

## RESEARCH ARTICLE

# The relationship between quality of work life and job satisfaction among audiologists in Iran

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### Abstract

**Background and Aim:** One of the most important pillars of the constancy of each organization is the satisfaction of its employees. Quality of work life is beyond job satisfaction; it involves the effect of the workplace on satisfaction with the job, satisfaction in non-work life domains and subjective well-being. This study aimed to determine the relationship between job satisfaction and quality of work life among audiologists in Iran.

**Methods:** A cross-sectional study was conducted among 251 audiologists. Minnesota and Van Laar questionnaires were used.

**Results:** According to the results, the mean of the job satisfaction of audiologists was 71.8%, generally showing that audiologists were satisfied with their job. Also, mean of the quality of work life of audiologists was 76.8%, which indicates good quality of work life for audiologists. The relationship between the quality of work life and its seven dimensions with job satisfaction was significant ( $p < 0.05$ ). In all of the dimensions except stress at work, the correlation coefficient was positive and significant ( $p = 0.68$ ); however, the relationship between

stress at work and job satisfaction was negative. Altogether, job career satisfaction had the strongest and stress at work had the weakest relationship with job satisfaction.

**Conclusion:** The data obtained from this study suggest that audiologists have good job satisfaction and quality of work life which can promise a bright future for audiologists and their clients. Promotion and improvement of dimensions of quality of work life can lead to higher job satisfaction and improve the provision of audiology services to clients.

**Keywords:** Audiologist; quality of work life; job satisfaction

### Introduction

Each society needs jobs to sustain its life. This need existed for centuries and will continue to exist in the future [1]. Employee satisfaction is one of the most important pillars of organizational sustainability and stability. Some theorists defined employee satisfaction or job satisfaction as the attitudes and positive perceptions of a person concerning his or her job. Some described it as a two-dimensional structure, including internal and external dimensions of satisfaction [2]. Job satisfaction is different from the quality of work life and interpreted as one of the many results of the quality of work life. Quality of work life is affected not only by job satisfaction, but also by satisfaction in other areas of

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life such as family life, leisure life, social life, and financial life. Thus, the concept of quality of work life is beyond job satisfaction, which includes the impact of the work environment on job satisfaction, satisfaction in other areas of life, sense of well-being, and subjective well-being [3].

Audiology is the study of the auditory system and related disorders through the identification and evaluation of hearing performance and rehabilitation. The field of audiology is, indeed, much broader than the auditory system. It studies the vestibular system, balance, and how the hearing information is processed in the central nervous system. This branch of science is aimed at preventing, evaluating, managing, counseling, and rehabilitating hearing problems, balance disorders, and their complications at different age groups, including infants, children, adults, and elderly [4].

Greenhaus et al. concluded that a happy employee would be a productive, devoted, and faithful employee [5]. The quality of work life has a substantial impact on employee responses such as organizational identity, job satisfaction, work partnership, job quest, job performance, turnover intention, and organizational change [6]. The purpose of the health care system is to provide physical, psychological, and social health to the people, and to create a climate where the employed workforce is prepared to provide higher quality services [7].

The quality of work life is based on the individual's feelings about the desirability of the place of work and what exists in the place. It is related to the current experience of the individual in the field of work, and it is aimed to promote and improve the satisfaction of employees and job satisfaction can enhance productivity. Therefore, the relationship between the components of quality of work life and job satisfaction can play a significant role in identifying the influential factors in improving the delivery of services by audiologists [8].

According to research [9], audiology is ranked 17<sup>th</sup> in the United States among 200 occupations based on work environment, physical needs, career prospects, income, and stress. In

particular, it is ranked 82 (fair) regarding work environment, 5 (very low) for stress, and 9 (very good) for career prospects.

The quality of work life has seven dimensions: job career satisfaction (JCS) (satisfaction with and interest in profession), home-work interface (HWI) (organizational efforts to help deal with stress outside the workplace), general well-being (GWB) (general satisfaction with life), control at work (CAW) (participation in decisions affecting the work environment), working conditions (WCS) (satisfaction with job positions), stress at work (SAW) (experiencing stress in the workplace), and overall quality of work life [10].

In the present study, we examined the relationship between job satisfaction and quality of work life among Iranian audiologists. The identified influential factors can be used as guidance for those involved in this area to improve the quality of work life and job satisfaction based on these factors with greater awareness of the needs of audiologists. Consequently, audiologists would be able to provide the conditions for their progress and continuity, which ultimately leads to the improvement of the level of work in audiology clinics and centers, resulting in the improvement of the delivery of services to the public.

## Methods

This is a descriptive-analytical study with the cross-sectional data. The study population consisted of all audiologists working in the audiology centers and clinics, i.e. all the audiologists in the Iran Association of Audiology. Because of the inaccessibility to accurate statistics in this regard, the researchers decided to use convenience sampling. A pilot study was conducted for sampling. Based on the mean and standard deviation obtained using the following formula, the number of participants was 251.

$$N = \frac{z^2 S^2}{d^2}$$

The data collection tool was a questionnaire. In the present study, the Persian version of

Minnesota satisfaction questionnaire (MSQ) short form was used to obtain job satisfaction information [11]. The Persian version of Van Laar's quality of work life questionnaire was used for quality of work life information [10].

The Minnesota job satisfaction questionnaire (MSQ) short form is a five-point Likert scale questionnaire. Accordingly, the scores ranged 20-100, and were divided into four levels: very dissatisfied (20-40), dissatisfied (41-60), satisfied (61-80), and very satisfied (81-100). In a study conducted by Bakhtiar Nasrabadi et al., the validity and reliability of the questionnaire were confirmed. In their study, the reliability coefficient of the MSQ was estimated 92 using Cronbach's alpha. For face and content validity, the questionnaire was submitted to the supervisors, counselors, and other professors in the field of management and psychology of education at the University of Isfahan, as well as managers, engineers, and senior employees of Esfahan Steel Company [11].

There are 24 questions in the work-related quality of life (WRQoL) scale for healthcare workers Van Laar with a 5-point Likert scale, including: strongly disagree, disagree, neither agree nor disagree, agree and strongly agree. To better compare and evaluate the result of the present study with of other studies, the total score ranged 24-120 after considering all the comments for each one component of the quality of work life. There were 23 questions focused on six items, i.e. JCS, GWB, WCS, HWI, SAW, and CAW. Question number 24 independently focused on the satisfaction with the quality of work life. This questionnaire was first translated to Persian, and the validity and reliability were confirmed by Shabaninejad et al. They adapted it by considering the cultural and situational conditions in Iran, and also given the fact that the study population was composed of family physicians. To determine the validity of the questionnaire, it was sent to the professors at the Department of Health Management and Health Economy of the Tehran University of Medical Sciences, as well as experts in the field of development in the Ministry of Health and Medical Education. The reliability of the questionnaire

was verified through a test-retest method. The correlation coefficient was 0.95 with a Cronbach's alpha of 0.78 for measuring the internal consistency between the questions [10].

Regarding the concurrence of the sampling and the 16<sup>th</sup> National Congress on Audiology in Tehran, those attending the congress were asked to complete the questionnaires in person. After collecting the questionnaires, all the data were analyzed and discussed to conclude.

Descriptive statistics, frequency and percentage of frequency, dispersion indices such as variance, and standard deviation were used for data analysis. The Pearson correlation coefficient test was used after the normality test. ANOVA and t-test were used to analyze the relationship between demographic characteristics and job satisfaction with SPSS 22. The normality of the data was first examined using the Kolmogorov-Smirnov test. According to the results, the coefficient of significance was more than the error level of 0.05 for all the variables. As a result, it can be claimed with a 95% confidence level the data followed a normal distribution. Parametric tests were also used to check their condition. To examine the difference between job satisfaction and demographic variables, independent t-test and ANOVA test were performed. Pearson correlation coefficient test was also used to examine the relationship between quality of work life and job satisfaction. The independent t-test and ANOVA test were used to examine the difference in the quality of work life according to demographic variables.

## Results

In the present study, 251 audiologists participated including 98 males and 153 females. The demographics included in the questionnaire were gender, age, level of education, work experience, type of employment (including employment in the public and private section), type of activity (including working in the fields of hearing diagnosis, rehabilitation, prevention and protection), and marital status.

According to the demographic variables, frequency distribution was as follows: 35.5% (89) of the respondents were aged 26-35

**Table 1. Frequency distribution of responders the job satisfaction**

Scale	Score of job satisfaction	Frequency (%)
Very satisfied	81-100	49 (19.5)
Satisfied	61-80	171 (68.1)
Dissatisfied	41-60	29 (11.6)
Very dissatisfied	20-40	2 (0.8)

as the largest group (more than one-third of respondents), and those aged above 55 were the smallest (2.7%). 39% of the respondents were male and 61% female.

The highest frequency of respondents (78.9%) were working in the field of audiology with a bachelor's degree, accounting for nearly a quarter of the total, and the lowest frequency of 3.2% were with a Ph.D. degree. In addition, 70.5% of the respondents were married and 29.5% were single.

There were 28.3% of the respondents had up to 5 years of work experience, which comprised the largest number of respondents, and then above 20 years (22.7%), 6-10 (20.3%), 11-16 (15.5%), and 16-20 years (13.2%), respectively. 49.4% of the respondents were working in the private section, accounting for nearly half of the respondents, and respondents who worked in the public section were the smallest group. Most of the respondents were engaged in diagnostic work, accounting for 36.6% of the total, and the smallest group was in the field of prevention and protection, and diagnosis (less than 1%). It is worth noting that 13.1% respondents were working in the field of diagnosis, prevention and protection, and rehabilitation simultaneously.

The mean of job satisfaction among the audiologists was 71.8%, according to which they were satisfied with their job.

In total, 87.6% of all respondents were satisfied or very satisfied with their work, and only 12.4% were dissatisfied or very dissatisfied. In Table 1, the frequency distribution of the audiologists is presented regarding job satisfaction.

The mean quality of work life was 76.84%, according to which the quality of work life reported was proved good.

Table 2 lists the frequency of respondents regarding the quality of work life. In total, 68.6% reported their quality of work life to be good or very good, accounting for more than two-thirds of respondents. Approximately one-third of respondents (31.3%) reported poor or very poor quality of work life.

Considering that the significant coefficient for the quality of work life and job satisfaction in all cases was zero, less than the error level of 0.05. Therefore, there found to be a significant relationship between quality of work life and its seven dimensions with job satisfaction among the audiologists at a confidence level of 95%. On the other hand, because in all cases, except for SAW, the correlation coefficient was more than zero, the relationships were positive and significant. But the relationship between SAW and job satisfaction was negative, i.e. the higher the SAW, the less the job satisfaction.

Among the dimensions of quality of work life, the strongest and weakest relationship were found to be between job satisfaction and JCS with a coefficient of 0.65 and SAW with a coefficient of -0.36, respectively. Finally, the correlation coefficient between the quality of work life and job satisfaction was 0.68, which is indicative of a positive and significant relationship.

According to the results of the tests, there was no significant difference between job satisfaction among female and male audiologists. Both groups were satisfied according to the mean of job satisfaction score. There was also no significant difference between job satisfaction among single and married respondents. Accordingly, both groups found to be satisfied with their job. Moreover, their job satisfaction was also same at different ages, indicating the insignificant effect of age on job satisfaction. Similar results were found in the case of level of education.

In the event of work experience, the coefficient was equal to 0.04 and less than the test diagnostic level (0.05). As a result, there is a significant difference between the job satisfaction and different work experience at 95% confidence



**Table 2. Frequency distribution of responders the quality of work life**

Scale	Score of QWL	Frequency (%)
Very good	79-120	19 (7.6)
Good	73-96	153 (61.0)
Bad	49-72	70 (27.8)
Very bad	24-48	9 (3.6)

QWL; quality of work life

level, which shows the different level of job satisfaction in case of different work experience. Tukey's follow-up test was conducted to determine which group has the highest job satisfaction regarding work experience. The results of the test showed that there are two different groups regarding job satisfaction among the respondents with different work experience. The members of the first group with higher job satisfaction had an experience of up to 5 years or 11-20 years while those of the second group with lower job satisfaction had an experience of 6-10 years or over 20 years

Considering that the significant coefficient for the quality of work life with satisfaction in all cases was zero and less than the error level of 0.05, there is thus a significant relationship between quality of work life and job satisfaction at 95% confidence level. On the other hand, the relationships are positive and significant because in all cases, except for SAW, the correlation coefficient is more than zero. But the relationship between SAW and job satisfaction was negative, i.e. the higher the SAW, the less the job satisfaction.

The results showed that the variables of gender, marital status, age, level of education and type of activity did not have a significant effect on quality of work life.

Concerning the type of employment, the significance coefficient was zero and less than the level of diagnosis (i.e. 0.05). As a result, there is a significant difference in the quality of work life with a 95% confidence level, and the quality of work life was not the same with a different

type of employment. Tukey's follow-up test was conducted to determine the group with the highest job satisfaction regarding the type of work. The results of the test showed that there are two different groups in terms of job satisfaction among the respondents with various types of employment. The first group with higher job satisfaction included those employed in the public section or simultaneously in both the sections while the second group with lower job satisfaction included those employed in the private section.

In case of work experience, the coefficient was equal to 0.04 and less than the test diagnostic level (0.05). As a result, there is a significant difference between the job satisfaction and different work experience at 95% confidence level, which shows the different level of job satisfaction in case of different work experience. Tukey's follow-up test was conducted to determine the group with the highest job satisfaction regarding work experience. The results of the test showed that there are two different groups regarding job satisfaction among the respondents with different work experience.

### Discussion

The objective of the present study was to examine the relationship between job satisfaction and quality of work life among audiologists. In this regard, the mean of job satisfaction among the audiologists was 71.8%. In other words, 87.6% of all respondents in total were satisfied or very satisfied with their work. Furthermore, the mean quality of work life was 76.8%. In other words, 61% of all respondents reported good quality of work life, according to which the quality of work life was proved good among audiologists.

Given the significant relationship between job satisfaction and quality of work life that was found in the present study, the results of other studies are almost consistent with of the current study. As Hadizadeh Talasaz et al., Goudarzvand-Chegini and Mirdoozandeh, Mirkamali and Narenji Sani, Saedi et al. and Zakerian et al. studied the relationship between job satisfaction and quality of work life and

reported a significant association [7,8,12-14]. Considering the significant relationship between quality of work life and job satisfaction found in the present study, it can be concluded that higher quality of work life represents higher job satisfaction among the audiologists. The identification of the factors affecting the quality of work life is of significance because job satisfaction can be improved by changing the components and dimensions to improve the work and organizational environments.

In the present study, the mean of job satisfaction among the audiologists was obtained 71.8%. In other words, 87.6% were satisfied or very satisfied with their work. Many other studies also reported similar results such as Martin et al. studied job satisfaction among audiologists. The results showed that the audiologists are satisfied with their job [15]. In a similar study, Saccone and Steiger also examined the job satisfaction among audiologists, and the results revealed that the audiologists are satisfied with their work life [16].

Luckner and Hanks also focused on the job satisfaction among the teachers of deaf or hard-of-hearing students in a study, finding a general job satisfaction [17].

Some studies have also been conducted in fields similar to audiology, which showed similar results. Lass et al. found that 86.6% of the speech-language pathologists were satisfied or very satisfied with their work [18]. Blood et al. also found that 42.2% of the speech-language pathologists were satisfied and 34.1% very satisfied [19].

In the present study, the mean quality of work life for audiologists was 76.8%. In other words, 61% of all respondents reported good quality of work life. Some other studies found similar results, and some others found very different results. First, the studies with very dissimilar results are: Arab et al. studied the quality of work life among specialized physicians in the affiliated hospitals of the Tehran University of Medical Sciences. The results showed an unacceptable level of the quality of work life, i.e. moderate and low [20], dissimilar to the results of the present study. Saleh Koushki et al. also

focused on the quality of work life among nurses in the affiliated hospitals of the Shahid Beheshti University of Medical Sciences, and reported moderate and low levels [21].

In the different occupations in the area of medical services, Zakerian et al. reported the mean quality of work life of 39.7% among the employees in the automotive industry, which is relatively small [14]. This significant difference between these studies and the present study may be due to the difference in the academic discipline, occupational and professional diversity of the participants, the extent of their duties, multiple job shifts, more workload, and generally due to the fundamental difference in the existing system of the occupations compared to audiology.

Hadizadeh Talasaz et al. examined the relationship among some midwives working in maternity hospitals and health centers in the city of Mashhad, and reported mean value of 65.2%. Goudarzvand-Chegini and Mirdoozandeh also studied the relationship between the quality of work life and job satisfaction among the staff of the hospitals in the city of Rasht, and reported the mean value of 73.2%. The results of both studies are consistent with of the present study [7-8].

In this study, job satisfaction was only different regarding work experience, with no significant relationship with other variables (gender, marital status, age, education, type of employment, and type of activity). The relationship between work experience and job satisfaction can be attributed to the different expectations among the audiologists with different work experience and income levels.

The quality of work life among the audiologists was not significantly different regarding gender, marital status, age, level of education, and type of activity. But about variable work experience and employment, there was found to be a different quality of work life among the audiologists. It can be argued that the public type of employment resulted in higher quality of work life than in private employment due to the sustainability of the working environment and conditions and also the more realistic expect-

tations of this kind of employment. Other reasons may be the reduced financial support provided by insurance agencies for hearing aids, professional interference with other specialties and, consequently, lower income levels for audiologists. However, a definite conclusion requires further research.

Among the dimensions of quality of work life, the strongest and weakest relationships were between job satisfaction and JCS and SAW, respectively. The relationship between SAW and job satisfaction was negative, i.e. the higher the SAW, the lower the job satisfaction. SAW is undoubtedly effective in reducing productivity and increasing mistakes and conflicts in interpersonal relationships. Also, the high level of stress has an adverse effect on the sense of well-being (sense of happiness, security, ability, and meeting basic needs and preferences).

One of the most effective tools in this area is education itself, since the communication skills acquired by an audiologist can help him/her to communicate better, especially those were referred, and they can be useful in reducing job stress. According to Arab et al., HWI was found to be the weakest among the dimensions of the quality of work life, indicating that the quality of work life negatively affects the specialized physicians' personal life. Among the dimensions, GWB was of the highest mean value and home-work interface of the lowest [21], which is completely in contradiction with the result of the present study.

Regarding the negative relationship between job satisfaction and stress in the present study and that 87.6% of respondents were satisfied or very satisfied with their job, it can be concluded that a high percentage of the respondents had experienced low job stress and high job satisfaction and that the audiology is generally a low-stress job in Iran. This result is similar to job stress ratings, and according to the ranking of the various occupations [9], audiology is ranked 5<sup>th</sup> regarding job stress, among the 200 different jobs in the United States, and is considered as a low-stress job.

Zakerian et al. reported that quality of work life was of the second highest mean value after job

satisfaction, and HWI was found to be of the lowest mean value. In general, job satisfaction and general well-being had the greatest impact on job satisfaction in the present study [14]. The difference in the results of this study with the findings of the published studies mentioned can be due to differences in the study samples, differences in the academic discipline, or differences in the system within which the samples are working. In the present study, JCS had the most impact on job satisfaction. Since JCS had the most impact on job satisfaction, it can be concluded that those who choose their jobs voluntarily with higher levels of physical and mental health enjoy the highest job satisfaction. Therefore, a need is felt to promote this branch of science for those students who need to choose an academic discipline after high school education.

### Conclusion

Since there is a significant relationship between quality of work life and job satisfaction, it can be concluded that the improvement of the dimensions of quality of work life, including higher satisfaction with profession (JCS), improved work-home interface (WHI), higher level of general well-being (GWB), greater control at work (CAW), improved working conditions (WCS), and low stress at work (SAW) can lead to greater job satisfaction among audiologists, which will consequently improve the quality of such services. Thus, it can be argued that if organizations improve all the aspects of their employees' quality of work life and provide favorable conditions in the workplace, employees can enjoy a sense of justice, progress, success, security and growth. They can demonstrate their abilities and creativity, and an overall job satisfaction, thus leading to increased employee performance and organizational growth and dynamism.

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### Conflict of interest

The authors declared no conflicts of interest.

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