## PUBLIC HEALTH RESEARCH

# Job Stress among General and Special School Teachers in Jahrom City, Iran 

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\begin{abstract}

| Introduction | Teaching is among the careers which are associated with a lot of stress. Occupational or job stress is an unfavorable mental state which is caused by the workplace environment and can seriously impede employees' performance. The purpose of this research was to compare occupational stress among general and special school teachers. |
| :---: | :---: |
| Methods | 84 teachers ( 42 were general school teachers and 42 were special school teachers) from Jahrom, Iran were selected as study samples. Special school teachers and general school teachers were chosen using convenience sampling and multistage random sampling methods, respectively. Parker and DeCotiis's job stress scale was used to assess job stress. The collected data were analysed by two-way analysis of variance (ANOVA) and multivariate analysis of variance (MANOVA). |
| Results | Results showed that job stress and its subscales were significantly higher among general school teachers than special school teachers (p <0.05); however, there was no significant difference between male and female teachers in terms of job stress and its subscales ( $p<0.05$ ). |
| Conclusions | According to the findings of this study, the Ministry of Education is recommended to prevent job stress by improving the level of services in general school and holding workshops with the aim of offering teachers some coping strategies to deal with stress in schools. |
| Keywords | Job stress - Occupational stress - Teachers - General schools - Special schools. |

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## INTRODUCTION

One of the significant aspects of any individual's life is his/her occupation. Holding careers or jobs help us to meet our living expenses and satisfy our psychological needs, including mental and physical activity, socialization, self-esteem and self-efficacy. Several factors such as a change in one's social role, disagreement at the workplace, competition at the workplace, work environment, attempts to show one's capabilities to others and high expectations in the workplace can affect employees' mental health in various jobs. ${ }^{1}$ In this regard, Adeniyi, Fakolade and Tella $(2010)^{2}$ believed that efficient performance in any occupation was highly dependent on the workplace environment. A constructive workplace, good interpersonal relationships, empathy between colleagues, financial and non-financial incentives, efficient management, availability of help from more experienced peers and other psychological and physical boosters in the workplace can result in better performance and more efficiency of employees. Otherwise, employees may experience job stress, which, in turn, can reduce work efficiency.

Teaching is among the careers which are associated with a lot of stress. Stress causes amnesia, confusion, poor judgment, lack of concentration, anger, drowsiness and depression; it can have detrimental effects on teachers' performance. ${ }^{3}$ The term job stress was first suggested when scientists found that there was a close relationship between working conditions and employees' mental health. ${ }^{4}$ The United State National Institute for Occupational Safety and Health (NIOSH) has defined job stress as a dangerous emotional and physical reaction to an inappropriate working condition. ${ }^{5}$ According to this definition, job stress is an unfavorable mental state which is caused by the workplace environment and can seriously impede employees' progress. ${ }^{6}$ From the early 1930s, job stress was investigated in various jobs. Teachers' job stress was first mentioned by Smith and Milstein, ${ }^{7}$ who believed that teachers were among those who experienced the highest level of job stress at the workplace. Since the early 1970s, studies on job stress among teachers have increased exponentially and most of these studies have been done on teachers who teach students with special needs. ${ }^{8}$

Research findings are contradictory regarding to the level of job stress among special school teachers and general school teachers. For instance, some studies have shown that special school teachers experience more job stress than general school teachers. ${ }^{9-21}$

However, some studies have shown that general school teachers experience higher job stress than special school teachers. ${ }^{3,5,}{ }^{52-35}$ Despite that, some other studies have reported that there is no significant difference between special school
teachers and general school teachers in terms of job stress. ${ }^{36,37}$

In addition, research findings are not conclusive regarding to 9 the role of gender in job stress among teachers. For example, some studies have indicated that there is no significant difference between male and female teachers in terms of job stress. ${ }^{38,} 39$ The results are mixed. While some researchers have observed that male teachers experience higher levels of job stress than female teachers, ${ }^{22,40-44}$ other researchers have reported the opposite, i.e. female teachers experience higher levels of job stress than male teachers. ${ }^{45-52}$

Therefore, there are some research evidences suggesting that among the demographic characteristics, gender may play a role in job stress. ${ }^{53}$ Nevertheless, research findings regarding the role of gender in job stress among teachers of different schools, including general and special schools, are inconsistent and, at times, they are contradictory. In other words, the available research evidence is not sufficient to allow us to draw a definite conclusion about the relationship between gender and the level of job stress experienced by teachers at the workplace. ${ }^{41}$

However, there is consensus among researchers that job stress can have detrimental effects on teachers, irrespective of their gender. ${ }^{10,54,}$ ${ }^{55}$ In fact, the results of numerous studies have shown that job stress in teachers can diminish the quality of their teaching, force them to resign and reduce students' participation in activities. Furthermore, job stress can result in reducing commitment to the needs of students, lessening cooperation with colleagues in school and neglecting of other duties, such as completing files in school and emotional exhaustion in students. ${ }^{56-58}$ Constant job stress can lead to career burnout, depression, anger, anxiety, irritability, drug abuse, reduced social communication, lessened capability, delay at work and other negative effects on teachers' personal and social mental health and quality of life. ${ }^{59}$

Therefore, considering the effects of job stress on all aspects of teachers' personal and professional life, the present study is significant in such a way its findings can encourage the Ministry of Education to provide teachers in general and special schools with a healthy workplace environment and certain benefits so that these teachers experience less mental pressure and occupational stress. In addition, given the contradictory findings on the role of gender in job stress among special and general school teachers and the limited studies done on this issue in Iran, the present study was an attempt to cast light on previous findings and extended the findings on job stress within the context of Iran by comparing the level of job stress among general and special school teachers and the role of gender in job stress. This
study sought to address the following research questions.

1. Is there any significant difference between general and special school teachers in terms of job stress based on their gender?
2. Is there any significant difference between general and special school teachers in terms of the subscales of job stress based on their gender?

## METHODOLOGY

Population, sample and sampling method
The design of the present study was causalcomparative. In this study, the statistical population consisted of all general and special school teachers in Jahrom, Fars Province, Iran of which a sample size of 84 teachers, including 42 general school teachers and 42 special school teachers, were selected. Due to the small number of special school teachers, they were selected through the convenience sampling method while the general school teachers were selected through the multistage random sampling method.

## Instrument

Job stress: Parker and DeCotiis's Job Stress Questionnaire (JSQ) (1983) was used to measure job stress. This scale was initially used by Parker and DeCotiis to determine organizational determinants of stress. This scale comprises 12 items scored on a five-point Likert scale ranging from "strongly agree" to "strongly disagree". In this questionnaire, job stress has two distinct dimensions, namely, time pressure and job-related anxiety. ${ }^{60} \mathrm{Wu}$ et al ${ }^{60}$ measured the overall reliability of this scale using Cronbach's alpha coefficient and reported it to be 0.85 . Glazzer et al ${ }^{61}$ stated that the overall reliability of this scale reported in different studies ranged between 0.78 and 0.91 . To measure the reliability of time pressure and anxiety dimensions, Parker and DeCotiis ${ }^{62}$ used Cronbach's alpha coefficient and calculated their reliability as 0.86 and 0.74 , respectively. They estimated the correlation
between the factors, used as scales, to assess the validity of the questionnaire and calculated it as 0.54 .

Data collection and analysis
After obtaining the necessary approvals to conduct this research and a letter of recommendation, the researchers referred to the special schools authorized by Jahrom Education Department and invited all teachers working in these schools to participate in this research. In the end, 42 questionnaires completed by special school teachers were collected. It was worth noting that special school teachers were chosen using the convenience sampling method. However, teachers from general schools were selected through multistage random sampling. Initially, for selecting the teachers from general schools, the list of schools in Jahrom was prepared, and randomly four girls' schools (two high schools and two elementary schools) and four boys' schools (two high schools and two elementary schools) were selected. Then, teachers in these schools were randomly selected. Finally, only 42 teachers agreed to participate in the study.

## Ethical Considerations

All general and special school teachers had consented for their participation in this study. The participants were aware of the purpose of the study and they had the right to leave the study at any time. They were assured that all information would remain confidential. The ethical review board of the Education Department of Jahrom in Fars Province in Iran had approved the study.

## RESULT

The sample characteristics of the teachers in special and general schools were presented in Table 1. There were no significant differences between the two groups in terms of the mean age (by independent t-test), educational level (by Chi-squared test) and work experience (by Chi-squared test).

Table 1 Sample Characteristics for Teachers of Special and General Schools

|  | Teachers of Special Schools ( $\mathrm{n}=42$ ) | Teachers of General Schools ( $\mathrm{n}=42$ ) | Sig. |
| :---: | :---: | :---: | :---: |
| Mean age (years) (SD) | 40.64 (6.40) | 39.19 (9.35) | No Sig. * |
| Range (years) | 24-57 | 23-52 |  |
| Male (female) of teachers | 19 (23) | 20 (22) | No Sig. * |
| educational level (\%): < MA* (> MA) | 28 (14) | 31 (11) | No Sig. * |
| work experience (\%): < 15 years (> 15 years) | 23 (19) | 20 (22) | No Sig. * |
| *MA= Master of Arts *P $\geq .05$ |  |  |  |

## Job stress

The mean score and standard deviation for job stress and its subscales based on gender differences were presented in Table 2

Table 2 The mean score and standard deviation for job stress and its subscales based on gender differences

| Variables | General school teachers |  | Special school teachers |  |  |  |
| :--- | :---: | :---: | ---: | :---: | ---: | ---: |
|  | Gender | Mean | SD | Gender | Mean | SD |
| Total job stress | Male | 25.68 | 6.30 | Male | 21.65 | 4.74 |
|  | Female | 25.70 | 7.21 | Female | 22.31 | 5.58 |
| Time pressure | Male | 10.77 | 3.85 | Male | 9.93 | 2.93 |
|  | Female | 11.10 | 4.42 | Female | 9.77 | 2.98 |
| Job-related anxiety | Male | 14.91 | 3.53 | Male | 11.72 | 3.32 |
|  | Female | 14.60 | 4.86 | Female | 12.54 | 3.43 |

As shown in Table 2, the mean score for job stress and its subscales, including time pressure and job-related anxieties, were higher among male and female teachers in general schools compared to that among male and female teachers in special schools. Two-way ANOVA was used to determine whether
school type (general vs. special), gender and the interaction between these two variables (school type*gender) had a significant effect on the level of job stress among teachers. The results were presented in Table 3.

Table 3 The effects of school type (general vs. special), gender and the interaction between these two variables (school type*gender) on the level of job stress among teachers

| Sources of change | Sum of <br> Squares | df |  | Mean <br> Square | F |
| :--- | ---: | ---: | ---: | ---: | ---: | Sig. $\quad$|  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| School type | 266.077 | 1 | 266.077 | 7.526 | 0.008 |
| Gender | 2.175 | 1 | 2.175 | 0.062 | 0.805 |
| School type*Gender | 1.945 | 1 | 1.945 | 0.055 | 0.815 |
| Error | 2828.294 | 80 | 35.354 |  |  |
| Total |  | 84 |  |  |  |

As presented in Table 3, the results of twoway ANOVA showed that there was a significant difference between general and special school teachers in terms of job stress ( $\mathrm{F}=7.526, \mathrm{P}<0.008$ ). To be more specific, teachers in general schools experienced higher levels of job stress than teachers in special schools. However, gender related to school type $[\mathrm{F}=0.062, \mathrm{P}=0.805]$ and gender $[\mathrm{F}=0.055, \mathrm{P}=0.815]$ did not have a significant effect on job stress among teachers.

Multivariate ANOVA was performed to address the second question of this study and the
results were presented in Table 4. It was worth noting that before multivariate ANOVA was performed, the Levine's test was used to evaluate the assumption of homogeneity of variances, and the results showed that it was not significant for any of the variables; therefore, multivariate ANOVA could be conducted. Furthermore, Box's M test was used to check the equality of the group covariance matrices. The results of the Box's M test were found not to be statistically significant, meaning that group covariance matrices were heterogeneous.

Table 4 Wilks' Lambda values in multivariate ANOVA for the subscales of job stress among general and special school teachers based on gender

| Wilks' Lambda | Value | F | $\mathrm{df}_{\mathrm{H}}$ |  | $\mathrm{df}_{\mathrm{E}}$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Sources |  |  |  | Sig. |  |
| School type | 80.95 | 4.641 |  | 2 | 79 |
| Gender | 0.999 | 0.42 |  | 2 | 79 |
| School type*Gender | 0.992 | 0.336 |  | 2 | 79 |

Based on the data presented in Table 4, it can be stated that the effect of school type on the linear combination of dependent variables was significant. However, the effects of gender and the
interaction between school type and gender on the linear combination of dependent variables were not significant. To further investigate whether school type had a significant effect on any of the dependent
variables, multivariate ANOVA was performed, and the results were presented in Table 5.

Table 5 The results of MANOVA for the subscales of job stress

| Sources of <br> variance | School type (general <br> vs. special) |  | Gender |  | School type* <br> Gender |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | F | P | F | P | F | P |
| Variables |  |  |  |  |  |  |
| Time pressure | 1.769 | 0.187 | 0.010 | 0.920 | 0.090 | 0.765 |
| Job-related variables | 9.180 | 0.003 | 0.085 | 0.771 | 0.421 | 0.518 |

Based on the results presented in Table 5, the effect of school type on time pressure [ $\mathrm{F}=1.769$, $\mathrm{P}=0.187$ ] was not significant, but its effect on jobrelated anxiety $[\mathrm{F}=9.180, \mathrm{P}=0.003$ ] was significant. In addition, the effect of gender on time pressure $[\mathrm{F}=0.010, \mathrm{P}=0.920]$ and job-related anxiety [ $\mathrm{F}=0.085, \mathrm{P}=0.771$ ] was not significant. Finally, the interaction between school type (general and special) and gender did not have any significant

## DISCUSSION

The results of this study showed that general school teachers experienced higher levels of job stress than special school teachers. Considering that general school teachers have to teach textbooks based on fixed topics and sub-topics and grapple with severe time constraints, they are constantly under a high level of stress. Furthermore, general school teachers have high expectations of their students and expect all students to participate in class activities and succeed in achieving their education goals, but special school teachers, compared with their counterparts in general schools, have to shape and adjust their expectations based on the special needs of students. Teaching in special schools is largely dependent on the ability and competence of students with special needs, i.e., if the students have a high learning potential, the teacher will strive to finish all the lessons within the time that is allotted to them; otherwise, they do not find it necessary to closely follow the course plan. This can possibly account for the lower levels of job stress in special school teachers compared to general school teachers. ${ }^{36}$ In addition, learning difficulties in some students, disagreement with colleagues, a considerable variety of textbooks, intensive curricula, heavy teaching workload, challenges in classroom management, crowded classrooms and disagreement between teachers and parents with regard to students' behavioral and educational needs are among the factors that may tax the patience of some general school teachers, reducing their commitment and job well-being and, ultimately causes job stress in them, ${ }^{24}$ which are needed to be explored in the future study.

The results of this study also showed that there was no significant difference between general
effect on time pressure $[\mathrm{F}=0.090, \mathrm{P}=0.765]$ and jobrelated anxiety $[\mathrm{F}=0.421, \mathrm{P}=0.518]$.

Therefore, it can be concluded that gender did not have a significant effect on the subscales of job stress among general and special school teachers. There was a significant difference between the general and special school teachers only in the subscale of job-related anxiety. In conclusion, teachers in general schools displayed greater jobrelated anxiety than teachers in special schools.
and special school teachers in terms of time pressure, as one of the two subscales of job stress. To explain this finding, it can be stated that teachers at both general and special schools have to meet parents' and school officials' high expectations about the use of up-to-date resources, cope with the lack of emotional support from school officials, tolerate some behavioral problems in some students, pay full attention to students' academic, emotional, behavioral needs and respond to the demands of all parents and principals. ${ }^{37}$ The above-mentioned challenges are encountered by both general and special school teachers and make both groups of teacher's experience time pressure, regardless of the type of school they work for.

Nevertheless, the results indicated that there was a significant difference between general and special school teachers in terms of job-related anxiety, the other subscale of job stress. More specifically, the mean score for job-related anxiety was higher for general school teachers than special school teachers. It can be argued that having to deal with crowded classrooms, more colleagues, disagreement with colleagues, heavy teaching workload and paucity of time cause more job-related anxiety in general school teachers than in special school teachers. ${ }^{63}$ It is also noted that Shernoff et al (2011) $)^{64}$ reported that crowded classrooms in general schools, limited facilities, various and intensive education programs, and some students' disruptive behaviors caused job-related anxiety in general school teachers.

In addition, the results of this study showed that there was no significant difference between male and female teachers in terms of job stress. One explanation for this finding is that male and female teachers have to in charge the same duties and
responsibilities in the classroom. ${ }^{24}$ For this reason, it can be concluded that both male and female teachers in different schools suffer from almost the same amount of job stress. In fact, all teachers, regardless of their gender, have to grapple with social tensions, low wages, strict and demanding school regulations, lack of effective feedback from school and students, and parental supervision over their teaching.

It is worth noting that there was no significant difference between male and female teachers in terms of time pressure, as one of the two subscales of job stress. In support of this study, it has been argued that the constant changes in the curriculum and the excessive demands of school cause the male and female teachers to suffer the same degree of time pressure. ${ }^{65}$ Another explanation for the above finding is that time constraints to fulfill their responsibilities make both male and female teachers feel that they have a limited amount of time; thus, they may experience time pressure in the schools and classrooms in which they teach. In addition, in most schools, teachers play a minor role in school decision-making. As a result, they feel obliged to carry out predetermined responsibilities within some short time limits imposed on them by school officials, which, in turn, can make them suffer from time pressure. ${ }^{37}$

Finally, there was no significant difference between male and female teachers in terms of jobrelated anxiety. One explanation for this finding could be the different teacher training courses, the reality of teaching as exists in the classroom, lack of clear criteria for assessing teachers' performance, lack of constructive feedback, and increased expectations and responsibilities which are sometimes unrealistic and beyond teachers' capabilities, crowded classrooms, high teaching workload, and insufficient wages can cause jobrelated anxiety in both male and female teachers. ${ }^{37}$

## CONCLUSION

Due to the small size of samples in this study, caution should be exercised in generalising the results. Therefore, it is suggested that future research should be done on a larger scale so that the results can be generalisable to other general and special school teachers. Based on the results of this study, it is recommended that some training workshops should be held to teach general school teachers how to cope with stressful conditions and adjust themselves to their working environment.

Conflict of interest statement
The authors declare that they have no conflict of interest.

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