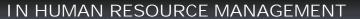


Current Issue Submissions

RESEARCH AND PRACTICE





Highlight, copy & paste to cite:

Koh, W. L. & Lim, C., (1996). Stress in Social Work: Testing a Singaporean Sample, Research and Practice in Human Resource Management, 4(1), 25-41.

Stress in Social Work: Testing a Singaporean Sample William L. Koh & Clarence Lim

ABSTRACT

The present study looks at a sample of 122 social workers in Singapore and examines whether occupational stress and negative life events are related to negative outcomes such as job dissatisfaction, dissatisfaction with the leader, job burnout, and anxiety and illnesses. We also examine the moderating effect of Type A personality on the relationships between stress and the negative outcomes. The study found that both occupational stress and negative life events are related to negative outcomes, although the impact made by occupational stress is greater. Type A personality moderates the relationships between stress and job satisfaction, and stress and anxiety and illnesses. Implications are also drawn for the management of social work organisations.

INTRODUCTION

The level of stress faced by professional workers in organisations can be sub stantial. In many professions, stress is intrinsic to the job itself, where competing demands, challenges and pressures come with the job and thus cannot be avoided. The sheer volume of work can be overwhelming, whether one is a manager in a profit-making organisation, a school teacher or a doctor. Over the past decade, popular and professional books like 'A measure of chronic organisational stress' (Jenner, 1986) and Occupational stress and organizational effectiveness (Riley & Zaccaro, 1987), magazines and journals have focused increasingly on stress and its impact on people and the organisations they work in. These are recognition of the serious consequences which stress has on the bottom-line of companies and the well-being of individuals. Only by having a better understanding of the causes and effects of stress are we able to plan and implement effective policies to combat and alleviate this silent yet potentially destructive problem.

For the purpose of this study the authors have decided to adopt the definition of Stress used by Cooper and Marshall (1976), namely, that occupational stress refers to negative factors or stressors associated with the workplace (e.g., work overload, role conflict/ambiguity, poor working conditions) and strain to be any form of harmful effect on that person as a result of the stressors (Kahn & Quinn, 1970; Lazarus, 1966). Conceptualising stress as stressors is not new. Sullivan and Bhagat (1992) mentioned that in many of the stress studies they meta-analysed, numerous researchers have used occupational stressors such as role ambiguity and role conflict to operationalise stress (e.g., Hollon & Chesser, 1976; Miles, 1976).

The dysfunctional effects of occupational stress on individuals and profit- making organisations have been extensively researched both abroad and in Singapore (Ivancevich & Matterson, 1984; Quah' & Campbell, 1994). Although academic research on stress faced by employees in non-profit

Volume 4: Issue 1 Editorial Papers Practitioner Focus Reviews

organisations in Singapore has been rather scant, there are signs that more and more people are beginning to understand that even in professions such as social work and teaching, occupational stress is prevalent. The recent focus on stress faced by school teachers in Singapore is a good example (Yeo, 1995; Nirmala, 1995). The year long study resulted in effective practical solutions mooted by school principals to counter stress faced by their teachers.

This study aims to contribute to a better understanding of the effects of stress on an important component of professionals in the human services, namely, social workers in welfare organisations, and highlight the problems and difficulties faced by these individuals.

Existing models of stress take cognizance of the fact that stress could be caused by organisational, personal or environmental factors (Cooper, 1986; Bhagat, 1983). This study analyses two of these sources of stress, namely organisational sources and personal sources of stress, and their impact on consequences such as job satisfaction, job burnout and anxiety-illness. Also examined will be the moderating role of Type A personality on the stress-strain relationship.

The relationship between occupational sources of stress and its consequences have been well documented. Occupational stressors such as role ambiguity and role conflict have been documented to lead to lower job satisfaction (Beehr & Newman, 1978), absenteeism and turnover (Steers & Rhodes, 1978; Porter & Steers, 1973), work performance (McGrath, 1976) and burnout (Schwab & Iwanicki, 1982; Brookings, et al., 1985).

In addition to occupational stressors such as role ambiguity and role conflict, it is becoming increasingly clear that personal life events constitute another source of stress for employees. Excessive life changes make adjustments difficult and thus produce stress (Holmes & Rahe, 1967). Subsequent studies show that stressful life events were linked to illnesses such as cardio-vascular disease (Friedman & Rosenman, 1970), sudden cardiac arrests and death (Rahe & Lind, 1971), serious illnesses (Wyler, Masuda & Holmes, 1971; Vinokur & Seizer, 1975), pregnancy and birth complications (Gorsuch & Key, 1974). More recently some researchers have proposed that positive life events should be distinguished from negative life events (Sarason, Johnson, & Siegel, 1979; Ross & Mirowsky, 1979; Justice et. at., 1981) and while the latter brings about negative consequences such as burnout and health problems, the former need not have any negative consequences (Justice et. al., 1981; Vinokur & Seizer, 1975). As such this research will only investigate negative life events to see if they contribute to greater strain experienced by the social workers.

Several outcomes have been associated with stress, four of which, namely, job satisfaction, satisfaction with the leader, job burnout and anxiety and illnesses, will be examined in this research. While job-related satisfaction is a rather well researched dependent variable in many stress studies (e.g., Cummins, 1989; Jamal, 1990; Sadri & Marcoulides, 1994), job burnout, termed by some as ' the malady of our age' (Modic, 1989) is a relatively new variable of interest to researchers.

Job burnout is characterised by (1) emotional exhaustion; (2) depersonalisation and (3) a decreased sense of personal accomplishment (Cordes & Dougherty, 1993; Maslach & Jackson, 1981; Lee & Ashforth, 1990). Emotional exhaustion involves feelings of being overextended and drained by work duties, helplessness, hopelessness and depression (Pines, Aronson & Kafry, 1981). The second component, depersonalisation, is often associated with a decrease in the awareness of the human attributes of others and a loss of humanity in interpersonal interaction (Pines, Aronson & Kafry, 1981). Depersonalization is a reaction to job related stress that results in workers becoming increasingly detached emotionally from work, co-workers, clients, and treating clients in dehumanizing ways (Maslach, 1976). Finally, the third component of burnout, diminished personal accomplishment is associated with a sense of constant and repeated failures, defeat and hopelessness (Cordes & Dougherty, 1993). Left unchecked, job burnout could lead to self, family, and even work place abuse (Cherniss, 1980). In line with previous studies on job burnout, it is hypothesized in this research that both occupational stressors and negative life events will be associated with higher level of burnout.

The use of moderator variables in stress research has become almost a routine ever since scholars realised that the relationship between stress and stress related outcomes is not as simple as it looks. Many moderators have been tested for their effects in moderating the relationship between stress and strain. Examples include sex (Ramos, 1975), Type A versus Type B personality (Caplan, 1972), social support (Caplan et. al., 1975; Cobb, 1976). In this research, one of such variables, namely, Type A personality, will be tested for its efficacy as a moderator variable in the stress-strain relationship.

Type A personality, characterised by a chronic sense of urgency and excessive competitive drive (Friedman & Rosenman, 1974), has been linked to both perceptions of stress and stress-related outcomes. It has also been found that Type As created more stress on themselves by increasing the volume of workload (Froggatt & Cotton, 1987), placed themselves in more stressful work environment (Zyzanski & Jenkins, 1970), worked longer hours, took on more overtime, reported higher levels of workload, greater supervisory responsibilities, and more role conflict than Type B individuals (Ganster, Sinie & Mayes, 1989). Caplan and Jones (1975) found that Type A personality moderated the relationship between workload and anxiety by increasing the impact of stress on anxiety. This relationship was supported by Keenan and McBain (1979) who found that Type A personality nioderated the relationship between role stress and job satisfaction.

Recent studies revealed that there are actually two dimensions of Type A personality, namely, the Achievement Strivings dimension and the ImpatienceIrritability dimension, and it is the latter dimension which is significantly correlated with physical complaints and not the former (Spence, Helmreich, & Pred, 1987). Hence, it is postulated that social workers who are higher on the Inipatience-Irritability dimension of Type A personality will experience greater amount of stress related outcomes like burnout and incidence of illness when impacted by environmental stressors. This aspect of Type A personality moderates the stress- strain relationship by significantly magnifying the dysfunctional effects of stress, thereby leading to greater negative outcomes. On the other hand, the Achievement Strivings dimension of Type A personality will not have such moderating effect on the stress-strain relationship.

Based on the just concluded discussion of stress related studies, the following hypotheses are formulated:

H1: Social workers who experience greater occupational stress and negative life events will also experience lower level of work satisfaction, lower level of satisfaction with the leader, higher levels of emotional exhaustion, feelings of depersonalisation, and feelings of personal accomplishment and anxiety and illness.

H2: The Impatience-Irritability dimension of Type A personality is hypothesized to reinforce the relationship between stress and the symptoms of life strains. Social workers who exhibit greater irritability and impatience are expected to experience a stronger relationship between stress and strains. The Achievement Strivings dimension of Type A personality is not expected to have this moderating effect on the stress-strain relationship.

RESEARCH METHOD

The sampling frame comprised paid, full-time social workers from different welfare organisations whose clients include children, juvenile, old folks and the handicapped. Fifty organisations from the 1990 list of about one hundred and twenty welfare organisations under the authority of the National Council of Social Services (NCSS) were randomly picked to take part in the research. From these fifty organisations, 250 full time social workers were selected to answer the survey questionnaires. The selection process took into account the number of social workers from each organisation who were actually in contact with their respective clients. More subjects were selected from those organisations which had more workers who were in touch with their clients. This form of quota sampling increased the likelihood that the sample is representative of the true population of social workers who were actively engaged in helping their clients.

In their day to day duties, social welfare workers are under constant pressure to meet deadlines for paperwork, meet the needs of their clients and, hopefully, see positive results from their efforts. This makes them highly susceptible to stress and stress related symptoms. While social workers may not be the only ones who suffer from stress related symptoms, Maslach (1978) pointed out that the potential for emotional strain is greatest for workers in the helping professions such as social work and teaching because of constant contact with other people and their problems. Such work often entail extensive and direct face-to-face contact with other people in emotionally charged situations and, often, feedback of success or failure is non-existent (Cordes & Dougherty, 1993). The nature of their job thus make them an ideal research subjects to examine stress and stress related symptoms.

To begin the data gathering process, a cover letter explaining the purpose of the study was facsimiled to the NCSS to solicit their approval and cooperation in allowing their surrogate welfare organizations to be approached for the survey. At the same time, a pilot study of the questionnaire was conducted with the aid of final year social work students from the Faculty of Arts & Social Sciences, National University of Singapore, as well as some personal friends of the second author who were involved in social work in Singapore.

After approval was granted by the NCSS, a total of two hundred and fifty questionnaires were personally delivered to the welfare organizations and quota sampling was used to select the respondents. The contact person of these various welfare organizations proceeded to distribute the questionnaires to those whose names were chosen. A self-addressed envelope was also distributed to the contact person, who then mailed those completed questionnaires back to the author. All data were collected from the period November 1994 to January 1995.

Occupational stress was measured using the Stress At Work scale developed by Jenner (1986). The scale consists of 18 Likert type items scored from 1 (Very True) to 5 (Very False). Jenner (1986) recorded that it covers four sources of occupational stress, namely, human relationship issues (e.g. "People I work with don' t do their share"), job demand issues (e.g. "1 have too much to do and too little time to do it), role issues (e.g. "I an unclear about what is expected of me"), and leadership issues (e.g. "I have too little supervision"). A respondent' s score was obtained by first reversing the scores for all items and then summing them up. A higher score corresponds to a higher level of perceived stress, Jenner (1986) reported high internal consistency (Cronbach' s Alpha = .91) and test-retest reliability (Pearson correlation of .92 after 1 week and .91 after 1 month). The same scale was used by Quah and Campbell (1994) in their study of 194 managers enrolled in business studies at the National University of Singapore, although reliability for the scale was not reported.

The revised Maslach Burnout Inventory (MBI, Maslach & Jackson, 1986) was used to measure the level of professional burnout perceived by the subjects. The three components of the scale measures emotional exhaustion (9 items), the personal accomplishment (8 items), and depersonalization (5 items). Every item in the Maslach Burnout Inventory is rated on a 6-point Likert type scale ranging from 1 (A Few Times A Year) to 6 (Everyday). A value of zero is scored if the subject indicates that he/she has never experienced the particular feeling or attitude described. For the three subscales, Cronbach coefficient alpha of .89 was registered for emotional exhaustion, .74 for personal accomplishment, .77 for depersonalization (Maslach & Jackson, 1981). Sample items from the scale include "I feel emotionally drained from my work," "I deal very effectively with the problems of my clients," and "I feel some clients blame me for some of their problems.")

The Life Experience Survey (LES; Sarason, Johnson, & Siegel 1979) was used to measure events which are stress inducing. The LES is rated on a 7-point Likert scale ranging from -3 (Extremely Negative) to +3 (Extremely Positive). A subject could rate an event as having a positive or negative impact on his/her life. The test-retest reliability of the LES are in the range of .56 to .88 (Johnson & Sarason, 1979). For this study, as we were only interested in negative life events, results from the pilot study were used to screen out items which were unlikely to happen to the respondents (e.g.

- "Son or daughter leaving home," "Being fired") or are likely to have positive impact (e.g.,
- "Outstanding personal achievement," "Engagement") thus leaving us with a modified version which consisted of 7 items which measure negative life events. Research subjects were asked to rate the impact which these seven events might have on them for the past year (January 1994 to lanuary 1995) on a four point scale ranging from "O" (No Impact) to "-3" (Extremely negative). For the current research, we reversed the score for easier interpretation of the scores. Hence, a higher positive score will mean greater negative impact. Sample items of the scale include, "Death of a family member or close friend," and "Serious illness or injury of close family

The Taylor Manifest Anxiety Scale (TMAS; Taylor, 1953) was used to measure anxiety and incidents of illness as a response to social/organizational stressors. The test-retest reliability estimate of the TMAS was found to be .82 over five months and .81 for a longer period (Taylor, 1953) and reasonably high internal consistency of .88 by Brief, et al., (1988) and .82 by Watson and Clark (1984). The current version, niodified to exclude rare illnesses, consisted of common illnesses such as diarrhoea, headaches, and constipation, is scored using a two point scale with 1 representing "False" and 2 representing "True." Sample items include, "I am often anxious," and "I have gastric problems every few days."

Satisfaction with the work itself and with the leader was operationalised through the attitude toward the kind of work subscale and satisfaction with the leader subscale from the Index of Organisational Reaction (JOR; Smith, 1976). Each item of the scales has its own five alternate responses, scored from 1 to 5 on the following two subscales: Supervision (6 items), and Kind of Work (6 items). For instance, one item from the kind of work subscale reads, "How do you feel about the kind of work you do?" was rated from 1 "Don't like it; would prefer some other kind of work" to 5 "It's exactly the kind of work I like best, "while an item from the satisfaction with the leader subscale reads, "How do you feel about the supervision you receive from your supervisor?" was scored from 1 "I am extremely satisfied" to 5 "1 am very dissatisfied." Dunham, Smith and Blackburn (1977) have found the reliability for the two subscales over six weeks to be .69 (supervision) and .74 (kind of work). Golenibiewski and Munzenrider (1988) had used both of these scales in their analyses of the phases model of burnout, and found burnout to be correlated to both subscaks from the IOR.

Type A personality was assessed using the Jenkins Activity Survey (JAS; Jenkins, Zyzanski, & Rosennian, 1979). The present revised version has 12 items which can broken down into two factors: Achievement Strivings and ImpatienceIrritability (Spence, Helmreich & Pred, 1987). The correlation between these two factors was low (about .15), suggesting that there is considerable independence between them (Spence et. al., 1987). Each item has its own 5 alternative responses, ranging from extreme Type B personality to extreme Type A personality, For instance, the item "How much does your work stir you into action ?" was scored 1 for the response "Much less than others" to 5 for "Much more than others." Another item from the scale reads, "Typically, how easily do you get irritated ?" and was scored from I "Not at all easily" to 5 "Extremely easily." Cronbach' s alphas ranged between .79 (for both sexes) for the Achievement Strivings subscale and .67 (for men) to .63 (for women) for the Impatience-Irritability subscale (Spence et. al., 1987).

RESULTS

members."

Of the two hundred and fifty questionnaires mailed out, a total of 122 usable ones were returned, representing a response rate of 48.8%. Another 31 were discarded due to incomplete responses. The typical respondent has 4.2 years of relevant working experience, is a Chinese female, aged between 26 to 30, and has a university/professional degree.

Preliminary factor analyses carried out on all the measurement scales show that a great majority of the items fall in line with the hypothesized factor structure. Two items from the Stress at Work scale which did not load above the .4 level were dropped from the scale (" I am cautious about

what I say in meetings," and " I have too little supervision."). Reliability analysis showed that dropping the two items actually increased the reliability of the scale and both items also showed item- scale total correlation of less than .3. Since the scale consisted of 18 items, the authors felt comfortable with dropping these two items from the scale. The same technique was used in deleting two items from the TMAS (" I perspire very easily even on a cool day," and " I feel hungry almost all the time.")

As can be seen from Table 1, all of the scales used in the questionnaire have a reliability coefficient of over .70 and they conipared favourably with the reported reliabilities of these scales used in previous studies.

Table 1 Means, Standard Deviations, Reliabilities and Correlations

	Mean	SD	1	2	3	4	5	6	7	8	9	10
 Occupational Stress 	43.93	10.29	.88									
2. Negative Life Events	.48	.68	.21***	.85								
3. Type A (Achievement Striving)	2.53	.55	.06	06	.72							
4. Type A (Impatience- Irritability)	3.40	.75	.24***	02	18**	.77						
5. Work Satisfaction	3.31	.96	- .43***	.02	- .36***	13	.80					
6. Satisfaction with leader	3.41	.79	- .68***	08	11	09	.49***	.84				
7. Emotional Exhaustion	2.25	1.45	.57***	.23***	.05	.25***	- .44***	- .40***	.89			
8. Depersonalisation	1.49	1.46	.44***	.21**	.10	.25***	- .41***	- .30***	.66***	.84		
9. Personal Accomplishment	2.64	1.28	.15*	12	.12	.16*	26**	02	.06	.11	.86	
10.Anxiety and Illnesses	17.94	3.44	.43***	.28***	.06	.24***	- .24***	23**	.40***	.31***	.09	.83

N=122; ***p < .01 **p < .05 *p < .1; Reliabilities of the measures are stated on the diagonal

In general, Table 1 shows that Hypothesis 1 was supported with occupational stress significantly correlated with work satisfaction (r = .43, p < .0001), emotional exhaustion (r = .57, p < .0001), depersonalisation (r = .44., p < .0001), personal accomplishment (r .15, p < .05) and anxiety and illness (r = .43, p < .0001). Negative life event was significantly correlated with emotional exhaustion (r = .23, p < .01), depersonalisation (r = .21, p < .05), and anxiety-illness (r = .28, p < .001). It is interesting to note that occupational stress bears stronger significant relations with all the dependent variables, compared with negative life events. This was confirmed by the subsequent multiple regressions in which occupational stress shows higher standardized betas than negative life events in their relations with all the dependent variables.

To test for the moderating effect of Type A personality, hierarchical regression analysis was carried out in four steps with occupational stress and negative life events entered into the regression equation in step 1. This was followed by Type A personality in step 2, the interaction term of Type A personality with occupational stress in step 3, and finally the interaction term between Type A personality with negative life event in step 4.

Table 2 indicates that the Impatience-Irritability dimension of Type A personality did not

moderate the relationship between stress and strain, although it did have significant main effects for three - emotional exhaustion (incremental r2 = .02 p < .10), depersonalisation (incremental r2 = .03, p<.05), and anxiety-illness (incremental r2 = .03, p<.05) - out of the six outcome variables, even after accounting for the main effects of occupational stress and negative life events.

Table 2
Hierachical Multiple Regression With Personality type (Irritability-Impatience) as
Moderating Variable

Dependent variables	Independent variables	R^2	R ² Change	F Change
	OS, NLE	.20***	.20	14.43***
Satisfaction with Work	OS, NLE, II	.20***	.00	.06
Satisfaction with work	OS, NLE, II, OS x II	.20***	.00	.79
	OS, NLE, II, OS x II, NLE x II	.20***	.00	.28
	OS, NLE	.46***	.46	51.7***
Satisfaction with the Leader	OS, NLE, II	.47***	.00	1.35
Satisfaction with the Leader	OS, NLE, II, OS x II	.47***	.00	.11
	OS, NLE, II, OS x II, NLE x II	.47***	.00	.03
	OS, NLE	.34***	.34	31.03**
Emotional Exhaustion	OS, NLE, II	.36***	.02	3.14*
EITIOTIONAL EXHAUSTION	OS, NLE, II, OS x II	.36***	.00	.36
	OS, NLE, II, OS x II, NLE x II	.36***	.00	.48
	OS, NLE	.21***	.21	15.74**
Depersonalisation	OS, NLE, II	.24***	.03	3.97**
Depersonalisation	OS, NLE, II, OS x II	.25***	.01	2.10
	OS, NLE, II, OS x II, NLE x II	.26***	.01	1.22
	OS, NLE	.05*	.05	3.00*
Personal Accomplishment	OS, NLE, II	.06*	.01	1.62
reisonal Accomplishment	OS, NLE, II, OS x II	.06*	.00	.13
	OS, NLE, II, OS x II, NLE x II	.06*	.00	.00
	OS, NLE	.20***	.20	15.27***
Anxioty and illnosses	OS, NLE, II	.23***	.03	4.68**
Anxiety and illnesses	OS, NLE, II, OS x II	.23***	.00	.59
	OS, NLE, II, OS \times II, NLE \times II	.23***	.00	.00

 $N=122\ ^{***}p<.001\ ^{*}p<.05\ OS=Occupational\ Stress;\ NLE=Negative\ Life\ Events;$ II=Impatience/Irritability

However, it was surprising that the Achievement Strivings component of Type A personality moderated the stress-strain relationship. As shown in Table 3, Achievement Strivings moderated the impact of stress on work satisfaction (r2 change = .03, p < .05) and anxiety and illnesses (r2 change = .03, p < .1). Further analyses revealed that the moderating effect was in the hypothesized direction in that when a person with higher level of Achievement Strivings encounters stress, he or she tends to feel less satisfied with his work and more anxiety and illnesses.

Table 3
Hierachical Multiple Regression With Personality (Achievement Striving) as
Moderating Variable

Dependent variables	Independent variables	R^2	R ² Change	F Change
	OS, NLE	.20***	.20	14.46***

Satisfaction with Work	OS, NLE, AS	.31***	.11	18.71***
Satisfaction with work	OS, NLE, AS, OS x AS	.31***	.00	.48
	OS, NLE, AS, OS x AS, NLE x AS	.34***	.03	5.76**
	OS, NLE	.46***	.46	51.70***
Satisfaction with the Leader	OS, NLE, AS	.47***	.00	1.05
Satisfaction with the Leader	OS, NLE, AS, OS x AS	.48***	.01	3.06
	OS, NLE, AS, OS x AS, NLE x AS	.48***	.00	.30
	OS, NLE	.34***	.34	31.03***
Emotional Exhaustion	OS, NLE, AS	.34***	.00	.13
EITIOUOTIAI EXTIAUSTIOIT	OS, NLE, AS, OS x AS	.34***	.00	.03
	OS, NLE, AS, OS x AS, NLE x AS	.34***	.00	.17
	OS, NLE	.21***	.21	15.74***
Depersonalisation	OS, NLE, AS	.22***	.01	.98
Depersonalisation	OS, NLE, AS, OS x AS	.22***	.00	1.37
	OS, NLE, AS, OS x AS, NLE x AS	.22***	.00	.21
	OS, NLE	.05**	.05	3.00**
Personal Accomplishment	OS, NLE, AS	.06**	.01	1.19
i ersonar Accomplishment	OS, NLE, AS, OS x AS	.07**	.01	.94
	OS, NLE, AS, OS x AS, NLE x AS	.07**	.01	.84
	OS, NLE	.22***	.22	16.80***
Anxiety	OS, NLE, AS	.22***	.00	.47
AllAlety	OS, NLE, AS, OS x AS	.24***	.02	3.01*
	OS, NLE, AS, OS x AS, NLE x AS	.25***	.01	1.27

 $N=122\ ^{***}p<.001\ ^*p<.05\ OS=Occupational\ Stress;\ NLE=Negative\ Life\ Events;\\ AS=Achievement\ Striving$

To ensure that none of our results was contaminated by multi-collinearity problem, tests for multi-collinearity was carried out each time a statistical analysis was performed. The results for all the multi-collinearity tests show that all the tolerances were within the recommended .01 level thus indicating that there was not any significant multi-collinearity problem.

In summary, occupational stress significantly explained the variances of the dependent variables like work satisfaction, satisfaction with the leader, emotional exhaustion, feelings of depersonalisation and anxiety-illnesses while negative life events explained variances in emotional exhaustion, depersonalisation and anxiety and illnesses, but not work satisfaction, satisfaction with the leader and personal accomplishment. For the moderating variables, the results proved a little bit disappointing with only two significant moderating effects out of the twelve tested relationships. The results show that the Achievement Strivings component of Type A personality moderated the relationship between stress and strain by heightening the effects of stress on work dissatisfaction and anxiety-illnesses while the Impatience-Irritability component did not have any significant moderating effect.

DISCUSSION

In line with previous research done in North America, the results of this study show that occupational stress was significantly correlated with satisfaction with the job itself and with the leader, emotional exhaustion, depersonalisation, personal accomplishment and anxiety-illnesses. The higher the level of occupational stress perceived by the social worker, the lower his or her satisfaction with the job itself and the leader, the higher the level of emotional exhaustion and depersonalisation felt, lower sense of personal accomplishment and greater anxiety and illnesses

experienced.

These findings are consistent with other research studies. Pines et. al., (1981) have documented the relationship between stress, emotional exhaustion, depersonalisation and personal accomplishment. By expending the necessary energy to cope with stress, psychological energy needed to carry out one, s work will be dep]eted thus causing the individual to be emotionally exhausted. Depersonalisation, on the other hand, is seen as a way of escaping from stress. Being personally detached from one, s clients helps to reduce the feelings of responsibility, which in turn helps to alleviate the feelings of inadequacy and helplessness when one is unable to help his or her clients. The positive relationship between stress and anxiety-illnesses has been cited by Vinokur and Selzer(1975).

To find out why occupational stress was only weakly (r = .15, p < .1) associated with feelings of personal accomplishment, a post study interview was conducted with some of the respondents. Most of them expressed intense desire to help people, which is the main reason why they are in the helping profession in the first place. Though constantly under pressure to help their clients achieve something in their lives, social workers are not always successful in their endeavours. If, occasionally, one of their clients does make it in life, the satisfaction and sense of accomplishment which they feel is sufficient to compensate for the past failures and enable them to engage their next assignments with renewed vigoL Another reason which many of the social workers mentioned was that no matter how minor it may seem to others, they feel that what they do make a significant difference in their clients' lives. It is this belief which gives them the drive and motivation to soldier on regardless of the stress that they face. These reasons could have accounted for the immaterial though significant correlations between occupational stress and negative life events and personal accomplishment.

That occupational stress was more strongly and significantly correlated with the dependent variables than negative life events may well indicate that while work stress can have a rather pervasive influence, extending even beyond work related outcomes, the social workers in the current sample were able to ensure that they do not allow such personal concerns to affect work related strains such as job satisfaction, and job burnout. Even though negative life events did have some impact on two components of job burnout, it is in the area of anxiety and illnesses that such events have the greatest impact.

The moderating effect of Type A personality (achievement strivings) on the stress-strain relationship reaffirmed the findings of Caplan and Jones (1975) and Keenan and McBain (1979) and confirmed our suspicion that Type As tend to express greater anxiety and lower job satisfaction whenever they experience stress. However, it was rather surprising that while we expected the impatience-irritability component (and not the achievement strivings component) of Type A personality to moderate the stress-strain relationship, the results turned out to be otherwise. Nevertheless, the findings did show that the impatience-irritability component did have direct impact on three of the six stress related outcomes, thus indicating that both components of Type A personality have negative impact one way or another.

The present study has shown that stress, whether arising from occupational or personal sources, has a significant impact on the psychological and physical illhealth of an individual. Because of the nature of their job. social workers are especially vulnerable to stress and its devastating effects (Maslach, 1978; Cordes & Dougherty, 1993). Both the individual social worker and the organisation he or she work for can and should take specific steps to help make the life of a social worker less stressful. For instance, one obvious step to take is for management to provide adequate training and preparation for fresh social workers to help them prepare for their tasks ahead. Management can draw up guidelines on task-related division of work so as to prevent Type As from overworking themselves, and to encourage employees to curtail the dysfunctional aspects of their Type A personality.

Finally, it is pertinent to understand that stress knows no national or occupational boundaries and therefore could affect anyone, anywhere and at any time. It is hoped that more research could be

done in the areas of stress management and intervention, and on subjects who are in the human services rather than concentrating merely on employees in profit making organisations. The recent study on stress faced by school teachers is a good step in this direction (Yeo, 1995; Nirmala, 1995). May this trend continue!

REFERENCES

- Beehr, T.A. and Newman, J.E., (1978), job Stress, employee health and organizational effectiveness: A facet analysis, model and literature review, *Personnel Psychology*, 31, pp. 665-699.
- Bhagat, R.S., (1983), Effects of personal life stress upon individual performance effectiveness and work adjustment processes within organizational settings: A research model, *Academy of Management Review*, 8, pp. 660-671.
- Brief, A.P., Burker, M.J. George, j.M., Robinson, B.S., and Webster, J., (1988), Should negative affectivity remain an unmeasured variable in the study of job stress? *Journal of Applied Psychology*, 73, pp. 193-198.
- Brookings, J.B., Bolton, B., Brown, C.E., and McEvoy, A., (1985), Self-reported job burnout among female human service professionals, *Journal of Occupational Behaviour*, 6, pp. 143-150.
- Cherniss, C., (1980), *Staff burnout: Job stress in the human services*, Beverly Hills, CA: Sage Publications.
- Caplan, R.D., (1972), Organisational stress and individual strain: A social psychological study of risk factors in coronary heart disease among administrators, engineers and scientists, *Dissertation Abstracts International*, 32(11 B), 6706B.
- Caplan, R.D., Cobb, S., French, J.R.P., Jr., Van Harrison, R.T., and Pinneau, S.R., (1975), Job demands and worker health, *NIOSH Research Report*, pp.75-160, Washington D.C.
- Caplan, R,D. and Jones, K.W, (1975), Effects of work load, role ambiguity and Type A personality on anxiety, depression and heart rate, *Journal of Applied Psychology*, 60, pp. 713-719.
- Cobb, S., (1976), Social support as moderator of life stress, *Psychosomatic Medicine*, 38, pp. 300-314.
- Cohen, J. and Cohen, P., (1983), *Applied multiple regression for the behavioural sciences*. (second edition), Hilisdale, NJ, Lawerence Erlbaurn Associates, Inc.
- Cummins, R.T., (1989), Locus of control and social support: Clarifiers of the relationship between job stress and job satisfaction, *Journal of Applied Social Psychology*, 19, 9, pp. 772-788.
- Cooper, C.L., (1986), Job distress: recent research and the emerging role of the clinical psychologist, *Bulletin of the British Psychological Society*, 39, pp. 325-331.
- Cordes, C.L. and Dougherty, T.W., (1993), A review and an integration of research on job burnout, *Academy of Management Review*, 18, 4, pp. 621-656.
- Dunham, R.B., Smith, F.J., and Blackburn, R.S., (1977), Validation of the Index of Organisational Reaction (IOR) with the JDI, MSQ and Faces Scale, *Academy of Management Journal*, 20, pp. 420-432.
- Friedman, M. and Rosenman, R.H., (1974), *Type A behaviour and your heart*, New York. Alfred Knopf.
- Froggatt, K.L. and Cotton, J.L., (1987), The Impact of Type A Behaviour pattern on role overload-induced stress and performance attributions, *Journal of Management*, 13, pp. 87-90.
- Ganster, D.C., Sime, WE., and Mayes, B., (1989), Type A behaviour in the work setting: A review and some new data, in A.W Siegman and T.M. Dembroski (eds.) *In Search of Coronary-Prone Behavior: Beyond Type A*, Erlbaum, Hillsdale, New Jersey.
- Golembiewski, R.T. and Munzenrider, R.F., (1988), Phases of burnout, New York: Praeger Press.

- Goursuch, R. L. and Key, M., (1974), Abnormalities of pregnancy as a function of anxiety and life stress. *Psychosomatic Medicine*, 36, pp.352-361.
- Holmes, T. H. and Rahe, R.H., (1967), The social adjustment rating scale. *Journal of Psychosomatic Research*, 11, pp. 213-218.
- Holmes, T. H. and Masuda, M., (1974), Life change and illness susceptibility. In Dohrenwend B. S. & Dohrenwend B. P (Eds). *Stressful Life Events: Their Nature and Effects*, 45-72. New York: Wiley.
- Ivancevich, J.M. and Matterson, M,T., (1984), Human Relations, 37, pp. 491-513.
- Jamal, M., (1990), Relationship of job stress and Type A behavour to employee s job satisfaction, organisational commitment, psychosomatic health problems and turnover motivation, *Human Relations*, 43, pp. 727-738.
- Jenkins, C.D., Zyzanski, S.J., and Rosenman, R.H., (1979), *The Jenkins Activity Survey*, New York: The Psychological Corporation.
- Jenner, J.R., (1986), A measure of chronic organizational stress, *Psychological Reports*, 58, pp. 543-546.
- Johnson, J.H. and Sarason, I.C., (1979), Recent developments on life stress, In Hamilton V. & Warburton D.M. (eds). *Human Stress and Cognition: An Information Processing Approach*. New York: Wiley.
- Justice, B., Gold, R.S., and Klein., J.P., (1981), Life events and burnout, *Journal of Psychology*, 108(2), pp. 219-226.
- Keenan, A. and McBain, G., (1979), Effects of Type A behavior, intolerance of ambiguity and locus of control on the relationship or role stress and work-related outcomes, *Journal of Occupational Psychology*, 52, pp. 277-285.
- Lee, R.T. and Ashforth, B.E., (1990), On the meaning of Maslach sthree dimensions of burnout; *Journal of Applied Psychology*, 75. pp. 743-747.
- MacGrath, J.E., (1976), Stress and Behaviour in Organizations. In M. D. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*, pp. 1351-1395, Chicago: Rand McNally and Company.
- Maslach, C., (1976), Burned-out, *Human Behavior*, 5(9), pp.16-22.
- Maslach, C and Jackson, S.E., (1981), The measurement of experienced burnout, *Journal of Occupational Behaviour*, 3, pp. 99-113.
- Matterson, M.T. and Ivancevich, J.M., (1987) Individual stress management interventions: evaluation of techniques, *Journal of Managerial Psychology*, 2, pp. 24-30.
- Modic, S.J., (1989), Surviving burnout, *Industry Week*, Feb 20, pp. 29-34.
- Neter, I., Wasserman, W., and Kutner, M.H., (1983), *Applied linear regression models*, Homewood, Illinois, Richard Irwin, Inc.
- Nirmala, M., (1995), Principals can best cut stress levels among teachers: Study, *The Straits Times*, September, 30, p. 3)
- Pines, A., Aronson, E., and Kafry, D., (1981), *Burnout: From tedium to personal growth*, New York: The Free Press.
- Porter, L.W. and Steers, R.M., (1973), Organisational, work, and personal factors in employee turnover and absenteeism, *Psychological Bulletin*, August, pp. 151-176.
- Quah, J. and Campbell, K.M., (1994), Role conflict and role ambiguity as factors in work stress among managers in Singapore: Some moderator variables. *Research and Practice in Human Resource Management*, 2, 1, pp. 21-33.
- Ramos, A.A., (1975), The relationship of sex and ethnic background to job-related stress of research and development professionals, *Dissertation Abstracts International*, 36(3)A, 1862A.

- Rahe, R.H, and Lind, B., (1971), Psychological factors and sudden cardiac death: A pilot study, *Journal of Psychosomatic Research*, 15, pp.19-24.
- Riley, A.W and Zaccaro, S.J., (1987), *Occupational stress & organizational effectiveness*, Praeger Publishers.
- Ross, C.E. and Mirowsky, J., (1979), A comparison of life-event weighting schemes: Change undesirability, and effect-proportional indices, *Journal of Health and Social Behaviour*, 20, pp. 166-177.
- Sadri, G. and Marchouiides, G.A. (1994), The dynamics of occupational stress: Proposing and testing a model, *Research and Practice in Human Resource Management*, 2, 1, pp. 1-19.
- Sarason, I.G., Johnson, j.H., and Siegel, J.M., (1979), Development of life experiences survey, In I. G. Sarason and C. D. Speilberger (Eds.), *Stress and Anxiety*, pp. 131-149
- Schwab, R.L. and Iwanicki, E.E., (1982), Perceived role conflict, role ambiguity, and teacher burnout. *Educational Administration Quarterly*, 18, pp. 60-74.
- Smith, F.J., (1976), The Index of Organisational Reaction (bR), *JSAS Catalog of selected documents in psychology*, 6(1): 54, No. 1265.
- Spence, J.T., Helmreich, R.L., and Pred, R.S., (1987), Impatience versus Achievement Strivings in the Type A Pattern: Differential effects on students health & academic achievement, *Journal of Applied Psychology*, 72, pp. 522-528.
- Steers, R.M. and Rhodes, S.R., (1978), Major influences on employee attendance: A Process model, *Journal of Applied Psychology*, 63, pp. 391-407.
- Taylor, J.A., (1953), A personality scale of manifest anxiety, *Journal of Abnormal Psychology*, 49, pp. 285-290.
- Vinokur, A. and Seizer, M., (1975), Desirable Versus Undesirable Life Events: Their Relationship to Stress and Mental Distress, *Journal of Personality and Social Psychology*, 66, pp. 297-333.
- Watson, D. and Clark, L.A., (1984), Negative affectivity: The disposition to experience aversive emotional states, *Psychological Bulletin*, 96, pp. 465-498.
- Wyler, A. R., Masuda M., and Holmes, T. H., (1971), Magnitude of life events and seriousness of illnesses, *Psychosomatic Medicine*, 33, pp.115-122.
- Yeo, G., (1995), Simple actions by principals combat stress in teachers, *The Straits Times*,