## COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

Occupational Stress Among Primary School Teachers: A Study in Jilin Province<br>Wen Xin ${ }^{1}$, Talwar, P. ${ }^{2 *}$, Tan Kock Wah ${ }^{3}$, Nur Fatihah Mat Yusoff ${ }^{4}$ and Oon Yin Bee ${ }^{5}$, Kartini Abdul Ghani ${ }^{6}$<br>${ }^{1,2,3,4,5,6}$ Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia


#### Abstract

The purpose of this study was to study the association between selected demographic characters and stress among primary school teachers. The respondents constituted of 60 male and female school teachers who were chosen using stratified sampling technique. Study was conducted in Jilin Province. Study design was cross sectional. SPSS was used to analyze both descriptive and inferential statistics. The main results were as follows. Female teachers experienced more stress compared to male teachers. Teachers below the age of 40 had more stress probably, due to teaching experience, as this study revealed that teachers who had more teaching experience had less stress. Marriage plays and important role in stress, unmarried teachers experienced comparatively higher levels of stress compared to those married. Furthermore, those living alone experienced more stress. Occupational stress is known to cause burnout. It may be a good strategy to provide training in stress management techniques


Keywords: Education; Occupation stress; Primary school teacher

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## INTRODUCTION

Occupational stress has been defined as the experience of negative emotional states such as frustration, worry, anxiety and depression

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attributed to work related factors (Kyriacou,
2009). A variety of factors contribute to workplace stress such as negative workload, isolation, extensive hours worked, toxic work environments, lack of autonomy, difficult relationships among coworkers and management, management hours, no pressure of work and no technicalities and rigors of bureaucratic rules (Dhar \& Magotra, 2018). Professional activity of teachers is, in psychological terms, one of the most stressful social activities among the jobs that are characterized by a large number of stress factors (Barabanshchikova, Meshkova \& Surova, 2014). Several studies investigating school teachers' stress indicate two types of

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stress factors namely work environmental stress which include unfavorable working conditions and individual stress which involves unique attributes of teachers such as age, gender, personality and demographic background (Bachkirova, 2005). In recent years, there has been an increasing amount of literature on relationship between gender and stress, 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 (Chan, Chen \& Chong,2010). When it comes to problem solving, male teachers use their professional experiences to solve academic problems while female teachers prefer to communicate with others to solve problems related to school (Chek et al, 2011; Myers, 2010). 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 neighbors' 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 (Chan, Chen \& Chong, 2010).

Besides gender, another important variable to be taken into consideration is the age of teacher.. Recent evidence indicates that the middle age between 31-50 years experienced more stress compared to the younger
age (20-30 years) and older age (Kavita \& Norliza Che Hassan, 2018). There is an unambiguous relationship between age and work experience. Work experience were positively and significantly related with the emotional competence of teachers (Holeyannavar \& Itagi, 2012). Studies have considered the relationship between healthy marriage and stress reduction. Marriage provides emotional support. While spouse may not be able to take away a stressful situation at school, just having them know about the stressor can lessen the feelings of stress.

Academic stress among primary school teachers may differ from country to country, if seen in the Chinese context, it appears that the phenomenon of stress among teachers is gaining attention. In China, the most basic education comes from primary school, so compared with the middle school and junior high school, primary school teachers will face more psychological problems in school (Chen \& Wu, 2006). The main focus of primary education is to impart cultural knowledge. Parents are child's first teacher and parents act as models to their children and also have a great responsibility to discipline their child. However, in China the responsibility to disciple the child is left to the school teacher. Organizational commitment is one of the features of the Chinese workforce and personal matters are not of much (Fusheng, 2008). According to Teacher's law in China (2013), there are three typesof working hours: standard working hour system, irregular working hour system and comprehensive working hour system. All teachers in China following the standard working hour system, which is not more than 8 hours a day. In comparison,

America's Teachers spend 10 hours and 40 minutes a day on average (Primary Sources, 2012).

Karasek's demand-control model (Figure 1) of occupational stress has had a large influence on the job design and occupational health literature, in part because it is quite spare, practical and testable. In Karasek's model, workplace stress is a function of how demanding a person's job is and how much control (discretion, authority or decision latitude etc.) the person has over their own responsibilities. This creates four kinds of jobs: passive, active, low strain and high strain. Job demands represent the psychological stressors in the work environment. These include factors such as: interruption rate, time pressure, conflicting demands, reaction time required, pace of work, proportion of work performed under pressure, amount of work, degree of concentration required, and the slowing down of work caused by the need to wait for others (Jones \& Bright, 2001).

There are various theories or propositions to explain occupational stress such as multidi-
mensional theory of burnout, physiological theories of stress at work, demand control model, effort-reward imbalance model and several others. The Karasek's demandcontrol model was used as a theoretical framework to explain occupational stress among school teachers. In conclusion, occupational stress arises from unforeseen duties and burdens the individuals' skills, or expectations, hindering one's ability to cope.

## PROBLEM STATEMENT

Teachers in China experience a higher level of stress compared to their counterparts in western countries and in other Chinese societies in particular Taiwan and Hong Kong (Chan, Chen \& Chong, 2010). Teachers' stress is not the same for different provincesin China due to the vast and large gap between city and provinces of China. China's one child policy has made the parents to overprotect their child. Though some children are difficult to control, the parents do not want them to be disciplined at school. Jilin province is only one of the many general provinces in China. However, due to the geographic position close to Beijing, the


Figure 1: Karasek's demand-control model
development of education is faster than other provinces. Currently, the education system in China is undergoing rapid changes. Nevertheless, these rapid changes also cause stress among teachers. Therefore, teaching becomes increasingly challenging in China as since it is closely related to human relations. Teachers in China are forced to work beyond schedule, face role conflicts, lack of support from administrators and face communication problems when interacting with students or parents, particularly due to lack of work experience, gender differences and marital status. Little is known about primary school teachers in Jilin province and it is not clear about the demographic variable that influence stress. Hence, this study.

## Main Objectives

To find the difference in job stress among primary school teachers' demographic profile in Jilin Province

## Specific Objectives

1. To compare the level of stress among male and female school teachers.
2. To determine the differences between age and stress of primary school teachers.
3. To identify the differences between working experience and stress of primary school teachers.
4. To identify the differences between marital status and stress of primary school teachers.
5. To identify the differences between type of family and stress of primary school teachers.

## Hypothesis

1. There is no significant differences in the level of stress and genders of primary school teachers.
2. There is no significant differences in age and stress among primary school teachers.
3. There is no significant differences between working experience and stress among primary school teachers.
4. There is no significant differences between marital status and stress among primary school teachers
5. There is no significant differences between type of family and stress among primary school teachers.

## METHODOLOGY

This study is a quantitative cross-sectional study design. The sample population of this research were primary school teachers from Jilin province which were selected using Stratified sampling. 30 male and 30 female teachers were chosen using this sampling technique. The total number of primary teachers was 167

## Instrumentation

Questionnaires were distributed to determine respondent's background information Part A requires respondents to fill in demographic background such as gender, age, and marital status, type of family and experience of the respondents. In part B , the Teachers Stress Questionnaire (Zurlo, Pes \& Capasso, 2013). Both the questionnaire and instrument werein Mandarin. The pilot study was carried out on 20 teachers as a guide to improve the items used. Cronbach
alpha value obtained was 0.85 . Data was analyzed using SPSS version 23.

## RESULTS

## Demographic Profile

Age of teachers was categorized into three categories, $25 \%$ were between 20 to 30 years, $51 \%$ were in the age group 31 to 40 years and $24 \%$ were 41 years and older. $50 \%$ were male and $50 \%$ were female teachers. Moreover, a vast majority (73.33\%) did not follow any religion. $11.67 \%$ were Islam, $10 \%$ were Buddhist and a small minority $5 \%$ were Christians. $58 \%$ were married, $30 \%$ were single and $12 \%$ divorced. $62 \%$ were living in a joint family and remaining $38 \%$ were living alone.
$28 \%$ had less than five years of teaching experience, $38 \%$ had six to ten years teaching experience, $17 \%$ had eleven to fifteen years' experience and $17 \%$ had more than fifteen years teaching experience. Next, an inferential statistical test was indicated to test the hypotheses. T-test was done to test the first hypotheses "There is no significant difference in the level of stress among different genders by primary school teachers". It was found that the mean stress level for female teachers was higher $(M=79.43$, $S D=16.06$ ) compared to male teachers ( $M=63.47, S D=16.20, t(58)=4.20, p=0.00)$. Thus, we reject the null hypotheses and conclude that the female teachers experience comparatively more stress than male teachers. This retorts our first objective.

Next, it was intended to see where young teachers experience more stress compared to older teachers. Younger teachers were cate-
gorized in the age group less than 40 years and older teachers more than 40 years. Findings of this study showed that the younger teachers experienced more stress ( $M=75.84$, $S D=13.84$ ) compared to older teachers ( $M=57, S D=17.43, t(58)=4.19, p=0.000)$. Thus, we reject the second hypotheses and conclude that there is a significant difference in age and stress among primary school teachers.

One-way ANOVA was conducted to compare the effect of year of experience on stress in 1-5 years, 6-10 years, 11-15 years and more than 16 years. It was found that the mean stress levels differed in all the three groups $(F(3,56)=25.973, p=0.000)$. Thus we reject the null hypotheses. Post hoc comparisons using the Tukey HSD test indicated that those who had more experience (16 years and above) had less stress.

An independent-samples t-test was conducted to compare type of family and stress in terms of living alone and stress $(M=76.78$, $S D=12.11$ ) and joint family ( $M=68.13$, $S D=18.33, t(58)=2.89, p=0.05)$. Therefore, fail to reject null hypotheses and conclude that there is no significant differences between type of family and stress among primary school teachers.

One-way ANOVA was conducted to compare the effect of marital status on stress in status of married, single and divorced. Interestingly, there was a significant effect of marital status on stress on the three marital status $(F(2,57)=8.115, p=0.001)$. Post hoc analysis revealed that single (never married) teachers experienced more stress compared to married teachers and those who were divorced.

## DISCUSSION

Primary school teachers are persistently exposed to high level of stress. Sociodemographic variables, working environment, work pressure play a substantial role in causing stress across teachers of different countries. Teaching is a stressful occupation due to continuous and fragmented demands of teaching often lead to overpowering pressures and challenges, which may lead to stress and hindering one's ability to cope. Occupational stress among primary school teachers in China has become a matter of increasing concern. It is evident from past related studies on the subject and also through factors that predispose educators to work related stress. However, job stress among Chinese primary school teachers remain very limited in Jilin Province as reflected by the lack of empirical data. The main aim of this study is to find the demographic variables that influence stress among primary school teaches in Jilin Province.

This study revealed that female teachers experienced higher levels of stress compared to male teachers. This study is similar to studies done by Liu and Ramsey (2008), who reported female teachers experience less job satisfaction than male teachers, especially satisfaction from work conditions, and a number of researchers have noted that female teachers report higher stress than male teachers.

It was intended to find whether age of teachers has an impact on stress. In this study it was found that teachers below the age of 40 experienced more stress compared
to teachers above the age of 40 . One of the reason for high stress levels among young teachers could be due to challenging situations such as aiming for promotions. Byrne (1991) in a similar study reported that due to lack of experience among the teachers could lead to stress.

To investigate further on years of teaching experience and stress it was hypothesized that years of teaching experience has no significant impact on stress. This study showed that those there was a significant difference in age group and stress. Post Hoc test showed that those teachers who had a substantial higher (16 years and above) experience comparatively less stress than those who had less experience. The older teachers might be more experienced and adaptable to the environment and more ready to cope with stress. It also means that increase in the year of teaching experience can improve capacity to analyze the school's role. Teachers could perform their roles better (Huberman, 1993). Thus, the hypotheses were rejected

Marriage is an important aspect of wellbeing. Marriage provides companionship and sharing. In this study it was found that teachers who were single (unmarried) experienced more stress than those who were married or divorced. Being unable to share their day to day problems with their spouse could be one of the factors for increased stress. In a similar study done by Palmer (2012) it was found that single people are more vulnerable to stress than the couples due to feeling of insecurity.

To further investigate the issue of high stress levels among unmarried teachers, it
was intended to find whether living in a joint family or living alone influenced stress. Good family cohesion can increase happiness. Family cohesion entails the emotional bonding family members have with one another (Olson, 1984). In this study it was found that those living alone had higher stress compared to those living in joint family. However, t-test was not significant. In other words, there was no difference in type of family and stress.

In conclusion, the primary aim of this research was to investigate the demographic features that influence occupational stress among school teachers. The finding of the study indicated that gender, age, type of family, year of experience and marital status influenced job stress. The school authority needs to be aware that occupational stress among primary school teachers which may affect primary school teacher's performance. Moreover, occupational stress may reduce teachers achieving self-performance values and satisfaction. Improving work conditions and providing and an occupational training programme might help to reduce occupational stress among primary school teachers. Occupational stress can cause burnout. It may be a good strategy to provide training in stress management techniques.

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