

## Correlation between Health Correlates and Quality of Working Life in the Staff of the Islamic Azad University, Lahijan Branch

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### Abstract

**Background and Objectives:** Quality of working life (QWL) is an important issue and examination of the aspects that can affect it causes promotion of individual and organizational productivity. This study was conducted to investigate correlation between health correlates and the QWL in the employees of the Islamic Azad University, Lahijan Branch.

**Methods:** This descriptive-correlational study with regression analysis was conducted on 130 nonteaching employees of the Islamic Azad University, Lahijan Branch selected by convenience sampling with reference to the number of the studied variables (spiritual, physical, mental, social, and environmental health). The participants filled out demographic, health-promoting behaviors, and QWL questionnaires. Data were analyzed by SPSS using descriptive and inferential statistical tests especially multivariate regression.

**Results:** Among health components, physical health ( $r=0.55$ ) and mental health ( $r=0.50$ ) had the highest correlation with total QWL score. The amount of explained variance in criterion variable (QWL) by the regression model was 40%. Table of coefficients demonstrated that the scores for mental health and spiritual health had greater contribution in the model than other health aspects. Physical health, psychological health, spiritual health, and environmental health explained 29%, 45%, 37%, and 21% variance in QWL, respectively.

**Conclusion:** The findings of this study demonstrated positive correlation between health aspects and QWL. Because the university employees spend a great deal of time at work and the quality of their work affects the entire organization, this finding can be useful to guide policy-makers and health experts in developing preventive and intervention programs in the future for promotion of the employees' health and organization.

**Keywords:** Employees, Health Aspects, Quality of Life.

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## Introduction

Higher education is considered critical to human development worldwide. Universities represent the main part of education systems. Without the presence of humans, organizations have no concept and even cannot be managed. Even despite the fact that the organizations have become technology-oriented, the human's role remains a critical and strategic factor for survival of the organizations and human resources are the most valuable asset for the organizations. It is the human that can make organizational decisions, propose solution, resolve organizational problems, enhance productivity, and define efficiency and effectiveness.

Employees spend a great deal of their time at work. Moreover, because the factors that put the

employees' physical and mental health or quality of life at risk are growingly increasing, it seems necessary to identify the factors that may endanger or enhance their quality of life (1).

The QWL among an organization's employees can affect its efficacy and quality positively or negatively. To promote the QWL, the organizations need to identify the factors that are effective on this variable so that they can take measures to improve it more efficiently. The employees' lifestyle is one of the factors that plays a very fundamental and significant role in the QWL. During the past 30 years, the World Health Organization (WHO)'s definition of lifestyle has led to a more comprehensive

understanding of the determinants of healthy and safe lifestyle.

Salvador et al. argue that quality of life consists of a collection of positive and negative health-dependent habits, and through assessment of a person's lifestyle, his/her individual and social situations can be assessed (2). The behaviors that people adopt in life affect their health and improvement of their quality of life. There are numerous physical, mental, social, spiritual, and even environmental risks that may lead to adverse outcomes for people, including excessive exposure to the sunlight, gases, and chemicals.

People's lifestyle and behaviors affect their health and improvement of their quality of life. According to a study conducted by the WHO, around 60% of people's quality of life and health is dependent on personal lifestyle and behavior, and evidence has demonstrated that lifestyle and general health are correlated. Over 53% of the causes of mortality in the community are related to lifestyle (3).

Gayathiri and Ramakrishnan's study demonstrated that high quality of life was associated with increased job satisfaction and organizational performance (4). Promotion of healthy behaviors causes the employees' QWL to enhance and the costs due to job-related healthcare and other problems to decrease, otherwise national economy is heavily affected. A number of studies have recently been conducted to investigate the association between different variables and the QWL.

Shojayy and Khazayi's study demonstrated that there was a significant association between spiritual leadership and the QWL (5). Dehghan Marvasti and Rasoli's study indicated a significant association between the teachers' QWL and mental health and their organizational performance (6). Lee et al.'s study showed that there was a significantly remarkable correlation between active personality and creative working behaviors in the teachers (7). de Carvalho et al.'s study on 318 Brazilian 48-year-old workers reported that the workers without any job-related musculoskeletal disorder attained higher scores for the quality of life in terms of functional ability as well as physical and social aspects (8).

Moreover, a number of studies have investigated and confirmed the association of

lifestyle components and health aspects with the QWL (9-11). Each of these studies has investigated independent aspects. Regarding such gap, the present study was conducted to investigate the role of important and different health components (spiritual, mental, physical, social, and environmental) to predict the QWL. The research question of this study is whether there is an association between health correlates and the QWL among university employees.

## Methods

The study population of this descriptive-correlational and correlational study consisted of all nonteaching employees of the Islamic Azad University, Lahijan Branch. According to Hooman's study, because the number of variables and components is determined according to the study population, the sample size was determined to be 130 people (12).

The participants were selected by convenience sampling. To conduct sampling, the questionnaires (demographic characteristics questionnaire and two questionnaires to investigate lifestyle and the QWL) were developed according to the sample size and sample population, and then administered to the participants. The inclusion criteria were being full-time nonteaching employee of the Islamic Azad University, Lahijan Branch, having an educational level of at least high school diploma, and volunteering to participate in the study. The participants were told to complete the questionnaires anonymously and that their responses would be kept confidential and be only available to the researcher.

Lifestyle Questionnaire that was developed by Laeli et al. consists of 68 questions that measure 10 factors using Likert scale. In the current study, five components (physical health, mental health, spiritual health, social health, and environmental health) were investigated. Cronbach's alpha coefficient in this questionnaire was derived 0.86-0.89 in Laeli et al.'s study. Furthermore, the test-retest reliability coefficient of this questionnaire was derived 0.84-0.94 (13). In the present study, Cronbach's alpha coefficient in the lifestyle questionnaire was derived 0.93.

Questionnaire for the QWL that was developed by Walton in 1973 consists of 26 items rated by 5-point Likert scale and measures the QWL in eight aspects (safe and sufficient payment, safe and healthy working environment, providing opportunities for continuous growth and security, social dependence of working life, the overall atmosphere of life, integration and social cohesion in the organization, the rule of law in the organization, and development of human capabilities).

Hosseininasab reported the reliability coefficient of the QWL questionnaire to be 0.83 (14). In the current study, Cronbach's alpha coefficient of the QWL questionnaire was derived 0.94.

The data were analyzed by a new version of SPSS using descriptive and inferential statistics such as multivariate regression to predict the QWL using lifestyle components.

## Result

Descriptive findings showed, in health aspects, physical health has a Mean±SD of 3.74±22.58, mental health, 3.47±21.74, spiritual health 3.41±20.57, social health 4.35±22.24, environmental health, 3.48±19.06 and quality of working life 1.66±75.77 respectively. The highest average physical health and lowest environmental health is concerned.

There was a significant correlation between all health aspects and the QWL total score that provides the prerequisite to use regression for prediction. Among the health aspects, physical health ( $r=0.53$ ) and mental health ( $r=0.50$ ) had the highest correlation with the QWL total score.

The highest mean value was obtained for physical health (22.58) and the lowest for environmental health (19.06).

Table 1 shows Pearson's correlation coefficients between the scores of health components and the total score of the QWL. There was a significant correlation between all health

aspects and the QWL total score that provides the prerequisite to use regression for prediction. Among the health aspects, physical health ( $r=0.55$ ) and mental health ( $r=0.50$ ) had the highest correlation with the QWL total score.

To investigate the predictive role of health components in the QWL, simultaneous multivariate regression was used. Tables 2 summarize the results of the regression coefficients. The health correlates explained 63% of variance in the QWL total score. In addition, the standardized  $\beta$  coefficients to assess the variables' contributions demonstrated that among the health aspects, mental health ( $\beta=0.45$ ), spiritual health ( $\beta=-0.37$ ), and physical health ( $\beta=0.29$ ) played greater roles and social health ( $\beta=-0.01$ ) a weaker role in predicting the criterion variable, i.e. QWL.

Table 2. Regression coefficients of health aspects and their role in predicting quality of working life

Predictive variables	B	SE	B	T	Sig
constant	17.58	8.34		11.2	0.03
Physical health	1.31	0.46	0.29	2.84	0.005
mental health	2.17	0.57	0.45	3.83	.000
Social health	-0.04	0.54	-	-	.091
			0.01	0.01	
Spiritual health	-1.8	0.6	-	-	0.003
			0.37	3.31	
Environmental health	1.01	0.49	0.21	2.05	0.04

## Discussion

The present study was conducted to investigate the association between the health correlates and QWL and the predictive role of the health aspects in the QWL among the employees of the Islamic Azad University, Lahijan Branch. The findings of this study demonstrated that all health aspects were significantly correlated with the QWL score. In addition, the health aspects (predictive variables) had significant contribution to explaining the variance in the QWL. Similar

Table 1. Pearson's correlation coefficients between health components and quality of working life

Components	Physical Health	Mental health	Spiritual health	Social health	Environment health
Mental health	0.68**	1			
Spiritual health	0.47**	0.7**	1		
Social health	0.48**	0.62**	0.76**	1	
Environmental health	0.59**	0.54**	0.6**	0.66**	1
Quality of working life	0.53**	0.5**	0.21*	0.27**	0.40**

\* Significant at level of 0.05; \*\* significant at level of 0.000.

studies confirm the findings of the current study (4-11).

Moreover, Naghibi et al.'s study demonstrated that there was a positive correlation between the mental health aspect of lifestyle and the quality of life (15). Almasi et al.'s study confirmed the association between lifestyle components and the quality of life (16). Evidence indicates that strong religious beliefs, spiritual interests, prayer, and rituals affect physical and mental health positively (17).

Taken together, the health aspects can predict the QWL according to the findings of this study. QWL refers to the employees' reaction to work especially its essential outcomes in satisfying job needs, consisting of eight components, i.e. safe and sufficient payment, safe and healthy working environment, providing opportunities for continuous growth and security, social

dependence of working life, the overall atmosphere of life, integration and social cohesion in the organization, the rule of law in the organization, and development of human capabilities.

Consistently, health promotion is the WHO's purpose up to 2020. Accordingly, in the light of this study's findings, different organizations and institutes can take appropriate measures to promote healthy behaviors in the community to provide physical, emotional, mental, and social health and subsequently quality of life in different conditions especially at work.

Among health aspects, physical health and mental health had the most significant correlation with the QWL. According to the standardized  $\beta$  coefficients to assess the variables' contributions, among the health aspects, physical health was the third leading component to affect the QWL, criterion variable, most markedly, i.e. the higher the health score, the higher the score for the QWL.

Consistent with the findings of a study (9), to explain these findings, we can argue that a person who is physically healthy is more likely to have high levels of physical power and force, to exhibit more efficient presence at work, to cooperate with his/her co-workers better, to act better in other job aspects, and generally to have better QWL and vice versa. Physically unhealthy lifestyle affects the QWL.

The mental health aspect was the second leading component to have the most significant and positive correlation with the total score for the QWL, i.e. criterion variable. According to the standardized  $\beta$  coefficients to assess the variables' contributions, among the health aspects, mental health was the first leading component to affect the QWL most markedly, which has been confirmed by Mazloum and Durban's study indicated that mental health was associated with the QWL and organizational performance, and mental health predicted 16% of variance in regulated job control (18). Mafi's study suggested an inverse correlation between the lifestyle (stress) and the quality of life (19).

To explain this finding, we can argue that relief of stress and life tensions as well as provision of mental health for people can provide conditions to have better quality of life; indeed, one who has higher peace, less frustrations and psychological conflicts, and higher levels of mental health is more likely to exhibit better performance and quality in other life aspects especially job and all job aspects. Such person has better problem solving, human resources management, and social skills. Moreover, the efficiency of the cognitive system increases through appropriate approaches to cope with life tensions and mental peace. As a result, these people are innovative in doing their organizational jobs, which results in increased efficiency of work and organizational performance. These people are adequately familiar with specified duties and set purposes and expectations, they know all job areas and how to respond or behave in different situations and in facing job challenges, and have better job control and higher levels of organizational performance. Such people, therefore, do not develop confusion and doubt in playing their professional role, and take action via controlling their emotions and using problem solving skills instead of evading or avoiding the difficulties.

Spiritual health was the second leading component to have the most significant effect on the QWL, i.e. criterion variable. Evidence indicates that having religious beliefs provides physical and mental health, and generally the quality of life (19). According to the projections

of the WHO's Commission on Social Determinants of Health (2008), biological and genetic factors, behavioral factors, health care system, and social conditions are 5%, 30%, 10%, and 55% effective on health. Spiritual aspect has fundamental, lasting, and useful effects on all effective factors on health, i.e. biological and environmental factors, health care services delivery system, and in particular social factors (20)

Much evidence has demonstrated that religion plays a significant part in people's life. Those people who have religious beliefs enjoy higher levels of physical and mental health, develop depression, anxiety, and certain diseases such as cancer and cardiovascular diseases less frequently, and are less likely to attempt suicide. Besides that, mortality rate in such people is lower (3).

Chica et al., cited by Edlin and Golanty, reported that religion/spirituality was associated with decreased mortality. The protective effect of spirituality can be attributed to attending religious ceremonies and institutions. When religious people experience the world's uniqueness, forget themselves, or understand the presence of God, the temporal lobe of the brain is activated, spiritual awareness enhanced, and therefore health promoted (21).

Schools and religions offer lifestyle to humans and claim that the ideal society and healthy life are realized by conformity to lifestyle they have offered.

In the recent years, the role of spirituality and religion in disease and health has increased in significance, and it has been suggested to incorporate spirituality into the biopsychosocial model. According to the findings, strong religious beliefs, spiritual interest, prayer, and rituals can positively affect physical and mental health. This argument can be explained by the fact that people can have healthy and emotional communication with each other through attending religious ceremonies, which causes development of a sense of empathy, altruism, solidarity, and friendship among people, provides social support, and increases patience and tolerance in dealing with difficulties. As a result, quality of life increases significantly in other environments, in family, and at work

where people spend a great deal of their useful time. According to monotheistic culture, through believing the existence of God as the creator of human, one is obliged to base all his/her voluntary behaviors according to monotheistic teachings. Accordingly, except for biological and vegetal processes that are spontaneously running according to divine laws, all voluntary behaviors, individual and social practices, should be performed according to divine ordinances.

Indeed, religion can help humans enhance their adjustment and psychological well-being through providing appropriate context to resolve certain basic issues such as identity and selecting a way of life that leads to perfection. Consistently, Ericsson argues that when one fails to find cultural and family positive values, he/she may face ideological clutter and his/her identity is likely to disintegrate. Religion can therefore help achieve individual and collective identity.

Spirituality leads to formation of spiritual beliefs and faith in job, which serves as internal stimulus in staff that is conducive to their occupational development and accountability. Because most respondents did not respond to items on personal lifestyle, the questionnaires were completed by convenience rather than random sampling, which can be considered a limitation of the current study. However, to the best of our knowledge, no study has yet investigated the concurrent effect of most health aspects on the QWL, which can be strength of this study.

## Conclusion

Staff spend a great deal of time at work and higher levels of the QWL can lead to certain outcomes such as enhanced productivity in the organization, job satisfaction, and improved intrapersonal factors. This study demonstrated that all health aspects (physical, psychological, social, spiritual, and environmental) were positively and significantly correlated with the QWL. Meanwhile, the greatest contribution to prediction was derived for psychological health followed by spiritual health. Therefore, studies to investigate causal relationship between these variables and develop interventions to promote

psychological and social health can help improve the QWL.

### Conflict of interest

The authors declare no conflict of interest.

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