

NEW MODEL FOR WORK STRESS PATTERNS

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ABSTRACT

This study tests a new work stress model by evaluating the major work stress sources and work stress coping strategies experienced by the Malaysian and Jordanian Customs Department employees. It further ranks the sources and coping strategies of work stress, and evaluates the relationships between stress patterns. The sample consists of 216 Malaysian Customs employees and 248 Jordanians Customs officers, from which correlation, means, path analysis and frequencies were computed. The major findings of the study show that Malaysian and Jordanian Customs employees identified role ambiguity as the main source of work stress while self-knowledge was the major coping strategy they used to overcome work stress. The relationship between sources of work stress and coping strategies is strong in the two cases while the relationship with personal differences is weak.

INTRODUCTION

Occupational stress is generating increasing concern among the public, media, employers and trade unions. Workplace health and safety representatives in many countries are seeking solutions to the nature and causes of the problem as well as the legal requirements relating to its prevention and control. A number of factors have to be considered in the study of stress, for example, the multidimensionality of the study, the definition of stress, the strong relationship between stress and behaviour, the increasing negative effects of stress on work, and the overall multidimensionality of stress.

Stress can influence an individual's behaviour either negatively or positively. Many researchers, like Spielberger (1979: 4), believe that work stress is one of the most important factors affecting productivity because of the direct relationship between the individual's behaviour and the stress he or she experiences. However, as stress is multidimensional, there is often confusion

about the term. According to Krohe (1999: 36), coping with stress is the effective way to reduce of its negative effects. He states that senior managers often think it is necessary to create a stressful work environment to adduce the best performance from their staff. However, stress can also be an obstacle to good performance, innovation, and creativity. Stress may lead to the commission of criminal acts (Schlesinger & Revitch 1981). Recent studies have shown that the financial cost of work stress has increased considerably worldwide (Spielberger & Reheiser 1995; Golembiewski et al. 1998; Levy 1998: 40), in the USA (Matteson & Ivancivich 1987: 241; Richardson & Larsen 1997; Arntz 1999: 12; Deneen 1998: 32; Aldred 1998: 19), UK and Krohe (1999) in Japan.

The causes of on-the-job stress, as Turner (1998: 19) states, range from severely traumatic experiences, such as fire or bombings, to injury or violence on the job. There are other negative outcomes to the organization, such as increased staff turnover (Maslach & Jackson 1981; Matteson & Ivancivich 1987: 241) and absenteeism (Warshaw 1979). For example, it was estimated that US companies lost \$18 billion annually from the consequences of stress outcomes such as turnover and absenteeism (United States 1997: 39). However, the most important negative effects may well be those that affect productivity and employee health (Cooper & Payne 1988; Kahn et al. 1964; Karasek & Theorel 1990; Keite & Sauter 1992; Levi, 1998; Matteson & Ivancivich 1982; Perrewé 1991; Quick et al. 1992).

The customs workers of most developing countries suffer various degrees of stress because of the nature and responsibility of their work. Customs work is highly stressful as the duties are difficult, varies qualitatively and quantitatively (social, economical and political) and heavy with responsibility at the international and national levels. Kasl (1998) found that high-stress jobs (like customs work) have chronic, unrelenting demands, a pace often dictated by extraneous factors, a necessity for constant vigilance, the prospect of drastic consequences such as the loss of life if the work demands are not met, and spillover between work and leisure time.

NATURE OF STRESS

There have been many studies on work stress that have been carried out by researchers. Hogan and Joyce (1982: 141) found the stress literature to be extensive and complex, traversing fields as diverse as Clinical and Applied Psychology, Anthropology, Sociology, Psychosomatic Medicine, Industrial Relations and Epidemiological. Putting it simply, stress is a natural and unavoidable part of life (*Modern Business Report* 1975: 12; Quick et al. 1987), with some researchers even believe it to be a *sine qua non* of life (Auerbach &

Gramling 1998). Stress can therefore be looked at from several different points of view, covering many different disciplines as mentioned above.

For the purpose of this study and after reviewing the literature we can define stress as an extraordinary state affecting the individual human functions as an outcome of internal and external factors that differ qualitatively (different types of stressors) and quantitatively (different number of stressors) in its outcome from individual performance due to individual differences.

LITERATURE REVIEW

This section highlights the analysis of many studies and theories related to work stress. Matteson and Ivancivich (1989), developed organizational stress framework that includes sources of work stress such as job factors, role conflict, role ambiguity, work overload, and insufficient control. Further, they examined the influence of biological/demographic variables such as age, sex, occupation, health status, education, and social support. Other proximate variable investigated in this model include cognitive/affective variable such as need levels, locus of control, Type A/B traits, hardiness, and self-esteem. Another model is the major categories of stress-at-work model, that was developed by Kahn and Cooper (1993). The model includes stressors intrinsic to the job, such as working conditions, the role of the individual in the organization, career development, relationships with others, and organizational structure and climate – the interface between home and work.

An expended review of the stress literature at international level (Manning et al. 1996; Crampton et al. 1995: 15; Peterson et al. 1995; Golembiewski et al. 1998; Xie 1996; Edwards 1996; Arlene 1996: 88; Seers et al. 1983; Antonioni 1995: 7; Xie & Gary 1995; Bolger & Zuckerman 1995; Brown & Cooper 1996; Aouserie 1996: 49; and Wellbrock 2000) shows numerous studies on work stress as it relates to different groups of workers such as the police, teachers, nurses, air traffic controllers, students, and army officers. These studies investigated sources of work stress, coping strategies and other variables. Additionally, studies on the Customs Departments employees are rare except the study by Barhem (1996), and it employed a different model than the more efficient and encompassing one we are using here.

Work stress studies in Malaysia and Jordan have been conducted on various groups such as teachers (Leng 1999; Norkiah 1980; Suseela 1994; Rosli 1997; Awang 1993; Yong 1999), information technology professionals (Foen 1999), sports (Lin 1999), Malay students in USA (Othman 1979), Malaysian administrators (Mohamed 1993), Jordanian private companies employees

(Mohamd 1999), Jordanian Customs employees (Barhem 1996), Jordanian public managers (Awamlah 1994), and Jordanian bank staff (Dawood 1991). To our knowledge, no stress study conducted in these two countries has focused on the high pressure job of Customs employees.

The Need for This Study

There are two main reasons for this study: problem that affects individuals and the environment in which the individuals are in. There was no research that addressed this issue among customs workers in Jordan and Malaysia. This study evaluates a new, hitherto untested model for occupational stress. The model is designed to evaluate the stress patterns in terms of personal differences, sources of work stress and coping strategies in two countries; Jordan and Malaysia, in order to glean a general understanding on how to cope with the stress, within the customs job environment. This would help to highlight stress causes and effects on customs employees in the two countries. It will be the only study looking at differences between Malaysian and Jordanian Customs work stress sources and coping strategies, but it could well be the first international multicultural study on the customs employee's work stress. We know that there was no study which examined the comparative work stress issue of customs employees. Results of this study will form a benchmark for future similar studies. They would also help Malaysian and Jordanian Customs improve their staff performance by testing the appropriate work environment in response to identified work stress sources and coping strategies.

There are many reasons for choosing Malaysia and Jordan as a place of. First, Jordan entered a new economic era after 1994 when it started to invite foreign investment, specifically after establishing the free trade zone in Aqaba in 2001. With its more open borders, the Jordanian Customs have had to work harder to prevent smuggling (of drugs and other dangerous materials) from neighboring countries, as a result of which several officers have lost their lives or have been seriously injured. The Malaysian Customs are not too different. In their *Department Annual Report* (1999), they successfully prevented many smuggling of dangerous goods into the country and in transit to other countries as well. Second, the conditions under which the Jordanian Customs operate today are akin to the situation in Malaysia with its large inflow of foreign investment. This study aims to help improve the Malaysian Customs by evaluating their performance as well as of the Jordanians. Third, Malaysia is an important country in Southeast Asia (economically and politically). Thus, creating a new dimension in stress studies in Malaysia will significantly help to develop such studies, especially in the Asian countries. Fourth, Malaysia provides the study with an important variable that is, its multiracial society, which can only increase in its universal applicability. Finally, despite the fact that Malaysia is an Asian

country and not a pioneer in relevant studies, it has good and modern databases which can facilitate such studies.

OBJECTIVES OF THE STUDY

There are three objectives for this study:

- To evaluate the relationship between the major work stress sources experienced by the Malaysian and Jordanian Customs and work stress coping strategies.
- To rank the sources of work stress and coping strategies.
- To evaluate the relationship between individual differences, and the major work stress sources and work stress coping strategies experienced by the Malaysian and Jordanian Customs.

THE CURRENT STUDY

The previous studies concentrated on one or more of stress patterns, some concerned with different sources of work stress or different coping strategies of work stress or the relationship of one of them with personal differences, and mostly they were in other fields. The current study includes many patterns of work stress and a set of sources of work stress, a set of different coping strategies of work stress, and a set of personal differences. It was derived from the theoretical models developed by Matteson and Ivancivich (1989), and Kahn and Cooper (1993). This study focuses on a new model for work stress that has not been examined before, specifically the study investigates the work stress among the Malaysian and Jordanian Customs employees, and evaluation of their work stress patterns using the model represented in Figure 1. The variables included in the study is very important to the manager is daily functions, and the manager can deal with it directly without the need for experts in the psychological or medical aspects of work stress.

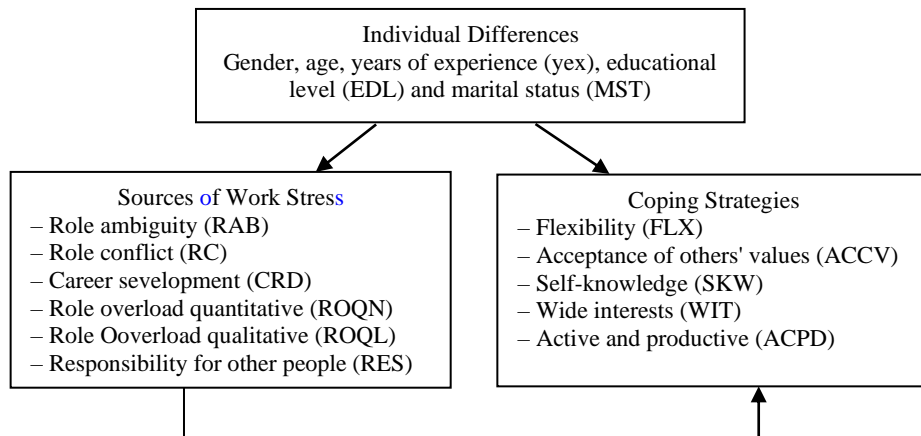


Figure 1. Hypothesized model of the study

This model is an attempt to measure the relationships between a set of work stress sources (role ambiguity, role conflict, career development, role overload quantitative, role overload-qualitative and responsibility for other people). Antonioni (1995) defined role ambiguity as when managers are unclear about their role(s), lack of clear information about what is expected of them or are uncertain about the limits of their authority. It is also defined by McLean (1979) as when an individual has insufficient information about his/her work role (scope and responsibility). He found that individuals suffering from role ambiguity have high job-related tension which is similar to Caplan and Jones (1975) findings.

According to Froiland (1993), role conflict occurs when an individual in a particular work is torn by conflicting job demands or doing things that he/she does not think is part of the job. Also, it occurs when an individual has to carry out tasks not perceived as part of his job (Sutherland & Cooper 1990). Career development is another important source of work stress. McLean (1979) stated that career development refers to the impact of under-promotion, over-promotion, and status incongruence. Krohe (1999) attributed 40 percent of worker turnover to work stress.

Overload significantly relates to a number of indicators of stress reaction as absenteeism (Marglies et al. 1974). Job overload or under-load is a source of work stress. Job overload, as defined by Kinney (1995), occurs with demands that exceed the capability of the individual, and job under-load with demands that do not challenge the individual, either qualitatively or quantitatively. Job under-load is associated with repetitive, routine, boring and under-stimulating work environments (ILO 1984). It was also found by Hubbard (1998) that the greatest cause of workplace stress is simple, plain and old-fashioned job overload.

Role overload occurs when the individual is unable to perform tasks that need high level of skills or/and knowledge. Kahn and Cooper (1993: 39) stated, "Qualitative overload occurs when an individual feels a lack of the skills and abilities needed to perform a given job". Schermerhorn et al. (2000) stated that role overload, both qualitative and quantitative occurs when too much is expected and the individual feels overwhelmed with work. Responsibility for others includes many aspects. According to McLean (1980), individuals who are responsible for others at work, and who must motivate, reward and admonish them generally experience a higher level of stress than those without such responsibilities.

The model is also investigates a set of coping strategies (flexibility, acceptance of others' values, self-knowledge, wide-interest and active and productive). Flexibility means to react to stress differently at different times. An individual is quite capable of adjusting his behavior within a short time to deal with a wide range of stress-inducing conditions, although this may require a variety of skills from him (Jayaranty & Chess 1983).

Acceptance of others' values is when a person is aware of the different views of others and **accepts** this as a fact of life. Tolerance is one of the major personal characteristics. Girdano et al. (1993) recommended examining our own expectations of self/others, expressing our feelings to others, greeting others and learning how to give and accept compliments. Self-knowledge is when an individual knows him/herself and accepts his/her own strengths and weaknesses. According to Krohe (1999), self-knowledge is obtained when you develop compassion and understanding for yourself and others, and a profound clarity that is otherwise unattained in a busy life. Also, gaining a sense of personal control over the situation will improve stress reduction (Yuen & Martin 1998).

Wide interest means having many interests outside of work, such as hobbies, sports or leisure activity. Girdano et al. (1993) also recommended joining social groups and reading. Lastly, active and productive is to be active and productive at work without sacrificing similar activities at home or in the community. Such persons are not drained by their jobs. Stark (1999) suggested that keeping stress low in the workplace is vital to maintaining productive employees. When employee suggestions are heard and considered, the likelihood of stress and negative feelings are greatly reduced. Spreitzer et al. (1997) reported that the higher levels of competence reduce stress. Yuen and Martin (1998) recommended working faster and more efficiently.

The third part of the model is personal differences (sex, age, experience, educational level and marital status). Many studies are concerned with the relationship between stress in the workplace and personal differences. The

results have been mixed. Some studies do find that there is a relationship, while others do not. It is, however, important to present the results according to the purposes and personal differences investigated. Therefore, the personal differences likely to be important are sex, age, experience, educational level and marital status.

The variable, country, is considered in the final stage of this analysis. One of the studies related to country was Peterson et al. (1995) and Brown and Cooper (1996). They found that role stressors varied more by country than by personal and organisational characteristics. Men and women differ naturally in many ways, and therefore, differences in their responses to stressors are not unexpected (Russo 1985; Stoney et al. 1985; Kerrler et al. 1985; Sultan 2000, 2001). According to Jick and Mitz (1985), males and females are subject to different patterns of stressors to which they respond differently (i.e., different outcomes and consequences) and cope with different strategies. Beehr and Schuler (1980) found little evidence that gender influences stress-related symptoms in the workplace. Alternatively, there is a lack of any sex-related difference in work stress (Summers et al. 1995; Smith 1993; Vinokur et al. 1996; Rosniah 1990).

As stress affects age, so too does age affect stress (Matteson & Ivancivich 1987). Stress also increases disorders, as men grow older (Leighton 1963; Comstock & Helsing 1976). Auerbach and Gramling (1998) found coping ability to be very much a function of past experience. Kahn and Cooper (1993) stated that experience worked as moderator of stress-strain relationship in a particular working environment. Mohamed (1999) observed that there is a negative relationship between the level of work stress, and work experience, education level and marital status. In terms of educational level, Syme (1975) found that stress-related illness increased as individuals climbed above the social level commensurating with their educational level. The better educated and endowed a person is, the less stress he feels (Sutherland & Cooper 1990). The marital status possible are single, married, divorced or widowed. Being married is less stressful and more satisfying for men than women (Jenkins 1991; Crosby 1984; Valdez & Gutek 1987). On the other hand, divorced women or men may have negative or positive performance although this would depend more on the individual (Crosby 1985; Johnson & Skinner 1986).

Based on the review of the literature from which our model was derived, we came up with the following hypotheses:

- H₁: There is a relationship between personal differences and work stress sources and coping strategies.
- H₂: There is a relationship between work stress sources and coping strategies.

METHODOLOGY

To measure the relationships between the variables according to the hypotheses, and the overall relationship between the variables, Pearson's correlation coefficient and path analysis were used. Averages and frequencies were used to rank the sources of work stress and coping strategies. These analytical tools have been used previously by Ganster et al. (1992: 329); Lee and Ashforth (1990); Bhagat et al. (1995); Wetzels et al. (1999) and Potthoff et al. (1995).

A questionnaire was constructed to measure these relationships. It consisted of three parts. The questionnaires were distributed to a random sample of Malaysian and Jordanian Customs employees by using stratified random sampling. There were 216 respondents from the Royal Malaysian Customs and Excise Department, and 248 were from the Jordanian Customs Department. The sampling technique used was stratified random sampling. The measurement for sources of work stress was adopted from Ivancivich and Micheal (1980). It comprised of 30 items to evaluate the influence of work stress sources. The level of stress was measured by the respondents on a five-point scale (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree). Scoring measurement for the sources and coping strategies was ranked from 1 to 5, the influence level is divided into three parts; < 2.5 = (low) level of influence; $2.5 \leq 3.5$ (medium) level of influence; > 3.5 (high) level of influence.

The Demographic Characteristics (Personal Differences) being the last section of the questionnaire contains questions with regards to the respondent's background information. The sample characteristics are summarised in Table 1. Majority of the Jordanian respondents were between 35–39 years, whereas majority of the Malaysian respondents were less than 40 years. In terms of education level, most of the Jordanian respondents were Diploma holders while in Malaysia most of the respondents were secondary school leavers and lower.

Reliability and Validity of the Tool of the Study

A pilot study was carried out in both countries to assess the internal consistency and reliability of the tool of the study. The Cronbach alpha for sources and coping strategies measures for Jordan was 0.753 and for Malaysia was 0.758. This assessment was also applied to the data collected (sources and coping strategies); Malaysia scored 0.776 and Jordan scored 0.778. The results indicated that the tool of the study was reliable within the acceptable standards. Content validity was measured by using a five points scale (ranging from strongly disagree [1] to strongly agree [5]) to classify the degree of feeling with stress patterns in all parts of the tool of the study. The construct validity of the tool of the study is consistent according to the four internal reliability measures

(Cronbach alpha results obtained for the pilot and sample measures) for both countries. The range is between 0.753 to 0.778 in all cases.

TABLE 1
MEMBERS' PROFILE

Variables		Malaysian		Jordanian	
		Frequency	Percent	Frequency	Percent
Age	< 25 years	29	13.4	7	2.8
	25–29 years	46	21.3	23	9.3
	30–34 years	33	15.3	76	30.6
	35–39 years	17	7.9	81	32.7
	> 40 years	91	42.1	61	24.6
Education	< Secondary school	79	36.6	18	7.3
	Diploma (college)	76	35.2	143	57.7
	First degree	47	21.8	75	30.2
	Master and Ph.D.	14	6.5	12	4.8
Experience	< 3 years	39	18.1	29	11.7
	4–6 years	41	19.0	27	10.9
	7–9 years	37	17.1	64	25.8
	10–12 years	13	6.0	47	19
	> 12 years	86	39.8	81	32.7
Marital status	Single	47	21.8	34	13.7
	Married	160	74.1	210	84.7
	Widow /Divorce	9	4.2	4	1.6
Gender	Male	122	56.5	231	93.1
	Female	94	43.5	17	6.9

RESULTS AND DISCUSSION

The study revealed the major sources of work stress in the Malaysian Customs Department. The major cause of work stress for Malaysian was role ambiguity as shown in Table 2. The duties in the Malaysian customs are divided in a hierarchical way – management; supporting and clerical staff – leaving little room for role ambiguity. Increased emphasis must be taken in terms of clarification of the jobs. Time, or the lack of it, was the most serious source for work stress by Hiok (2000). Similarly, role ambiguity was ranked first by the Jordanians as a major source of work stress.

The Malaysian, however, found flexibility as the best strategy for coping with work stress, as well as the Jordanian as shown in (Table 3). The customs employees in the tow departments are highly qualified to understand their strength and weaknesses. In Malaysia, Awang (1993) found that time management had the best potential to reduce stress.

TABLE 2
SOURCES OF WORK STRESS SUFFERED BY THE MALAYSIAN AND JORDANIAN CUSTOMS (RANKED IN DESCENDING ORDER OF MEAN)

			RAB	RC	ROQN	ROQL	CRD	RES
Malaysian	N	Valid	216	216	216	216	216	216
	Mean		3.6713	3.5870	3.6296	3.5204	3.3870	3.3083
	Std. Deviation		0.63970	0.65601	0.61776	0.65553	0.81213	0.59418
Jordanian	N	Valid	248	248	248	248	248	248
	Mean		3.6073	3.3984	3.1234	3.2081	3.0218	3.0843
	Std. Deviation		0.73111	0.74377	0.66814	0.70826	0.84432	0.55721

RAB: role ambiguity RC: role conflict ROQL: role overload-qualitative
 ROQN: role overload-quantitative CRD: career development RES: responsibility for other people
 σ: standard deviation

TABLE 3
COPING STRATEGIES BY THE MALAYSIAN CUSTOMS (RANKED IN DESCENDING ORDER)

			SKW	WIT	FLX	ACCV	ACPD
Malaysia	N	Valid	216	216	216	216	216
	Mean		2.6481	2.4367	3.5648	2.6829	2.6447
	σ		0.56706	0.59116	0.60823	0.47386	0.53447
			SKW	WIT	ACCV	ACDP	FLX
Jordanian	N	Valid	248	248	248	248	248
	Mean		2.3377	2.0524	2.5363	2.5353	3.2782
	σ		0.49144	0.51556	0.51515	0.59859	0.80098

SKW: self-knowledge WIT: wide interest FLX: flexibility
 ACCV: acceptance of others' values ACPD: active and productive

Hypothesis Testing

This study clarified the relationships between the dependent and independent variables in the model. In the Malaysian case, a significant relationship was found between the sources of work stress and coping strategies as represented by the arrows in Figure 2 and in Table 4. The relationships between personal differences and sources of work stress were weak, although significant (they are therefore in dotted arrows). The relationships between personal difference and coping strategies were significant. Path analysis in Table 5 also shows a significant relationship between role ambiguity, role overload qualitative, and some personal differences. There was also a significant relationship between sources of work stress and coping strategies. None of the models shows overall significance with R² greater than 0.5. Yaacob (1995) found a positive relationship between role conflict and level of work stress among the staff of Universiti Teknologi Malaysia.

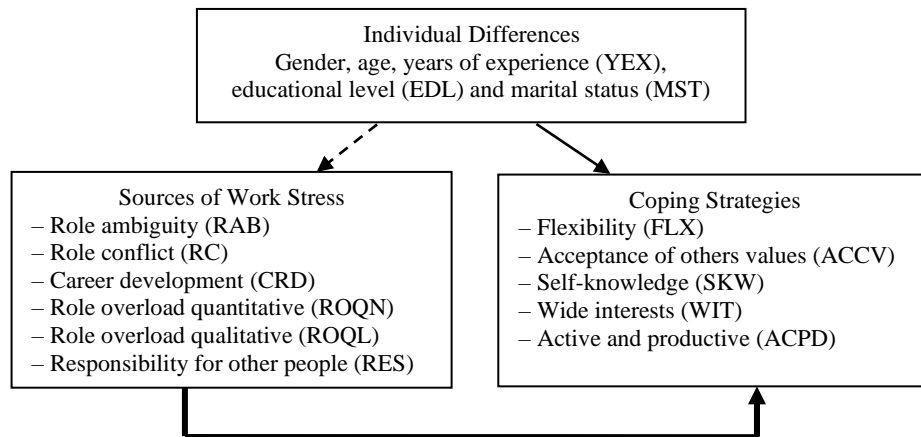


Figure 2. Stress relationships found in the Malaysian Customs

Relation with only one variable: - - - ►
 Relation with most of the variables: ———►
 Relation with all variables: ———►

TABLE 4
 CORRELATIONS FOR THE MALAYSIAN CUSTOMS EMPLOYEES

		RAB	RC	ROQN	ROQL	CRD	RES	SKW	WIT	FLX	ACCV	ACPD
SK	P.C	-0.222(**)	-0.177(**)	-0.143(*)	-0.124	-0.061	0.123	1				
	Sig.	0.001	0.009	0.036	0.069	0.369	0.072	-				
WIT	P.C	-0.158(*)	-0.138(*)	-0.084	-0.012	0.097	0.246(**)	0.465(**)	1			
	Sig.	0.02	0.043	0.219	0.858	0.155	0	0	-			
FLX	P.C	-0.233(**)	-0.228(**)	-0.208(**)	-0.234(**)	-0.262(**)	-0.146(*)	0.119	0.027	1		
	Sig.	0.001	0.001	0.002	0.001	0	0.032	0.08	0.698	-		
ACCV	P.C	-0.123	-0.187(**)	-0.201(**)	-0.105	0.015	0.119	0.401(**)	0.587(**)	0.049	1	
	Sig.	0.071	0.006	0.003	0.124	0.831	0.08	0	0	0.476	-	
ACPD	P.C	-0.249(**)	-0.264(**)	-0.212(**)	-0.175(*)	-0.11	0.047	0.504(**)	0.587(**)	0.196(**)	0.546(**)	1
	Sig.	0	0	0.002	0.01	0.106	0.491	0	0	0.004	0	-
Age	P.C	0.148(*)	0.018	-0.024	-0.021	0.025	-0.134(*)	-0.065	-0.123	0.067	-0.068	-0.124
	Sig.	0.03	0.795	0.729	0.763	0.716	0.05	0.343	0.072	0.328	0.318	0.069
YEX	P.C	0.218(**)	0.1	0.09	0.07	0.066	-0.091	-0.122	-0.142(*)	0.005	-0.147(*)	-0.176(**)
	Sig.	0.001	0.142	0.187	0.302	0.337	0.182	0.072	0.037	0.94	0.031	0.01
MST	P.C	0.084	0.022	0.065	0.109	-0.02	-0.06	-0.071	-0.111	-0.041	-0.027	-0.073
	Sig.	0.221	0.744	0.343	0.109	0.767	0.379	0.302	0.105	0.554	0.697	0.287
GD	P.C	0.034	0.08	-0.024	0.141(*)	0.09	0.148(*)	0.034	0.047	0.019	0.174(*)	0.138(*)
	Sig.	0.623	0.241	0.726	0.038	0.187	0.029	0.617	0.495	0.78	0.01	0.042
EDL	P.C	0.182(**)	0.091	0.027	0.089	0.071	0.063	-0.140(*)	-0.079	-0.042	-0.115	-0.061
	Sig.	0.007	0.185	0.691	0.195	0.301	0.355	0.04	0.247	0.537	0.092	0.374
N		216	216	216	216	216	216	216	216	216	216	216

** Correlation is significant at the 0.01 level (2-tailed).
 * Correlation is significant at the 0.05 level (2-tailed).
 P.C: Pearson Correlation.
 Sig.: Significance level.
 GD: Gender.

Table a1

In the case of the Jordanian, the strongest relationship was between sources of work stress and coping strategies. There was no significant relationship founded between personal differences and sources, while a weak relationship existed between coping strategies and personal differences as represented in Figure 3 and Table 6. Path analysis in Table 7 shows a significant relationship between role conflict and genders as well as a significant relationship between sources of work stress and coping strategies. None of the models shows overall significance with R^2 greater than 0.5.

The second hypothesis was accepted while the first hypothesis was partially accepted in the Malaysian case.

IMPLICATIONS AND DIRECTIONS FOR FUTURE RESEARCH

Part of the strength of a research project lies in the recognition of its limitations, which are pointers for future research. Several caveats must be sounded in this study. Firstly, the data were gathered from two Asian countries, and therefore, the universal applicability of the findings can be questioned, especially to the Western world. Nevertheless, the results can form a benchmark – the basis with which to compare future findings.

The challenge for researchers is to develop a more systematic view on the stress environment faced by customs employees and provide a more solid framework with which to explain the stress suffered. In fact, this study suggests that sustainable improvement (qualitatively and quantitatively) in customs employees' performance can be achieved if more related studies had been done. One of the strengths of this model is its comprehensive coverage of the stress phenomena on work stress patterns qualitatively (variety of variables) and quantitatively (number of variables).

Overall, the findings have broadened the understanding of work stress in the Malaysian customs. By understanding their problems, it is hoped that this will be the first of many steps, or studies, to improve the customs employees' performance by alleviating their stress suffered. This study has contributed to management theory by deriving a basic general model for studying work stress in the Customs, and improved our understanding of organizational behavior for better management.

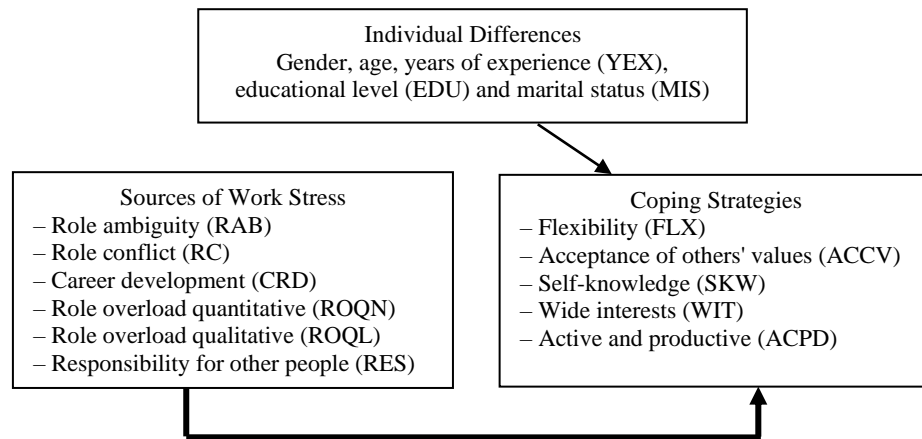


Figure 3. Stress relationships found for the Jordanian Customs

TABLE 6
CORRELATIONS FOR THE JORDANIAN CUSTOMS EMPLOYEES

		RAB	RC	ROQL	ROQN	RES	CRD	SKW	WIT	ACCV	ACDP	FLX
SKW	P.C	-0.304(**)	-0.241(**)	0.028	-0.253(**)	-0.124	-0.083	1				
	Sig.	0	0	0.661	0	0.051	0.191	-				
WIT	P.C	-0.089	0.021	0.241(**)	0.008	0.123	0.111	0.207(**)	1			
	Sig.	0.162	0.738	0	0.904	0.053	0.08	0.001	-			
ACCV	P.C	-0.054	0.014	-0.022	-0.056	0.05	-0.037	0.169(**)	0.284(**)	1		
	Sig.	0.393	0.821	0.732	0.377	0.435	0.557	0.008	0	-		
ACDP	P.C	-0.407(**)	-0.243(**)	-0.025	-0.296(**)	-0.317(**)	-0.155(*)	0.340(**)	0.173(**)	0.334(**)	1	
	Sig.	0	0	0.694	0	0	0.015	0	0.006	0	-	
FLX	P.C	-0.202(**)	-0.266(**)	-0.254(**)	-0.217(**)	-0.197(**)	-0.202(**)	0.320(**)	0.082	0.186(**)	0.113	1
	Sig.	0.001	0	0	0.001	0.002	0.001	0	0.197	0.003	0.075	-
Age	P.C	-0.074	-0.076	-0.055	-0.034	-0.046	-0.062	-0.028	-0.074	0.013	0.125(*)	-0.017
	Sig.	0.247	0.231	0.384	0.595	0.467	0.328	0.657	0.248	0.837	0.049	0.788
EDL	P.C	0.028	0.057	0.101	0.105	0.045	0.084	0.019	-0.036	-0.009	0.011	-0.07
	Sig.	0.659	0.374	0.113	0.098	0.481	0.188	0.766	0.571	0.888	0.858	0.274
YEX	P.C	0.032	0.045	0.037	0.025	0.094	-0.008	-0.1	-0.059	-0.045	-0.066	-0.075
	Sig.	0.612	0.48	0.56	0.691	0.14	0.896	0.117	0.355	0.48	0.303	0.237
MST	P.C	-0.029	-0.05	-0.054	0.047	-0.02	0.026	-0.085	-0.086	-0.03	0.069	0.018
	Sig.	0.645	0.43	0.401	0.465	0.755	0.685	0.18	0.176	0.641	0.279	0.775
Gender	P.C	0.019	-0.008	0.017	0.069	-0.003	-0.024	0.049	0.045	-0.019	-0.083	0.012
	Sig.	0.764	0.9	0.792	0.278	0.96	0.708	0.441	0.483	0.764	0.194	0.85
	N	248	248	248	248	248	248	248	248	248	248	248

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

P.C: Pearson correlation.

Sig.: Significance level.

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Implications for Management Practice

The two customs department's administrations will do well to take practical measures from this study. There is a need to improve the communication channels and prepare specific guidelines for the jobs to be performed in order to minimize role ambiguity. Skills training is important to avoid role conflict. The selection criteria should be set not only to identify qualified applicants but also those flexible enough and able to cope efficiently with role overload-qualitative. Additionally, skills training should be developed to provide the staff with the necessary knowledge and skills to increase their coping ability against stress. It is strongly recommended that the Malaysian customs administration develop a classification system to avoid role conflict and role ambiguity, as this would allow employees to adapt more easily between different jobs. In other words, this will allow them to become all-rounders and thus able to do a variety of jobs efficiently and effectively.

The Jordanian customs administration should accelerate its computerization program so that its present limbo state is ended earlier to avoid role ambiguity. They should also improve the communication channels to prevent role conflict. Both the customs departments need to improve their motivation system to increase productivity. To increase the sense of responsibility, the two administrations must improve their job classification and inculcate a sense of social responsibility in their staff.

REFERENCES

- Abdullah, Rosmawati. (1999). *Job stress among teachers in a secondary school and sources from job-related factors and non job-related factors*. Serdang: MS, Universiti Putra Malaysia.
- Aldred, C. (1998). Workplace stress claims rising. UK Union Reports. *Business Insurance*, 32 (38): 19.
- Antonioni, D. (1995). Practising conflict management reduce organisational stressors. *IM*, (September): 7.
- Aouserie, Reda. (1996). Stress, coping strategies and job satisfaction in university academic staff. *Educational Psychology*, 16 (1): 49.

- Arlene Joann. (1996). *An exploratory study of stress, stressors, applications of coping mechanisms, and responses to stress of clinical staff nurses functioning in the adult Intensive Care Unit*. Macdonald: Madonna University, MSN, p. 88.
- Arntz, Jane Boucher. (1998). A workplace epidemic: the "I hate my job" syndrome. *Business Journal Serving Greater Milwaukee*, 16 (15): 12.
- Auerbach, Stephen M. and Gramling, S. (1998). *Stress management: psychological foundations*. Englewood Cliffs, NJ: Prentice-Hall.
- Awamlah. (1994). العوامل، نائل، : تحليل الاجهاد لدى المديرين في الخدمة المدنية في الأردن، دراسة ميدانية، أبحاث اليرموك، سلسلة العلوم الإنسانية و الاجتماعية، مجلد 10، عدد 4.
- Awang, Siti Fatimah. (1993). *Hubungan antara pengurusan masa dengan tahap ketegangan (stress) di kalangan Pengetua Sekolah Menengah*. Tesis Sarjana Pendidikan, Universiti Kebangsaan Malaysia, Bangi.
- Barhem. (1996). بلال برهم (1996)، مصادر الإجهاد الوظيفي واستراتيجيات مكافحتها: دراسة ميدانية لأراء الموظفين العاملين في دائرة الجمارك في الأردن، رسالة ماجستير، جامعة اليرموك، الأردن.
- Beehr, T. A. and Schuler, R. (1980). Stress in organisation. In Rowland, K. and Ferris, G. (eds.). *Personal management*, pp. 390–419. Boston: Allyn and Bacon, p. 51.
- Bhagat, Rabi S., Allie, Stephen M. and Ford, David L. Jr. (1995). *Coping with stressful life events: an empirical analysis*. In Crandall, R. and Perrewé, Pamela L. *Occupational stress*. Taylor and Francis, pp. 93–112.
- Bolger Niall and Zuckerman Adam. (1995). A framework of studying personality in the stress process. *Journal of Personality and Social Psychology*, 69 (5).
- Brown, J. and Cooper, C. (1996). Occupational stress among senior police officers. *British Journal of Psychology*, February, 87 (1).
- Caplan, R. D. and Jones, K. W. (1975). Effects of work load, role ambiguity and type a personality on anxiety, depression, and heart rate. *Journal of Applied Psychology*, 60: 713–719.

- Comslock, G. W. and Helsing, K. J. (1976). Symptoms of depression in two communities. *Psychological Medicine*, 6: 551–563.
- Cooper, Cary L. and Payne, Roye. (1988). *Causes, coping and consequences of stress at work*. New York: John Wiley & Sons, pp. 234–240.
- Crampton, Suzane M., John, H. and Mishrd, Jitendra M. (1995). Stress and stress management. *SAM Advanced Management Journal*, (Summer): 15.
- Crosby, F. (1984). Job satisfaction and domestic life. In Lee, M. D. and Kanurgo, R. N. *Management of work and personal life*. New York: Praeger.
- _____. (1985). *Divorce in corporate America*. Unpublished manuscript. Northampton, Mass.: Smith College.
- Dawood. (1991).
داوود, نعيم (1991), مصادر ضغط العمل التي يتعرض لها العاملون في المصارف التجارية العاملة في الأردن, رسالة ماجستير, الجامعة الأردنية, الأردن.
- DeFrank, Richard S. and Ivancivich, John M. (1998). Stress on the job: an executive update. *Academy of Management Executive*, (August), 2 (3): 55.
- Deneen, S. (1998). Stress-related problems cut into workplace productivity. *Orlando Business Journal*, 15 (12): 32.
- Edwards, J. (1996). An examination of competing versions of the person-environment fit approach to stress. *Academy of Management Journal*, 39 (2).
- Foen Ng. (1999). *Occupational stress among the information technology professionals in selected companies in the Klang Valley*. MS, Universiti Putra Malaysia.
- Froiland, P. (1993). What cures job stress. *Training*, (December): 34.
- Ganster, Daniel C. and Fox, Marlyn L. (1992). Dispositional affect and work-related stress. *Journal of Applied Psychology*, 77 (3): 329.
- Girdano, Daniel A., Everly, George S. and Dusek, Dorothy E. (1993). *Controlling stress and tension: a holistic approach*. Englewood Cliffs, NJ: Prentice-Hall.

- Golembiewski et al. (1998). Estimates of burnout in public agencies: worldwide. How many employees have which degrees of burnout, and with what consequences? *Public Administration Review*, January/February, 58 (1): 59–65.
- Hiok, Ong Mek. (2000). *A study on occupational stress among government secondary school teachers in Kuala Lumpur*. M.Sc. thesis, Universiti Putra Malaysia.
- Hogan, R. and Hogan, Joyce C. (1982). Subjective correlates of stress and human performance. In Alluisi, Earl A. and Fleishman, Edwin A. (eds.). *Human performance and productivity*. Vol. 3, pp. 141. New Jersey: Lawrence Erlbaum Associates.
- Hubbard, Andrew S. (1998). Stress management. *Mortgage Banking*, 58 (7): 101.
- ILO (International Labor Office). (1984). *Automation, work organization and occupational stress*. Geneva: ILO, p. 171.
- Jayaranty, S. and Chess, W. A. (1983). Job satisfaction and burnout in social work. In Farber, B. A. (ed.). *Stress and burnout in human service professions*. Pergaman Press, New York pp. 129–144.
- Jenkins, R. (1991). Demographic aspects of stress. In Cooper, Cary L. and Payne, R. *Personality and stress: individual differences in the stress process*. Chichester: John Wiley and Sons, p. 122.
- Jick, T. D. and Mitz, L. F. (1985). Sex differences in work stress. *Academy of Management Review*, 10: 408–420.
- Johnson, W. R. and Skinner, J. (1986). Labour supply and marital separation. *American Economic Review*, 76: 455–469.
- Kahn, H. and Cooper, Cary L. (1993). *Stress in the dealing room*. London: Routledge, p. 33.
- Kahn, R. L., Quinn, D. M., Snock, R. P. and Rosenthal, R. N. (1964). *Organizational stress: studies in role conflict and ambiguity*. New York: Wiley.
- Karasek, R. A. Jr. and Theorel, T. (1990). *Healthy work stress, productivity and the reconstruction of working life*. New York: Basic Books.

- Kasl. (1998). *HealthMagazine*,
<http://www.thriveonline.com/@@yz87SQ...9hfpb/thrive/health/stress/jobs.html>
- Keite, G. P. and Sauter, S. L. (1992). *Work and well-being: an agenda for the 1990s*. Washington, DC: American Psychological Association.
- Kerrler, R. C., Price, R. H. and Wartman, C. B. (1985). Social factors in psychopathology. *Annual Review of Psychology*, 36: 531–572.
- Kinney, Joseph A. (1995). *Violence at workplace: how to make your company safer for employees and customers*. England: Prentice-Hall, p. 40.
- Krohe Jr., James. (1999). Workplace stress. *Across the Board*, 36 (2): 36.
- Lee Raymond and Ashforth Blake. (1990). On the meaning of Maslach's three dimensions of burnout. *Journal of Applied Psychology*, 75 (6): 743–747.
- Leighton. (1963). The character of danger of psychiatric symptoms in selected communities. *The Stirling County study of psychiatric disorders and sociocultural environment*, vol. 3. New York: Basic Books.
- Leng Tan. (1999). *Stress coping strategies among primary school administrators in Kuantan, Pahang*. MS, Universiti Putra Malaysia.
- Levi, L. (1981). *Preventing work stress*. Reading, Mass.: Addison-Wesley.
- Levy, James D. (1998). A little stress is part of every workplace. *Orlando Business Journal*, 14 (45) [sic]: 40.
- Lin Low. (1999). *Cognitive strategies for coping with stress in a simulated golf task*. MS, Universiti Putra Malaysia.
- Mclean, Alan A. (1979). *Work stress*. Philippines: Addison-Wesley, p. 34.
- Mclean, Albert, (1980). *Work stress*. Reading, Mass.: Addison-Wesley, pp. 126–127.
- Manning, Michael R., Jackson, Conrad N. and Fusilier, Marcelline R. (1996). Occupational stress, social support and the costs of health care. *Academy of Management Journal*, 39 (3).
- Marglies, B. L., Kores, W. H. and Quinn, R. P. (1974). Job stress: an unlisted occupational hazard. *Journal of Occupational Medicine*, 16 (10): 654–661.

- Matteson, Michael T. and Ivancivich, John M. (1989). *Controlling work stress*. San Francisco: Jossey-Bass, p. 27.
- Modern Business Reports. (1975). *Health in business: how it affects executives, their employees and their productivity*. Hamilton: Alexander, English Edition, No E-020, p. 12.
- Mohamd, Ali (1999).
دراسة تحليلية لضغوط العمل لدى العاملين في الشركات العامة الكبرى في جنوب الأردن. مؤتمنة للبحوث والدراسات, م 14, عدد 7.
- Mohamed Mahmood Nazar. (1993). *An understanding of the meaning of being in stress: a study of the phenomenon of stress of Malaysian administrators in a job related situation* (Ph.D.), Duquesne University.
- Maslach, C. and Jackson, S. E. (1981). The Measurement of Experienced Burnout. *Journal of Occupational Behaviour*, 2: 99–113.
- Matteson, M. T. and Ivancivich, J. M. (1982). *Managing job stress and health: the intelligent persons guide*. New York: Free Press.
- _____. (1987). *Controlling work stress*. San Francisco: Jossey Bass, p. 241.
- Norkiah Abdul Kadir. (1980). *Hubungan antara ketegangan dan kepuasan kerja di kalangan guru, latihan ilmiah*, Universiti Kebangsaan Malaysia dan Universiti Putra Malaysia.
- Othman Abdul Halim. (1979). *The identification of adjustment problems, life stress and perceived usefulness of problem-solving resources in a Malay student sample in the United*, (Ph.D.), Indiana University.
- Perrewé, P. L. (1991). Handbook in job stress (Special Issue). *Journal of Social Behaviour and Personality*, 6 (7).
- Peterson, Mark F. et al. (1995). Role conflict, ambiguity and overload: a 21 nations study. *Academy of Management Journal*, 38 (2): 429–452.
- Potthoff, John G., Holahan, Charles J. and Joiner, Thomas E. (1995). Reassurance seeking, stress generation and depressive symptoms: an integration model. *Journal of Personality and Social Psychology*, 68 (4): 664–670.

- Quick, J. C., Quick, Jonathan D., Horn, Rebeca S. and Quick, J. C. (1987). Health consequences of stress. In Ivancivich, John M. and Ganster, Daniel C. (eds.). *Job stress: from theory to suggestion*. N.p.: Hawarth Press Inc., pp. 19–36.
- Richardson, P. and Larsen, J. (1997). Repetitive strain injuries in the information age workplace. *Human Resource Management*, Winter, 36 (4): 377–384.
- Rosli Mat Taib. (1997). *Kepuasan kerja di kalangan guru: kajian di dua daerah di Selangor*. M.Ed. Dissertation, Universiti Malaya.
- Rosniah Mustapha. (1990). Stress levels between sex and sex-roles. *Akademika*, 36: 39–147.
- Russo, N. F. (1985). *A women's mental health guide*. Washington, DC: American Psychological Association.
- Schermerhorn, John R., James, H. and Richard, O. (2000). *Organizational behavior*. New York: John Wiley & Sons, p. 202.
- Schlesinger, Louis B. and Eugene, R. (1981). *Stress violence and crime*. In Kutash, Irwin L., Schlesinger, Louis B. and Associates. *Handbook on stress and anxiety*. California: Jossey Bass, pp. 174–188.
- Seers, A., Mc Gee, Gail W., Serej, Timothy T. and Graen, George B. (1983). The interaction of job stress and social support: a strong invariance investigation. *Academy of Management Journal*, 26 (2): 274.
- Smith, J. (1993). *Understanding stress and coping*. New York: Macmillan Publishers, p. 46.
- Spielberger, C. (1979). *Understanding stress and anxiety*. London: Harber and Row Publishers, p. 4.
- Spielberger, Charles D. and Reheiser, Eric C. (1995). Measuring occupational stress: the job stress survey. In Crandall, R. and Perrewé, Pamela L. (eds.). *Occupational stress*. N.p.: Taylor and Francis.
- Spreitzer, Gretchen M., Kizibs, Mark A. and Nason, Stephen W. (1997). A dimensional analysis of the relationship between psychological empowerment and effectiveness, satisfaction, and strain. *Journal of Management*, 23 (5): 679–704.

- Stark Nancy. (1999). How do you reduce stress in the workplace? *Baltimore Business Journal*, 16 (42): 19.
- Stoney, C. M., Daws, M. C. and Matthews, K. A. (1985). Sex difference in physiological response to stress and in coronary heart disease: a causal link? *Psychophysiology*, 24: 127–131.
- Sultan, Awied (2000). مصادر الضغوط المهنية لدى المدرسين في المرحلة المتوسطة بدولة الكويت وعلاقتها بالاضطرابات النفسية الجسمية, مجلة العلوم الاجتماعية, م28, عدد1.
- _____. (2001). مصادر الضغوط في العمل: دراسة مقارنة بين الموظفين الكويتيين وغير الكويتيين في القطاع العام, مجلة جامعة الملك سعود, م 13, العلوم الإدارية (1), ص-ص 67-112.
- Summers, Timothy P., De Cotiis, Thomas A. and Denise Angelos. (1995). A field study of some antecedents and consequences of felt job stress. In Crandall, R. and Perrewé, Pamela L. (eds.). *Occupational stress: a hand book*. Bristol: Taylor and Francis, pp. 113–128.
- Suseela Malakolunthu. (1994). *A study of teacher's stress and it's correlats*. M.Ed. Dissertation, Universiti Malaya.
- Sutherland and Cooper. (1990). *Understanding stress: a psychological perspective for health professionals*. London: Chapman and Hall.
- Syme, S. L. (1975). Social and psychological risk factors in coronary heart disease. *Journal of American Heart Association*, 44: 17–21.
- Turner, Missy. (1998). Start-up venture seeks to take stress out of the workplace. *San Antonio Business Journal*, 12 (44): 19.
- United States. (1997). Employees health and hygiene. *Indianapolis Business Journal*, (March), 18: 39.
- Valdez, R. L. and Gutek, B. A. (1987). *Family roles: a help or a hindrance for working women?* In Gutek, B. A. and Larwood, L. (eds.). *Women's career development*. Beverly Hills: Sage, pp. 157–169.

- Vinokur, Amiram D., Price, Richard H. and Caplan, Robert D. (1996). Hard times and hurtful partners: how financial strain affects depression and relationship satisfaction of unemployed persons and their spouses. *Journal of Personality and Social Psychology*, 71 (1): 166–179.
- Warshaw, L. J. (1979). *Managing stress*. Reading, Mass.: Addison-Wesley.
- Wellbrock, Kathleen. (2000). *Stress, hardiness, social support network orientation and trauma-related symptoms in police officers*. Ph.D. Dissertation, California School of Professional Psychology, USA.
- Wetzels, M., Ko, De Ruyter and Jos Lemmink. (1999). Role stress in after-sale service management. *Journal of Service Research*, (August): 50–67.
- Xie, Lin Jia. (1996). Karasek's model in the People's Republic of China: effects of job demands, control, and individual differences. *Academy of Management Journal*, 39 (6): 1594–1618.
- Xie, Jia Lin and Gary Johns. (1995). Job scope and stress: can job scope be too high. *Academy of Management Journal*, 38 (5): 1288–1309.
- Yaacob, Hashim Fauzy. (1995). *Communication factors and their relationships with stress of University Teknologi Malaysia*. MS, Universiti Putra Malaysia.
- Yong Thung Ing. (1999). *Factors effecting occupational stress among teachers of a secondary school in Sarawak*. MS, Universiti Putra Malaysia.
- Yuen, J. and Martin, Maryjane. (1998). Creative ways for managing workplace tension. *Communication World*, 15 (7): 18.