

## ORGANIZATIONAL AND PERSONALITY EFFECTS ON MANAGERS' JOB STRESS: IS IT DIFFERENT FOR MALAYSIAN MEN AND WOMEN?

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### ABSTRACT

Artikel ini bertujuan untuk menentukan pengaruh berbagai variabel organisasional (konflik, hambatan karir, keterasingan, beban kerja berlebihan, dan lingkungan kerja yang tidak menyenangkan) dan variabel kepribadian (neuroticism, extraversion, keterbukaan, agreeableness, dan conscientiousness) terhadap stres kerja di antara para manajer yang bekerja pada sektor elektronika di Malaysia serta bagaimana pengaruh tersebut bervariasi bila dihubungkan dengan gender. Analisis terhadap 285 responden menggunakan hierarchical regresi mengungkapkan bahwa empat dari lima variabel organisasional (konflik, hambatan karir, keterasingan, dan beban kerja berlebihan) memiliki pengaruh positif secara signifikan terhadap stres kerja. Dalam hal ciri-ciri kepribadian, neuroticism dan conscientiousness ditemukan memiliki pengaruh positif secara signifikan terhadap stres kerja. Sebaliknya extraversion dan agreeableness memiliki pengaruh negatif secara signifikan terhadap stres kerja. Gender ditemukan memoderasi pengaruh dari seluruh variabel independen terhadap stres kerja pada tingkat 0.01. Artikel ini juga membahas berbagai implikasi hasil penelitian bagi praktik manajerial dan penelitian di masa mendatang.

**Keywords :** Job Stress, Gender, Role Conflict, Personality

Job stress has long been an important concept in the organizational study of the responses employees have to their surroundings. The many challenges in the work environments, characterized by heightened competition, lack of time, more uncontrollable factors, lack of space, continuous technological development, conflicting demands from organizational stakeholders (Hall & Savery, 1986), increased use of participatory management and computerization (Murray & Forbes, 1986), greater uncertainty, and others have resulted in higher job stress. In the pursuit for

organizational excellence, managers need to work under highly stressful circumstances.

Managers in the manufacturing sector have been found to be experiencing high stress (Jestin & Gampel, 2002). The weakening of the global economy during the past few years has resulted in substantial downsizing and retrenchments. Such events among employees in local and foreign firms are inevitable given Malaysia's reliance on the industrial sectors particularly electronics, which account for 60 percent of its total exports (Bank Negara Malaysia, 2001).

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Although there have been several studies on job stress within the Malaysian context (for instance, Kuan, 1994; Bat, 1995; Aun, 1998; Yahya, 1998), these studies have been somewhat fragmented. Specifically, the objectives of this study are: (1) to gauge the extent to which organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) and individuals' personality traits (neuroticism, extraversion, agreeableness, openness, and conscientiousness) affect job stress and, (2) to examine whether gender moderates the relationship between the predictor variables and job stress.

## REVIEW OF LITERATURE

### Organizational Sources of Stress

Job stress has been defined as the non-specific response of the body to any demands made upon it (Selye, 1976). It is considered to be an internal state or reaction to anything a person consciously or unconsciously perceive as a threat, either real or imagined (Clarke & Watson, 1991). Robbins (2001) defines stress as a dynamic condition in which the individual is confronted with an opportunity, constraint, or demand related to what he or she desires and for which the outcome is perceived to be both uncertain and important. Stress can be caused by environmental, organizational, and individual variables (Matteson & Ivancevich, 1999; Cook & Hunsaker, 2001). Organizational variables have been known to create stress for employees at the workplace (Greenhaus & Beutell, 1985). Among the numerous organizational sources of stress, only five variables were investigated in this study namely conflict, blocked career, alienation, work overload, and unfavourable work environment.

Role conflict has been found to have a positive relationship with job stress

(Roberts et al., 1997). When individuals are required to play two or more roles that work against each other, they are likely to experience job stress. This is because role conflicts create expectations that may be hard to reconcile. Previous scholars (for instance, Foot & Venne, 1990; Rahim, 1996) discovered a positive relationship between barriers to career advancement and job stress. When employees perceived a lack of career opportunities, they are likely to feel uncertain about their future in the organization, which in turn, are likely to induce stress. Working alone on one's job without social support from one's peers and supervisors would lead to job stress (Mirovisky & Ross, 1986; Thoits, 1995; Eugene, 1999). According to Kanungo (1981), when workers believe there is a separation between their own job and other work related context, a sense of frustration that finally manifested in a behavioral state of apathy is likely to occur. This is particularly intense for employees with high social needs. Work overload both quantitatively and qualitatively has been empirically linked to a variety of physiological, psychological, and behavioral strain symptoms (Beehr & Newman, 1978; Miller & Ellis, 1990; Roberts et al., 1997). According to Greenhaus et al. (1987), heavy workload lowers one's psychological wellbeing resulting in job stress. Additionally, a work environment associated with unpleasant organizational climate, lack of privacy, a lot of hassle in conducting work, and physical distractions can result in higher stress (Miller & Ellis, 1990; Eugene, 1999).

### Personality Traits as Sources of Stress

Past studies have indicated the potential impact of personality traits on job stress (Goldberg, 1993; Deary & Blenkin, 1996). Over the years, five personality dimensions that have been identified as being able to explain a majority of the variance in behavioral outcomes are neuroticism,



extraversion, openness, agreeableness, and conscientiousness (John & Srivastava, 1999). Neuroticism involves a sense of emotional instability and negative affect (Costa & McCrae, 1985; John & Srivastava, 1999). People with neuroticism traits are those who experience more negative emotions, which would be reflected in poor job attitudes, and high levels of job stress. According to Tellegen (1985), neuroticism functions as a warning system, activated by perceptions of environmental uncertainty, and tends to interfere with one's ability to adapt. Thus, individuals with elevated levels of neuroticism would be expected to be associated with higher stress since they are more likely to view stimuli as a threat to them. Prior studies have provided empirical evidence on the positive relationship between neuroticism and job stress (Tellegen, 1985; Deary & Blenkin, 1996; Birch & Kamali, 2001).

Extraversion relates to social facility, ambition, energy, enthusiasm, dominance, and positive affectivity (Watson & Clark, 1997). Individuals who are high in extraversion exert more leadership, being more physically and verbally active, and to be more friendly and outgoing around others than most people tend to be (Costa & McCrae, 1992). According to Moberg (2001), extraversion taps the individual's predispositions to view his/her actions as positive, emotionally satisfying, and effectual. Such information seems to suggest that individuals who are high on extraversion are more likely to experience lower stress since they are more likely to perceive stimuli in a positive and favourable manner. Birch and Kamali (2001) discovered that extraversion had a negative relationship with job stress.

Openness involves intellectual activity, cultural sophistication, thoughtfulness, originality, imagination, need for variety, and preference for cognitive complexity (McCrae, 1996). According to Costa and McCrae (1992), the openness

factor include behaviors that convey a willingness to entertain and experience novelty, whether in interests, people, situations, values, or ideas, and a sense of divergent and creative thinking. According to Moberg (2001), individuals who have high openness are less likely to emphasize rules, order, and conformity, more flexible, and find it easier to understand others' point of views. Hence, one would expect individuals with elevated levels of openness to be associated with lower stress since they are able to adapt to the different environmental stimuli.

Agreeableness reflects the ability to be kind, considerate, likeable, cooperative, and helpful (Graziano & Eisenberg, 1997). People who are high in agreeableness are sympathetic, helpful, and cooperative, whilst those who are low in agreeableness are antagonistic, skeptical, and competitive (Costa & McCrae, 1992). According to Moberg (2001), individuals who have high agreeableness are more likely to emphasize cooperation and consideration for others. Since highly agreeable individuals tend to be friendly to other people, they are more likely to experience lower stress. Finally, conscientiousness, has been defined as social conformity and impulse control, cautiousness, orderliness, persistence, dependability, responsibility, carefulness, and preference for predictability (Hogan & Ones, 1997). Those who are high in conscientiousness are thought to exhibit high levels of perseverance, low impulsiveness, a strong disposition toward achievement, and a responsible orientation toward work (Moberg, 2001). Costa and McCrae (1992) viewed conscientiousness as a group-based responsibility relating to activities of planning, organizing, and task completion. Deary and Blenkin (1996) found that conscientiousness contributed to positive feelings of personal achievement since highly conscientious individuals have a greater inclination to apply themselves to solving the practical aspects of a stressor. Moberg (2001)



added that individuals with high conscientiousness are able to address conflict situations promptly and resolve disputes in an organized fashion that benefits the group. Such information seems to suggest that conscientiousness would be negatively related to job stress.

The Moderating Role of Gender In The Relationship Between Stressors (Organizational and Personality) and Job Stress

It is widely believed that women as a group are more stressed and experience different kind of job stress than men (Miller & Ellis, 1990). According to Jick and Mitz (1985), women experience psychological distress namely, depression, emotional discomfort more frequently than men. This inclination to experience higher stress among women may be associated with the multiple role and conflicting demands imposed by the domestic and employment duties. According to Terborg (1977), working women particularly those in managerial positions frequently experience role overload and conflicts resulting in higher stress because they have to undertake their job responsibilities and at the same time maintain their domestic role as wife and mother. Haw (1982) further added that for many women, family demands and obligations had to take precedence over work. Therefore, given their heavy workload,

working women rather than men are more likely to experience higher stress. Additionally, women of the East are more likely to experience higher stress compared to their counterparts from Western countries. One plausible explanation for greater stress among Eastern women may be due to the fact that women tend to be victims of various forms of discrimination (Northcraft & Gutek, 1993), and sex-role stereotyping (Ngo & Tsang, 1998). For instance, in Taiwan, men are accorded a wider range of opportunities and authority over women (Farh et al., 1997). Similarly, in Malaysia, when resources are limited, families give sons priority and preferences in gaining an education (Mansor, 1994). Within such a context, women's involvement in organizational activities may be somewhat restricted, thereby, resulting in higher stress.

THEORETICAL FRAMEWORK AND HYPOTHESES

Conceptualization of Variables

Based on the discussion made in the review of literature subsection, the criterion variable for this study is job stress. The predictor variables consisted of organizational factors and personality traits of the individuals. The relationships between the study variables are depicted in Figure 1.

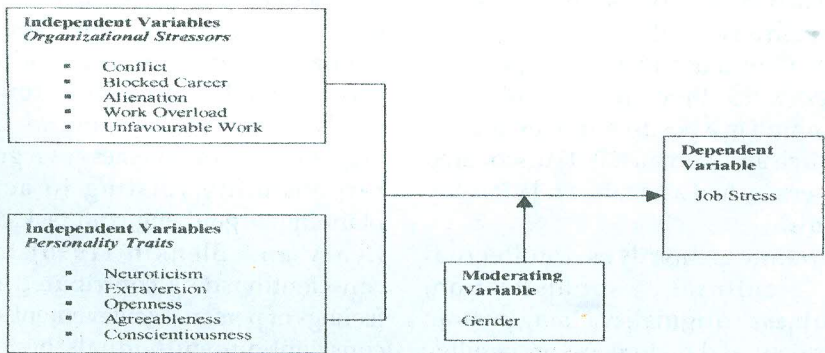


Figure 1  
Conceptual Framework of the Study



## Hypotheses

From the model depicted in Figure 1, the three major hypotheses are as follows:

- H1: Organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) will be positively related to job stress.
- H2: Personality traits (extraversion, agreeableness, openness, conscientiousness except neuroticism) will be negatively related to job stress.
- H3: The effects of organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) and personality traits (extraversion, agreeableness, openness, conscientiousness except neuroticism) on job stress will be stronger for women than men.

## METHODOLOGY

### Subjects

Participants in the study consisted of managers attached to twenty randomly selected electronic firms (both local and foreign) located on the island of Penang, Malaysia. A total of 400 questionnaires were distributed via the help of company officials in proportion to the population of managers in these firms. Respondents were given three weeks to answer the questionnaires.

### Measurements

The predictor variables in this study consisted of organizational and personality variables. Organizational variables include conflict, blocked career, alienation, work overload, and unfavourable work environment. Organizational variables were measured using a 25-item questionnaire (Davis et al., 2000). Each organizational stressor was measured using 5-items based

on a 5-point Likert response format ranging from (1) "Strongly Disagree" to (5) "Strongly Agree". The mean scores were computed by averaging the scores for all the items associated with a particular stressor. Another set of independent variable relates to personality. Personality variables include extraversion, neuroticism, agreeableness, openness, and conscientiousness. These five dimensions of personality were gauged using 60-items derived from the NEO Five Factor Inventory (Costa & McCrae, 1992). Each personality trait was assessed using 12-items. A 5-point scale ranging from (1) "Strongly Disagree" to (5) "Strongly Agree" was utilized. The mean score for each personality trait was obtained by averaging the scores for each of the 12 items. On the other hand, the criterion variable in this study is job stress. Job stress was measured using a 20-item screening inventory (Goldberg & Hillier, 1978) based on a 5-point scale ranging from (0) "Never" to (4) "Almost Always". The job stress level for each respondent was computed by summing the total score for all the 20 items. Subsequently, the total scores obtained were averaged in order to gauge the overall job stress level for the sample in accordance to Davis et al.'s (2000) suggestion as follows: 0-25 (coping adequately with job stress), 26-40 (suffering from job stress), 41-55 (suffering from high job stress), 56-80 (experiencing very high job stress or burnout).

### Method of Analyses

Job stress can be influenced by personal factors (Matteson & Ivancevich, 1999). Six personal variables (age, marital status, number of children, working experience, and job tenure) were controlled in the statistical analysis following previous researchers (Cooper et al., 1994; Roberts et al., 1997; Smith et al., 1998). The first and second hypotheses were tested using a four-step hierarchical regression (Cohen & Cohen, 1975) where the control variables were entered in the first step, followed by the main



effects of the five organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) plus the five personality variables (neuroticism, extraversion, agreeableness, openness, and conscientiousness) in the second step. Gender was added into the equation in the third step. In the fourth and final step, the ten interaction terms were entered into the regression equation. The change in the F-value and the significance of the individual parameter was observed. If the interaction

term is found to be significant, gender is said to moderate the relationship between the relevant predictor variable and job stress.

RESULTS

Response and Profile of Respondents

At the end of the stated period, of the 400 questionnaires sent out, 285 useable responses were obtained representing a response rate of 71.25%. The sample profile is shown in Table 1.

Table 1  
Sample Profile of the Respondents

Demographic Variables	Categories	Frequency	Percentage (%)
Gender	Male	162	56.8
	Female	123	43.2
Age	Less Than 30 years	108	37.9
	30 to 35 years	101	35.4
	36 to 40 years	66	23.2
	41 to 45 years	10	3.50
Marital Status	Single	136	47.7
	Married	149	52.3
Number of Children	None	144	50.5
	One	42	14.7
	Two	72	25.3
	Three	27	9.50
Working Experience	Less than 1 year	48	16.8
	1 to 5 years	83	29.1
	6 to 10 years	91	31.9
	11 to 15 years	53	18.6
	More Than 15 years	10	3.50
Job Tenure	Less than 1 year	110	38.6
	1 to 5 years	83	29.1
	6 to 10 years	87	30.5
	11 to 15 years	5	1.80

Source: Research Data



In terms of gender, more than half (56.8%) of the sample consisted of males with the remaining 43.2% being females. As for age, almost all the respondents (96.5%) were 40 years old and below. Regarding marital status, a majority (52.3%) of respondents were married with the remaining 47.7% being singles. In terms of the number of children, a majority (50.5%) of the sample had no children. As for working experience, 54% of the sample had been working for more than

6 years. Finally, regarding job tenure, 67.7% of the respondents had been in their current job for 5 years or less.

Table 2 depicts the reliabilities of the survey instruments.

As seen from Table 2, the instruments used in this study were reliable, with coefficients ranging from 0.80 to 0.96, which exceeded the minimum acceptance level of 0.7 (Nunnally, 1978).

**Table 2**  
**Reliability Coefficients of the Instruments**

Variable	Cronbach's Alpha Value
Conflict	0.8747
Blocked Career	0.8631
Alienation	0.8875
Work Overload	0.8518
Unfavourable Work Environment	0.8026
Neuroticism	0.9580
Extraversion	0.9505
Agreeableness	0.9104
Openness	0.9483
Conscientiousness	0.9421
Job Stress	0.9182

Source: Research Data



The mean scores and standard deviations for each study variable can be seen from Table 3

Table 3  
Mean Scores and Standard Deviations of the Study Variables

Variable	Mean	Std. Deviation
Conflict	2.667	0.716
Blocked Career	2.806	0.647
Alienation	2.652	0.839
Work Overload	3.011	0.736
Unfavourable Work Environment	2.506	0.663
Neuroticism	3.146	0.910
Extraversion	2.989	0.720
Agreeableness	2.782	0.631
Openness	2.860	0.704
Conscientiousness	2.973	0.735

Source: Research Data

Table 4  
Correlation Coefficients of the Study Variables

	1	2	3	4	5	6	7	8	9	10	11
1.J. Stress	1.000										
2. Conflict	0.334**	1.000									
3. B. Career	0.545**	0.216**	1.000								
4. Alienation	0.340**	-0.272**	0.019	1.000							
5. W. Ove.	0.340**	0.643**	0.362**	-0.182**	1.000						
6. Un. W. Env.	0.319**	0.582**	0.224**	-0.168**	0.295**	1.000					
7. Neurot.	0.831**	0.383**	0.513**	0.210**	0.267**	0.415**	1.000				
8. Extraver.	-0.188**	-0.136*	0.068	-0.067	-0.170**	-0.016	-0.029	1.000			
9. Open.	-0.258**	-0.108	-0.107	0.161**	0.069	-0.187**	-0.437**	-0.101	1.000		
10. Agre.	-0.159**	0.135*	0.214**	0.092	0.230**	-0.036	-0.346**	0.010	0.289**	1.000	
11. Consc.	-0.160**	-0.010	0.209**	-0.164**	0.208**	0.073	-0.376**	-0.109	-0.019	0.163**	1.000

\*p < 0.01, \*\*p < 0.05

Source: Research Data



From Table 3, it can be seen that the mean value for each of the organizational variables ranges from 2.51 to 3.15, with a standard deviation of 0.63 to 0.91. The mean score for job stress was 45.38 with a standard deviation score of 10.72. Based on Davis et al.'s (2000) interpretation, this score indicates that respondents in this study, on the average, experience high job stress.

The correlations among the variables in this investigation can be observed from Table 4.

As seen from Table 4, the Pearson's correlation coefficients were wide ranging (-0.010 to 0.831) across all variables for the sample involved. Specifically, significant positive relationships exist between the organizational variables and job stress. On

**Table 5**  
**Results of Hierarchical Regression Analysis**

Independent Variable	Std Beta Step 1	Std Beta Step 2	Std Beta Step 3	Std Beta Step 4
<i>Control Variables</i>				
Age	0.207*	-0.172*	-0.174**	-2.592*
Marital Status	-0.116	*0.142*	0.136*	-2.299*
Number of Children	0.301**	-0.225	-0.217**	-3.116*
Work Experience	-0.011	-0.058**	-0.072	-5.241*
Job Tenure	-0.705**	0.181**	0.228**	8.133**
<i>Model Variables</i>				
Conflict		0.126*	2.147*	9.879**
Blocked Career		0.395**	6.575**	21.984**
Alienation		0.298**	7.833**	15.023**
Work Overload		0.118**	3.473**	7.525**
Unfav. W. Environ. Neuroticism		-0.011	-0.728	6.190**
Extraversion		0.579**	6.448**	4.728**
Openness		-0.131**	-3.940**	-2.632**
Agreeableness		0.032	0.877	4.247**
Conscientiousness		-0.131**	-2.504*	-6.752**
		0.133*	2.490*	0.224
<i>Moderating Variable</i>				
Gender			-3.406**	8.285**
<i>Interaction Terms</i>				
Gender * Conflict				-18.267**
Gender * Blocked Career				-21.529**
Gender * Alienation				-12.520**
Gender * Work Overload				-6.782**
Gender * Unfav. W. Environ.				-9.982**
Gender * Neuroticism				15.743**
Gender * Extraversion				-13.091**
Gender * Openness				-3.230**
Gender * Agreeableness				9.172**
Gender * Conscientiousness				12.408**
R <sup>2</sup>	0.370	0.891	0.896	0.986
Adj R <sup>2</sup>	0.358	0.884	0.889	0.984
R <sup>2</sup> Change	0.370	0.521	0.005	0.090
Sig. F Change	0.000	0.000	0.000	0.000

\* p < 0.05, \*\* p < 0.01

Source: Research Data



the other hand, personality variables except for neuroticism were significantly and negatively correlated with job stress.

The results of the four-step hierarchical regression undertaken to test the first, second, and third hypotheses of this study is depicted in Table 5.

As shown in Table 5, when the five personal variables were entered into the regression equation in the first step, the coefficient of determination ( $R^2$ ) was found to be 0.37 indicating that 37% of the variance in job stress is explained by the demographic variables. Specifically, age and number of children had significant positive relationships with job stress whereas job tenure had a significant negative relationship with job stress. In step 2, by adding the ten independent variables,  $R^2$  increased to 89.1%. This  $R^2$  change (0.521) is significant. This implies that the additional 52.1% of variance in job stress is explained by the organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) and personality variables (neuroticism, extraversion, openness, agreeableness, and conscientiousness). As for the independent variables, eight out of the ten organizational and personality variables were found to have an impact on job stress. Of the organizational variables, blocked career ( $b = 0.395$ ), alienation ( $b = 0.298$ ), conflict ( $b = 0.126$ ), and work overload ( $b = 0.118$ ) were found to have significant and positive relationships with job stress. Unfavourable work environment, however, had no effect on stress. These results provide partial support for the first hypothesis of the study.

As for the personality variables, four of five dimensions had significant relationships with job stress. Specifically, neuroticism ( $b = 0.579$ ), and conscientiousness ( $b = 0.133$ ) were found to have significant and positive relationships with job stress. In contrast, extraversion ( $b = -0.131$ ), and agreeableness ( $b = -0.131$ ) had

significant and positive effects on stress. Openness, however, had no impact on job stress. Thus, the second hypothesis is partially supported.

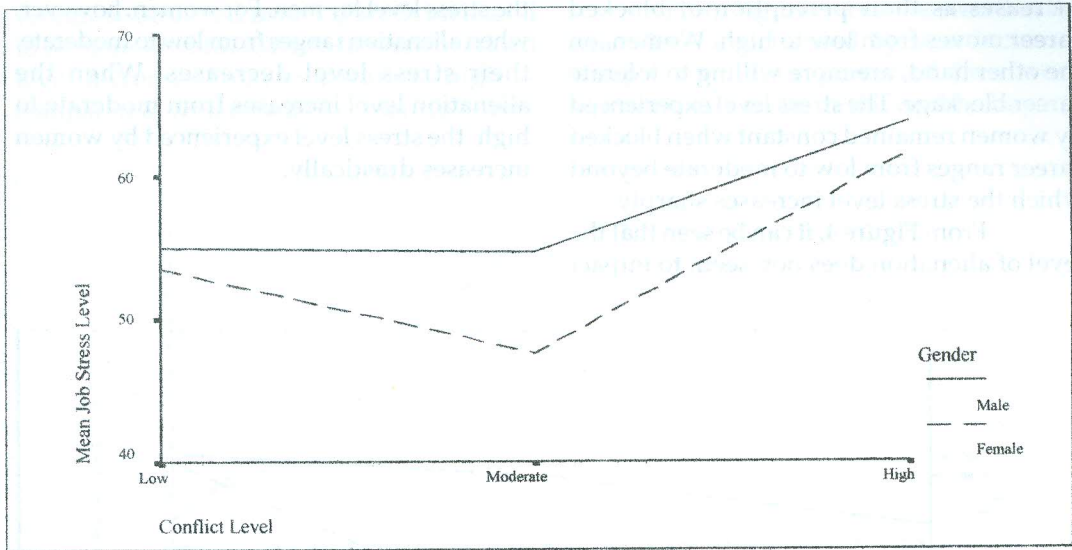
In the third step, gender was entered into the equation as an independent variable in order to gauge its impact as an independent predictor. The  $R^2$  increased from 89.1% to 89.6% indicating a change of 0.5%, which is significant ( $F$  change  $< 0.01$ ). In the fourth and final step, the ten interaction terms were entered into the model. From Table 5, it can be seen that the additional variance explained by the ten interaction terms was 9% and this addition is significant ( $F$  change  $< 0.01$ ), indicating that there is a moderation effect. From the final regression equation, it can be observed that all interaction terms were significant at the 0.01 level. These results provide support for the third hypothesis of the present investigation.

#### Moderating Effects of Gender

Based on the information gathered from Table 5, all interaction terms were significant at the 0.01 level. To portray the interactions between gender and each facet of the organizational and personality variables more clearly, graphs were drawn. To draw the graphs, the facets were first recoded into three categories namely: Low, Moderate and High by dividing the respondents into three approximately equal group using percentile ( $0 - 33\% = \text{Low}$ ,  $33.1 - 66\% = \text{Medium}$  and  $66.1 - 100\% = \text{High}$ ). The results of the significant interactions are presented in Figure 2 to Figure 11.

From Figure 2, it can be observed that for men, when conflict level ranges from low to moderate, their stress level remains the same. However, when the conflict level increases from moderate to high, their stress level increases at an increasing rate. This implies that men are able to tolerate a low to moderate level of conflict beyond which their stress level increases. For women, the pattern is different. The stress level experienced by



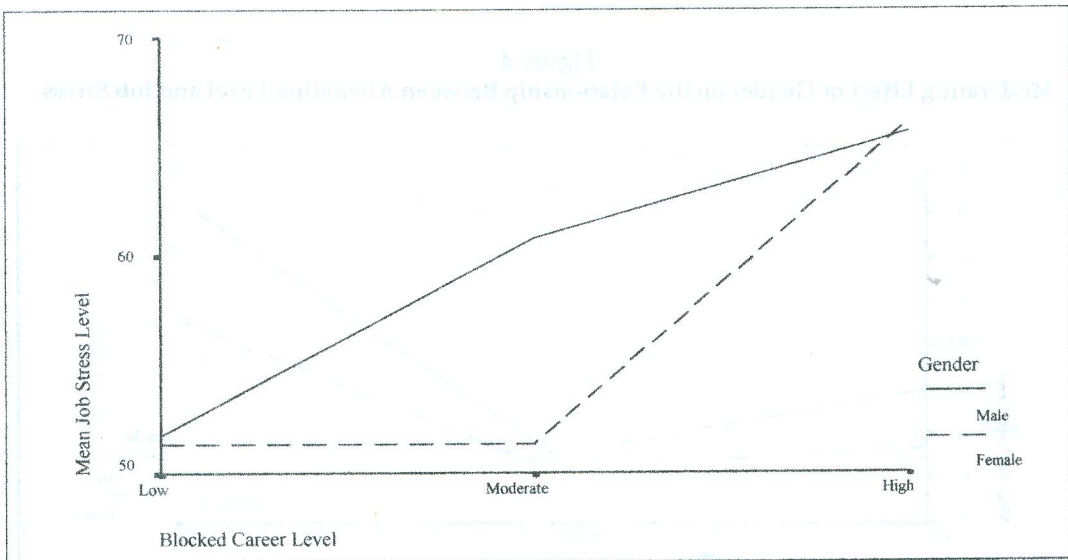


**Figure 2**

**Moderating Effect of Gender on the Relationship Between Conflict Level and Job Stress**

women decreases when the level of conflict ranges from low to moderate beyond which the stress level increases dramatically.

As shown in Figure 3, men are not tolerant to blocked career at their workplace. Specifically, their stress level



**Figure 3**

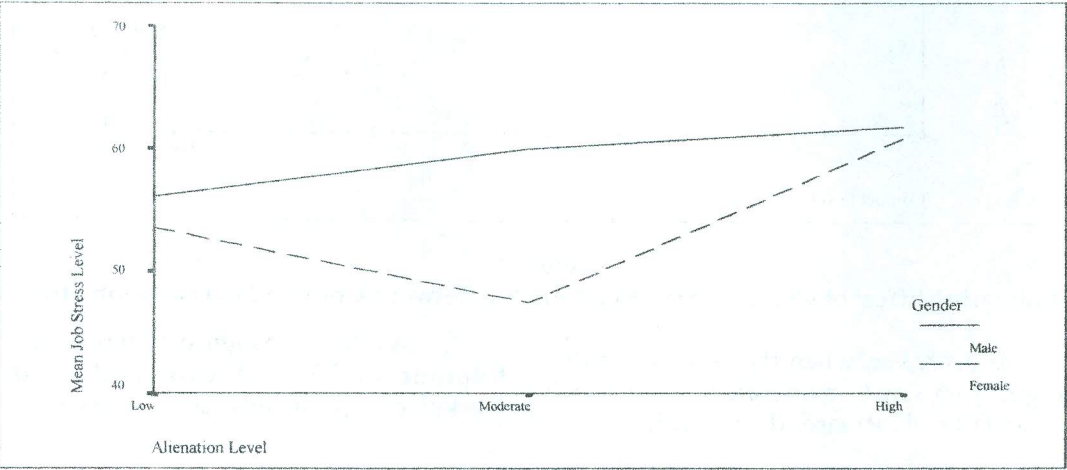
**Moderating Effect of Gender on the Relationship Between Blocked Career Level and Job Stress**



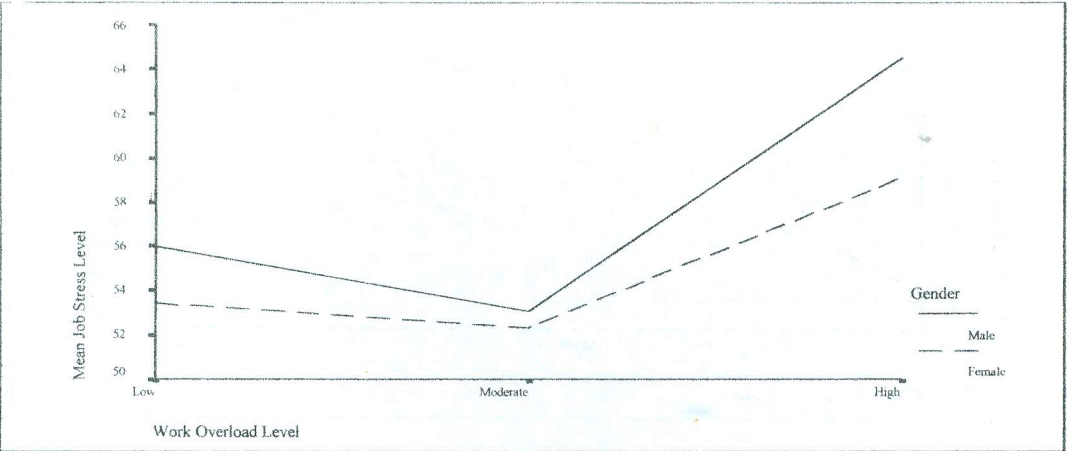
increases as their perception of blocked career moves from low to high. Women, on the other hand, are more willing to tolerate career blockage. The stress level experienced by women remained constant when blocked career ranges from low to moderate beyond which the stress level increases sharply.

From Figure 4, it can be seen that the level of alienation does not seem to impact

the stress level for men. For women, however, when alienation ranges from low to moderate, their stress level decreases. When the alienation level increases from moderate to high, the stress level experienced by women increases drastically.



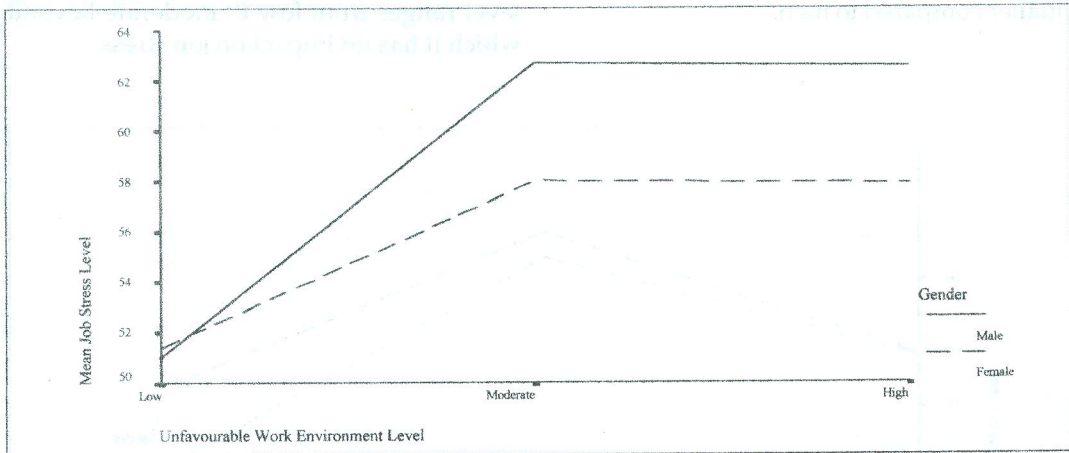
**Figure 4**  
Moderating Effect of Gender on the Relationship Between Alienation Level and Job Stress



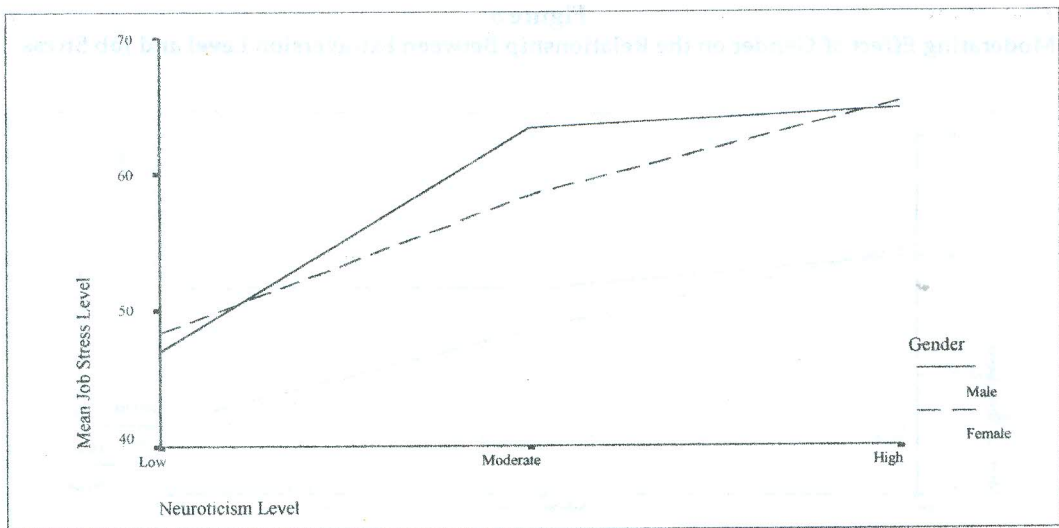
**Figure 5**  
Moderating Effect of Gender on the Relationship Between Work Overload Level and Job Stress

As can be observed from Figure 5, men tend to be more stressful when their work overload level increases from moderate to high as compared to women who are more tolerant.

From Figure 6, it can be seen that the stress level experienced by men increases sharply when they perceived their work environment to be unfavorable beyond



**Figure 6**  
Moderating Effect of Gender on the Relationship Between Unfavourable Work Environment Level and Job Stress

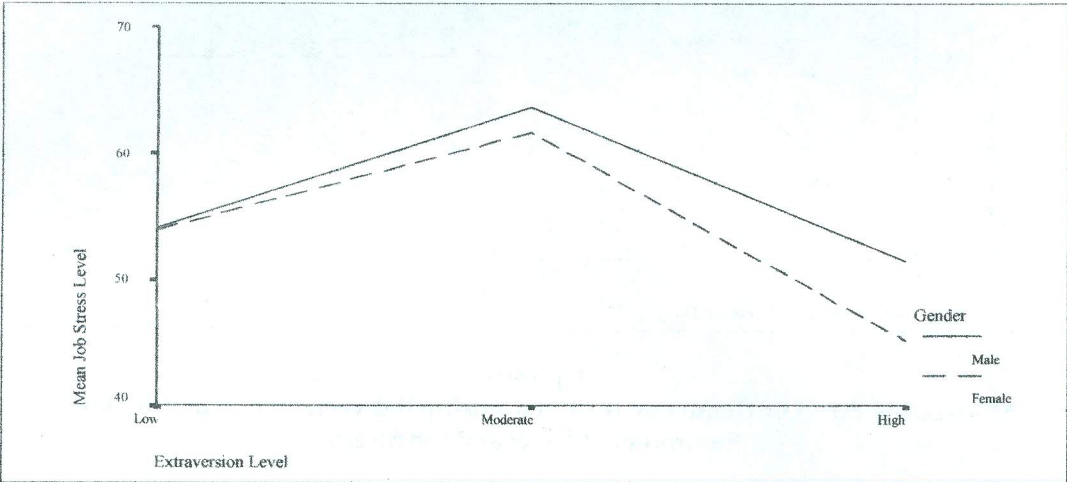


**Figure 7**  
Moderating Effect of Gender on the Relationship Between Neuroticism Level and Job Stress

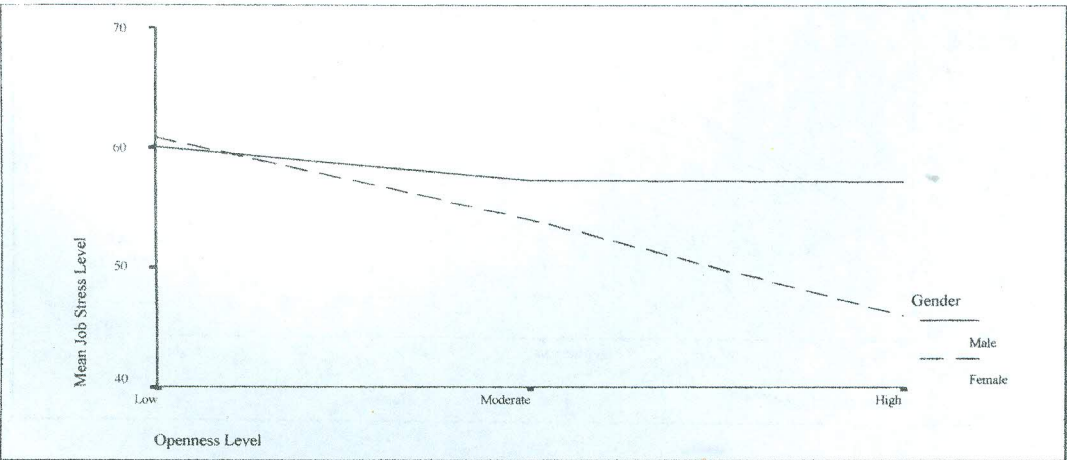


which this factor had no further impact on stress. The pattern of relationship between unfavorable work environment and job stress is similar for women. However, the rate of change in the relationship for women is smaller compared to men.

As shown in Figure 7, women tend to become more stressful when their neuroticism level increases from low to high. For men, however, their stress level increases at an increasing rate when their neuroticism level ranges from low to moderate beyond which it has no impact on job stress.



**Figure 8**  
Moderating Effect of Gender on the Relationship Between Extraversion Level and Job Stress



**Figure 9**  
Moderating Effect of Gender on the Relationship Between Openness Level and Job Stress

As can be observed from Figure 8, men tend to exhibit higher stress when their extraversion level ranges from low to moderate whereas women tend to exhibit lower stress levels when extraversion ranges from moderate to high.

From Figure 9, the level of openness does not seem to influence stress among men. Women's stress level, on the other hand, declines as their level of openness increases from low to high.

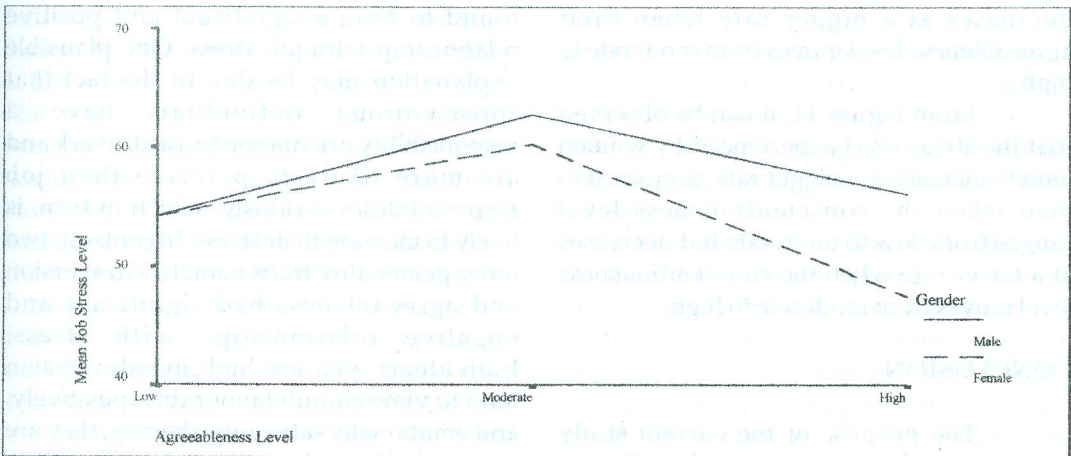


Figure 10

Moderating Effect of Gender on the Relationship Between Agreeableness Level and Job Stress

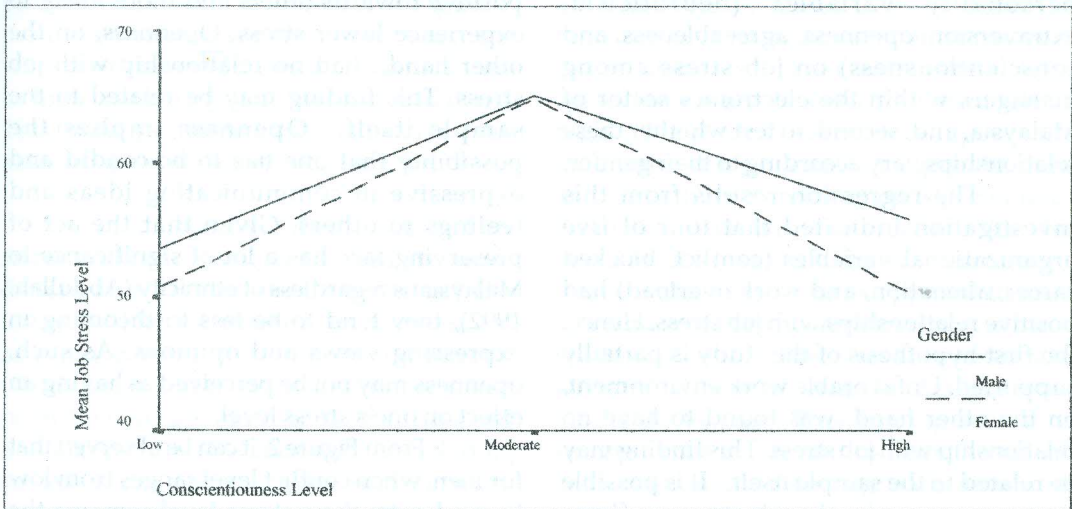


Figure 11

Moderating Effect of Gender on the Relationship Between Conscientiousness Level and Job Stress



As shown in Figure 10, men tend to become more stressful when their agreeableness level increases from low to moderate. On the other hand, their stress level decreases when their level of agreeableness increases from moderate to high. For women, however, their stress level decreases at a bigger rate when their agreeableness level moves from moderate to high.

From Figure 11, it can be observed that the stress level experienced by women tend to increase at a bigger rate compared to men when the conscientiousness level ranges from low to moderate but decreases at a faster rate when the conscientiousness level moves from moderate to high.

## CONCLUSION

The purpose of the current study was two-fold: first, to determine the influence of organizational variables (conflict, blocked career, alienation, work overload, and unfavourable work environment) and personality variables (neuroticism, extraversion, openness, agreeableness, and conscientiousness) on job stress among managers within the electronics sector of Malaysia, and, second, to test whether these relationships vary according to their gender.

The regression results from this investigation indicated that four of five organizational variables (conflict, blocked career, alienation, and work overload) had positive relationships with job stress. Hence, the first hypothesis of the study is partially supported. Unfavorable work environment, on the other hand, was found to have no relationship with job stress. This finding may be related to the sample itself. It is possible that managers in the electronics firms sampled may have perceived their work climate as relatively conducive. Within such a context, this variable may not be viewed as an organizational stressor.

In terms of personality variables, neuroticism had a significant and positive relationship with job stress. Individuals with elevated levels of neuroticism would be expected to be associated with higher stress since they are more likely to view stimuli as a threat to them. Conscientiousness, too, was found to have a significant and positive relationship with job stress. One plausible explanation may be due to the fact that conscientious individuals have a responsibility orientation towards work and are more likely to perceive their job responsibilities seriously, which in turn, is likely to increase their stress. In contrast, two other personality traits namely extraversion and agreeableness had significant and negative relationships with stress. Individuals who are high in extraversion tend to view stimuli favourably, positively, and emotionally satisfying, thereby, they are more likely to experience lower stress. Individuals who are high in agreeableness are sympathetic, helpful, cooperative, and friendly. As such, they are more likely to feel positive towards others and more likely to experience lower stress. Openness, on the other hand, had no relationship with job stress. This finding may be related to the sample itself. Openness implies the possibility that one has to be candid and expressive in communicating ideas and feelings to others. Given that the act of preserving face has a lot of significance to Malaysians regardless of ethnicity (Abdullah, 1992), they tend to be less forthcoming in expressing views and opinions. As such, openness may not be perceived as having an effect on one's stress level.

From Figure 2, it can be observed that for men, when conflict level ranges from low to moderate, their stress level remains the same. As their conflict level increases from moderate to high, their stress level increases at an increasing rate. This implies that men are able to tolerate a low to moderate level of conflict beyond which their stress level



increases. For women, however, the pattern is different. The stress level experienced by women decreases when the level of conflict ranges from low to moderate beyond which the stress level increases drastically. This finding seems to suggest that low to moderate levels of conflict would be more preferable for women. As shown in Figure 3, for men, their stress level increases as their perception of blocked career moves from low to high. The stress level experienced by women remains constant when blocked career ranges from low to moderate beyond which the stress level increases dramatically. This finding seems to suggest that men are not able to tolerate career blockage. From Figure 4, it can be seen that the level of alienation does not seem to impact the stress level for men. For women, however, their stress level decreases when alienation ranges from low to moderate. As alienation level increases from moderate to high, the stress level experienced by women increases sharply. This finding seems to suggest that low to moderate levels of alienation would be more preferable for women. As shown in Figure 5, men experienced higher stress when the work overload level increases from moderate to high whereas women are more tolerant. This finding seems to imply that men are not able to cope with heavy work burden.

From Figure 6, it can be seen that the stress level experienced by men increases drastically when they perceived the unfavourableness of their work environment as ranging from low to moderate beyond which unfavorable work environment had no further impact on stress. Women, too, had a similar pattern of relationship. This finding seems to suggest that unfavorable work environment is stressful for both men and women. As shown in Figure 7, women tend to become more stressful when their neuroticism level increases from low to high. For men, however, their stress level increases at an increasing rate when their neuroticism

level ranges from low to moderate beyond which it has no impact on job stress. This finding seems to imply that neuroticism tend to increase stress among men and women but the impact seem to be more prominent for women. From Figure 8, it can be seen that men tend to exhibit higher stress when their extraversion level ranges from low to moderate. Women, on the other hand, tend to exhibit lower stress level when extraversion ranges from moderate to high. This finding seems to suggest that moderate to high level of extraversion among women is preferable.

As can be observed from Figure 9, the level of openness does not seem to influence stress among men. However, for women, their stress level declines as their level of openness increases from low to high. This finding seems to suggest that low to high levels of openness among women is preferable. As shown in Figure 10, for men, their stress level increases when their agreeableness level increases from low to moderate but decreases when their level of agreeableness increases from moderate to high. For women, however, their stress level decreases at a bigger rate when their agreeableness level moves from moderate to high. This finding seems to suggest that moderate to high levels of agreeableness among both men and women is preferable. From Figure 11, it can be observed that the stress level experienced by women tend to increase at a bigger rate as opposed to men when the conscientiousness level ranges from low to moderate but decreases at a faster rate when the conscientiousness level ranges from moderate to high. This finding seems to suggest that moderate to high levels of conscientiousness among both men and women is preferable.

From the managerial point of view, the findings from this research suggest that employing organizations need to attend to organizational factors that are likely to act as job stressors. In order to reduce stress



among managers, organizations should provide sufficient opportunities for their managers to move to higher positions in the organizational hierarchy, build cohesive cross-functional work teams, avoid burdening managers with heavy workloads, and communicate clearly its expectations. Given that gender did play the role of a moderator in the relationship between the organizational variables and job stress, organizations need to be careful in their placement process. For instance, employers may need to avoid placing: (1) managers of either gender in jobs that entail moderate to high levels of conflict, (2) men in jobs that have minimal prospects of career progression, (3) women in jobs that are highly alienated, (4) men in jobs that entails heavy work duties and assignments, (5) both men and women managers in an unfavorable work environment. Similarly, the findings from this investigation suggest that organizations need to attend to the individual's personality traits that are likely to induce stress. Given that gender did play the role of a moderator in the relationship between personality dimensions and job stress, organizations need to be careful in their selection process. For example, employers may need to select candidates of either gender : (1) who experience moderate to high levels of agreeableness, and (2) who experience moderate to high levels of conscientiousness.

There are three major limitations in this research that need to be noted. First, this study makes use of cross-sectional data, which limits inferences with regards to causality between the independent variables and the dependent variable. The use of a longitudinal approach would improve the ability to make causal statements. Second, this study is limited to managers within the manufacturing industry of Malaysia. Thus, the validity of the findings cannot be generalized to other job incumbents in other sectors. Future research may be conducted to

compare the predictive validity of the model across different jobs and industries. Third, given that there may be other individual, occupational, organizational, and non-work factors that also affect and moderate stress, researchers interested in this area should try to explore these factors in future.

## REFERENCES

- Abdullah, A., 1992. "Influence of ethnic values at the Malaysian workplace". In A. Abdullah (ed) *Understanding the Malaysian Workforce: Guidelines for Managers*. Kuala Lumpur : Malaysian Institute of Management, pp. 2-17.
- Aun, O.E., 1998, *Perceived Organizational Climate, Teachers' Locus of Control and Burnout*. Unpublished MBA Thesis. Penang: Universiti Sains Malaysia.
- Bank Negara Malaysia, 2001. *Annual Report*.
- Bat, S.T., 1995. *Effect of Organizational Environment and Personal Factors on Work Stress and Organizational Commitment*. Unpublished MBA Thesis. Penang: Universiti Sains Malaysia.
- Beehr, T.A., and J.E. Newman, 1978. "Job Stress, Employee Health and Organizational Effectiveness: A Facet Analysis, Model and Literature Review". *Personnel Psychology*. 31,3, 665-699.
- Birch D. N., and F. Kamali, 2001. "Psychological Stress, Anxiety, Depression, Job Satisfaction, and Personality Characteristics in Pre-Registration House Officers". *Postgraduate Medical Journal*. 77,904, 109-121.
- Clark, L.A., and D.Watson, 1991. "Tripartite model of anxiety and depression: Psychometric evidence and taxonomic implications". *Journal of Abnormal Psychology*, 100,12, 316-336.
- Cohen, J., and P. Cohen, 1975. *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. New Jersey: Lawrence Erlbaum Associates.
- Cook, C.W., and P.L. Hunsaker, 2001. *Management and Organizational Behavior*. 3<sup>rd</sup> Ed. New York: McGraw Hill.
- Cooper, C. L., B. D.Kirkaldy, and J. Brown, 1994. "A Model of Job Stress and Physical Health: The Role of Individual Differences". *Personality and Individual Differences*. 16,6, 653-655.
- Costa, P.T., and R.R. McCrae, 1985. *The NEO Personality Inventory Manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Costa, P.T., and R.R. McCrae, 1985. *Revised NEO Personality Inventory and NEO Five-Factor Inventory: Professional Manual*. Odessa, FL: Psychological Assessment Resources, Inc.
- Davis, M., R.E.Elizabeth, and M. Matthew, 2000. *The Relaxation and Stress Reduction Workbook*. 5<sup>th</sup> Ed. New York: New Harbinger Publications.
- Deary, I.J., and H. Blenkin, 1996. "Models of Job-Related Stress and Personal Achievement Among Consultant Doctors". *British Journal of Psychology*. 87,1, 3-29.
- Eugene, J.W., 1999. "The Impact of Work Resources on Job Stress Among Correctional Treatment Staff". *Journal of Addictions and Offender Counseling*. 20, 1, 26-34.
- Farh, J-H., P.C. Earley, and S-C. Lin, 1997. "Impetus for Action: A Cultural Analysis of Justice and Organizational Citizenship Behavior in Chinese Society". *Administrative Science Quarterly*. 42,3, 421-444.
- Foot, D.K., and R. Venne, 1990. "Population, Pyramids and Promotional Prospects". *Canadian Public Policy*. 14,4, 387-398.
- Goldberg, L.R. 1993 "The Structure of Phenotypic Personality Traits". *American Psychologist*. 48,1,26-34.
- Goldberg, D., and V. Hillier, 1978. *A User's Guide to the General Health Questionnaire (GHQ)*. Windsor: NFER-Nelson.



- Graziano, W.G., and N.H. Eisenberg, 1997. "Agreeableness: A Dimension of Personality. In R.Hogan Influence of ethnic values at the Malaysian workplace". In R. Hogan, J.A. Johnson, & S. Briggs (eds), Handbook of Personality Psychology. San Diego: Academic Press. pp. 795-824.
- Greenhaus, J.H., and N.J. Beutell, 1985 "Sources of Conflict Between Work and Family Roles". Academy of Management Review. 12,6, 120-128.
- Greenhaus, J.H., A.G. Bedeian, and K.W. Mossholder, 1987. "Work Experiences, Job Performance, and Feelings of Personal and Family Well-Being". Journal of Vocational Behavior. 31,7, 200-215.
- Hall, K., and L. K. Savery, 1986. "Tight Rein, More Stress". Harvard Business Review. 23,10, 1162-1164.
- Haw, M.A. 1982. "Women, Work and Stress: A Review and Agenda for the Future". Journal of Health and Social Behavior. 23, 132-144.
- Hogan, J., and D.S. Ones, 1997. "Conscientiousness and Integrity at Work". In R.Hogan, J. A. Johnson, & S. Briggs (eds), Handbook of Personality Psychology. San Diego: Academic Press. pp. 849-870.
- Jestin. W., and A. Gampel, 2002. The Big Valley, Global Outlook. Toronto: McGraw Hill.
- Jick, T.D., and L.F. Mitz, 1985. "Sex Differences in Work Stress". Academy of Management Review. 10,1,408-420.
- John, O.P., and S. Srivastava, 1999. "The Big Five-Trait Taxonomy: History, Measurement, and Theoretical Perspective". In L.Pervis & O. John (eds), Handbook of Personality: Theory and Research. New York: Guilford. pp. 102-138.
- Kanungo, R.N., 1981. "Work alienation and Involvement: Problems and Prospects". International Review of Applied Psychology. 30, 1-15.
- Kuan, O.W., 1994. The Effect of Marital Status of Working Women on Organizational Commitment and Work Stress. Unpublished MBA Thesis. Penang: Universiti Sains Malaysia.
- Mansor, N., 1994. "Women Managers in Malaysia: Their Mobility and Challenges". In N.J. Adler & D.N. Izraeli (eds), Competitive Frontiers: Women Managers in a Global Economy. Cambridge, Massachusetts: Blackwell Publishers. pp. 101-113.
- Matteson, M. T., and J. M. Ivancevich, 1999. Organizational Behavior and Management. 5<sup>th</sup> Ed. New York: McGraw Hill.
- McCrae, R.R., 1996. "Social Consequences of Experiential Openness". Psychological Bulletin. 120, 323-337.
- Miller, K., and B.H. Ellis, 1990. "An Integrated Model of Communication, Stress, and Burnout in the Workplace". Communication Research. 17, 3, 27-300.
- Mirovisky, J., and E. Ross, 1986. "Social Patterns of Distress". Annual Review of Sociology. 12,23-45.
- Moberg, P.J., 2001. "Linking Conflict Strategy to the Five-Factor Model: Theoretical and Emperical Foundations". International Journal of Conflict Management. 12,1, 47-68.
- Murray, T. J., and D. Forbes, 1986. "Where Have All the Middle Managers Gone?". Dun's Business Month. 31-34.
- Ngo, H-Y, and A.W-N. Tsang, 1998. "Employment Practices and Organizational Commitment: Differential Effects for Men and Women". The International Journal of Organizational Analysis. 3, 251-266.
- Northcraft, G.B., and B.A. Gutek, 1993. "Point-Counterpoint: Discrimination Against Women in Management-

- Going, Going, Gone or Going but Never Gone". In E.A.Fagenson (eds), *Women in Management: Trends, Issues, and Challenges in Managerial Diversity*. California: Sage. pp. 219-245.
- Nunnally, J.L. 1978. *Psychometric Theory*. 2<sup>nd</sup> Ed. New York: McGraw Hill.
- Rahim, A. 1996. "Stress, Strain, and Other Moderators: An Empirical Comparison of Entrepreneurs and Managers". *Journal of Small Business Management*. 34,1, 46-58.
- Roberts, J. A., R. A. Lapidus, and L. B. Chonko, 1997. "Salesperson and Stress : The Moderating Role of Locus of Control on Work Stressors and Felt Stress". *Journal of Marketing Theory and Practice*. 5,3, 93-108.
- Robbins, S.P., 2001. *Organizational Behavior*. 9<sup>th</sup> Ed. New Jersey: Prentice-Hall, Inc.
- Selye, H., 1976. *The Stress of Life*, New York: McGraw Hill.
- Smith, P.L., S. J. Stanley, and H. Frank, 1998. "Employee Work Attitudes: The Subtle Influence of Gender". *Human Relations*. 51,5, 649-667.
- Tellegen, A., 1985. "Structures of Mood and Personality and Their Relevance to Assessing Anxiety With An Emphasis on Self-Report". In A. H. Tuma & J. D. Maser (Eds.), *Anxiety and Anxiety Disorders*. Hillsdale, NJ.: Erlbaum. pp. 681-706.
- Terborg, J.T. 1977. "Women in Management: A Research Review". *Journal of Applied Psychology*. 62, 647-664.
- Thoits, P., 1995. "Stress, Coping, and Social Support Processes: Where are We? What Next?". *Journal of Health and Social Behavior*. 36,1, 53-79.
- Watson, D., and L.A.Clark, 1997. "Extraversion and Its Positive Emotional Core". In R.Hogan, J. A. Johnson, & S. Briggs (eds), *Handbook of Personality Psychology*. San Diego: Academic Press. pp. 767-794.
- Yahya, R., 1998. *Organizational Factors that Contribute to Teachers' Stress*. Unpublished MBA Thesis. Penang: Universiti Sains Malaysia.