

The Effectiveness Of Holistic Approach In Reducing Stress Among Teachers

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ABSTRAK

Tujuan utama kajian ini adalah untuk meneliti kesan pendekatan holistik dalam mengurangkan stres di kalangan guru di daerah Seberang Perai Selatan, Pulau Pinang. Subjek kajian terdiri daripada 31 orang guru lelaki dan 39 orang guru perempuan. Mereka telah dibahagikan kepada 2 kumpulan, iaitu kumpulan rawatan (35 orang) dan kumpulan kawalan (35 orang). Kumpulan rawatan telah mengikuti bengkel pengurangan stres dan telah mengamalkan teknik-teknik yang dipelajari itu selama sebulan. Ujian stres prarawatan dan posrawatan telah dilakukan dan data-data dianalisis dengan menggunakan pakej komputer SPSS/PC+. Dua alat ukur psikologi laporan sendiri telah digunakan dalam kajian ini, iaitu Soal Selidik Stres Guru (TSQ) untuk menaksir stres kerja guru dan 'Professional Life Stress Scale' (PLSS) untuk menaksir stres kehidupan sebagai golongan profesional. Keputusan menunjukkan bahawa strategi pengurangan stres yang berpendekatan holistik ini dapat mengurangkan stres guru secara berkesan. Keputusan juga menunjukkan yang ciri-ciri demografi guru seperti jantina, sekolah, jawatan, kelayakan, kaum dan umur tidak mempengaruhi kesan rawatan. Dapatan kajian juga menunjukkan bahawa terdapat guru yang mengalami stres berlebihan yang sebenarnya dapat dikurangkan dengan pendekatan yang berkesan kos ini. Ia juga menonjolkan keperluan dan kepentingan program pengurangan stres dalam memupuk kesihatan fizikal, mental dan mempertingkatkan produktiviti di kalangan guru dan pentadbir pendidikan.

Introduction

Although stress is inevitable in our daily life but teaching is considered as a very stressful job compared to other professions (Cox & Brockley, 1984). Teachers are often burdened with a variety of work which is beyond their expectation and ability to cope. Thus school has been regarded as 'coping organizations' by some researchers (Abdul Shukor, 1994).

Kyriacou & Sutcliffe (1978b) conceptualised teacher stress as a response syndrome of negative affect (such as anger or depression) mediated by an appraisal of threat to the teacher's self-esteem or well-being, and by coping mechanisms activated to reduce the perceived threat. Fontana (1989) defined stress as a demand made upon the adaptive capacities of the mind and body. By using the above definitions as guidelines, let us examine if our teachers in Malaysia are experiencing stress too.

Our teachers had lots to complain lately. Many issues had been highlighted in local newspapers. They were unhappy with issues like the New Remuneration System (Guru Malaysia, No. 2, 1994), student indiscipline (The Star, April 11 : 1994), and insufficient teachers due to optional retirement and early resignation (New Straits Times, October 21:

1994). The Star (February 19 : 1995) reported that change of policies, heavy workload, long working hours, student indiscipline, lack of facilities, too many meetings, big classes and low salary were sources of stress for our teachers.

To make matters worse, Abdul Shukor Abdullah (1994), the then Deputy Director-General of Education of Malaysia, noted that throughout the year the principals and teachers are busy with all sorts of activities which have nothing much to do with their professional teaching duties. Activities like Art Week, Science Week, Community Education, Road Safety Week and all sort of competitions have taken too much of their teaching time, so much so that they are unable to concentrate in their core business - teaching their students.

Consequences of Teacher Stress

Dunham (1976) suggested that high teacher turnover is indicative of the prevalence of stress in teachers. Many researchers (Dunham, 1976; Pratt, 1978; Kyriacou & Pratt, 1985) agreed that high teacher stress caused many problems. It could cause emotional distress and burnout. Stressful teachers would not be able to perform their duties well in the classroom. They had the tendency to take more leave, to opt for early retirement or even resign. Kaiser & Polczynski (1982) found that high teacher stress led to frustration, aggression, anxiety and avoidance behaviours. Solomon (1980) suggested that performance of teachers like classroom creativity would also be adversely affected.

High level of teacher stress if left unchecked will affect the economy of a country. The government would need more money to train new teachers to replace vacancies left by those stressed out teachers. At personal level, a high level of stress would affect teachers' well-being and cause psychological as well as physical sickness (O'Connor & Clarke, 1990). Most teachers and educational organizations seem not to realize or even bother about the seriousness of teacher stress. Probably some teachers are reluctant to reveal that they are having stress and some are not even aware of it. They still continue to overload themselves with work which are well beyond their coping abilities.

Teacher stress is a global issue. Many researches had been carried out all over the world. Unfortunately not many had been done locally. So far only 8 theses regarding teacher stress have been cited in Malaysia (Norkiah, 1981; Siti Radziah, 1982; Rohani, 1984; Suaidah, 1984; Zunaidah, 1990; Kassim, 1990; Md Ansari, 1993; Noriah 1994). Surprisingly, most of the local researchers found that our teachers are only experiencing moderate level of stress, which really contradicts most of the findings elsewhere !

Measurement of Teacher Stress

It is difficult to measure the stress level of an individual since it varies from time to time and it also varies from situation to situation. Some psychological instruments which have been widely used in researches include (a) Teacher Stress Questionnaire (Kyriacou & Sutcliffe, 1978a), (b) Professional Life Stress Scale (Fontana, 1993), (c) Maslach Burnout Inventory (Maslach & Jackson, 1981), (d) Teacher Event Stress Inventory (Pratt, 1978), and (e) Social Readjustment Rating Scale (Holmes & Rahe, 1967).

Each instrument has its own strengths and weaknesses. In general, subjective measurement of feeling and emotion concerning one's work using self-reported instrument has been widely used (Hiebert dan Farber, 1984). Some researchers have suggested that self-reporting instruments are more practical and easy to handle (Kyriacou & Sutcliffe, 1977, 1978a, 1987; Pettegrew & Wolf, 1982). No doubt the accuracy of the instruments may be questionable, nevertheless the scores obtained could serve as guidelines for reference and for planning strategies to cope with stress.

Strategy for Stress Management

We can divide stress management strategies into two main groups as suggested by Kyriacou (1987), that is (a) direct actions and (b) palliative techniques. Direct actions deal with sources of stress directly by altering the situations. If the stressful situations persist beyond one's control, palliative techniques are used to reduce the excessive stress experienced by the individual. Since teachers are often having stress which is beyond their ability to cope, they need to learn how to protect themselves by using palliative techniques. Furthermore, as stress may occur at anywhere and anytime, palliative techniques give immediate relief to stress that arise out of expectation.

Stress is multidimensional and multimodal. Thus there is no single best technique to reduce excessive stress. Many techniques had been recommended and surprisingly most of them are effective in certain ways. Girdano et al.(1993) suggest holistic stress management which encompasses complete life styles of an individual. It is very useful in managing excessive stress without going through medical treatment. Many researchers (Friedman et al.,1983; Woodhouse et al.,1985; Bertoch et al.,1988) have adopted holistic approach in their stress management programmes and obtained satisfactory results.

To help our teachers cope with stress, a simple yet effective programme had been planned by the authors based on the guidelines given by Girdano et al.(1993). It adopted a holistic approach by combining treatment from physical, psychological and social aspects as outlined below.

Table 1 Outline of The Stress Management Programme

<i>Three categories of major responses that can reduce overall stress effectively (Girdano et al. 1993) :</i>	<i>Three major techniques suggested by the authors :</i>
1. Quieting the external environment to reduce stimulation of the individual.	1. Rational-Emotive Therapy (Ellis, 1975)
2. Quieting the internal environment to reduce sensory stimulation of the central nervous system.	2. Progressive Relaxation (Jacobson, 1974)
3. Conditioning the mind to reduce arousing thoughts and promote peaceful thoughts.	3. Meditation (Benson,1975)

Since there are many stress reduction techniques that produce the same outcome for each category of response, the authors have to decide very carefully in order that the programme will be practical and cost effective. The criteria for choosing the above techniques are

- a. effectiveness of the techniques based on literature review
- b. easy to learn and easy to practise without involving sophisticated equipments
- c. not burdensome to the practitioners.

The authors believe that overall stress can be greatly reduced by incorporating all the three techniques as suggested. Here is a brief description of each technique :

Rational-Emotive Therapy (Ellis, 1975)

According to Abram & Ellis (1994), the major causes of stress of an individual is due to the irrational belief-systems and the self-defeating styles of an individual. To reduce their excessive stress, Rational-emoitif therapists often dispute or challenge their irrational thinking by asking them the following questions :

- (a) Is it logical ?
- (b) Is it empirical ?
- (c) Is it pragmatic ?

Successful treatment will enable the clients to adopt a more realistic, rational thought patterns and behaviour.

Progressive Relaxation (Jacobson, 1974)

People who have developed cognitive awareness to tense and relax their muscles at will are able to achieve relaxation readily. Progressive Relaxation can be practised anywhere and anytime. This neuromuscular relaxation needs passive concentration and rather easy to learn.

Meditation (Benson, 1975)

Meditation teaches us to concentrate on one thing at a time. It helps us to disipline our minds. Benson (1975) had devised a simple method based on Transcendental Meditation. It is easy to practise. Meditation elicits relaxation response which counteracts the stress response.

A quasi-experimental design was developed to test the null hypotheses below :

Hipotesis 1

There will be no difference between the stress levels of teachers who have completed the stress reduction programme and the control group.

Hipotesis 2

There will be no difference between the pretreatment and posttreatment stress levels of teachers who have completed the stress reduction programme.

Method

This is a quasi-experimental research. Both treatment and control group had been given pretests and posttests before and after the treatment.

Participants

Subjects were teachers from primary and secondary school from Seberang Perai Selatan District. Seventy teachers were chosen from 177 teachers who attended Professional Development Programme on 1st of July 1995 in Nibong Tebal. The criteria for selection were (a) voluntary participation, and (b) non-exposure to any stress management programme.

Treatment

The treatment group attended workshops on three separate Saturdays (1st, 15th & 22nd, July 1995) in Nibong Tebal. The programme consisted of 5 sessions :

- Session 1 : Concept of Stress
Signs and symptoms of stress, causes and consequences of stress were presented.
- Session 2 : Strategies for Controlling Stress
Various stress reduction techniques.
Holistic stress management and planning of stress reduction schedule.
- Session 3 : Rational-Emotive Therapy (RET)
Understanding of the basic principle of RET.
Application in teaching life by using RET self-help forms.
- Session 4 : Progressive Relaxation
Workshops on breathing exercise and muscular relaxation.
- Session 5 : Meditation
Workshops on basic steps in meditation.
Practical sessions conducted by an experienced practitioner in meditation.

The workshops were led by the author with the help of three facilitators (two school counsellors and one experienced practitioner in meditation). Participants were asked to practise daily each technique learned throughout the period of treatment.

Measures

Teachers Stress Questionnaire (Kyriacou & Sutcliffe, 1978a) was used to measure work stress of teachers. This questionnaire consists of 51 items divided into 4 subscales labeled as (a) Pupils Misbehaviour (b) Poor Working Conditions (c) Time Pressure and (d) Poor School Ethos. Many researchers (Norkiah, 1981; Siti Radziah, 1982; Rohani, 1984; Suaidah, 1984; Litt & Turk, 1985; Payne & Furnham, 1987; Borg et al., 1991) had modified this instrument in their researches. The authors used all items of TSQ in this research. Only minor modification was made. Item 25 "non-exam final year pupils" had been replaced by "too many meetings".

TSQ has high face validity. Each source of stress correlates positively with the overall stress. The authors tested the reliability of TSQ based on pretest data by using Alpha Cronbach (N=70). Results indicated high reliability of 0.96. The reliability of each subscale varies in the range of 0.88 to 0.95 as below :

Table 2 Reliability of TSQ Subscales

<i>Subscale</i>	<i>No. of Items</i>	<i>Reliability (Alpha Cronbach)</i>
Pupils' Misbehaviour	19	0.95
Poor Working Conditions	16	0.91
Time Pressure	13	0.88
Poor School Ethos	11	0.88

Professional Life Stress Scale (Fontana, 1993) was used to measure overall life stress as professionals. Fontana & Abouserie (1993) used this instrument to measure life stress of teachers in their research. It had 45 items covering many aspects of professional life. Total score can be obtained by adding up the score of each item. Stress levels have been divided into 4 categories as below :

Low Stress (Score 0 - 17)

Subjects have no problem with stress.

Moderate Stress (Score 18 - 34)

Subjects are advised to reduce their stress level.

Serious Stress (Score 35 - 51)

Subjects are having problem related to stress. Actions have to be taken because they are having higher risk of psychological and physical sickness.

Very Serious Stress (Score 52 - 68)

Immediate actions have to be taken to reduce the stress level because the subjects are going to collapse very soon.

In a research done by Fontana & Abouserie (1993), they concluded that the reliability indicators for the PLSS are 0.65 and 0.74 by split half and alpha coefficient methods respectively. The scale was found to have an acceptable level of reliability and is internally consistent.

The authors had translated both TSQ and PLSS to Malay language with the help of three senior bilingual graduate teachers based on procedure suggested by Brislin (1988). A pilot test was carried out before the research. A total of 59 secondary school teachers from Nibong Tebal participated. It was found that both the instruments used were suitable. The authors also tested the reliability of both instruments based on the data collected by using Apha Cronbach. Results indicated that reliability of TSQ and PLSS are 0.96 and 0.62 respectively.

Data Analysis & Results

The participants were divided into two groups, that is, treatment group (n=35) and control group (n=35).

Table 3 Distribution based on Demographical Characteristics

VARIABLES	CATEGORIES	TREATMENT GROUP (n = 35) NUMBER(%)	CONTROL GROUP (n = 35) NUMBER(%)
Sex	Male	14 (40.0)	17 (48.6)
	Female	21 (60.0)	18 (51.4)
School	Primary	23 (65.7)	24 (68.6)
	Secondary	12 (34.3)	11 (31.4)
Position	Teacher	20 (57.1)	20 (57.1)
	Administrator	15 (42.9)	15 (42.9)
Qualification	Non-Graduate	27 (77.1)	28 (80.0)
	Graduate	8 (22.9)	7 (20.0)
Race	Malay	14 (40.0)	14 (40.0)
	Chinese	15 (42.9)	15 (42.9)
	Indian	6 (17.1)	6 (17.1)
Age	<30 years	8 (22.9)	3 (8.6)
	30-45 years	22 (62.9)	22 (62.9)
	>45 years	5 (14.3)	10 (28.6)
Experience in Teaching	First year	3 (8.6)	1 (2.9)
	1-4 years	4 (11.4)	3 (8.6)
	5-10 years	7 (20.0)	4 (11.4)
	>10 years	21 (60.0)	27 (77.1)

The means of the pretests for treatment group and control group based on TSQ data were almost the same, that is 2.13 and 2.12 respectively. Whereas pretests measured by PLSS showed different stress levels for both groups, that is 24.29 for treatment group and 19.43 for control group.

It was found that 28.6% of the sample (N=70) were having low stress, 64.3% having moderate stress and 7.1% having serious stress. None of them have very serious stress. There were more teachers in treatment group having moderate stress than that of the control group.

Effect of Treatment

In order to make a fair comparison, posttreatment means had been adjusted based on the differences between pretreatment means (Huck et al.,1974). Thus ANCOVA was employed to compare adjusted posttreatment means, with pretreatment means as covariates.

Table 4 Pretreatment and Posttreatment Means

<i>Measurement</i>	<i>Treatment Group (n = 35)</i>		<i>Control Group (n = 35)</i>	
	<i>Pretest (s.d.)</i>	<i>Posttest (s.d.)</i>	<i>Pretest (s.d.)</i>	<i>Posttest (s.d.)</i>
TSQ	2.13 (0.60)	1.47 (0.70)	2.12 (0.49)	2.12 (0.47)
PLSS	24.29 (7.61)	19.29 (6.70)	19.43 (6.88)	19.40 (7.53)

Comparing Adjusted Posttreatment Means

Results showed that there was significant difference ($p < .001$) between adjusted posttests for treatment and control groups by using TSQ data. Whereas by PLSS data, the difference was not significant ($p < .151$). The posttreatment means of treatment group was reduced by 0.67 (TSQ) and 5.00 (PLSS). For the control group, the difference is negligible.

Table 5 Comparing Adjusted Posttests between Treatment Group and Control Group using Pretests as Covariate

<i>Instrument</i>	<i>Source of Variation</i>	<i>Adjusted SS</i>	<i>Adjusted df</i>	<i>Adjusted MS</i>	<i>F</i>	<i>Level of Significant</i>
TSQ	Treatment	7.227	1	7.227	28.230	0.001***
PLSS	Treatment	85.085	1	85.085	2.107	0.151

*** $P < 0.001$

Comparing Pretests and Posttests For Each Group

Pretest and posttest data of each group were compared using t-test. For treatment group, posttest means had dropped significantly compared to pretest means by using both instruments. For control group, the difference in stress level for pretests and posttests was negligible and non-significant, statistically.

Table 6 Summary of t-test for Treatment Group and Control Group (Pretests and Posttests)

Measurements	Pre (s.d)	Pos (s.d.)	t	Sig. Level
<i>T-test : Treatment Group Pre-post</i>				
TSQ	2.13(0.60)	1.47(0.70)	6.29	0.001***
PLSS	24.29(7.61)	19.29(6.70)	4.63	0.001***
<i>T-test : Control Group Pre-post</i>				
TSQ	2.12(0.49)	2.10(0.47)	0.24	0.82
PLSS	19.43(6.88)	19.40(7.53)	0.02	0.98

*** $P < 0.001$

Effect of Treatment based on Demographical Characteristics

The posttreatment means had been analysed by ANCOVA using pretreatment means as covariate to investigate the effect of demographical differences. Results showed that there is no significant difference between posttreatment means based on demographical characteristics.

Table 7 Summary of 6 one-way ANCOVA for the Treatment Group

Source of Variation	df	Adjusted MS	Adjusted F	Level of Significance
Sex	1	0.238	0.663	0.422
School	1	0.077	0.212	0.648
Position	1	0.273	0.764	0.388
Qualification	1	0.062	0.170	0.683
Race	2	0.105	0.284	0.755
Age	2	0.178	0.486	0.620

In response to the question 'How is your stress level after treatment?', all, except one participant, agreed that their stress levels were lower compared to their stress levels before treatment.

Discussions

In our research sample (N=70), 64.3% teachers have moderate stress and 7.1% have serious stress. Both groups of teachers also need treatment to reduce their stress levels as suggested by Fontana dan Abouserie (1993). Although we cannot take this sample as representative of the whole population, it does indicate that some of our teachers are having serious stress and need treatment badly (Hall et al, 1986; Cox et al, 1988).

Each individual has different make-up and different source of stress. It is difficult to identify what combinations of factors that cause stress. Thus there is no one best technique in dealing with stress. However the holistic approach seems to be the best alternative where relaxation response is elicited directly or indirectly through various techniques to combat stress and tension.

Some reseachers have recommended too many techniques in their stress management programmes which in itself become a new source of stress (Bertoch et al, 1988). In fact most of the technique produce more or less the same type of effect. It becomes reduntant and time consuming to practise a few techniques that elicit the same effect. We only need to concentrate on three major effective techniques that elicit the different categories of relaxation response required. The authors had recommended (a) Rational-Emotive Therapy (Ellis, 1975) to quiet the external environment (b) Progressive Relaxation (Jacobson, 1974) to quiet the internal environment and (c) Meditation (Benson, 1975) for conditioning the mind.

Participants were taught the techniques. They practised each technique daily according to their own schedules. The effect in reducing their stress levels was tremendous as indicated in the research results. RET had helped them to be more realistic in their expectation and be more rational in their thinking. These changes had reduced the impact of stress on them. Through Progressive Relaxation, the whole neuromuscular system had been calimed down. Meditation helped to condition the mind and reduce arousing thoughts. Combination of all these techniques elicited relaxation response. This treatment, irrespective of stress profiles and demographical characteristics, had greatly reduced the excessive stress of the participants.

The results obtained by TSQ and PLSS seem to be quite different. This is understandable because TSQ measured teacher stress, whereas PLSS measured life stress. They have different construct. Since our main purpose is to reduce teacher stress, we emphasize more on the data obtained by using TSQ.

The effectiveness of our stress reduction programme implies that excessive stress can be reduced by this cost-effective programme regardless of the demographical differences. The Malaysian Education Ministry and other human resource development units should provide training in holistic stress reduction for the teachers and officers from time to time. This will not only protect them from harmful effect of stress but will also enhance their effectiveness, creativity and productivity in their work and life.

As this study has its own limitations, further research is needed to develop a strategy that will first identify the stress profile of an individual and find out the best corresponding stress reduction technique to be practised. This will lead to maximum reduction of stress.

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