

Work Stress of Teachers from Primary and Secondary Schools in Hong Kong

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Abstract—The present study was developed to comprehensively investigate the occupational health problems among teachers of primary and secondary schools in Hong Kong. A random sample of 6000 teachers was generated from the database of Hong Kong Professional Teachers' Union (HKPTU) members. A self-administrated questionnaire was designed and sent by mail to the teachers of primary and secondary schools in Hong Kong, together with a cover letter and a reply paid envelope. A total of 1,710 usable questionnaires were returned. The results indicated that comparing with one year and five years ago, 91.6% and 97.3% of the responding teachers reported an increase of perceived stress level, respectively. Heavy workload, time pressure, education reforms, external school review, pursuing further education, and managing students' behaviour and learning were the most frequently reported sources of work stress. The four most frequently reported stress management activities were sleeping, talking to neighbors and friends, self-relaxing, and watching television, whereas the least frequently reported activity was doing more exercises or sports. The findings of this research could serve as a useful reference for the government and related organizations such as the Education and Manpower Bureau and Professional Teachers' Union when formulating the policies and strategies to help the teachers relieve and cope with their work-related health problems.

Index Terms—Occupational health problem, Teachers, Work pressure

I. INTRODUCTION

Stress could simply be defined as an unpleasant emotion, which arises when people worry that they could not cope with excessive pressures or other types of demand placed upon them [1]. Kyriacou and Sutcliffe [2] had exhaustively defined teacher stress as a response to negative effect such as anger or depression by a teacher, usually accompanied by potentially pathogenic, physiological and biochemical changes resulting from aspects of the teacher's job, and mediated by the perception that the demands made upon the teacher constitute a threat to his or her self-esteem or well-being and by coping mechanisms activated to reduce the perceived threat.

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The phenomenon of work stress of teachers has been receiving increased global attention and concern in recent years. Several studies had been undertaken to examine the prevalence, level and major sources of work stress among school teachers in England [3], Malta [4-5], New South Wales [6], Pakistan [7], U.S. [8-9], Welsh [10], West Indies [11], and Hong Kong [12-15]. The combination of the findings in these studies revealed that the phenomenon of stress problem of teachers was widespread and was not restricted to a particular country. In Hong Kong, public awareness of the work stress problem of teachers had been heightened with the increasing occurrence of suicide cases amongst teachers [16].

The health of teachers could be seriously affected by stress [17-18]. Moreover, apart from teachers themselves, work stress suffered by them can also adversely affect their students and the learning environment [18-19]. In addition, stress problems of teacher might cause an increase in teaching costs [1]. It was sympathetic and worth studying this issue so as to minimize the adverse effects of work stress of teachers on students, classrooms, schools and teachers themselves. Studying on the issue of work stress of teachers was essential and it was important for the management and teachers to work together to improve the working environment and conditions so as to combat stress.

This research aimed to determine the level of self-reported stress, the main sources of life and work stress and to find out the common choices of stress management activities among the teachers. The effects of gender, working experience and other biographical variables on the sources and level of self-reported stress, and on the choices of stress management activities were examined. The differences between primary and secondary school teachers were also investigated.

II. METHODS

A questionnaire was designed to investigate the occupational health problems among teachers of primary and secondary schools in Hong Kong. A number of 3,000 primary school teachers and 3,000 secondary school teachers were generated from the database of Hong Kong Professional Teachers' Union (HKPTU) members. A self-administrated questionnaire was designed and sent by mail to the selected sample, together with a cover letter and a reply paid envelope. The respondents were asked to rate the level of stress that they had perceived and identify the sources of their stress and stress management activities. A total of 1,710 usable questionnaires were returned. A pilot

study was conducted for refining the questionnaire and determining the time that was required for completing the questionnaire. The SPSS statistical software program (version 11.0) was used to compile statistics and analyze the collected data.

III. RESULTS AND DISCUSSIONS

A. Characteristics of Respondents

907 respondents (53.0%) were primary school teachers and 803 (47.0%) were secondary school teachers; 477 (27.9%) respondents were men and 1,233 (72.1%) were women. The majorities of the respondents had more than five years of teaching experience (85.3%), taught in aided schools (87.0%), and were under permanent employment (94.9%).

B. Perceived Stress Level

Comparing with one year and five years ago, 91.6% and 97.3% of the responding teachers reported an increase of perceived stress level, respectively. The results of *t* tests (for two-category) and one-way ANOVAs (for more-than-two-category) (Table I) showed no significant gender difference. Both male and female teachers in Hong Kong seem to experience the same level of perceived stress. However, teachers of primary schools showed significantly higher perceived stress level than those of secondary schools. Career instability due to related issues of class cuts and surplus teacher could be the main reasons for the significantly higher stress level of the primary school teachers in Hong Kong. No significant difference in perceived stress level was found between teachers with different years of teaching experience. Nevertheless, teachers without a degree were found to perceive a higher stress level as compared to those holding a degree.

TABLE I THE P VALUES FOR HYPOTHESIS TESTING OF DIFFERENCE IN PERCEIVED STRESS LEVEL AMONG DIFFERENT GROUPS OF TEACHERS.

Independent variable	p value	
	Comparing with one year ago	Comparing with five years ago
Gender	.670	.667
Age	.015*	.002***
Marital status	.186	.395
Number of children	.037*	.356
Education level	.001****	.006**
Teaching Training	.131	.097
Teaching experience	.133	.085
School level of teaching	.039*	.020*
Finance type of school	.000****	.01**
Working mode	.973	.461
LPR-Putonghua	.536	.002***
LPR-English	.063	.092
Discipline & guidance team	.019*	.092
Class teacher	.984	.432
Teaching post in primary school	.259	.099
Teaching post in secondary school	.002***	.000****

* p < 0.05 ** p < 0.01 *** p < 0.005 **** p < 0.001

C. Perceived Sources of Work Stress

The sources of work stress reported by the teachers were shown in Table II. Heavy workload and time pressure (95.1%), education reforms (86.8%), external school review (70.1%), pursuing further education (60.9%), and managing

students' behaviour, and learning (57.6%) were the most frequently reported sources of work stress. The results of Pearson Chi-Square tests indicated that primary school teachers were significantly more likely than secondary school teachers to report pursuing further education, career instability, implementation of Language Proficiency Requirement, getting along and working relationships with colleagues, and salary cut as sources of work stress. On the other hand, a significantly higher percentage of secondary school teachers than primary school teachers reported managing students' behaviour and learning and guidance and discipline work as major sources of work stress. Gender difference was also discovered. Male teachers were more likely than female teachers to report education reform, and external school review while female teachers were significantly more likely than male teachers to report pursuing further education, implementation of Language Proficiency Requirement, getting along and working relationships with colleagues, and salary cut as sources of work stress.

D. Other Perceived Sources of Life Stress

Other perceived sources of life stress reported by the subjects were shown in Table III. The most frequently reported source of life stress was unstable economy, which was reported by about one third of the respondents. Other sources included financial stress (33.0%), family problem (27.4%), children education (24.3%), and children stress (15.3%). Primary school teachers were more likely than secondary school teachers to report unstable economy and financial stress as sources of life stress. Also, male teachers were more likely than female teachers to report financial stress and children education as sources of life stress.

E. Stress Management Activities

The stress management activities reported by the respondents were shown in Table IV. The four most frequently reported activities were sleeping (57.5%), talking to neighbours and friends (57.1%), self-relaxing (44.0%), and watching television (42.2%). The least frequently reported activity was doing more exercises or sports (32.3%). Primary school teachers were significantly more likely than secondary school teachers to manage stress by sleeping, talking to neighbours and friends, watching television and shopping, whereas secondary school teachers were more likely than the primary school teachers to do more exercises or sports to manage their stress. For gender difference, male teachers were more likely than female teachers to manage stress by listening to music and doing more exercises or sports. On the other hand, female teachers were significantly more likely than male teachers to report sleeping, talking to neighbours and friends, watching television and shopping as their choices of stress management activities. The life style and choice of activities of male teachers seem healthier or relatively better for health than those of female teachers.

TABLE II NUMBER AND PERCENTAGE OF TEACHERS REPORTING DIFFERENT SOURCES OF WORK STRESS.

Sources of work stress	School level of teaching				Gender				Overall	
	Primary		Secondary		Male		Female			
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
1 Heavy Workload and time pressure	867	(95.60)	760	(94.60)	453	(95.00)	1174	(95.20)	1627	(95.10)
2 Education reforms	794	(87.50)	691	(86.10)	432	(90.60)	1053	(85.40)	1485	(86.80)
3 External school review	648	(71.40)	551	(68.60)	357	(74.80)	842	(68.30)	1199	(70.10)
4 Pursuing further education	632	(69.70)	410	(51.10)	247	(51.80)	795	(64.50)	1042	(60.90)
5 Managing students' behaviour and learning	484	(53.40)	501	(62.40)	275	(57.70)	710	(57.60)	985	(57.60)
6 Career instability due to related issues of cutting class and surplus teacher	546	(60.20)	388	(48.30)	273	(57.20)	661	(53.60)	934	(54.60)
7 School management	448	(49.40)	419	(52.20)	230	(48.20)	637	(51.70)	867	(50.70)
8 Implementation of Language proficiency Requirement	517	(57.00)	215	(26.80)	163	(34.20)	569	(46.10)	732	(42.80)
9 Guidance and discipline work	246	(27.10)	286	(35.60)	133	(27.90)	399	(32.40)	532	(31.10)
10 Getting along and working relationships with colleagues	304	(33.50)	213	(26.50)	112	(23.50)	405	(32.80)	517	(30.20)
11 Salary cut	275	(30.30)	187	(23.30)	106	(22.20)	356	(28.90)	462	(27.00)
12 School violence	82	(9.00)	88	(11.00)	53	(11.10)	117	(9.50)	170	(9.90)

TABLE III OTHER PERCEIVED SOURCES OF LIFE STRESS REPORTED BY THE RESPONDENTS.

Sources of work stress	School level of teaching				Gender				Overall	
	Primary		Secondary		Male		Female			
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
1 Unstable economy	338	(37.30)	243	(30.30)	175	(36.70)	406	(32.90)	581	(34.00)
2 Financial stress	331	(36.50)	233	(29.00)	178	(37.30)	386	(31.30)	564	(33.00)
3 Family problem	263	(29.00)	206	(25.70)	129	(27.00)	340	(27.60)	469	(27.40)
4 Children education	211	(23.30)	205	(25.50)	143	(30.00)	273	(22.10)	416	(24.30)
5 Children stress	136	(15.00)	125	(15.60)	80	(16.80)	181	(14.70)	261	(15.30)

TABLE IV NUMBER AND PERCENTAGE OF TEACHERS REPORTING DIFFERENT STRESS MANAGEMENT ACTIVITIES
(RESPONDENTS WERE ALLOWED TO REPORT MORE THAN ONE ACTIVITY).

Stress Management Activities	School level of teaching				Gender				Overall	
	Primary		Secondary		Male		Female			
	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)	Frequency	(%)
1 Sleeping	555	(61.20)	428	(53.30)	245	(51.40)	738	(59.90)	983	(57.50)
2 Talking to neighbors & friends	551	(60.70)	426	(53.10)	157	(32.90)	820	(66.50)	977	(57.10)
3 Self-relaxing	407	(44.90)	345	(43.00)	219	(45.90)	533	(43.20)	752	(44.00)
4 Watching TV	422	(46.50)	300	(37.40)	165	(34.60)	557	(45.20)	722	(42.20)
5 Listening to music	347	(38.30)	274	(34.10)	200	(41.90)	421	(34.10)	621	(36.30)
6 Shopping	338	(37.30)	239	(29.80)	63	(13.20)	514	(41.70)	577	(33.70)
7 Doing more exercises/sports	260	(28.70)	293	(36.50)	212	(44.40)	341	(27.70)	553	(32.30)

IV. CONCLUSION

In recent years, the problem of teacher stress and related issues of redundant teacher, education reforms, Language Proficiency Assessment for Teachers, and cutting of classes and schools had already drawn the public attention and frequently be the headlines of newspapers. The findings of this research could serve as a useful reference for the government and related organizations such as the Education and Manpower Bureau and Professional Teachers' Union when formulating the policies and strategies to help the teachers relieve and cope with their work-related health problems. Moreover, with the information of common sources of teacher stress found in this research for reference, the government could be more considerate of the teachers while establishing new education policies or educational reforms. Finally, this research study is believed to be able to enlighten other researchers to conduct further in-depth studies to investigate the occupation health problems of the teachers.

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