only 672 cases (654 of them were male and 18 participants did not report their sex) were used because they provided complete data on the variables that were used in the current study. The mean age of the sample was 35.06 [range from 24 to 59 years; standard deviation (SD) = 6.79].

Instruments

Items for role conflicts. There were four response items for work–family conflict, including: (a) *The requirements of my task usually lead*

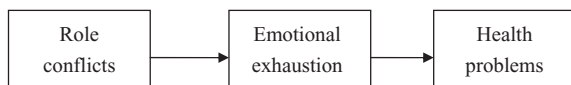


Figure 1. The research model.

to complaints from my spouse or opposite-sex friends. (b) *The long working hours usually deprive me of spending time with family.* (c) *My family usually worries about the risks associated with police work.* (d) *Because of work, I cannot relax at home, which often results in complaints from my family.* Participants were asked to rate these items on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha value for these four items was 0.82. The average score among these items was computed as the index for work–family conflict. Further, there were three response items for uncompromising–friendly conflict, including: (a) *As a police officer, I often get confused in playing a role of an uncompromising lawman on the one hand, and playing a role of a friendly helper on the other hand.* (b) *Police officers would like to help the public but they are often misunderstood. I have no idea what I can do.* (c) *Police work should be uncompromised, but people do not respect police officers.* Participants were asked to rate these items on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha value for these three items was 0.72. The average score among these items was computed as the index for uncompromising–friendly conflict.

Items for emotional exhaustion. There were five symptoms for assessing emotional exhaustion at work: (a) lethargy; (b) lassitude; (c) feeling down; (d) languor; and (e) exhaustion. Participants were asked to rate these items on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha value for these four items was 0.87. The average score among these items was computed as the index for emotional exhaustion.

Items for health problems. There were five symptoms for health problems, including: (a)

headache; (b) stomach ache; (c) sleep problems; (d) body aches; and (e) hypertension. Participants were asked to rate these items on a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The Cronbach's alpha value for these four items was 0.85. The average score among these items was computed as the index for health problems.

Results

Descriptive statistics analysis

Table I presents descriptive statistics of the four research variables, including means, SDs and correlations. From the mean score it can be seen that police officers in the current study face serious role conflicts. The mean scores of the work–family and uncompromising–friendly conflicts were 4 points on a five-point scale. The scores of emotional exhaustion and health problems exceeded the mid-point on a five-point scale, also implying the presence of problems of emotional exhaustion and health.

Furthermore, all four of these variables were highly correlated. Firstly, the two kinds of conflicts were highly correlated ($r = 0.75, p < 0.001$). Secondly, both conflicts were also positively related to emotional exhaustion and health problems ($r = 0.50$ to $0.57, ps < 0.001$). Finally, emotional exhaustion and health problems were also highly correlated ($r = 0.72, p < 0.001$).

Structural equation modelling

The proposed model, depicted in Figure 1, was analysed using AMOS 7.0 (Chicago: SPSS) (Arbuckle, 2006) with a maximum likelihood estimation procedure. Because the two kinds of conflicts were highly correlated, a latent factor

Table I. Descriptive statistics of the research variables ($n = 672$).

Research variables	Mean	SD	1	2	3
Work–family conflict	4.01	0.79	—	—	—
Uncompromising–friendly conflict	4.03	0.76	0.75***	—	—
Emotional exhaustion	3.44	0.90	0.57***	0.50***	—
Health problems	3.59	0.85	0.56***	0.51***	0.72***

*** $p < 0.001$.

SD: standard deviation.

called role conflict was extracted to influence the two conflicts. Variance of the role conflict factor was set as 1. The role conflict factor had a direct effect on emotional exhaustion, and emotional exhaustion had a direct effect on health problems. Although all parameters estimated in the model were significant, the χ^2 value of this model was 56.4 with 2 degrees of freedom (df) ($p < 0.05$), rejecting the model. Other fit indices were not satisfactory as well (Tucker Lewis Index (TLI) = 0.88, Comparative Fit Index (CFI) = 0.96, Root Mean Square Error of Approximation (RMSEA) = 0.20, 90 per cent confidence interval (CI) RMSEA = 0.16–0.25, Root Mean Square Residual (RMR) = 0.45).

Furthermore, the direct effect of role conflict factors on health problems was added to loosen the complete mediation hypothesis on emotional exhaustion. The result of the analysis is presented in Figure 2, in which the standardized estimates of path loadings are displayed. The χ^2 value of this model was 0.3 with 1 df ($p > 0.05$), supporting the model. Other fit indices were satisfactory as well (TLI = 1.00, CFI = 1.00, RMSEA = 0.00, 90 per cent CI RMSEA = 0.00–0.08, RMR = 0.01). This finding showed that emotional exhaustion did not have a complete mediation effect on the relationship between role conflict and health problems.

Discussion

This study focused on the role conflicts faced by police officers in Taiwan and investigated the relationship between role conflicts, emotional exhaustion and health problems based on the energetic process proposed in the JD-R model (Schaufeli & Bakker, 2004). In brief, correlation analysis showed that role conflicts had positive correlations to

emotional exhaustion and health problems. Emotional exhaustion also had a positive correlation to health problems. The result of the structural equation model further suggested that the positive effect of role conflicts on health problems was partially mediated by emotional exhaustion.

There were two main contributions in this study. Firstly, previous studies on role conflict of police officers usually focus on work–family conflict (e.g. Alexander & Walker, 1996; Burke, 1993, 1994, 1997; Burke & Deszca, 1986; Goodman, 1990), an inter-role conflict that results from the imposition of two incompatible roles on a single person (Van sell et al., 1981). However, there were other types of role conflicts faced by police officers. This study indicated an intrasender role conflict that results from incompatible expectations for police officers (Van sell et al., 1981), that is, the dual image of being uncompromising and friendly. This intrasender role conflict has become more salient recently in Taiwan. From Mon’s (2003) analysis, it can be seen that as Taiwan became more democratic, different tasks and expectations were imposed upon police officers, which made the intrasender role conflict more serious for police officers in Taiwan. This intrasender role conflict was not secondary to the work–family conflict; as indicated in the current results, the mean scores of work–family and uncompromising–friendly conflicts were 4 points on a five-point scale, suggesting that uncompromising–friendly conflict was as serious as the work–family conflict faced by police officers in Taiwan. Therefore, the first contribution of this study was to indicate another form of role conflict faced by police officers and empirically examine its effect on emotional exhaustion and health problems.

However, the author also acknowledges a limitation in the generalizability of the current results to other nations because this study was only

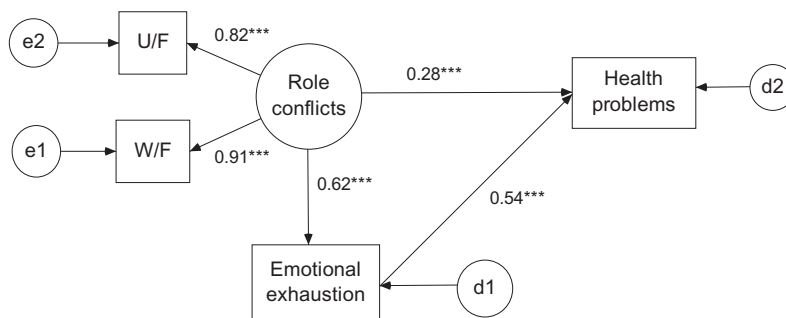


Figure 2. The research model with standardized path coefficients. *** $p < 0.001$. U/F: uncompromising–friendly conflict; W/F: work–family conflict. d1 = disturbance of emotional exhaustion; d2 = disturbance of health problems; e1 = error of work–family conflict; e2 = error of uncompromising–friendly conflict.

conducted in Taiwan. In other nations, the intrasender role conflict (uncompromising–friendly conflict) identified in this study may not be a serious problem for police officers. However, police officers in other nations may face other role conflicts stemming from the values and expectations of police officers in those nations. Thus, this study does not claim that the uncompromising–friendly conflict is a stressor for all police officers in the world but rather would like to indicate that in addition to the work–family conflict, there are other kinds of role conflicts faced by police officers. These role conflicts should not be neglected in investigating work stress among police officers.

Furthermore, the second contribution of this study was to examine the relationship between role conflicts, emotional exhaustion and health problems based on the energetic process in the JD-R model (Schaufeli & Bakker, 2004). On the one hand, the JD-R model provided a theoretical framework to explain the relationship between role conflicts, emotional exhaustion and health problems. On the other hand, this study also empirically examined the energetic process in the JD-R model on another occupational sample, the police officers. However, there were several differences between Schaufeli and Bakker's (2004) work and the present study that should be addressed. According to Schaufeli and Bakker's (2004) theoretical analysis and empirical findings on four different occupational samples, it was hypothesized that the effect of job demands on health problems was fully mediated by burnout. However, in the current study, the effect of role conflicts (a form of job demands) on health problems was not completely mediated by emotional exhaustion, the indicator of burnout. This alternative finding may have resulted from the use of different measurements in the current study from those used in Schaufeli and Bakker's (2004) study.

Specifically, the job demands measured by Schaufeli and Bakker (2004) were quantitative (i.e. workload) and qualitative (i.e. emotional) demands. However, the job demands measured in the current study were role conflicts faced by participants. In other words, the contents of job demands were different in these two studies. In addition, Schaufeli and Bakker (2004) used the Maslach Burnout Inventory-General Survey to assess burnout from three perspectives: exhaustion, cynicism and professional efficacy. High scores on exhaustion and cynicism and low scores

on professional efficacy are indicative of burnout. The current study only used emotional exhaustion as an indicator of burnout, not covering other components of burnout. Therefore, the differing results may stem from different job demands and the lack of a comprehensive indicator of burnout. This was a limitation of this study testing the energetic process in the JD-R model.

Generally, this study focused on the role conflicts faced by police officers in Taiwan and identified an intrasender role conflict (uncompromising–friendly conflict) that was not investigated in previous studies of police officers. Furthermore, the energetic process in the JD-R model (Schaufeli & Bakker, 2004) was applied as a framework to investigate the relationship between role conflicts, emotional exhaustion and health problems. Although there are some limitations, this study does contribute to the body of police studies.

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