

THE IMPACTS OF STRUCTURE, CLIMATE AND SELF-EFFICACY ON STRESS: A MALAYSIAN SURVEY

*Aizzat Mohd. Nasurdin**, *T. Ramayah* and *Yeoh Chee Beng*
School of Management, Universiti Sains Malaysia
11800 USM Pulau Pinang, Malaysia
*e-mail: aizzat@usm.my

ABSTRACT

This study examines the impacts of organisational structure (formalisation and centralisation) and organisational climate in predicting job stress in a non-Western environment. It also explores the moderating effects of self-efficacy in the proposed relationships. A total of 151 securities sales personnel in Malaysia were sampled for this study. The findings indicated a positive relationship between both structural variables and stress. The organisational climate dimensions were found to be unrelated to stress. The role of self-efficacy as a moderator in the hypothesised relationships had limited support. Implications of this work and directions for future research are discussed.

Keywords: stress, structure, climate, self-efficacy, sales personnel, securities, Malaysia

INTRODUCTION

Recent years have seen an increasing number of workers experiencing excessive pressures arising from increasing competition, corporate restructurings, technological changes, and demand for high organisational performance. Employees are required to perform multiple tasks, acquire new knowledge and skills, and work independently to meet job demands. All of these challenges lead to greater stress. Depending on the severity and duration of these stressors, stress can manifest itself physiologically, psychologically, and behaviourally in the affected individual. Since stress has dysfunctional consequences on workers, an understanding the effects of workplace elements on job stress is likely to aid organisations in fostering a "low-stress" environment and assist employees in coping with stress.

Generally, stress among the sales workforce in securities trading is intense. This is because as boundary spanners, these workers are vulnerable to conflicting role demands. They have to reconcile the needs, desires, and expectations of both clients and employers. Additionally, their high stress is prompted by ambiguity in external environmental elements, such as economic conditions, market demands,

and government regulations. According to Murray and Schlacter (1990), the task of selling securities is a challenging one, leading to greater stress, as this commodity has been perceived to possess a high degree of risk. In the past decade, pressures and challenges arising from the increasingly competitive business environment have resulted in a significant number of mergers and acquisitions among segments within the global financial services industry. One such segment relates to the stock broking sector.

In the case of Malaysia, regulators have encouraged locally owned stock broking companies to merge into a core of well-capitalised universal brokers that are able to offer a wide range of capital market services. Such major consolidation practices would make the nation's capital market more competitive and help increase fund management efficiency. Relevant securities laws have also been reviewed and amended to enhance the enforcement powers of the country's Securities Commission. As a result, by the end of 2005, the number of Malaysian-owned stock broking companies decreased from 60 to 32 (Economic Planning Unit, 2006). Mergers and acquisitions represent highly emotive and destabilising change events that can create a high degree of stress (Lotz & Donald, 2006). This is because employees involved in such organisational changes are likely to feel uncertain about potential termination, transfers, and the need to survive in a new and relatively unknown environment. These feelings of job insecurity may create stress. Following the substantial reforms undertaken within the Malaysian stock broking sector, its employees, especially sales personnel, are expected to experience high stress.

While studies on the effects of organisation-related stressors on job stress in the United States and other developed countries (like Canada, South Africa, Finland, Norway and Australia) have mushroomed over the past decade (Hemingway & Smith, 1999; Lapidus, Roberts, & Chonko, 1997; Lotz & Donald, 2006; Makikangas & Kinnunen, 2003; Mikkelsen & Gundersen, 2003; Miller & Ellis, 1990; Montgomery, Blodgett, & Barnes, 1996; Savery & Luks, 2001), attempts to look at the construct in developing countries of the East, particularly Malaysia, are generally lacking, with very few exceptions (Manshor, Fontaine, & Choy, 2003; Nasurdin, Ramayah, & Kumaresan, 2005). Manshor et al. (2003) discovered that heavy workload, prolonged work at video display terminals, and risk and danger associated with the job contributed to occupational stress among managers attached to multinational firms in Malaysia. On the other hand, Nasurdin et al. (2005) found evidence for significant positive effects of selected organisational variables (e.g., conflict, blocked career, and alienation) on managerial job stress. In addition, the personality trait relating to neuroticism was found to moderate the relationships between certain organisational stressors (alienation, work overload, and unfavourable work environment) and job stress.

Hence, by drawing samples from non-Western developing countries, we will be able to enrich the literature on job stress antecedents across people from different country of origin. According to Agarwal (1993), even though there have been many published studies on the stress antecedents in a sales setting, how these elements affect the job stress of salespeople in an international context or among different nationalities is less clear. With the increasing internationalisation of businesses and the fact that the financial sales field is susceptible to high stress, there is a definite need to fill this gap in the literature. As such, this study is designed to identify predictors of stress among sales personnel within Malaysian financial securities trading.

In addition, findings on the moderating role of individual-level self-efficacy in stressors-outcomes linkages have been divided. Some scholars (Grau, Salanova, & Peiro, 2001; Jex & Bliese, 1999) have found evidence for the moderating influence of self-efficacy on the relationship between job stressors and psychological strains. However, others such as Jex and Gudanowski (1992) have not found such relations to exist. Hence, additional research on the role of individual-level self-efficacy as a moderator of organisational stressors-outcomes linkages, particularly using an Asian sample, is warranted. It is hoped that findings from the present study will contribute positively to the body of knowledge on the existence of cross-cultural differences, thereby creating a more robust theory of the field. As Poelmans (2003) suggests, one way of doing cross-cultural research is to collect data in a specific country or region and to test or replicate existing Anglo-Saxon models. Therefore, our objective is to contribute to the existing research on job stress by first examining the direct effects of organisational structure (formalisation and centralisation) and organisational climate on job stress and then by exploring the potential role of self-efficacy as a moderator in the proposed relationships.

REVIEW OF LITERATURE

Stress and Organisational Stressors

Stress may be broadly conceptualised as any condition that has adverse consequences for an individual's well-being (Crank, 1991). A more refined definition is given by Parker and DeCotiis (1983) who view stress as an awareness or feeling of personal dysfunction resulting from perceived conditions at the workplace, as well as one's psychological and physiological reactions to these uncomfortable or undesirable conditions. Stress can be triggered by an array of variables relating to the environment, the organisation, and the individual (Robbins & Judge, 2007). For employees, the organisation plays a primary role in causing job stress. However, the workplace stressors-stress relationships are not

always straightforward. According to Fairbrother and Warn (2003), the lack of consistent findings may be dependent upon the job contexts being investigated.

While a comprehensive framework of job stress for financial securities salespeople have been developed and tested by Montgomery et al. (1996), our purpose was to examine whether organisational structure and organisational climate serve as direct antecedents of their job stress. We focus on organisational structure because they represent general practices that pervade the entire organisation as advocated by Singh, Verbeke, and Rhoads (1996). In line with the work of past researchers (Fotinos-Ventouratos & Cooper, 2005; Lapidus et al., 1997; Sohi, Smith, & Ford, 1996), and in the interest of parsimony, only formalisation and centralisation were considered in the present study. Organisational climate was also included in this study because this construct has received relatively little attention in the stress literature (Hemingway & Smith, 1999; Makikangas & Kinnunen, 2003; Wong & Wong, 2002). Additionally, in an industry that is volatile and where organisational success and survival depend upon the organisation's capacity to change, employees' perceptions of their organisation's climate are important, as suggested by Akbulut, Kuzu, Latchem, and Odabasi (2007).

There is evidence to suggest that the nature and strength of the relationship between organisational stressors and stress may be determined by employees' beliefs concerning their ability to accomplish a course of action needed to meet the demands of a situation (Beehr & Newman, 1978; Grau et al., 2001; Jex & Bliese, 1999; Jex, Bliese, Buzzell, & Primeau, 2001; Siu, Spector, Cooper, & Lu, 2005). Employees who do not feel capable and confident of performing well in a situation (low self-efficacy) would view organisational stressors as being more threatening and are more likely to experience greater stress than those who feel more capable and are more confident of their own efforts (high self-efficacy). Thus, our second objective is to test whether self-efficacy moderates the organisational stressors-stress relationships.

Formalisation and Job Stress

Formalisation reflects the degree to which jobs within an organisation are standardised and the extent to which employee behaviour is guided by rules and procedures (Robbins & Coulter, 2005). Organisations with high formalisation possess elaborate employee manuals, explicit job descriptions, numerous organisational rules, clearly defined procedures concerning work processes, and other written documents. Likewise, a job that is highly formalised suggests that the incumbent job has little discretion as to what is to be done, when it is to be done, and how one ought to do it. Hence, in a highly formalised environment, employees are likely to experience high stress because they have lesser control

about how they perform their work and have little flexibility to choose actions that they think would best fit their situation. In the case of securities trading where the environment is highly volatile, formalisation is bound to have a direct influence on salespeople's job stress.

In a similar vein, it can also be argued that formalisation can have an indirect effect on stress through role conflict. When sales personnel are not given the freedom to suggest whichever investment mechanism they feel is appropriate for each client, they are more likely to experience conflict between the goals of the company and those of the customer. Additionally, excessive paperwork and complicated "red tape" may clash with the demands imposed by the client. As a result, it may be difficult for the salespeople to balance their responsibilities to their clients and to their organisations. Such incongruent expectations may cause role conflict, which in turn may lead to greater stress. Previous findings by scholars (Agarwal, 1999; Lapidus et al., 1997; Roberts, Lapidus, & Chonko, 1997; Um & Harrison, 1998) provide empirical support for the positive impact of formalisation on stress level experienced by sales personnel. On the basis of the preceding argument, it can be posited that formalisation should lead to an increase in job stress among salespeople within the financial securities sector. Therefore, we propose that:

H₁: There will be a positive relationship between formalisation and job stress of the securities sales personnel.

Centralisation and Job Stress

According to Hodge, Anthony and Gales (2003), centralisation occurs when the decision-making authority is vested in top management. In a highly centralised organisation, top managers make the organisation's key decisions with little or no input from lower-level employees. In this situation, the organisation's become less flexible since workers have limited autonomy and control over their work, which in turn, positively affect their stress levels (Sohi et al., 1996). Lapidus et al. (1997) provided empirical evidence for the positive effect of centralisation on job stress. Centralisation also implies lack of empowerment. According to Froiland (1993), when employees are empowered, they have more control over how they perform their work, which tends to reduce the risk of stress. In their study of human service professionals, Lait and Wallace (2002) note that the lack of autonomy and control over daily work activities contributes to greater job stress.

In the securities business, increased centralisation suggests that salespeople are unable to apply their own discretion in deciding actions that they think is appropriate in a particular trading situation. For example, the salespeople are

unable to decide which stocks to sell or to utilise whichever sales techniques they feel work best. Furthermore, when decisions are made at the top in the organisational hierarchy, sales personnel are likely to experience role ambiguity. This is because salespeople as boundary spanners are accountable to their clients and yet may feel powerless to act, as they need time to obtain the necessary information regarding organisational decisions. The findings by Sohi et al. (1996) offer empirical proof for a positive relationship between centralisation and role ambiguity. The constraints associated with role ambiguity due to information deficiency may subsequently enhance sales personnel's stress level. Moncrief, Babakus, Cravens, and Johnston (1997) demonstrate that role ambiguity contributes to greater job stress. Hence, it can be conjectured that centralisation should positively affect job stress among sales personnel within the Malaysian stock broking industry. As a result, the following hypothesis is formulated:

H₂: There will be a positive relationship between centralisation and job stress of the securities sales personnel.

Organisational Climate and Job Stress

Broadly speaking, organisational climate refers to the shared perceptions of employees regarding organisational functioning and practices (Yahyagil, 2006). More specifically, it relates to the shared perceptions of organisational policies, practices, and procedures, both formal and informal (Reichers & Schneider, 1990). According to Prichard and Karasick (1973), organisational climate may be regarded as a relatively enduring quality of an organisation's internal environment that distinguishes it from other organisations; a) which results from the behaviour and policies of its members, especially those at the top level; b) which is being perceived by members of the organisation; c) which serves as a basis for interpreting the situation; and d) which acts as a source of pressure for directing actions or activity.

Organisational climate has been conceptualised as a multidimensional construct (Litwin & Stringer, 1968; Muchinsky, 1976; Parker, Baltes, Young et al., 2003; Patterson, West, Shackleton et al., 2005; Schnake, 1983). For example, structure, responsibility, reward, risk taking, support, warmth, standard, conflict, identity (Litwin & Stringer, 1968), individual autonomy, degree of structure imposed on the situation, reward orientation, consideration, warmth, and support (Campbell, Dunnette, Lawler, & Weick, 1970; Field & Abelson, 1982), role stress and lack of harmony, job challenge and autonomy, leadership facilitation and support, work group cooperation, friendliness, and warmth (James & James, 1989), nature of interpersonal relationships, nature of hierarchy, nature of work, and focus on support and rewards (Schneider, Brief, & Guzzo, 1996). However, four common dimensions were examined in the present investigation: autonomy/control, degree

of structure, rewards, and consideration, warmth and support, following past scholars (Campbell et al., 1970; Field & Abelson, 1982).

Organisational climate has been proposed as a contributor to stress (Hemingway & Smith, 1999; Zeffane & McLoughlin, 2006). A favourable evaluation of the work environment will lead to lower stress, whereas an unfavourable psychological atmosphere perceived by the employees will result in higher stress. A favourable climate entails a high level of autonomy, strong peer cohesion, supervisory support, and a low level of work pressure. In contrast, an unfavourable climate will be associated with a lack of autonomy, poor peer cohesion, inadequate supervisory support, and high work pressure. The role of organisational climate as a stressor is consistent with the argument put forth by Wong and Wong (2002). Specifically, a climate characterised by extreme competition or poor interpersonal communication can foster stress at the workplace. Likewise, an organisation that adopts a strict and threatening management style is bound to be more stressful to work in compared to one that has a more supportive and considerate style.

A work climate that is judged as being structurally flexible, providing freedom in decision making, emphasising rewards for a job well done, encouraging challenge in terms of goals and risk taking, and fostering warmth, support, open-communication, as well as a sense of identity, is likely to reduce stress. This is because such a climate will be able to facilitate employees' goal achievement. In such situation, employees are bound to feel motivated, satisfied, and less stressed. Many salespeople enter a sales career for the freedom and independence associated with the profession (Montgomery et al., 1996). It is logical to assume that a work environment perceived as encouraging individual responsibility, being less structured, focusing on positive reinforcements rather than punishments, and promoting interpersonal relationships will lead to lower stress among securities salespeople. Previous researchers have reported that specific climate dimensions were related to greater stress (Hemingway & Smith, 1999; Makikangas & Kinnunen, 2003). Therefore, our third hypothesis is:

- H₃: There will be a negative relationship between favourable organisational climate dimensions (i.e., high degree of autonomy, low degree of structure, high degree of rewards, and a high degree of warmth) and job stress of the securities sales personnel.

The Moderating Role of Self-Efficacy in the Stressor-Stress Relationships

Self-efficacy represents an individual's beliefs regarding his/her ability to organise and executes a course of action needed to meet the demands of a situation (Bandura, 1977). Put another way, self-efficacy is a person's belief about his/her chances of successfully accomplishing a specific task (Kreitner & Kinicki, 1995). Individuals with high self-efficacy feel capable and confident of performing well in a situation (Luthans, 1995). These positive self-perceptions would have a favourable impact on the amount of effort and persistence shown by individuals when faced with workplace stressors. According to Beehr and Newman (1978), employees who do not believe that they will be able to undertake their job responsibilities (low self-efficacy) would view organisational stressors as being more threatening and are likely to exhibit more negative reactions than those who are more confident (high self-efficacy). Similarly, Jex and Bliese (1999) argue that individuals with high self-efficacy tend to do something about stressors, whereas those with low self-efficacy have a greater tendency to worry about them. Moreover, Jex et al. (2001) surmised that stressors would be more threatening to individuals who do not perceive themselves as having the competence to perform their job tasks. Given that stress levels differ according to one's beliefs about oneself, it is intuitively appealing to conjecture self-efficacy as a moderator in the relationship between stressors and job stress.

In securities sales, we argue that salespeople with high self-efficacy would be able to cope with occupational stressors better than those with low self-efficacy. Those who are confident in their ability to achieve desired job outcomes (high self-efficacy) are likely to use effective coping strategies, which in turn will help them to adapt to workplace stressors (characterised by high formalisation, high centralisation, and poor organisational climate) much better. Prior studies have provided empirical proof for the role of self-efficacy as a moderator in stress-strain relationships (Jex & Bliese, 1999; Grau et al., 2001; Siu et al., 2005). On the basis of the literature, self-efficacy is expected to moderate organisational stressors-stress relationships as follows:

- H₄: The positive relationship between organisational structure (formalisation and centralisation) and unfavourable organisational climate (i.e., low degree of autonomy, high degree of structure, low degree of rewards, and a low degree of warmth) and job stress will be weaker for high self-efficacy sales personnel than for low self-efficacy sales personnel.

METHOD

Population, Subjects and Procedure

The population for this study consisted of securities salespeople (i.e. paid dealers) working in the state of Penang, Malaysia. The choice of state was based on convenience. At the time of study, nine stock broking firms were operating on the island and mainland of Penang, involving a total of 225 dealers. However, at the time of questionnaire distribution, 29 of them had resigned. Since the remaining population of dealers were relatively small, and to ensure a sufficient number of responses, we opted for a census by distributing questionnaires to all of them with the help of each firm's human resource officials. Respondents were given two weeks to answer the questionnaires. After the stipulated period, a total of 151 useable questionnaires were gathered, representing a response rate of about 77%.

Measurements

The organisational stressors studied are organisational structure (formalisation and centralisation) and organisational climate (participation and rewards, structure, warmth and support, standards, and responsibility). Formalisation and centralisation were measured on a scale of four items, each adopted from Camps and Cruz (2002). Responses to the items were anchored by a 5-point scale (1 = very much disagree to 5 = very much agree). Organisational climate was measured using a 30-item instrument developed by Schnake (1983). A four-point response format (1 = definitely disagree to 4 = definitely agree) was used. Self-efficacy was measured using 10 items adopted from Schwarzer and Scholz (2000) utilising a four-point response format (1 = not at all true to 4 = exactly true). Job stress, the criterion variable, was gauged using six items adopted from Cullen, Lemming, Link and Wozniak (1985). Answers were scored on 5-point Likert scale (1 = strongly agree to 5 = strongly disagree).

Data Analysis

Selected personal variables (age, gender, marital status, education, race, number of children, organisational tenure, job tenure, and monthly income) were controlled in the statistical analysis following several researchers (Cooper, Kirkcaldy, & Brown, 1994; Coverman, 1989; Kirkcaldy, Brown, & Cooper, 1998; Lait & Wallace, 2002; Rashed, 2001; Roberts et al., 1997). Factor analyses were performed to detect the dimensionality of the constructs. We used hierarchical multiple regression (Cohen & Cohen, 1975) to test the hypotheses.

RESULTS

Sample Characteristics

There were more males (51%) than females (49%). Chinese (69.5%) dominated the sample. The majority (78.8%) of them were 35 years old and below, with 43.7% between the ages of 26 to 30 years. Over half of them (58.3%) were holders of bachelor's degrees. About 60% of our respondents had been in their job for 5 years and below. Almost all (91.4%) had worked for 10 or fewer years in the current firm. Over three quarters of them (77.5%) were married. About half of the married respondents (50.3%) had between one to two children. About half of them (50.3%) earned monthly incomes between RM2,500 and RM3,499.

Factor Results

A series of factor analyses were conducted to validate the dimensionality of the constructs. In interpreting the factors, we used the guideline provided by Igbaria, Livari and Maragahh (1995) where a loading of 0.50 or greater on one factor and 0.35 or lower on the other factor are considered. Results of the analyses demonstrate the existence of a single factor solution for formalisation, centralisation, and job stress. Five meaningful factors were associated with organisational climate. We label them as inadequacy of rewards and planning, standards, structure, inadequacy of support, and management control.

Descriptive Statistics, Intercorrelations, and Scale Reliabilities

The means, standard deviations, and coefficient alphas for the study variables are shown in Table 1. The mean values (standard deviations) for formalisation and centralisation were 3.57 and 4.06 (1.07 and 0.66), respectively. The mean scores for climate dimensions ranged from 2.50 to 3.27 and standard deviations in between 0.35 to 0.61. Self-efficacy has a mean of 2.13 (S.D. = 0.83) whereas the mean for job stress is 3.77 (S.D. = 1.13).

Correlations among all variables are also illustrated in Table 1. As can be seen, intercorrelations among the study variables were wide ranging (-0.01 to 0.85). The reliabilities for the variables were calculated and all concur with Nunnally's (1978) minimum threshold of 0.70.

Regression Analysis

The regression results summarising the relationships between organisational stressors, self-efficacy, and stress are presented in Table 2.

Table 1
Means, standard deviations, intercorrelations, and reliabilities of study variables

| Variables | Mean | Std. Dev. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|--|------|--------------|---------|---------|--------|--------|--------|--------|--------|---------|--------|
| 1. Formalisation | 3.57 | 1.07 | (0.94) | | | | | | | | |
| 2. Centralisation | 4.06 | 0.66 | 0.56** | (0.87) | | | | | | | |
| 3. Inadequacy of rewards and planning | 3.27 | 0.35 | -0.17* | -0.04 | (0.71) | | | | | | |
| 4. Standards | 2.50 | 0.75 | -0.02 | -0.19* | -0.08 | (0.74) | | | | | |
| 5. Structure | 2.79 | 0.62 | 0.13 | -0.03 | 0.01 | 0.37** | (0.77) | | | | |
| 6. Inadequacy of support | 3.16 | 0.29 | 0.01 | 0.03 | 0.44** | 0.03 | 0.13 | (0.70) | | | |
| 7. Management control | 2.93 | 0.61 | 0.02 | -0.05 | 0.14 | 0.34** | 0.32** | 0.12 | (0.71) | | |
| 8. Self-efficacy | 2.13 | 0.83 | -0.59** | -0.32** | 0.26** | -0.05 | -0.07 | -0.01 | -0.01 | (0.97) | |
| 9. Job stress | 3.77 | 1.13 | 0.85** | 0.58** | -0.17* | -0.04 | 0.06 | -0.06 | -0.04 | -0.52** | (0.95) |

Note: * $p < 0.05$, ** $p < 0.01$; values in parentheses indicate Cronbach's alpha

Table 2
Hierarchical regression results: impact of organisational structure, organisational climate, and self-efficacy on job stress

| Independent variable | Std. Beta Step 1 | Std. Beta Step 2 | Std. Beta Step 3 | Std. Beta Step 4 |
|---|---------------------|---------------------|---------------------|---------------------|
| Control variables | | | | |
| Gender | 0.069 | -0.023 | -0.021 | -0.044 |
| Age | -0.304 | -0.081 | -0.073 | 0.045 |
| Marital status | 0.066 | 0.079 | 0.103 | 0.061 |
| Number of children | 0.811** | 0.203* | 0.196* | 0.168 |
| Education | -0.048 | -0.013 | 0.007 | 0.019 |
| Race 1 | 0.033 | -0.176 | -0.189 | -0.225* |
| Race 2 | 0.034 | -0.178 | -0.193 | -0.206 |
| Job tenure | -0.505* | -0.255 | -0.318 | -0.510** |
| Organisational tenure | 0.294 | 0.231 | 0.297 | 0.445** |
| Monthly income | -0.349** | -0.157 | -0.155** | -0.129* |
| Model variables | | | | |
| Formalisation | | 0.639** | 0.586** | 0.042 |
| Centralisation | | 0.131** | 0.122* | 0.150 |
| Inadequacy of rewards and planning | | -0.052 | -0.035 | 0.116 |
| Standards | | 0.020 | 0.013 | 0.139 |
| Structure | | -0.019 | -0.017 | -0.050 |
| Inadequacy of support | | -0.033 | -0.041 | -0.013 |
| Management control | | 0.024 | 0.035 | 0.135* |
| Moderating variable | | | | |
| Self-efficacy | | | -0.093 | 0.253 |
| Interaction terms | | | | |
| Formalisation * Self- efficacy | | | | 0.446** |
| Centralisation * Self- efficacy | | | | -0.161 |
| Inadequacy of rewards and planning * Self-efficacy | | | | -0.545 |
| Standards * Self-efficacy | | | | -0.282 |
| Structure * Self-efficacy | | | | 0.113 |
| Inadequacy of support * Self-efficacy | | | | -0.040 |
| Management control * Self- efficacy | | | | -0.233** |
| R^2 | 0.621 | 0.829 | 0.833 | 0.863 |
| Adj R^2 | 0.593 | 0.807 | 0.810 | 0.836 |
| R^2 change | 0.621 | 0.208 | 0.004 | 0.030 |
| F-value | 22.610** | 37.380** | 36.120** | 31.080** |
| Sig. F change | 0.000 | 0.000 | 0.070 | 0.001 |

Note: * $p < 0.05$, ** $p < 0.01$

Our results indicate that control variables were able to account for 62% of the variance in job stress ($R^2 = 0.62$). At the second stage of entry, the R^2 change was significant (0.21), suggesting that an additional 21% variance is being explained by organisational structure (formalisation and centralisation) and organisational climate (inadequacy of rewards and planning, standards, structure, inadequacy of support, and management control). Specifically, formalisation ($\beta = 0.639$, $p < 0.01$) and centralisation ($\beta = 0.131$, $p < 0.01$) were found to have significant and positive relationships with job stress. These results provided supported H_1 and H_2 . All the climate dimensions have no significant impact on stress. Hence, H_3 was unsubstantiated. At the third stage of entry, the beta value for self-efficacy was insignificant, suggesting that self-efficacy did not have any independent effect on stress. With the final inclusion of the interaction terms into the model, the additional increase in variance of 3% was found to be significant ($p < 0.01$). Two of these interactions were found to be significant ($p < 0.01$), indicating that self-efficacy did moderate the stressors-stress relationships. With regard to the climate dimensions, only one interaction term was found to be significant. The negative sign for this interaction term (management control \times self-efficacy) demonstrated the buffering role of self-efficacy on job stress for increasing levels of management control. On the other hand, the positive sign for the other interaction term (formalisation \times self-efficacy) indicates that the positive relationship between formalisation and stress was stronger for individuals with high self-efficacy compared to those with low self-efficacy. In sum, the results provided partial support for H_4 .

Moderating Effects of Self-Efficacy

We draw graphs to depict the two significant interaction terms (formalisation \times self-efficacy, and control \times self-efficacy) more lucidly. We recoded the variables into two categories (low and high) by dividing the respondents into two equal groups using median. Results of the significant interactions are portrayed in Figures 1 and 2, respectively.

As shown in Figure 1, job stress does not change, as the formalisation level increases from low to high for individuals with low self-efficacy. On the other hand, the stress level of individuals increases as formalisation increases for those with high self-efficacy. This finding seems to suggest that employees with high self-efficacy experience greater stress at their workplace when they perceive formalisation to be high.

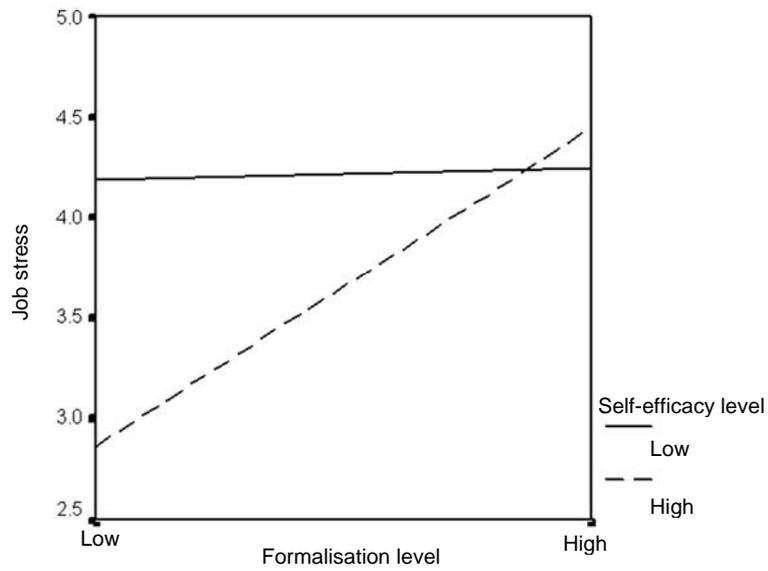


Figure 1. Moderating effect of self-efficacy on the relationship between formalisation and job stress

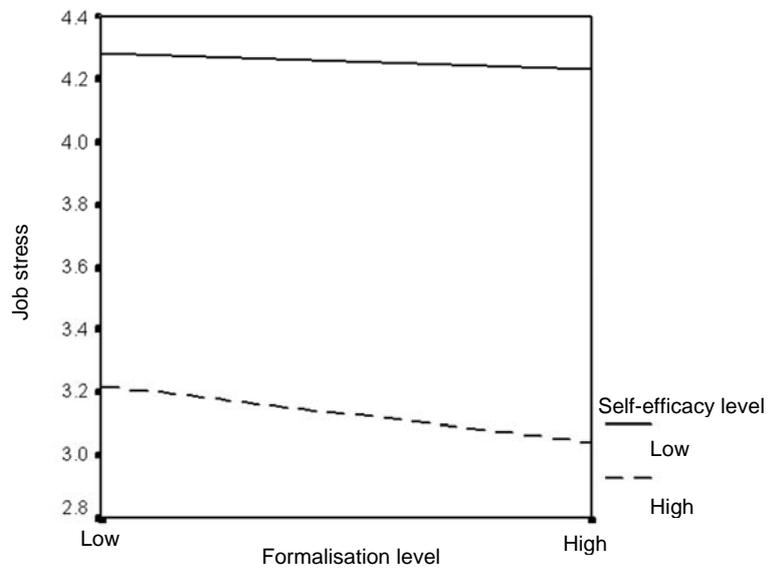


Figure 2. Moderating effect of self-efficacy on the relationship between management control and job stress

As indicated in Figure 2, job stress does not change as the management control level increases from low to high for low self-efficacy individuals. For those with high self-efficacy, their job stress decreases gradually as the level of perceived control increases. Based on the graphs, it can be concluded that the positive effect of formalisation on stress is more pronounced among people with high self-efficacy. The stress level of high self-efficacy individuals tend to decline as the amount of management control perceived by them increases. For those with low self-efficacy, their stress levels remain constant despite changes in the levels of formalisation and management control.

DISCUSSION

The present study was designed to examine the effects of organisational structure and organisational climate on job stress and to explore the moderating role of self-efficacy in stressors-stress linkages. Survey data were gathered from a sample of dealers within the stock broking industry of Malaysia. Our results indicated that both formalisation and centralisation had positive relationships with job stress.

The findings on the positive relationship between formalisation and job stress are consistent with those obtained by Lapidus et al. (1997). When salespeople are required to abide to rigid rules and procedures, they are likely to experience high stress due to the lesser amount of control over how they perform their work. In the securities industry, when salespeople are not given the freedom to provide different solutions in response to different client needs, they are more likely to experience conflict between the goals of the company and those of the customer, which in turn leads to greater stress.

Our finding on the positive relationship between centralisation and stress supports those of Sohi et al. (1996). In the case of the financial securities business, when top-level managers make decisions, sales personnel such as boundary spanners are accountable to their clients but may feel powerless to act due to information deficiency. These constraints may trigger one's stress level. Besides, the practice of centralisation implies that sales personnel are not able to use their own discretion in making decisions that they think is appropriate in a particular trading situation. This lack of autonomy and control over day-to-day work regime will contribute to higher stress, as noted by Lait and Wallace (2002).

In the present study, none of the climate dimensions had any effects on job stress. This finding may be attributed to the occupation of the sample itself. Uncertainty in the external environment, particularly market conditions, rather than the

perceived internal work environment, may be more likely to have an impact on the stress level of the sales workforce within the securities industry. In securities trading, salespeople are responsible for the effective and efficient management of their clients' investment portfolios. However, their work activities are being constrained by external environmental elements beyond their control, such as economic conditions, fluctuations of the stock and bond markets, government regulations, price and direction of securities and other investments, and others, as suggested by Montgomery et al. (1996). Within such a context, the internal work environment may not have much influence on their stress level.

Results of our research suggest that high levels of self-efficacy may buffer the negative impact of management control on job stress. Individuals with high self-efficacy may react more favourably to jobs involving greater management control. Salespeople who have positive self-perceptions about their own abilities will be less likely to view organisational monitoring as being threatening compared to low self-efficacy individuals. The result was opposite for formalisation, whereby higher stress was experienced by salespeople with high self-efficacy. It is plausible that for sales personnel who judged themselves as possessing self-mastery and self-confidence (high self-efficacy), working within the securities-selling environment, which is governed by extensive rules and regulations (higher formalisation), may impede their activities that are aimed at serving the needs of their clients. This, in turn, may result in greater stress. In summary, even though only two interaction terms involving self-efficacy were found to be significant, these results do suggest that self-efficacy can act as a moderator in affecting the organisational stressors-stress relationships, and thus are consistent with other studies (Jex & Bliese, 1999; Grau et al., 2001; Siu et al., 2005).

Managerial Implications

Our findings revealed that formalisation and centralisation were two major predictors of securities salespeople's job stress in Malaysia. Higher formalisation and centralisation are associated with greater stress. To combat stress among the sales workforce, stock broking companies should reduce excessive paperwork and regulations. Since securities salespeople function in a continually dynamic external environment, particularly with regard to market fluctuations, they need to be adaptive in their approach to clients. The existence of flexible rules and policies would enable sales personnel to recommend client-suited investments. In addition, managers should consider empowering their sales personnel. Being boundary spanners, salespeople have the primary concern of the welfare of their clients. The provision of autonomy would allow them control over the performance of their job tasks. Given that securities salespeople often have to

deal with varied client requirements, granting them the freedom to decide over the contents of their interactions with clients will foster a sense of personal achievement and help lower their stress levels. The results of the present research also point towards the value of creating a more flexible work culture with fewer rules and regulations for salespeople with high self-efficacy and heightening their self-efficacy beliefs in order to assist them in coping with management control of their work environment.

Limitations and Future Suggestions

The contributions of this research should be viewed in the light of several limitations. First, this study utilises a cross-sectional methodology. Hence, caution must be taken when making inferences regarding the causality of the relationships reported. The use of a longitudinal approach would improve the ability to make causal statements. Second, the sample in this study consisted of dealers within the stock broking firms of Malaysia. Thus, the validity of the findings cannot be generalised to other job incumbents in other work and industrial settings. In the future, it would be useful to conduct similar studies to compare the predictive validity of the model across different occupations and sectors. Third, this study did not examine attitudinal and behavioural outcomes, such as job satisfaction, organisational commitment, performance, or turnover intentions. Following the suggestion made by Montgomery et al. (1996), incorporating outcome measures would have allowed sales managers to gauge the adverse impact of job stress on the productivity levels of salespeople. Therefore, it would be interesting for future researchers to focus on the antecedents as well as on stress-related outcomes.

CONCLUSION

Despite its limitations, this study has contributed to the existing literature on job stress in two ways. First, this study examined the linkage between employees' perceptions of organisational structure and job stress using a sample of employees from a developing country in Southeast Asia such as Malaysia. Additionally, our research sought to explore the role of self-efficacy as a moderator in the proposed relationships. This is an addition to the limited number of studies on the antecedents of stress within the non-Western context. Second, given the need to conduct more research in different sales settings and among different types of sales personnel, as recommended by Moncrief et al. (1997), and the fact that financial services salespeople experienced high stress levels (Montgomery et al., 1996), this investigation further expands the empirical base of research findings on salespeople's job stress.

REFERENCES

- Agarwal, S. (1993). The influence of formalization on role stress, organizational commitment, and work alienation of salespersons: A cross-national comparative study. *Journal of International Business Studies*, 24(4), 715–739.
- _____. (1999). Impact of job formalization and administrative controls on attitudes of industrial salespersons. *Industrial Marketing Management*, 28, 359–368.
- Akbulut, Y., Kuzu, A., Latchem, C., & Odabasi, F. (2007). Change readiness among teaching staff at Andalou University, Turkey. *Distance Education*, 28(3), 335–350.
- Bandura, A. (1977). Self-efficacy: Toward a unified theory of behavioural change. *Psychological Review*, 84, 191–215.
- Beehr, T. A., & Newman, J. E. (1978). Job stress, employee health and organizational effectiveness: A facet analysis, model, and literature review. *Personnel Psychology*, 31(3), 665–699.
- Campbell, J. P., Dunnette, M. D., Lawler, E. E., & Weick, K. E. (1970). *Managerial behavior, performance, and effectiveness*. New York: McGraw-Hill.
- Camps, J., & Cruz, S. (2002). Organic structures in a dynamic and complex environment: A theoretical and empirical study. Retrieved on 17 January 2003, from http://acede.uib.es/papers/134_front.pdf.
- Cohen, J., & Cohen, P. (1975). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. New Jersey: Lawrence Erlbaum.
- Cooper, C. L., Kirkcaldy, B. D., & Brown, J. (1994). A model of job stress and physical health: The role of individual differences. *Personality and Individual Differences*, 16(6), 653–655.
- Coverman, S. (1989). Role overload, role conflict, and stress: Addressing consequences of multiple role demand. *Social Forces*, 67(4), 965–982.
- Crank, J. (1991). Work stress and job dissatisfaction in the public sector: An examination of public safety dimensions. *Social Sciences Journal*, 28(1), 85–101.
- Cullen, F., Lemming, T., Link, B., & Wozniak, J. (1985). The impact of social supports on police stress. *Criminology*, 23(3), 503–522.
- Economic Planning Unit. (2006). *Ninth Malaysia Plan 2006–2010*. Putrajaya: Prime Minister's Department.
- Fairbrother, K., & Warn, J. (2003). Workplace dimensions, stress and job satisfaction. *Journal of Managerial Psychology*, 18(1), 8–21.
- Field, R. H. G., & Abelson, M. A. (1982). Climate: A reconceptualization and proposed model. *Human Relations*, 35(3), 181–201.
- Fotinos-Ventouratos, R., & Cooper, C. (2005). The role of gender and social class in work stress. *Journal of Managerial Psychology*, 20(1), 14–23.
- Froiland, P. (1993). What cures job stress? *Training*, 30(12), 32–36.
- Grau, R., Salanova, M., & Peiro, J. M. (2001). Moderator effects of self-efficacy on occupational stress. *Psychology in Spain*, 5(1), 63–74.
- Hemingway, M. A., & Smith, C. S. (1999). Organizational climate and occupational stressors as predictors of withdrawal behaviours and injuries in nurses. *Journal of Occupational and Organizational Psychology*, 72(3), 285–299.
- Hodge, B. J., Anthony, W. P., & Gales, L. M. (2003). *Organizational theory: A strategic approach*. 6th edition. New Jersey: Pearson Education.

- Igbaria, M., Livari, J., & Maragahh, H. (1995). Why do individuals use computer technology? A Finnish case study. *Information and Management*, 5, 227–238.
- James, L. A., & James, L. R. (1989). Integrating work environment perceptions: Explorations into the measurement of meaning. *Journal of Applied Psychology*, 74(5), 739–751.
- Jex, S. M. & Bliese, P. D. (1999). Efficacy beliefs as a moderator of the impact of work-related stressors: A multilevel study. *Journal of Applied Psychology*, 84(3), 349–361.
- Jex, S. M., Bliese, P. D., Buzzell, S., & Primeau, J. (2001). The impact of self-efficacy on stressor-strain relations: Coping style as an explanatory mechanism. *Journal of Applied Psychology*, 86(3), 401–409.
- Jex, S. M., & Gudanowski, D. M. (1992). Efficacy beliefs and work stress: An exploratory study. *Journal of Organizational Behavior*, 13, 509–517.
- Kirkcaldy, B., Brown, J., & Cooper, C.L. (1998). The demographics of occupational stress among police superintendents. *Journal of Managerial Psychology*, 13(1/2), 90–101.
- Kreitner, R., & Kinicki, A. (1995). *Organizational behavior*. 3rd edition. Boston, MA: Richard D. Irwin.
- Lait, J., & Wallace, J. E. (2002). Stress at work: A study of organizational-professional conflict and unmet expectations. *Relations Industrielles*, 57(3), 463–487.
- Lapidus, R. S., Roberts, J. A., & Chonko, L. B. (1997). Stressors, leadership substitutes, and relations with supervision among industrial salespeople. *Industrial Marketing Management*, 26, 225–269.
- Litwin, G. H., & Stringer, R. A. Jr. (1968). *Motivation and organizational climate*. Boston, MA: Harvard University.
- Lotz, T., & Donald, F. (2006). Stress and communication across job levels after acquisition. *South African Journal of Business Management*, 37(1), 1–8.
- Luthans, F. (1995). *Organizational behavior*. 7th edition. New York: McGraw-Hill.
- Makikangas, A., & Kinnunen, U. (2003). Psychosocial work stressors and well-being: Self-esteem and optimism as moderators in a one-year longitudinal sample. *Personality and Individual Differences*, 35, 537–557.
- Manshor, A. T., Fontaine, R., & Choy, C. S. (2003). Occupational stress among managers: A Malaysian survey. *Journal of Managerial Psychology*, 18(6), 622–628.
- Mikkelsen, A., & Gundersen, M. (2003). The effect of participatory organizational intervention on work environment, job stress, and subjective health complaints. *International Journal of Stress Management*, 10(2), 91–110.
- Miller, K., & Ellis, B. H. (1990). An integrated model of communication, stress and burnout in the workplace. *Communication Research*, 17(3), 27–300.
- Moncrief, W. C., Babakus, E., Cravens, D. W., & Johnston, M. (1997). Examining the antecedents and consequences of salesperson job stress. *European Journal of Marketing*, 31(11/12), 786–798.
- Montgomery, D. C., Blodgett, J. G., & Barnes J. H. (1996). A model of financial securities salespersons' job stress. *The Journal of Services Marketing*, 10(3), 21–38.
- Muchinsky, P. M. (1976). An assessment of Litwin and Stringer organization climate questionnaire: An empirical and theoretical extension of the Sims and Lafollette study. *Personnel Psychology*, 29, 371–392.

- Murray, K. B., & Schlacter, J. L. (1990). The impact of services versus goods on consumers' assessment of perceived risk and variability. *Journal of Academy of Marketing Science*, 18(1), 51–65.
- Nasurdin, A. M., Ramayah, T., & Kumaresan, S. (2005). Organizational stressors and job stress among managers: The moderating role of neuroticism. *Singapore Management Review*, 27(2), 63–79.
- Nunnally, J. L. (1978). *Psychometric theory*. 2nd edition. New York: McGraw-Hill.
- Parker, C. P., Baltes, B. B., Young, S. A., Huff, J. W., Altmann, R. A., LaCost, H. A., & Roberts, J. E. (2003). Relationships between psychological climate perceptions and work outcomes: A meta-analytic review. *Journal of Organizational Behavior*, 24(4), 389–418.
- Parker, D. F., & DeCotiis, T. A. (1983). Organizational determinants of job stress. *Organizational Behavior and Human Performance*, 32, 160–177.
- Patterson, M., West, M. A., Shackleton, V. J., Dawson, J. F., Lawthom, R., Maitlis, S., Robinson, D. L., & Wallace, A. M. (2005). Validating the organizational climate measure: Links to managerial practices, productivity and innovation. *Journal of Organizational Behavior*, 26, 379–408.
- Poelmans, S. (2003). The multi-level 'fit' model of work and family. *International Journal of Cross Cultural Management*, 3(3), 267–274.
- Pritchard, R., & Karasick, B. (1973). The effects of organizational climate on managerial job performance and satisfaction. *Organizational Behaviour and Human Performance*, 9, 126–146.
- Rashed, A. A. (2001). The effect of personal characteristics on job satisfaction: A study among male managers in the Kuwait oil industry. *International Journal of Commerce & Management*, 11(3), 91–111.
- Reichers, A. E., & Schneider, B. (1990). Climate and culture: An evolution of constructs. In B. Schneider (ed.), *Organizational Climate and Culture* (5–39). San Francisco, CA: Jossey-Bass.
- Roberts, J. A., Lapidus, R. A., & Chonko, L. B. (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., & Judge, T. A. (2007). *Organizational behavior*. 12th edition. New Jersey: Pearson Education.
- Robbins, S. P., & Coulter, M. (2005). *Management*. 8th edition. New Jersey: Prentice-Hall.
- Savery, L. K., & Luks, J. A. (2001). The relationship between empowerment, job satisfaction and reported stress levels: Some Australian evidence. *Leadership and Organization Development Journal*, 22(3), 97–104.
- Schnake, M. E. (1983). An empirical assessment of the effects of affective response in the measurement of organizational climate. *Personnel Psychology*, 36, 791–807.
- Schneider, B., Brief, A., & Guzzo, R. (1996). Creating a climate and culture for sustainable organizational change. *Organizational Dynamics*, 24(4), 7–19.
- Schwarzer, R., & Scholz, U. (August, 2000). Cross-cultural assessment of coping resources: The general perceived self-efficacy. Paper presented at the First Asian Congress of Health Psychology: Health Psychology and Culture, August 28–29, Tokyo, Japan. Retrieved on 15 January 2003, from <http://userpage.fu-berlin.de/~health/engscal.htm>.

- Singh, J., Verbeke, W., & Rhoads, G. K. (1996). Do organizational practices matter in role stress processes? A study of direct and moderating effects for marketing-oriented boundary spanners. *Journal of Marketing*, 60(3), 69–94.
- Siu, O. L., Spector, P. E., Cooper, C. L., & Lu, C. Q. (2005). Work stress, self-efficacy, Chinese work values, and work well-being in Hong Kong and Beijing. *International Journal of Stress Management*, 12(3), 274–288.
- Sohi, R. S., Smith, D. C., & Ford, N. M. (1996). How does sharing a sales force between multiple divisions affect salesperson? *Academy of Marketing Science*, 24(3), 195–214.
- Um, M. Y., & Harrison, D. F. (1998). Role stressors, burnout, mediators, and job satisfaction: A stress-strain outcome model and an empirical test. *Social Work Research*, 22(2), 195–214.
- Wong, M. F., & Wong, M. P. (2002). Workplace stress: Causes, consequences, and why it concerns managers. *Akauntan Nasional*, 11, 24–28.
- Yahyagil, M. Y. (2006). The fit between the concepts of organizational culture and climate. *Journal of Organizational Culture, Communications and Conflict*, 10(2), 77–104.
- Zeffane, R., & McLoughlin, D. (2006). Cooperation and stress: Exploring the differential impact of job satisfaction, communication and culture. *Management Research News*, 29(10), 618–631.