

A Study of Job Stress Among Professional Accountants Working in Selected Public Accounting Firms : A Malaysian Case

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ABSTRAK

Kajian ini membuat semula dan memperpanjangkan kajian-kajian sebelumnya yang telah dilaksanakan di Amerika Syarikat (Gaertner dan Ruhe, 1981) dan di Britain (Lyall, 1984). Ianya dilaksanakan secara penyemakan intensif penulisan dan kajian yang berkaitan dengan ketegangan kerja dan juga kerja luar menggunakan instrumen soal selidik yang mana telah digunakan sebelumnya (dalam dua penyelidikan yang disebut di atas) dengan hanya sedikit perubahan dibuat kepadanya bagi menyesuaikan dengan keadaan di Malaysia.

Penyelidikan ini bertujuan mengenalpasti sama ada saiz firma yang berbeza dan fungsian kerja dan tingkat jawatan yang berlainan dalam sesebuah firma itu menghasilkan perbezaan yang signifikan di kalangan punca ketegangan yang dihadapi, tindakbalas ketegangan dan moderator yang terdapat dalam fenomena ketegangan kerja tersebut. Di samping itu, kajian cuma mengenalpasti sama ada wujud atau tidak perhubungan linear yang positif di antara punca-punca ketegangan kerja dan tindakbalas-tindakbalas ketegangan.

Hasil kajian menunjukkan bahawa di antara tiga angkubah - saiz firma, fungsian kerja dan tingkat jawatan - hanya tingkat jawatan yang berlainan yang menonjolkan keadaan samada seseorang akauntan profesional itu akan mengalami ketegangan kerja yang berbeza. Juga dikenalpasti bahawa kebanyakan perbezaan yang signifikan ini wujud di kalangan punca ketegangan dan bukannya tindakbalas ketegangan. Keputusan ini adalah seperti apa yang juga ditemui dalam kajian Gaertner dan Ruhe (1981).

ABSTRACT

The study replicates and extends earlier studies on job stress in public accounting conducted in the United States (Gaertner and Ruhe, 1981) and Britain (Lyall, 1984) it is done through an extensive review of literature on job stress and field study using the same questionnaire as utilized in the two earlier studies with only slight modifications are made to suit the Malaysian context.

The study seeks answer to what may be the sources of stress, psychological outcomes and moderators of stressful situations in selected public accounting firms and whether there exist significant linear relationships between the job stressors and mental strains. Furthermore, it attempts to find out whether different firm sizes, functional areas and position levels differ significantly in the stressors confronted and strains experienced by the public accountants.

The findings indicate that stressors faced by most respondents are quantitative workload, variations in workload, responsibility for persons and travel. Very few report confronting role conflict and role ambiguity. As for the mental strains, respondents do not show that they are experiencing any except for job and workload dissatisfactions and pay inequity. It is also found that more than 70 percent of the respondents feel that they have job autonomy and that they do not possess the Type A personality traits.

INTRODUCTION

The study of job stress has become an important research area for the last three decades because of its serious implications to both the organization and its human resources. The prolonged experience of stressful situations are not desirable to one's mental and physical well-being. Hans Selye (1956), the father of stress research, explains that stress involves the working responses of the bodily internal organs to maintain the state of equilibrium (homeostasis) when there is a threat (stressor) coming in to affect it. The stressor may either be physical or psychological. The responses include the body's nervous system to trigger a flood of adrenalin and other hormone, increase in the supply of blood to the heart resulting with the increase in blood pressure, muscles tension and heart beat. The absorption of food from the digestive system is reduced while energy-producing substance, such as sugar and fats, are released to meet a need for an increased energy supply. The final result, as suggested by Cannon (1939), may bring the muscular system to be activated for defense reactions - either to flee or fight back! Selye (1956) however disagrees and suggests another kind of final response: there would emerge the feelings of helplessness, defeat, depression, failure, deprivation or frustration. Selye (1956, 1976) further suggests that for the body and/or mind to return to homeostasis, it demands readjustment. For that to take place, it will consume part of the body's "adaptation energy". Continued adaptation and loss of adaptation energy will eventually lead to exhaustion (which may be resersible through adequate rest or sleep) and death. Often, prior to death and after repeated or prolonged stressful experiences, "diseases of adaptation" or strain appear in the forms of emotional disturbances, headaches, insomnia, upset stomach, sinus attacks, hypertension, gastric and duodenal ulcers, certain types of rheumatic or allergic afflictions, as well as cardiovascular and kidney diseases (Schuler, 1980).

As an adult living in today's society, one would experience innumerable stresses coming from various domains of one's life - work, family and residence. The phenomenon called job stress is defined here as any characteristic of the working environment which poses a threat to

an employee for there is a misfit between his or her skills and abilities and demands of the job and a misfit in terms of his or her needs supplied by the job environment resulting with disruption in his or her body's state of equilibrium and which in turn causing or contributing towards physiological, psychological and behavioral strain outcomes (Beehr & Newman, 1978; French et al., 1974; Margolis & Kroes, 1974).

OBJECTIVES

The general objective of the study is to assess the job stress phenomenon as experienced by the professional accountants working in selected public accounting firms. Specifically, the objectives are:

1. Do the sizes of the offices as well as staff's functional areas and position levels differ significantly in the stressors confronted, strains experienced and moderators operated?
2. If there exist significant differences, where are there?
3. Are there significant linear relationships between the job stressors and the mental strains?

(See FIGURE 1)

Null Hypothesis.

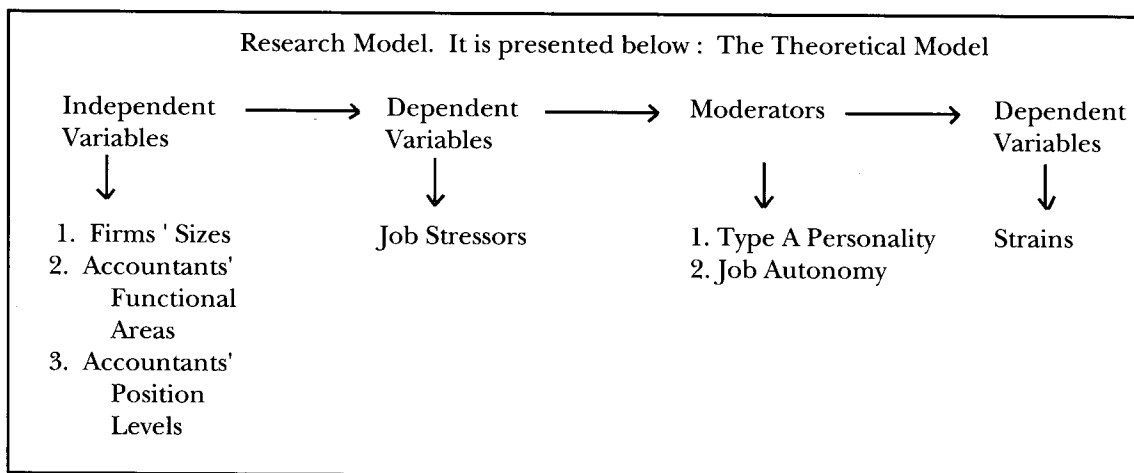
The research questions (2) and (3) may be stated in the following groups of null hypotheses:

1. There are no significant differences among the different organizational sizes, functional areas and position levels in the following variables:
 - a. nine job stressors;
 - b. ten psychological strains; and
 - c. two moderators
2. There are no significant and positive relationships between the stressors and strains.

LITERATURE REVIEW

As the researchers from the Institute of Social Research at the University of Michigan came

FIGURE 1. Research Model and Hypothesis.



out with a model called social environment (French & Kahn, 1962) to describe the job stress phenomenon as early as 1960's. Through the years, the model has been amended and tested and served on so many other job stress studies (Kahn et al., 1964; French & Caplan, 1970). Out of the so many proposed refinement of the social environment model, one that stands out as quite useful is a person-environment (P-E) fit model as propounded by Lofquist and Dawis (1969) and others (French, 1973; French et al., 1974; Caplan et al., 1975).

Dependent and Moderating Variables

All the variables studied herein have also been found in other job stress studies. House and Rizzo (1972), Kahn et al. (1964) and Miles (1976) have found that role stress would result in a number of dysfunctional consequences: low performance and satisfaction, high anxiety, tension and inclination to leave the organization. Aranya and Ferris (1984), in their investigation on role conflict involving 1200 Canadian chartered accountants working in both professional and non-professional organizations, suggested that subjective role conflict is inevitable among the accountants. This is because of the professional and organizational allegiances they are supposed to have toward the accounting profession's standards and ethical codes and as employees to the objectives and way of doing things of their employing organizations. They also found that the level of conflict between the two commitments is lower as an accountant moves upward through the organizational

hierarchy.

Furthermore, the subjective role conflict is found negatively correlated to the accountants' job satisfaction and positively correlated to their intention to leave the firms. Senatra (1980) found in his study that job satisfaction for accountants working in a public accounting firm is negatively related to the amount of role ambiguity experienced. The study by French and Caplan (1970) has found that both quantitative and qualitative overload produce at least nine different unwanted outcomes: job dissatisfaction, excessive job tension, low self-esteem, threat, embarrassment, high cholesterol levels, increased heart rate and skin resistance and increased cigarette consumption. The last four are risk factors in heart disease. As for Margolis et al. (1974), they found that work overload may be associated with lowered self-esteem, decrease work motivation, increase absenteeism, sharply reduced numbers of suggestions contributed and escapist drinking. Friedman et al. (1958) found that there is some positive correlation between qualitative overload and cholesterol levels for accountants preparing their clients' income tax statements under the approaching tax deadline. Margolis et al. (1974) found from a sample of 1400 workers that non-participation is the most consistent and significant predictor and indicator of job stress. The stressor is significantly related to overall poor physical health, escapist drinking, depressed mood, low self-esteem, low life satisfaction, low job satisfaction, low motivation to work, intention to leave job and absenteeism from work.

Other studies (Quinn & Shepard, 1974; French & Caplan, 1970; Cooper & Marshall, 1978) have also noted the same results. In fact, French and Caplan (1970) concluded in their study that based upon statistical results, the lack of participation has the greatest harmful effect on job satisfaction compared to other stressors such as role conflict, role ambiguity and quantitative and qualitative overload and that low participation generates these other stressors. Just like the stressors mentioned above, others such as responsibility for people (French & Caplan, 1970), job future ambiguity (Erikson et al., 1972; Blau, 1978) and travel (Sofer, 1970) have also been identified as stressors which are associated with various psychological, physiological and behavioral strain outcomes. Studies have also found that the relationships between job stressors and strain outcomes are not straight forward. A number of factors can act as moderators either to intensify or weaken the relationships. These may be the person's gender (Davison & Cooper, 1980), age (Stouffer et al., 1950; Langner, 1963; Indik et al., 1964) years of working experience (Abde-Halim, 1981; French and Caplan, 1972; Schuler, 1977) and personality type (Kobassa & Maddi, 1977; Lefcourt, 1978; Keenan & McBain, 1979). Kahn et al. (1964) find that people who suffer more tension are the anxiety-prone, introvert, flexible personality type. In addition, the behavioral style Type A has been found in many studies to be associated with experiencing more stress. Thus, Type A personality is linked with coronary heart disease and various mental strains such as anxiety, depression and job dissatisfaction (French & Caplan, 1970; Howard et al., 1976; Choo, 1986). Besides the person's personal characteristics, environmental working attributes can also act as moderators. These may include the presence of good interpersonal relationships in work place (Caplan, 1972) and job autonomy. The latter is found to have a positive relationship with job satisfaction and job performance (Hackman & Lawler, 1971; Brief & Aldag, 1979) and to alleviate the experience of stress (French & Caplan, 1972; Harrison, 1976; Karasek, 1979). Sorensen et al. (1973) and Lengerman (1971) found that accountants will confront role conflict when they are unable to obtain adequate job autonomy. Lengerman (1971), Sorensen (1967) and Sorensen and Sorensen (1974) found that

the accountants' professional autonomy is less threatened in national accounting firms than in non-accounting firms. In addition, they suggested that the higher the position occupied in the firm's hierarchy, the greater the sense of autonomy will be. Lengerman (1971) also founds that the greater sense of job autonomy has appeared to take place in accounting firms which have fewer branch office and smaller number of professional staff in the office.

Independent Variables

Compared to organizational sizes, functional areas and position levels are widely used as variables in job stress studies and normally considered as the moderating variables. Albrecht et al. (1981) found in their study of job satisfactions of accountants that partners in medium-sized offices are more satisfied than those in small (under 50 staff) or large (over 200 staff) offices. Caplan et al. (1975), Morris et al. (1979), French and Caplan (1970), French et al. (1965) and Russek (1962) have all found that types of occupation bring out differences in job stress experienced. Specifically, French and Caplan (1970), in the NASA study, found that there are differences in job stress experienced and thus strain responses among the three NASA working groups: administrators, engineers and scientists. Russek (1962) who attempted to predict the relative frequency of hypertension and CHD within three professions (medicine, dentistry and law) found that professionals occupying different in each profession showed differences in their tendency for CHD. That is, for each profession, the general practitioners show CHD rates which are two to three times higher compared to those of specialists. As for position levels, many studies show that the position one holds in an organization could also bring the difference (Szlgyi & Sims, 1975; Schuler, 1975; Miles & Perreault, 1976; Schuler, 1977; Locked, 1976). Aranya and Ferris (1984) found from a sample of over 800 American auditors that within the accounting firms, the level of perceived conflict varies inversely with the individual's position in the hierarchy. Albrecht et al. (1981) have also found from his study which samples accountants in twenty-five offices of accounting firms across the United States that as the accountants move up the organizational hierarchy, their job satisfaction

increased. Kasl (1980) in his review of job stress studies which include Kahn (1972), Kornhauser (1965), Quinn et. al. (1971), Robinson et. al. (1969) found that prestige or status level of a job is clearly associated with higher job satisfaction and with better mental health.

RESEARCH METHODOLOGY

Measurement

The questionnaire adopted is used previously by Gaertner and Ruhe (1981) and Lyall (1984) in the United States and United Kingdom, respectively. Slight modifications were made to the questionnaire to suit the Malaysian context. Gaertner and Ruhe (1981) who first constructed the questionnaire did so by adapting an instrument for measuring stress developed in the Social Environment and Mental Health Program of the Institute for Social Research at the University of Michigan. The questionnaire was made 129 questions and space was provided for further comments.

Sample

Thirteen accounting firms located in Penang, Ipoh, Kuala Lumpur and Johor Bahru were selected and a total of 263 questionnaires are mailed in packets. Each packet contained the total number of questionnaires asked by each firm. A total of 118 questionnaires were returned for a response rate of 45 per cent. In selecting the firms, convenience sampling is used. The sample accounting firms were derived from the Directory of Accountants, Auditors, Tax Consultants and Tax Advisers (As of September 30, 1988) published by the Malaysian Institute of Accountants (MIA).

Data Tabulation and Statistical Tests

The data gathered were coded and tabulated using the electronic spreadsheet program Quattro Pro Version 3. For statistical testings, the entire data file was 'exported' to Microstat, a PC statistical package. Due to the small number of partners (three only), they were grouped together with the managers for statistical testings. To test the significant of differences among firm's sizes, functional areas and position levels in the stressors, strains and situational moderators, the one way ANOVA (Analysis of Variance) test statistic was used. If significant

differences were reported, the Fisher's Test of Least Significant Differences (Fisher's LSD Test) would be employed to ascertain which groups differed and in which manner. Finally, the Pearson's coefficient of correlation was computed to find out the strength of linear relationships, if they existed, between job stressors and strains.

FINDINGS

Respondents' Profile

The profile in terms of demographic variables is shown in TABLE 1. TABLE 1 shows that the dominant ethnic race working in the public accounting firms is Chinese, accounting for nearly 75 per cent of the total respondents. Most of the respondents, 73 per cent, are in their twenties and over 73 per cent are still singles. Approximately 44 per cent have already passed their accounting professional examination while about 42 per cent holding only university degrees. Majority of the respondents (around 80 per cent) are working in the audit area. Over 40 per cent are junior staff and around 25 per cent has been attached with their firms for less than a year. More than 60 per cent hold no supervisory positions. Nearly 50 per cent are working with small firms which is defined here as employing fewer than 50 accountant professionals. Finally, about 43 per cent believe that they would only be staying in public accounting for at most 4 years and around 48 per cent prefer to stay working with the present employer for at most 9 years. In summary, this sample of professional accountants is largely composed of young, unmarried, Chinese who have at least one university degree and work in the small firms in the audit area.

Comparison of Means

TABLE 2 shows mean response comparisons of stressors, strains and situational moderators for the different organizational sizes, functions and position levels in public accounting. Among the 10 potential stressors, 10 strains and 2 situational moderators, only 1 stressor is found to be significantly different at 95 per cent confidence level among the three firms' sizes: small, medium and large. The Fisher's LSD test shows that the large firms' accountants confront greater role conflict than either the small

or medium firm sizes' accountants, at 95 per cent confidence level. No significant difference is found in the functional area. The most conspicuous feature of TABLE 2 is the number of statistically significant differences found among position levels (4 of 9 stressors, 1 of 10 strains and 2 of 2 situational moderators). These are quantitative workload, responsibility for persons, participation, travel, autonomy, Type A personality and self-esteem. By using the Fisher's LSD test, at 95 per cent confidence level, it was found that:

1. Both managers and seniors had the same level of quantitative workload which was significantly greater than junior.
2. The managers had significantly more responsibility for persons than either the seniors or juniors.
3. Both managers and seniors had the same level of participation which was significantly greater than juniors.
4. Both seniors and juniors had the same level of travel which was significantly greater than managers.
5. Juniors had significantly less job autonomy than either the seniors or managers.
6. Both the managers and seniors had the same level of Type A personality profile which was significantly less than the juniors.
7. Juniors had the significantly less self-esteem than either the managers or seniors.

Correlation

In order to understand the relationships between job stressors and strains, the Pearson's coefficient of correlation was calculated. The results are shown in TABLE 3. At 95 per cent confidence level, significant correlations exist between stressors:

1. Quantitative workload and strains workload dissatisfaction (.23), boredom (-.18), pay inequity (.21) and self-esteem (-.35)
2. Variance in workload and strains workload

dissatisfaction (.24) and pay inequity (.19)

3. Responsibility for persons and strains self-esteem (.24)
4. Underuse and strains job dissatisfaction (.24), workload dissatisfaction (.28), boredom (.41), depression (.27), frustration (.22) and self-esteem (.38)
5. Participation and strains boredom (.31), anxiety (.26), depression (-.21) and self-esteem (-.26)
6. Role ambiguity and strains job dissatisfaction (.38), workload dissatisfaction (.26), boredom (.37), anxiety (.30), irritation (.26), depression (.37), loneliness (.24), frustration (.35) and self-esteem (.24).
7. Role conflict and strains workload dissatisfaction (.34), boredom (.37), anxiety (.20), irritation (.33), depression (.41), loneliness (.42), frustration (.43) and pay inequity (.31)
8. Job future ambiguity and strains job dissatisfaction (.35), workload dissatisfaction (.24), boredom (.41), anxiety (.42), irritation (.25), depression (.46), loneliness (.18), frustration (.34).

Majority of these significant correlations supported the predicted positive relationships—the more a stressor confronted by a respondent, the more strains resulted. Out of 10 strains, role ambiguity was significantly and positively correlated to nine. Both role conflict and role job future ambiguity were associated significantly and positively with eight strains.

Voluntary Unstructured Comments

Twenty nine percent of the respondents provided voluntary unstructured comments which could be categorized into two areas:

- a. *Pay*. The respondents were very much dissatisfied with the amount of their salaries considering the workload and deadlines they had to face. One even claims that "most of the accounting firm staff are underpaid and overwork." Many who voiced their unhappiness over the pay issue pointed out that they

TABLE 1. Respondent's Profile by Demographic Variables.

Category	Sub - Category	Frequency	% - age
Age Group	20 - 24	36	30.51 %
	25 - 29	50	42.37 %
	30 - 34	28	23.73 %
	35 - 39	2	1.69 %
	40 - 44	1	0.85 %
	45 - 49	0	0 %
Sex	50 - 54	1	0.85 %
	Male	68	57.63 %
Race	Female	50	42.37 %
	Malay	16	13.56 %
	Chinese	88	74.58 %
	Indian	13	11.02 %
Marital Status	Others	1	0.85 %
	Bachelor	87	73.73 %
Professional Background	Married	31	26.27 %
	CPA w/o Univ. Degree	32	27.12 %
	CPA w/ Univ. Degree	20	16.95 %
	With Univ. Degree	49	41.53 %
	With Adv. Degree (S)	6	5.08 %
Functional Area	Others	11	9.32 %
	Audit	96	81.36 %
	Tax	8	6.78 %
Position Level	MAS	14	11.86 %
	Partner/Manager	36	30.51 %
	Senior	34	28.81 %
No. of Professional Accountants in the Firm	Junior	48	40.68 %
	Less than 50	58	49.15 %
	50 - 100	27	22.88 %
Supervisory Role held	Over 100	33	27.97 %
	Yes	42	35.59 %
Length of Time Working with Present Employer	No	76	64.41 %
	Less than 1 month	1	0.85 %
	1 - 6 month	24	20.34 %
	7 - 12 month	5	4.24 %
	1 - 5 Years	53	44.92 %
	6 - 10 Years	28	23.73 %
Length of Time in Present Position	No Response	7	5.93 %
	Less than 1 month	4	3.39 %
	1 - 6 month.	26	22.03 %
	7 - 12 month	16	13.56 %
	1 - 5 Years	38	32.2 %
	6 - 10 years	12	10.17 %
Number of Years Expected to Stay in Public Accounting	Over 10 years	2	1.69 %
	More than 8	12	10.17 %
	5 - 7	31	26.27 %
	2 - 4	44	37.29 %
	As long as possible	24	20.34 %
Number of Years Expected to Stay with Present Employer	Less than 1	7	5.93 %
	1 - 4	8	6.78 %
	5 - 9	48	40.68 %
	10 - 14	33	27.97 %
	15 - 19	15	12.71 %
	20 - 24	1	0.85 %
	25 - 29	1	0.85 %
	30 or more	2	1.69 %
No Response	10	8.47 %	

TABLE 2. Frequency and Percentage Distribution of Responses by Job Stressors.

Job Stressor	Class Limit	Scale	Frequency	Percentage
1. Quantitative Workload	1 - 5 (Hardly Any to a Great Deal)	1	0	0.00 %
		2	8	5.08 %
		3	110	93.22 %
		4	2	1.69 %
		5	0	0.00 %
2. Variations in Workload	1 - 4 (Hardly Any to Often)	1	1	0.85 %
		2	11	9.32 %
		3	72	61.02 %
		4	34	28.81 %
3. Responsibility for Persons	1 - 5 (Very Little to a Great Deal)	1	4	3.39 %
		2	38	32.20 %
		3	59	50.00 %
		4	16	13.56 %
		5	1	0.85 %
4. Underuse	1 - 5 (Hardly Any to Very Often)	1	23	19.48 %
		2	56	48.61 %
		3	36	30.51 %
		4	4	3.39 %
		5	0	0.00 %
5. Participation	1 - 5 (Very Little to a Great Deal)	1	10	8.47 %
		2	21	17.80 %
		3	67	56.78 %
		4	20	16.95 %
		5	0	0.00 %
6. Role Ambiguity	1 - 5 (Hardly Any to Very Often)	1	39	33.05 %
		2	72	61.02 %
		3	7	5.93 %
		4	0	0.00 %
		5	0	0.00 %
7. Role Conflict	1 - 5 (Rarely to Very Often)	1	24	20.34 %
		2	81	68.64 %
		3	13	11.02 %
		4	0	0.00 %
		5	0	0.00 %
8. Job Future Ambiguity	1 - 5 (Somewhat Uncertain to Very Certain)	1	8	6.78 %
		2	30	25.42 %
		3	51	43.22 %
		4	26	22.03 %
		5	3	2.54 %
9. Travel	1 - 5 (Very Little to a Great Deal)	1	3	2.54 %
		2	39	33.05 %
		3	80	50.85 %
		4	16	13.68 %
		5	0	0.00 %

TABLE 3. Frequency and Percentage Distributions of Responses by Strain Outcomes.

Job Stressor	Class Limit	Scale	Frequency	Percentage
1. Job Dissatisfaction	1 - 3 (Take ' to 'Not Take the Same Job)	1	69	58.47%
		2	49	41.53%
		3	0	0.00%
2. Workload Dissatisfaction	1 - 5 (Never to Very Often)	1	16	13.56%
		2	54	45.76%
		3	33	27.97%
		4	13	11.02%
		5	2	1.69%
3. Boredom	1 - 5 (Never to Very Often)	1	31	26.27%
		2	62	52.54%
		3	20	16.95%
		4	5	4.24%
		5	0	0.00%
4. Anxiety	1 - 4 (Never to Very Often)	1	69	58.47%
		2	47	39.83%
		3	2	1.69%
		4	0	0.00%
5. Irritation	1 - 4 (Never to Very Often)	1	58	47.46%
		2	57	48.31%
		3	5	4.24%
		4	0	0.00%
6. Depression	1 - 4 (Very Often to Hardly)	1	85	55.08%
		2	49	41.53%
		3	4	3.39%
		4	0	0.00%
7. Loneliness	1 - 4 (Never to Very Often)	1	67	56.78%
		2	44	37.29%
		3	5	4.24%
		4	2	1.69%
8. Frustration	1 - 4 (Never to Very Often)	1	75	63.58%
		2	38	32.20%
		3	5	4.24%
		4	0	0.00%
9. Pay Inequity	1 - 5 (Very Much Less to Much More Than What I Ought to Get)	1	3	2.54%
		2	38	32.20%
		3	48	38.98%
		4	23	19.49%
		5	8	6.78%
10. Self Esteem	1 - 7 (Successful to Unsuccessful)	1	32	27.12%
		2	46	38.98%
		3	23	19.49%
		4	16	13.56%
		5	0	0.00%
		6	1	0.85%
		7	0	0.00%

were looking at their present positions to gain the precious few years of public accounting experience for a more rewarding positions later outside of public accounting.

b. *Leaving public accounting field.* Some resigned to the fact that in public accounting stress was inevitable. As a result, they pointed out that many who would not allow themselves to work under such conditions for far too long would quit - sooner rather than later. This as one respondent had written to be the explanation "for the high employees' turnover for most firms."

All the comments have been useful as supplementary information to interpret other data and to come to the conclusions and provide recommendations as detailed next.

DISCUSSIONS

The size of an accounting firm does not appear to have any significant bearing on whether a professional accountant would be getting different stressful experience. The same could also be said for the accountants working in different functional areas. The area that shows statistically significant difference in job stress is the position level. And still in this case the differences are mostly available in the types of job stressor an accountant would confront and not in the kinds of mental strain experienced. These findings on comparisons by means are in most cases similar to those of Gaertner and Ruhe (1981) and others doing job stress studies in public accounting such as Scroeder and Imdicke (1977), Albrecht et al. (1981), Lengerman (1971), Sorensen (1967), and Sorensen and Sorensen (1974).

In particular, the same recommendation expounded in Gaertner and Ruhe (1981) is made here: the focus on alleviating stressful experiences in public accounting do not need to be segmentalized based on the various firms' sizes and functional areas, instead, the focus should be on position levels.

As for the correlation test, the low correlations indicate that there may be causal link between the job stressors and strains. However, the presence of so many interacting variables in the relationships has resulted in the fact that not a single variable shows a strong, dominant factor. Nevertheless, majority of the correla-

tions are positive as predicted, with quite a number of significant relationships. These findings appear to be consistent with other job stress studies such as French and Caplan (1970) and Kahn (1973). Kasl (1980) in his review of job stress studies (Quinn and Shepard, 1974; Quinn et al., 1971; Hammer and Tosi, 1974; House and Rizzo, 1972; Johnson and Stinson, 1975; Keller, 1975; Lyons, 1971; Kahn et al., 1964; Miles and Perreault, 1976 and Caplan et al., 1975) concluded that the degree of associations between various aspects of the work environment to mental strains is relatively small.

Even though the present study does not attempt to find out whether there are associations or not between the stressors or strains on one hand and the intention to leave the firms on the other, data tabulated from the demographic section of the questionnaire instrument shows that about 40 percent of the respondents have the intention to leave public accounting field within the next four years and approximately 50 percent have already planned that they would not be staying longer than 9 years with their present employers. See Harrell and Stahl (1984) and Ferris (1977), for example, who find that job satisfaction correlates positively with intent to remain in the firms for all groups of the public accountants studied.

Since generally it can also be concluded that quite a number of stressors are reported as strenuous or frequently faced by the respondents (notwithstanding the minimal mental strains reported as taking place), it is the advantage of many parties for everybody within the accounting firms to be more aware of job stress and its repercussions in their working environment and also personal lives. Strategies at both the organizational and individual levels need to be implemented to fight off aversive stressors (Mohd. Ali, 1991). For a start, the firms may want to include in the training programs information on how to cope with unavoidable stress as found in the working environment. It is strongly believed that the welfare of the individual employees goes together with the welfare of the organizations.

LIMITATIONS OF THE STUDY

The study has a number of limitations which may be rectified in further study. First, it is in

the limited number of relevant variables examined which is in fact the obvious limitation in many human behaviour studies. The independent variables may be expanded to include gender, age and even race. Also, the study is limited to the negative consequences of job stress. An inclusion of positive consequences of job stress may be more realistic. The strains may also be extended to job turnover, absenteeism and physical health. As for the moderators, there are others besides Type A personality and job autonomy which could be studied. Second, the relatively small number of respondents has also limited the kind of analysis which may be utilized. A bigger sample size which includes a significant number of partners as well as the managers, senior and junior staff in all the functional areas is needed. Third, the findings should be approached with caution. Because of the convenience sampling used, the results are not generalizable to all accounting firms or even to offices of the same firms. Therefore, the findings are representative only to the extent that the organizational climates of accounting firms are similar. However, Montagna (1974) stated that, at least with regard to informal internal rules, there is very little difference in behavior from one firm to the next. There are also so many possible explanatory variables (such as marital status, age and gender) which are not controlled. In addition, the fact that most respondents claim that they are relatively free from most mental strains is rather mind boggling considering their reports that they face strenuous stressors in many different forms. There may be good reason for this to take place. However, further study may need to test the instrument for its validity and reliability in local environment even though it is very well tested and found highly reliable and valid in the United States. Moreover, the bias caused by using only self-reported type of measurements is obvious. Accordingly, subjective measurement of psychological strains need to be supported by other types of measurements: visual observation, interviewing, job performance measures and biochemical assessments. The final limitation involves the approach taken to collect the data. Since stress or rather strain is a result of interaction of an individual with his or her environment, over time, the longitudinal approach is more desirable. It permits the gather-

ing of data on stressors and strains taking place at different points in time within the working environment of the accounting firms. Thus, it tends to extend the understanding on the temporal aspects of stress - that is, in the happening sequences of stressors and strains and the duration (acute, chronic or recurring) of the stress phenomenon (Marshall and Cooper, 1979).

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