

# Assessment of Quality of Life of the Teachers in Girl's High School Compared to General Population in Iran

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## Abstract

**Background:** Teachers are one of the most important human resources. The strengths and quality of any educational system depends largely upon their teacher's work. It has been well documented that teaching is one of the most stressful professions in the world. **Aim:** This study aimed to determine the teachers' quality of life in Tehran high schools compares the quality of life of Tehran general population. **Subjects and Methods:** In a cross-sectional study, a sample of 190 girl's high school teachers was selected from 30 schools of Tehran using stratified random sampling. In this study, age, teaching experience, marital status, education, and income were considered independent variables. The SF-36 Quality of Life Scale was used to assess the quality of life. **Results:** There was a positive association between teaching experience and the mean scores of mental health subscales, and also between marital status and the mean scores of physical functioning, vitality, and total physical health; in other words, the score was higher in single teachers ( $P < 0.05$ ). The mean scores of teachers in this study were significantly lower than the general population in all dimensions of the QOL except for mental health and emotional limitations ( $P < 0.05$ ). **Conclusions:** In Tehran, teachers have a lower QOL than the general population. This study suggests that adequate coping resources, especially social support, may be an important factor for improving the teachers' quality of life.

**Keywords:** Quality life; Teacher; School; Population

## Introduction

Teachers are one of the most important human resources. The success of any educational system depends on quality teachers. The strengths and quality of any educational system depends largely upon their teacher's work. It has been well documented that teaching is one of the most stressful professions in the world. [1,2] Teachers tend to perceive certain features of their career that are harmful to their health. In Iran, the education system has undergone major changes recently. However, despite many reforms and innovations over the last decade, Iranian teachers still suffer from stressful working conditions. The prevalence of anxiety, hypertension, headache, psychosomatic disorders, and cardiovascular diseases is higher in teachers compared to other occupations. [3-6] Numerous studies have shown that excessive stress may have an obvious effect on the physical and mental health status of the teachers. It has been reported that teachers have a lower quality of life (QOL) and shorter life expectancy. [7] The reason why assessment of school teachers' QoL is very important is because their QoL not only affects them but also influences the students' performance and the way teachers handle responsibilities in the educational setting. School teachers should have a good quality of life to train good students. Any problem or defect in the quality of life of teachers can affect their occupational performance. Unfortunately teachers have been reported to have a lower quality of life (QOL) and shorter life expectancy as a result of higher occupational stress. Some teachers retire early and some even quit their job. [8,9] Demographic characteristics have been regarded as important

determinants of the teachers' QOL. Demographic factors (such as teaching experience, marital status, education, and income) may affect the health of the teachers. However, few studies have investigated Iranian teachers. Thus, the aim of this study was to analyze work-related and demographic parameters that may affect the health of the Iranian teachers. Therefore, this study was conducted to assess the teachers' quality of life in Tehran high schools and compare it with the quality of life of the general population of Tehran. The findings from this study can be used to design potential management strategies for improving the teachers' QOL.

## Materials and Methods

In this cross-sectional study, cluster sampling was used to select teachers. The study population comprised 310 school teachers working in 30 girls' high schools downtown, of which 190 were selected randomly. A pretest questionnaire was completed by 30 teachers, and the sample size was calculated based on the mean and standard deviation of the total score of the Quality of Life (QOL) of the teachers on pretest and the general population of Tehran. In total, 190 completed questionnaires

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were returned of which 169 were valid (if more than half of the items in the questionnaire were missing, the questionnaire was excluded from the study). Data were collected using the SF-36 Quality of Life and Demographic Questionnaire. The health concepts are described by a range of scores varying from 0 to 100, with higher scores indicating better health.<sup>[10]</sup> All of the participants were well informed about the content and the aim of the questionnaire. After written consent was obtained, an anonymous questionnaire was given to individual subjects. The study protocol was in accordance with the ethical standards of the human experimentation of Tehran Medical University Committee. The tool used in this study had two parts: a demographic questionnaire for. The demographic details including age, marital status, education, teaching experience, and income, and the 36-item Short-Form Health Survey (SF-36) for assessment of the teachers' quality of life (QOL). The SF-36 consists of 36 items that measure eight different dimensions of health, including physical function, role limitations related to physical problems, bodily pain, general health perception, vitality, social functioning, role limitations due to emotional problems, and mental health, which can be categorized into physical component summary (PCS) and mental component summary (MCS). The health concepts are described by scores ranging from 0 to 100, with higher scores indicating better health.<sup>[9-11]</sup>

## Results

In total, 169 questionnaires were analyzed with a valid response

**Table 1: The frequency and relative frequency of independent variables in the study population.**

Independent Variables	N= (169)	%
<b>Teaching Experience (year)</b>		
<10	13	7.7
10-20	82	48.5
>20	74	43.8
<b>Income (Rials)</b>		
≥ 6000000	91	53.8
<6000000	78	46.2
<b>Marital Status</b>		
Single	21	12.4
Married	148	87.6
<b>Education</b>		
Associate Degree & Bachelor's Degree	142	84
Master & PhD	27	16

**Table 2: Relationship between quality of life, mental and physical score with demographic characteristics.**

Variables	Total Score of Quality of Life	Mental Component Score	Physical Component Score
<b>Teaching Experience (years)</b>			
<10	69.43 ± 17.06	68.20 ± 14.76	68.81 ± 19.36
10-20	64.18 ± 16.63	63.08 ± 17.24	63.07 ± 16.38
20<	67.48 ± 17.20	68.34 ± 16.41	64.82 ± 19.41
<b>Income (Rials)</b>			
≥ 6000000	64.99 ± 16.96	64.64 ± 18.86	63.56 ± 17.76
<6000000	67.22 ± 16.89	67.10 ± 16.76	65.12 ± 18.25
<b>Marital Status</b>			
Single	68.45 ± 19.62	69.64 ± 18.49	65.40 ± 22.75*
Married	65.67 ± 16.54	59.22 ± 16.55	64.12 ± 17.25
<b>Education</b>			
Associate Degree & Bachelor's Degree	65.81 ± 16.65	65.77 ± 16.78	63.97 ± 17.61
Master & PhD	67.13 ± 18.51	65.80 ± 17.31	65.90 ± 19.92

rate of 0.94%. Approximately 48% of the teachers had a teaching experience more than 20 years, and about 87.6% were married [Table 1].

According to the results, the mean and standard deviation of the total score of mental health, physical health, and quality of life in the study population was  $65.77 \pm 16.81$ ,  $64.28 \pm 17.95$ , and  $66.02 \pm 16.91$ , respectively. There was no association between the mean score of quality of life and its subscales with age, income, and educational level as independent variables. There was a positive association between the mean score of mental health and teaching experience ( $P < 0.05$ ); in other words, teachers with teaching experience more than 20 years had a significantly higher mental health. Moreover, there was a positive association between the mean scores of physical functioning ( $P < 0.01$ ), vitality, and total physical health ( $P < 0.05$ ) with marital status, i.e., single teachers scored higher than married teachers [Table 2].

The mean score of teachers in this study for dimensions of physical function, role limitations related to physical problems, bodily pain, general health perception, vitality, and social functioning were significantly lower than the general population<sup>[12]</sup> ( $P < 0.001$ ) [Table 3]. The QOL scores and demographic characteristics are listed in Table 4.

## Discussion

The result of this study showed the highest sub-score was related to physical functioning ( $72.33 \pm 21.88$ ) and the lowest was related to vitality ( $60.25 \pm 17.32$ ). The results of another study confirm these findings.<sup>[13,14]</sup> According to our results, the mean score of the QoL and subscales of physical functioning and mental health had no association with age, which is compatible with the results of a similar study in Indian teachers.<sup>[15]</sup> However, there was a positive association between the mean score of mental health subscale with teaching experience. It might be because self-esteem increases with work experience and teachers were proficient in routine work and were able to resolve problems independently. Older teachers with a longer teaching experience feel less stressed about basic working conditions such as time and work environment. Moreover, marital status had a positive association with the mean score of physical functioning, vitality, and total quality of life ( $P < 0.05$ ); these scores were higher in single teachers, maybe because married teachers have more

**Table 3: Relationship between dimension of life quality and demographic characteristics in subjects.**

Variables	physical functioning	Physical Limitations	Bodily Pain	General Health	Vitality	Social Functioning	Emotional Limitation	Mental Health
<b>Teaching Experience (year)</b>								
<10	76.43 ± 23.31	67.82 ± 41.46	69.90 ± 20.00	65.47 ± 12.62	64.29 ± 12.70	76.56 ± 18.38	69.23 ± 39.58	66.23 ± 8.68
10-20	72.46 ± 19.19	60.16 ± 37.39	67.93 ± 19.42	59.67 ± 16.28	57.85 ± 17.09	68.08 ± 21.03	63.89 ± 41.26	65.07 ± 17.11
<20	71.47 ± 24.51	59.11 ± 37.01	69.28 ± 22.11	62.66 ± 20.64	63.43 ± 17.93	71.71 ± 21.55	73.01 ± 34.07	71.70 ± 14.89
<b>Income (Rials)</b>								
≥ 6000000	71.88 ± 21.99	58.54 ± 37.25	68.00 ± 20.93	61.23 ± 17.95	60.13 ± 16.63	70.63 ± 20.19	63.66 ± 39.74	67.88 ± 14.96
<6000000	22.85 ± 21.89	62.31 ± 37.66	69.44 ± 20.25	61.64 ± 18.38	61.54 ± 18.18	69.95 ± 22.24	73.70 ± 35.72	68.26 ± 17.05
<b>Marital Status</b>								
Single	65.99 ± 29.53	62.57 ± 38.87	70.95 ± 22.56	63.98 ± 22.26	63.69 ± 21.9	74.40 ± 22.87	76.15 ± 30.94	71.42 ± 15.90
Married	73.23 ± 20.55	59.96 ± 37.28	68.34 ± 20.34	61.06 ± 17.49	60.37 ± 16.62	69.74 ± 20.86	67.18 ± 39.03	67.58 ± 15.91
<b>Education</b>								
Associate Degree & Bachelor's Degree	71.84 ± 21.74	60.50 ± 36.85	67.64 ± 20.75	61.35 ± 18.63	61.04 ± 17.15	70.55 ± 20.59	67.66 ± 38.74	68.16 ± 16.11
Master & PhD	74.91 ± 22.87	59.14 ± 40.76	74.05 ± 19.07	61.77 ± 15.32	59.43 ± 18.48	69.09 ± 23.98	71.60 ± 35.45	67.52 ± 15.08

**Table 4: The mean and standard deviation of quality of life scores for the Iranian general population and survey population.**

SF-36 subscales	Study Sample (n=169) Mean (SD)	Normal Population (n=3335) Mean (SD)	P-value
Physical Functioning	72.33 (21.88)	87.64 (18.36)	0.000
Physical Limitations	60.28 (37.37)	74.19 (35.77)	0.000
Bodily Pain	68.66 (20.57)	83.05 (22.63)	0.000
General Health	61.42 (18.10)	69.97 (19.33)	0.000
Vitality	60.25 (17.32)	67.30 (16.32)	0.000
Social Functioning	70.32 (21.10)	78.67 (23.08)	0.000
Emotional Limitation	68.29 (38.16)	68.43 (40.25)	0.964
Mental Health	68.06 (15.91)	68.28 (17.61)	0.765

responsibilities; [16-19] for example, they have to take care of their family and shoulder a variety of domestic duties, and face social pressures and challenges which may result in physical and mental health problems. Teachers are usually expected to take more responsibility in teaching. This study showed that teachers had significantly lower scores in physical functioning, role limitations related to physical problems, bodily pain, general health perception, vitality, and social functioning when compared to the general population of Tehran (P value<0.001). The results were consistent with previous studies. [20,21] This could be attributed to the demanding work environment of teachers compared to the general population of Tehran. Teachers in Iran have an excessive workload, including preparing lessons, communicating with parents and pupils, grading test papers, and fulfilling administrative duties. Recent changes in the education system and applying modern education technologies have placed higher demands on teachers, requiring efforts to absorb the latest knowledge to improve their ability and keep up with society developments. This may contribute to breakdown due to increasing work demands and lower resources, which could reduce the QoL. [22] These results are similar to studies conducted in other countries. [23,24] A teacher's performance is assessed via their students' test scores and rate of acceptance in the university entrance exam, which puts a great deal of pressure on teachers.. Teachers face high demands in both the quantity and quality of their work, as well as organizational competitiveness. Thus, the increasing competition leads to psychological strain and fatigue.

These strains not only have a negative impact on the teachers' attitudes towards their profession, anxiety, and ability to cope with dilemmas, but also lead to inattentiveness, withdrawal or aggressiveness, concerns about physical status, and increased risk of sleep problems, depression, and cardiovascular diseases. [25] Interpersonal strain is negatively related to mental health. Teachers need to be skilled in teaching and moral guidance activities that require emotional intelligence in empathy and social-interpersonal areas. [26] Due to the high demands of their profession, teachers may experience psychological or emotional problems. In addition, previous studies have revealed that lack of teamwork and insufficient communication are crucial strain factors in the teachers' workplace. As a result, teachers often quarrel with family members or colleagues, and have an over-reliance on them. In summary, job strain may affect the QOL by influencing one's perception of health and well-being, and may also affect one's sense of QOL by contributing to physical or mental disease. Therefore, teachers should be given more help to improve their QOL and well-being. In this study, evidence was provided to support assertions made in previous studies [27] that impaired QOL is associated with occupational stress and strain, and that coping resources could enhance physical and mental health. As a limitation, this study had a cross-sectional design based on self-reported measures, so no conclusions can be drawn on the causality of the associations observed between the QOL and independent variable. Additionally, subjects were from district 10 and 11 of Tehran, which may limit the generalizability of the results. However, despite the above limitations, this study had notable strong points, including a large sample size and a high valid response rate.

## Conclusion

This study showed that teachers have a significantly lower score in all domains of the quality of life compared to the general population of Tehran, except for emotional limitations and mental health subscales. More help should be offered to teachers to improve their QOL and well-being. It is prudent to provide proper recreational activities for teachers and their families. Further research is required to investigate the causes of the teachers' poor physical and social status.

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## Conflict of Interest

The authors declare that they have no conflicts of interest or competing interests.

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