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Dear Author(s),

Corresponding Author: Dr. Hossein Khanifar

PhD, Associate Professor, Faculty of Management, College of Qom, University of Tehran, Iran

Ali Alimadadi

MA Student in Executive Management, College of Qom, University of Tehran, Iran

Sayed Mojtaba HosseiniFard

MA Student in Human Resource Management, Shahed University, Tehran, Iran

We have completed the evaluation process of the article entitled **“Job Satisfaction Is a Great Mediator in Persived QWL: The investigation of Work Life Quality Status for IT User Employees (An Empirical Survey on Universities Based in Qom Province in Iran)”** by 3 reviewers.

We are pleased to inform you that your paper has been accepted for publication in **Volume 4, Issue 5** of the **“Innova Ciencia”** Journal.

Thank you for contributing to our journal. Should you have any question, please contact us.

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Job satisfaction is a great mediator in perceived QWL: The investigation of Work Life Quality Status for IT User Employees (An empirical Survey on Universities Based in Qom Province in Iran)

Hossein Khanifar

*PhD, Associate Professor, Department of Management, College of Qom, Tehran University, Iran
(sm.hosseinifard@alumni.ut.ac.ir)*

Ali Alimadadi

MA Student in Executive Management, Department of Management, College of Qom, Tehran University, Iran

Seyed Mojtaba Hosseini Fard

MA Student in Human Resource Management, Shahed University, Iran

Abstract

Effective human resource is the most important aspect of every organization. Almost all experts consider human resource as the most vital resource for organizations. They believe that this resource should be enhanced as the main asset of every society, triggering them to attempt more to make their society progress using proper policies. As Gordon believes, the only thing considered as competitive advantage today is quality people. In fact, people are the soft asset and the hidden value of any organization (Wyatt, *et al.*, 2007: 501). Therefore, paying attention to work life quality of people is vital.

Purpose: This article aims at studying the current situation and the effect of research variables on the work life of the staff who are information technology users in selected universities based in Qom province of Iran.

Initially, with the aim of achieving a precise understanding of QWL, the existing definitions of the issue were studied. Then, the authors dealt with the elements of QWL, namely health and well-being, job security, competency development, balance between work life and non-work (personal) life (Rethinam, Ismail, 2008: 67) these elements were put in a survey to be analyzed.

Methodology: Two questionnaires were used as the tools of this study. The first questionnaire contained 23 questions to assess the current situation and the effect of research variables on the recognized level of QWL among IT users. T-test was performed as well as confirmatory factor analysis using SPSS and AMOS software tools. The second questionnaire based on AHP method and using implemented software in an MS Excel environment aimed at apprehending the priority of research variables among the sample members.

Population/ sample: The population of this research included employees who use IT in the universities based in Qom, in which 143 filled forms were collected using cluster sampling, and finally, with the omission of 23 irrelevant forms, the sample included a number of 120 forms.

Findings: Data analysis showed that there is a significant direct correlation only between *job satisfaction* and *health and well-being*, which is intervened by *job satisfaction* variable.

Key Words

Quality of work life (QWL), IT users, stress, Job satisfaction, Job security, competencies, balance between work life and non-work life

INTRODUCTION (Problem Description)

Efficient human resource is the most important asset of every organization. The more high quality the human resource is, the more success and enhancement opportunities are. Therefore, huge amount of emphasize should be placed on improving the quality of human resource to provide benefits for the organization as well as the employees. Desired use of human resource is dependent on actions taken to guard people's minds as well as their bodies, which include welfare and healthcare facilities, reward plans, job security, respecting the role and the position of individual people in the organization, providing the environment for people's growth and progress, etc. These actions are generally called *quality of work life enhancement*. *Quality of work life (QWL)* programs include any type of improvement in organizational culture that supports employees growth and excellence (Filipo, 1987: 412).

Since there is a direct relationship between human resource management procedures and the quality of work life, reviving people through enhancing the quality of their work life is the key to the success of every organization. Hence, today managers' concerns about the quality of work life is a reflection of the importance that all businesspeople give to the issue. Some experts believe that one of the reasons why productivity has stagnated as well as the quality of production in industrious countries is deficiencies of work life and the change of employees' interests as well as priorities. Employees ask for more participation and supervision in their own works. The importance of nonfinancial rewards is increasingly known more rather than financial ones, particularly for those employees who have higher education. In addition, employees react better when they are respected and participated in making decisions (Dolan and Scholes, 2002).

Regarding the time and the energy that employees consume in workplaces, it is important for them to be satisfied by their work life. Therefore, work conditions affects not only their physical but also their psychological health. Thus, if organizations are concerned about achieving a competitive advantage in the market, they should pay attention to human resource as one of the most valuable assets of their own (Wyatt, *et al*, 2007: 501)

In recent few years, some research has been done in order to identify the vital contribution of employees' health on the overall performance of organizations. Most authors consider a relationship between quality of work life job consequences and ethics, productivity, corporate social responsibility and organizational performance (Koonme, *et al*, 2009: 1). However, according to our search in domestic information centers as well as theses and research reports, there is no considerable piece of research performed in this regard, while the nature of Information Technology users has brought new situations for them in the work environment, which Robbins (2001) believes to bring a hard time for IT experts in terms of QWL.

No doubt, all other occupations have a capacity to influence the work and non-work life balance, but some occupations are potentially more influential than others. Bagnara, Mariani and Parlangei (2001) have reported that work within the high technology and continuously facing uncertainty are potentially more stressful than others. Martinsons and Cheung (2001) further argue that continuous changes in work related factors directly or indirectly affected the IT professionals. Indeed these changes demand them to perform thus; an effective measure to handle its consequences is the responsibility of the

organizations. Therefore, one of the ongoing concerns among the IT industries is to mitigate the effects of changes in work environment on job satisfaction, work performance, reliability, health and comfort. Understanding the constructs of QWL among the IT professionals is essential to provide substantial strategies to counteract such surges (Ref. De Jonge et al., 2000; Andries et al., 2002) especially in the technologically emerging societies of Malaysia (Rethinam, Ismail, 2008: 60).

Therefore, authors in this article are to study and model IT user employees in universities with the main question of "how is the status for IT user work life in the selected universities based in Qom province?"

A Brief Review of the Literature

Quality of Work Life

Quality of work life is defined as a method or an approach that identifies specific methods and techniques for altering the work (Mesut, 2006: 174) As Armstrong puts it, quality of work life is the satisfaction of employees' needs through the resources, the activities and the results of engagement and participation in their work environment. As he states, many researchers have found that the quality of employees' work life is affected by their experience and their future state of work (Armstrong, 2006: 174). Quality of work life is to satisfy different needs of employees such as social, esteem, the need to use skills and so on (Cheung & Tang, 2009: 3).

Given the mentioned definitions and regarding the nature of contemporary work life, we put QWL as the efficiency and usefulness of work environments. In fact, work environments efficiency affects the direction of employees' needs and shaping values paying attention to which paves the way to achieve health, welfare, job satisfaction, job security, improving the level of capabilities, and balancing work life with non-work life. Such an attitude makes it all important to consider QWL for IT user staff.

During last few decades, six different approaches have been proposed and evolved as mentioned in table 1.

History of QWL

The History of QWL through different eras is shown in the table 2.

Table 1. Evolution of quality of work life definitions

period	Quality of Work Life Definition
1969-1972	<i>First:</i> quality of work life = a variable (employees' reaction about work, individual results such as job satisfaction and psychological health)
1969-1975	<i>Second:</i> quality of work life = an approach (implementing common projects between employees and managers aiming at improvement of individual results firstly, and organizational results secondly.
1972-1975	<i>Third:</i> quality of work life = methods of technologies for enhancing work environment as well as rendering it more productive and satisfying (synonym to concepts such as Autonomous Work Groups, job enrichment, etc.)
1975-1980	<i>Fourth:</i> quality of work = a movement (with the ideals of Participative Management and Industrial Democracy)
1980-1990	<i>Fifth:</i> quality of work = a major social issue and a universal concept. In other words, all organizational improvement and effectiveness attempts are considered as some parts of QWL.
1990 till now	<i>Sixth:</i> quality of work life = an ethical issue (one of the basic core values of organizational behavior)

(Nadler & Lawler, 1983, 22-26; Masjudi, 2010, 19-23; Shahbazi, 2007, 19)

Table 2. History of QWL

Period	History of QWL
1950-1959	QWL was first suggested in the Europe during 1950s based on the research conducted by Eric Trist and his colleagues in Tawistak University of London in the fired of human relations.
1960s	QWL reached America, and unlike Europe, this kind was more complex and composite in which different approaches were used. In this regard, the preventive activities of Robert Ford in AT&T lead to creation and application of job enrichment activities in the private as well as the public sector (Ma'danipur, 2002: 7).
1972	The term <i>quality of work life</i> was first proposed in the International Conference of Workforce Relations and continued to be viewed as a) a movement; b) a set of organizational interferences; c) some kind of employees' work life (Kandasamy & Ancheri, 2008: 2).
March 1972	The only event that brought public attention to the issue was the strike of approximately 8000 employees in a General Motors' new factory in Lordstown, Ohio. On that occasion, both workers and managers blamed GM senior managers for reducing the number of workforce while speeding up the work in the assembly line (Masjudi, 2010, 15).

The issue of QWL was not a coherent theory until 1970s. Afterwards, however, two stages are considerable for QWL related activities as below:

Stage one: during 1969-1974: the mentioned three factors as well as inflation and costs of energy brought US governmental bodies and other companies' attention to what called "quality of employment" or "effects of job experiments on people" (Nadler & Lawler, 1983: 20-30).

Stage two: the second wave launched in 1979 until now, the most important factor of which is international competition. USA faced an increasing competition in international as well as domestic markets because of imported products. Americans thought as to whether other countries do a different thing than they do in terms of management. Japanese management received the most attention in this regard. Accordingly, the issue of QWL was considered again as a managerial issue as to what is it really and literally, and how its concepts can be used for improving employees' work life (Me'marzadeh & Asadi, 2008).

Quality of work life criteria

Culture in every society shapes on the basis of that society's philosophy. Therefore, like quality of life and quality of work life in different societies, quality of wok has a unique definition for every society (Salmani, 2003: 77). Quality of work life has a specific definition for every ethnic and every society so that no universal definition could be proposed for it. Different scholars have proposed different definitions for Quality of work life as well as different criteria, some of which are listed in table 3.

Table 3. Quality of Work Life Attributes

Authors	Quality of Work Life Attributes
Walton(1975)	1. Being fairly and adequately paid off 2. Secure healthy work conditions 4. Being provided with growth opportunity 5. Social dependency of work 6. General life space 7. Human capability development 8. Social coherence and integration in the work organization
Stein(1983)	1. Independence and self-authority 2. Being identified as an important person 3. Assets and belongings 4. Development and progress 5. External rewards
Levine, Taylor and Davis (1984)	1. Being respected by managers and being trusted in terms of capabilities 2. Job rotation 3. Work challenge 4. Future progress opportunities deriving from the current job 5. Self-esteem 6. Adherence between work and life 7. Contribution towards society from the work
Cai Hui-ru (1994)	1. Life quality: compensation, welfare, job security, job support 2. Social quality: the relationship between managers, coworkers and customers 3. Growth quality: participative

Jia Hai-wei (2003)	management, promotion, individual growth, self-esteem and job specifications 1. Need for survival 2. Need for passion 3. Need for affiliation 3. Need for oneself
Chen jia-sheng, Fan jing-li (2000)	1. Work environment 2. Compensation 3. Welfare 4. Promotion 5. Job nature 6. Training and development 7. Managers leadership style 8. Collaboration among coworkers 9. Organizational image 10. Communications 11. Organizational regulations 12. Culture and organizational atmosphere 13. Work time and work pressure
Qing tao, peng tian-yu and lou jian(2007)	1. Work duties: work independence, importance of duties, work feedback, importance of work 2. Organizational environment: team morale, interpersonal relationships, management style 3. Social psychology: psychological and social support, bilateral respect, social image of the organization, economic position
(Mirkamali, 2008: 77)	
Rethinam and Ismail(2008)	1. Health and well-being 2. Job security 3. Job satisfaction 4. Competency development 5. Creating an understanding of QWL.
(Rethinam and Ismail, 2008: 60)	

Having different models and theories investigated, Rethinam and Ismail's model was selected as the most suitable by the authors in this study (Rethinam, Ismail, 2008: 60). The model was then exposed to expert opinions and its comprehensiveness was confirmed for applying in the target population. Afterwards, based on the existing theories and experts' opinions, causal relationships between the elements of the model were revised and the research model was determined, which is illustrated below:

1. Health and well-being

Health and well-being as a part of QWL is concerned with people's physical as well as psychological aspects. This factor is included in the model to help ensuring the environment as lacking psychological pressures for employees, providing them with the possibility of performing their daily activities and job duties without any obstacles. As a result, tensionless work environment brings comfort to the work life.

Job stress is a term to describe the stress rising from job environment. Robbins classifies these factors into three classes, namely environmental, organizational and individual (Jandaghi, *et al.*, 2011: 25).

Parker and Decotiis describe the term as an awareness or a personal understanding of a disruptive event, which is derived from the work conditions and leads to psychological, physiological and behavioral reactions to these conditions (Nasurdin, *et al.*, 2006, p 118).

2. Job Security

Job security is described as maintaining one's own job at present and in the future so that one can satisfy his/her own future needs. If Job security is threatened, other issues turn to be trivial (Rezaian, 2006, 108).

3. Job Satisfaction

Job satisfaction is the overall attitude of an individual toward his/her job as well as the level of emotions and positive attitudes that an individual has about his/her own job (Sanagu, 2009: 7).

4. Developing Competencies

A piece of knowledge that lacks conceptualization is in fact a piece of information. To become a piece of knowledge, a piece of information needs to be interpreted by a person and be composed with his/her opinions as well as commitments. Wisdom will be derived from understanding the knowledge. If we apply our wisdom, we become skilled. By mixing different skills, one becomes an

expert. When having confidence about our expertise, we are masters (Hosseinifard et al., 2011; Nonaka and Takeuchi, 1995).

5. Understanding of QWL

According to researches, there is an interaction between work life and personal life so that there is a positive correlation between job satisfaction and life satisfaction. This interaction affects the whole quality of an individual's life and consequently affects his/her physiological and psychological health (Rezaian, 2006: 27-29).

Information Technology (IT)

In this section, a definition of information technology is presented before identifying the relationship between QWL attributes and Information Technology.

Definition of Information Technology and Its Users

Information Technology deals with studying, implementing, supporting and management of computer systems, especially computer programs. Briefly, Information Technology deals with issues related to using computers and application systems (Davari and Sahba, 2010: 18).

In this research, Information Technology users are "those people who use Information Technology and their work could to be done only by the continuous use of this technology". This people are potentially subject to some deficiencies in the five above-mentioned dimensions of QWL.

The relationship between IT and QWL

Making use of information technology downsizes organizations so that after 2005, medium-scale and large-scale organizations would be, according to research reports, 30 percent smaller in terms of physical assets and the number of employees. Such a situation brings certain conditions to organizations so people would bear more skepticism and pressure which may threaten their capabilities. In addition, the balance between work and daily activities will be affected by this new situation.

The relationship between the five criteria of QWL and information technology related jobs is presented (Rethinam, Ismail, 2008: 61-66). Since the goal of this study is examining the model presented by Rethinam and Ismail in the application, all definitions and relationships are derived from their research:

1. Information Technology Versus Health And Lack Of Stress

(The nature of IT professions reflect a similar situation that continuously demanding and monotonous work environment that affects the brains resulting in exhaustion and decreasing in some of IT professionals' cognitive abilities).

Employees develop various symptoms of stress that can harm job performance, health and even threaten the ability to cope with the environment

The symptoms of techno stress are related to physical and psychological conditions such as backache, uncertain tempers, ulcers, acne, insomnia, low morale and job-hopping. On the other hand, resistance to learn and keep up with IT or

rejection of the technology due to individual ambivalence, reluctance or fear of IT also causes stress particularly among seasoned IT professionals.

The majority of these studies showed substantial increase in neck, shoulder and hand or wrist problem among those working for longer hours with poor ergonomic practices while working on a computer.

An unstressful workplace is not merely from the financial reimbursement or other benefits that matter. It is a feeling of fulfillment and gratification that the employees experience from working, thus it eventually provides a good health and well-being.

2. Information Technology Versus Job Security

Jobs in IT industries such as computer programming, software development, system analysis are highly paid but the chance to extend the contract is uncertain. Therefore, it is observed that IT industry has practiced high employment rate but low job security which has led to the intrinsic insecure work environments that lead to poor QWL.

The emergence of outsourcing and IT automation concept also has significantly fuelled the sense of job insecurity among IT professionals. As a conclusion, the unstable work nature and the way working culture are being diversified, point to a considerable impact on the job security among the IT professionals.

3. Information Technology Versus Job Satisfaction

Typically job satisfaction is defined as an employee's level of positive effect towards job or job situation that enhances quality of work life. The definition, however, evolves as the changes take place in work environment.

Traut, Larsen and Feimen (2000) suggested that a better understanding of job satisfaction will ensure a sustainable development of IT workforce. Although, job satisfaction has been studied ever since the emergence of concept of job (Lamond and Spector, 2000), it remains as one of the most heavily studied topics in the human resource management especially among the industry like IT which experiencing high turnover culture.

In summary, the scope of job satisfaction varies with the industries however, general concepts such as physical conditions that allow the utilization of the ability of employees, proud of working in an organization and a sense of belonging that leads to job satisfaction are among the items adopted in any study on QWL.

4. Information Technology Versus Competency Development

Therefore competency development is operationalized as the nature of the job that provides opportunities and stimulates growth in skills and knowledge either for career or organizational development.

Empirical research portrays that IT profession is associated with higher skill levels, greater employee responsibility and greater task complexity that lead to higher utilization of individual capabilities. Hence, individuals in such work scenario, who use more advanced technological infrastructures, are exposed to greater competency development (Wall, Cordery and Clegg, 2002). Learning opportunities and skill discretion have also proven to have a positive effect on job satisfaction and reduced job stress that will lead to better QWL. The opportunity to develop and the use of

skills is associated with learning mechanisms. This applies especially when the job requires employees to deploy cognitive skills. With respect to learning, greater autonomy on job enhances the acquisition and utilization of knowledge whilst greater participation is held to promote cognitive growth via increased knowledge transfer among employees (Scully, Kirkpatrick and Locke 1995). Such a job environment expands knowledge base, leads to a better understanding of how the job is related to other organizational practices and a greater ability to solve problems.

5. Information Technology Versus Understanding of QWL

The advantage of being able to work anywhere and at any time has blurred the boundaries of work and leisure hours. Ironically, with IT revolution and intensified virtual communications, workload and working hours among the workforce have increased.

The IT work environment is widely assumed to be a high-commitment workplace that forces the IT professionals to sacrifice their personal leisure hours to meet their work demand.

Traditional human resource policy practices that require the IT professionals to work long hours at the expense of personal time is believed to generate poor work family relationship. Working long hours consistently reflect poor health both physically and psychologically. Most studies on hours of work and health re-affirm that consistent long hours at work do reflect itself in employees' ill- health, both physical and psychological. As the IT work environment imposes its employees to work extended hours either at office or home, this might have tremendous effect on the marital and family relationship. There is a link between long hours and the breakdown of the family, primarily because in contemporary business environment an average family is a dual-earner family.



Figure 1. Constructs of QWL (Rethinam, Ismail, 2008: 67)

The balance is important particularly among the IT professionals in order to nurture and develop the sustainable human resource practices in the IT work environment. Therefore, balance between work and non-work life is suggested as one of the measures of QWL.

Research Background

Past Research in Iran

Some outstanding studied performed in other countries are as follows:

1. Masjudi, 2009, a study of the relationship between QWL and individual commitment of employees in National Iranian Oil Refining and Distribution Company (NIORDC)
2. Mehmandust, 2008, the relationship between QWL and organizational commitment of employees in physical training departments at the universities based in Tehran
3. Saifi, 2006, the relationship between QWL and organizational commitment of employees in university hospitals based in Sanandaj city
4. Qa'empanah, 2001, factors affecting the improvement of QWL for employees in the Defense Industry's Training And Research Institute
5. Senobari, 2010, the relationship between QWL and employees' performance in Refah Department Stores Company
6. Jamshidi, 2000, a study of QWL for employees of the daily rehabilitation center of Tehran Welfare Organization
7. Gohari, 1997, QWL and its implications on employees' performance in production sector

Background in Other Countries

Some outstanding studied performed in other countries are as follows:

8. Michael, 2009, the implications of QWL for organizational commitment
9. Skop, 2005, a survey on the QWL for 624 male and female employees in Information Technology Company
10. Chen Huang, 2005, the implications of QWL on organizational commitment
11. Kinzl, 2005, the implications of QWL for organizational commitment for job satisfaction
12. Surd, 2002, a study on the effects of QWL in universities and turnover intention
13. Donaldson, 2000, the effects of QWL on the level of organizational commitment.

Research Methodology

Research Model

Based on the study of various pieces of research and using expert opinions, and based on Rethinam and Ismail's proposed model, the model for this research presented as follows:

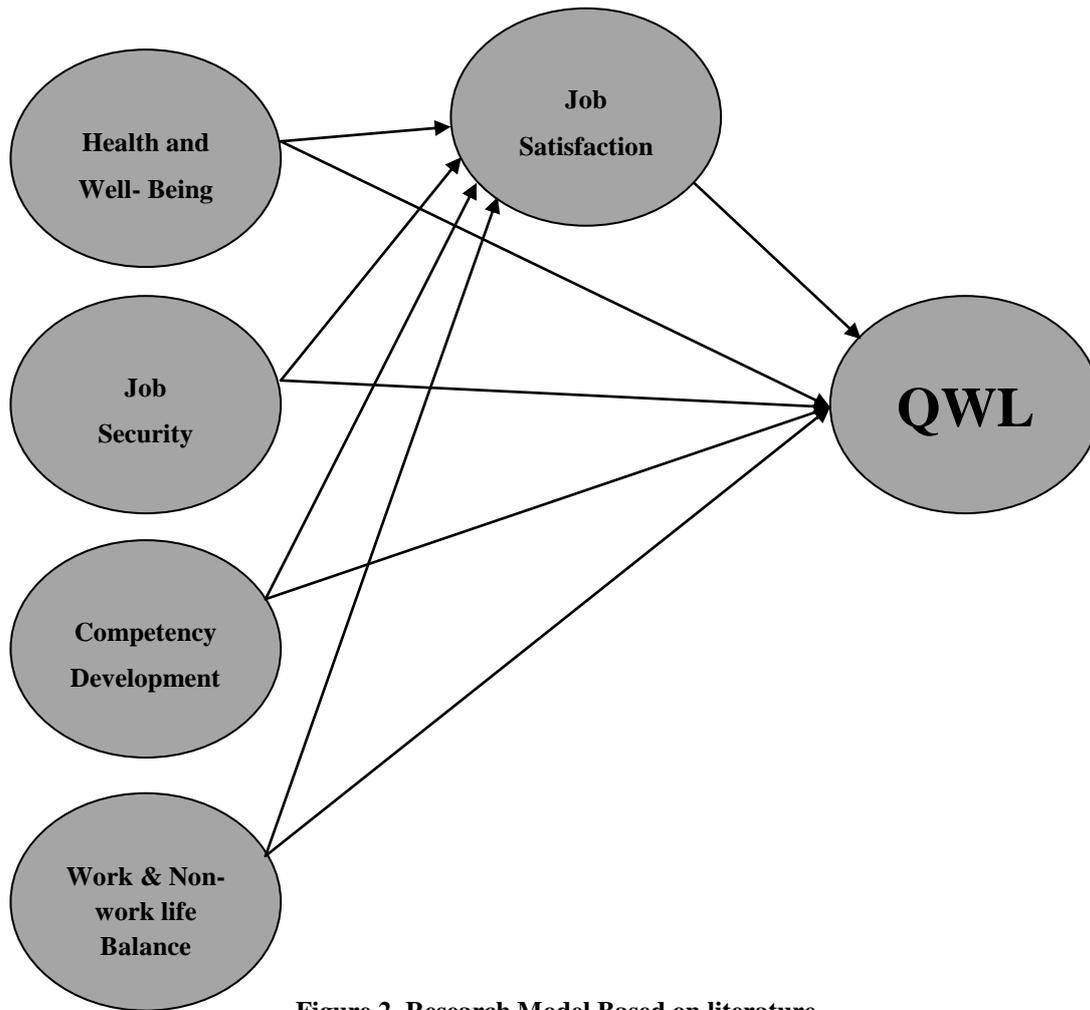


Figure 2. Research Model Based on literature

Research Objectives

1. Assessing the research model using structural equations tests.
2. Assessing the role of job satisfaction as the intervening variable in determining the quality of work life.
3. Assessing the quality of IT user employees' work life in the universities based in Qom.
4. Assessing the priority of sample selected opinions on quality of life criteria

Research Method and Type

The research is applied in terms of its objectives, and it is a field study survey in terms of data gathering method.

Research scope

The scope of this research is organizational behavior issues in general, and QWL related issues in particular. Time scope was autumn 2011 and place scope was some selected universities based in Qom province in Iran.

Population and Sample

The population of this study and sample includes those employees in the selected universities who, according to the definition mentioned in the literature review, are considered Information Technology users (those whose job is dependent on continuous use of IT). These employees are working at such organizational functions as informatics and networking, accounting and budgeting, virtual faculty, library lending system, etc. From these people, according to the sampling done, a number of 143 filled questionnaires were collected 120 of which were valid enough to be included in the analysis.

Data gathering tools

The tools of data gathering in this research were two separate questionnaires:

1. The first questionnaire was designed by the authors by selecting the most suitable questions from several international standard international questionnaires, which are verified by experts. In addition, in order to examine the reliability of the questionnaire, the Cronbach Alpha test was applied for a sample of 30 statistics. The resulting Cronbach Alpha Coefficient was 0.88, which is highly reliable.

Table 4. Number of questions used in the questionnaire for every aspect of QWL

Aspect	Number of Questions
Health and lack of stress	4
Job security	4
Job satisfaction	4
Competency development	4
Balance between work and non-work life	4
Understanding of QWL	3
Sum	23

This should be noted that after testing construct validity via Amos software, some of these questions have deleted. This has been shown in model fit graphics.

2. A questionnaire designed using AHP method, to examine the opinions of the sample members about different aspects of QWL. The concepts related to these five aspects were assessed via ten questions in nine paired comparisons.

Data Analysis and Findings

In order to perform factor analysis on the research variables, the results of the SPSS software tool were investigated about the KMO index and Bartlett test:

Table 5. Bartlett's Test & KMO Index

Bartlett's Test of Sphericity			KMO Measure of Sampling Adequacy ≥ 0.7
Sig	DF	Chi-Square	0.806
.000	253	1211.805	

A. Measurement model

To examine the relationship between the variables of the research, the Measurement model was discussed first. By investigating the outputs of the software tool, research data normality was verified initially. Then, to assess the reliability of

the model, factor load quantities were considered. Questions with a quantity less than 0.5 were omitted except the first question, which remained in the model though having a lower factor load due to its importance in the literature and passing acceptable construct reliability of CR=0.646

In order to determine the goodness-of-fit of the model, indexes of *Chi-Square*, *P-Value*, *Relative Chi-Square*, *RMR*, *GFI*, *NFI*, *CFI*, and *RMSEA* were used as well as ordinary rules for their acceptance. Verification of four indexes out of this set confirmed the goodness-of-fit of this model. The model obtained 53 percent of the variance of the population for the QWL variables.

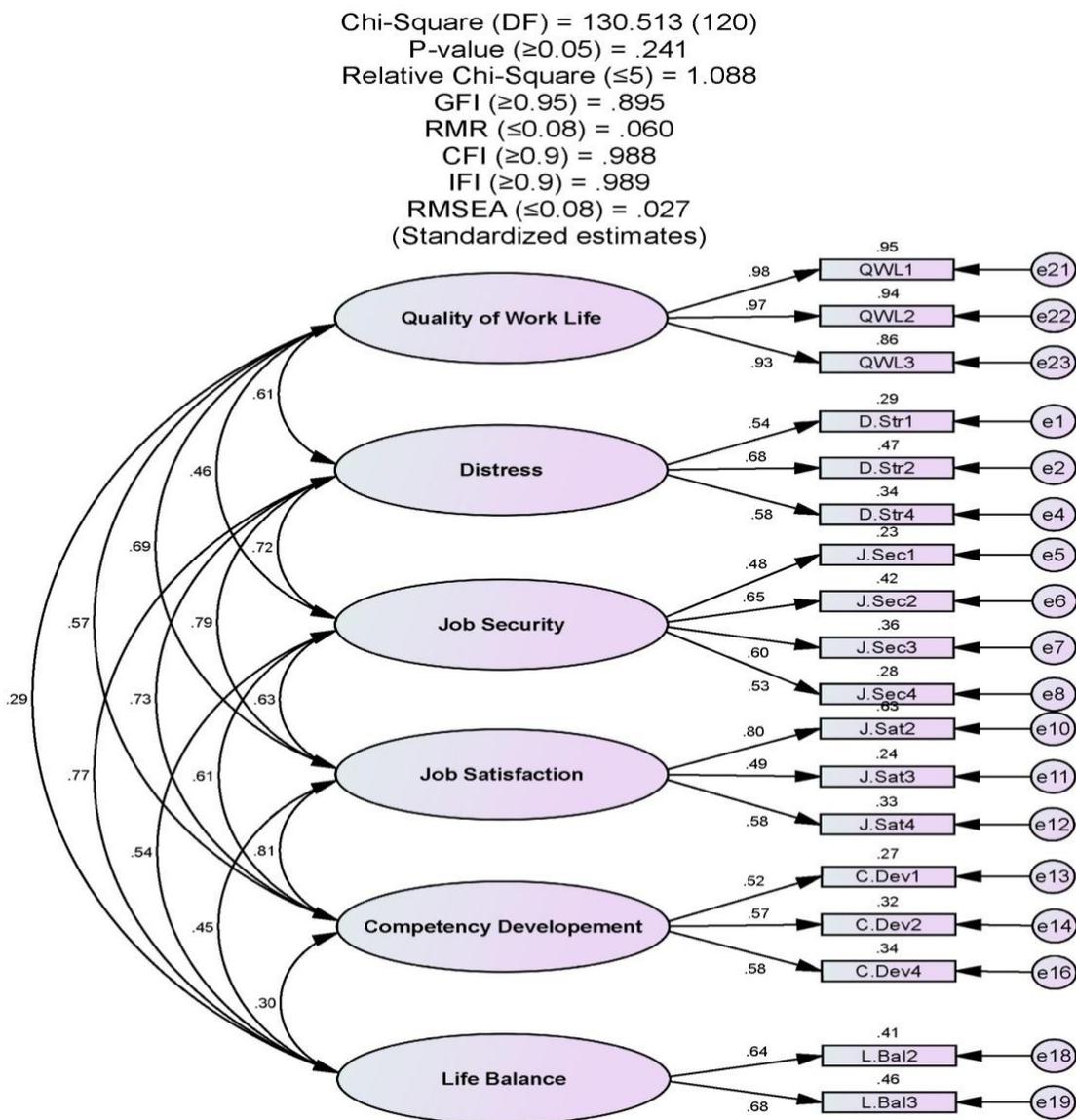


Figure 3. Measurement model

B. Structural model

Based on the criteria mentioned in the previous section, the structural model of the research has a proper goodness-of-fit. To determine the effect of each research variable, their direct effects are investigated as well as their indirect ones.

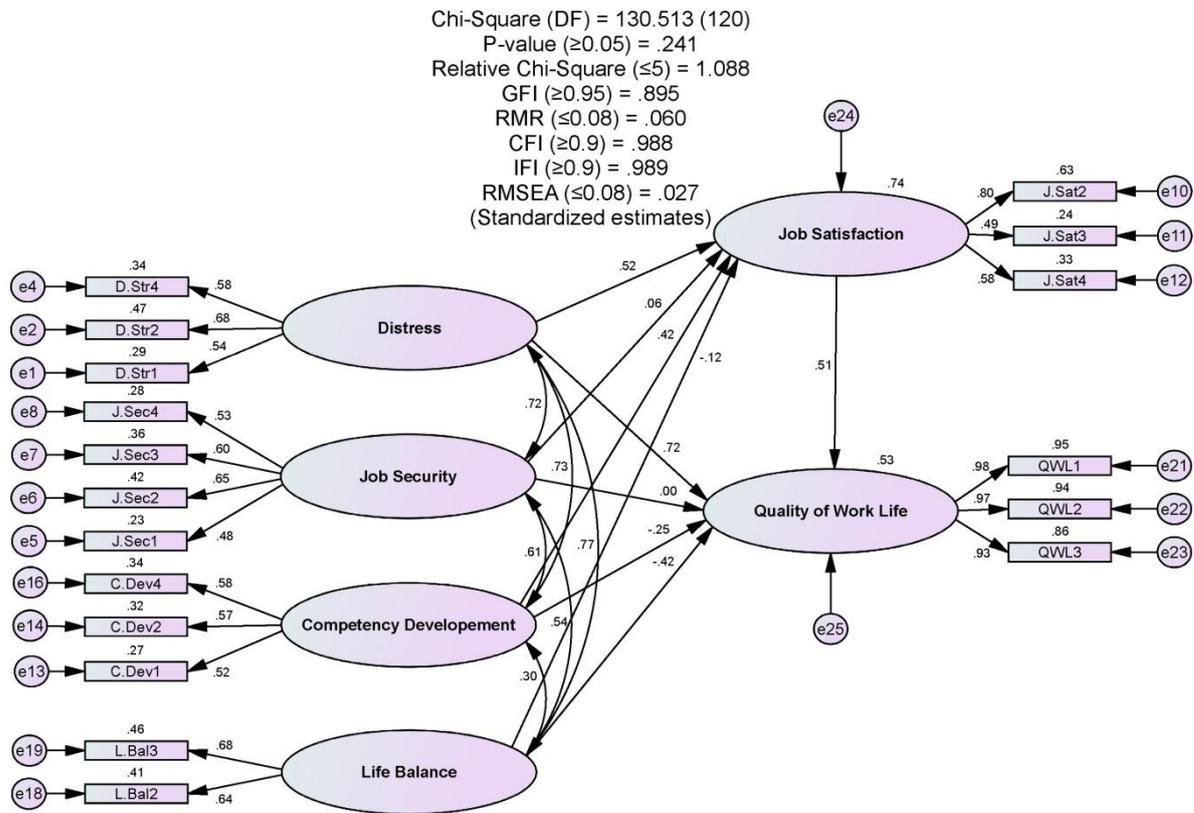


Figure 4. Structural model (Default)

Table 6. Direct effects

Variables	Non-Standard Weight	Standard Weight	P
Job Satisfaction ← Distress	.807	.523	.033
Job Satisfaction ← Job Security	.106	.063	.165
Job Satisfaction ← Competency Development	.751	.424	.393
Job Satisfaction ← Life Balance	-.157	-.117	.127
Quality of Work Life ← Job Satisfaction	.684	.505	.041
Quality of Work Life ← Health and well-being	1.505	.720	.097
Quality of Work Life ← Job Security	.002	.001	.297
Quality of Work Life ← Competency Development	-.592	-.246	.182
Quality of Work Life ← Life Balance	-.756	-.418	.234

Looking at the results rendered by the software tool, it is clear that direct impact significance is verified only for *job satisfaction* variable (0.505), while indirect impact significance is verified only for *distress* or *health and well-being* ($0.264 = 0.523 * 0.505$).

C. Direct and Indirect models

In order to measure the mediation of job satisfaction variable, the three models of the research were compared.

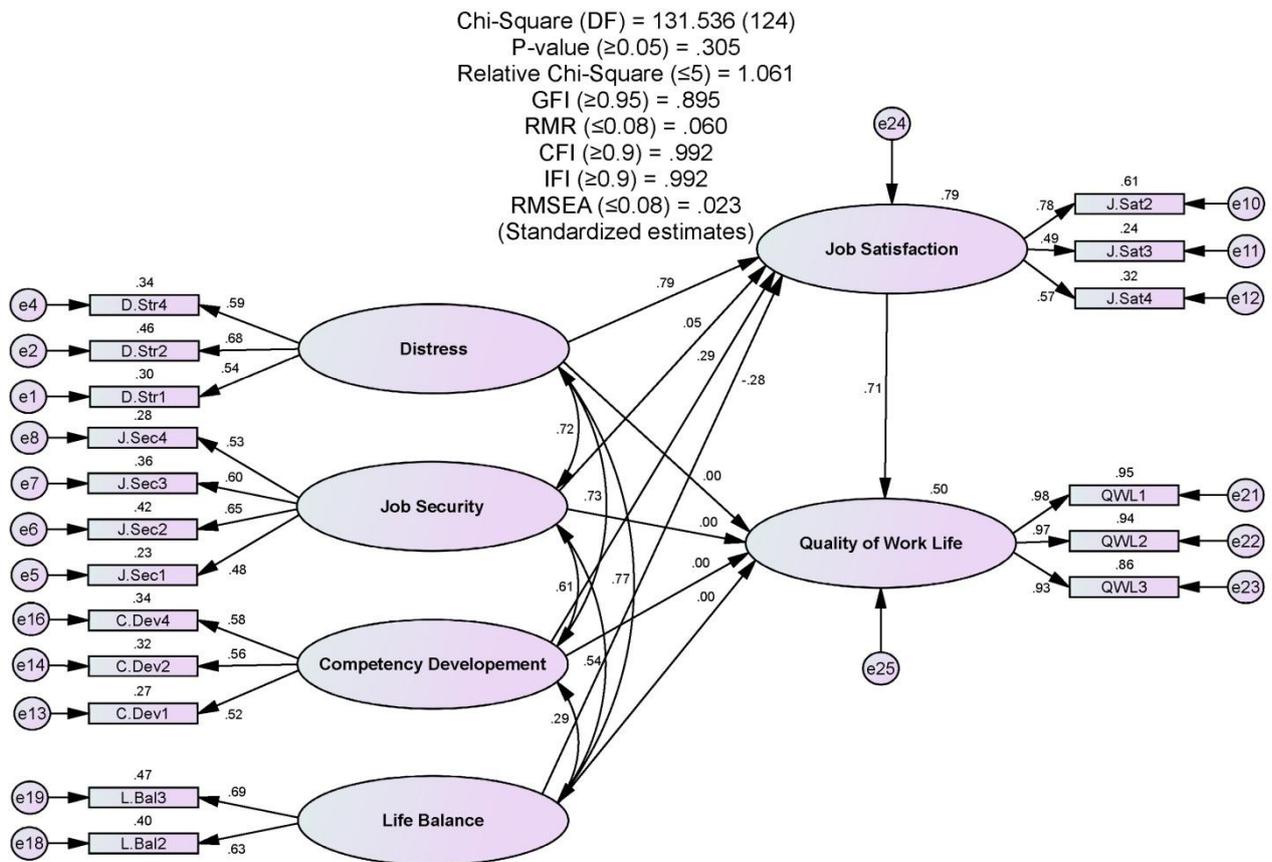
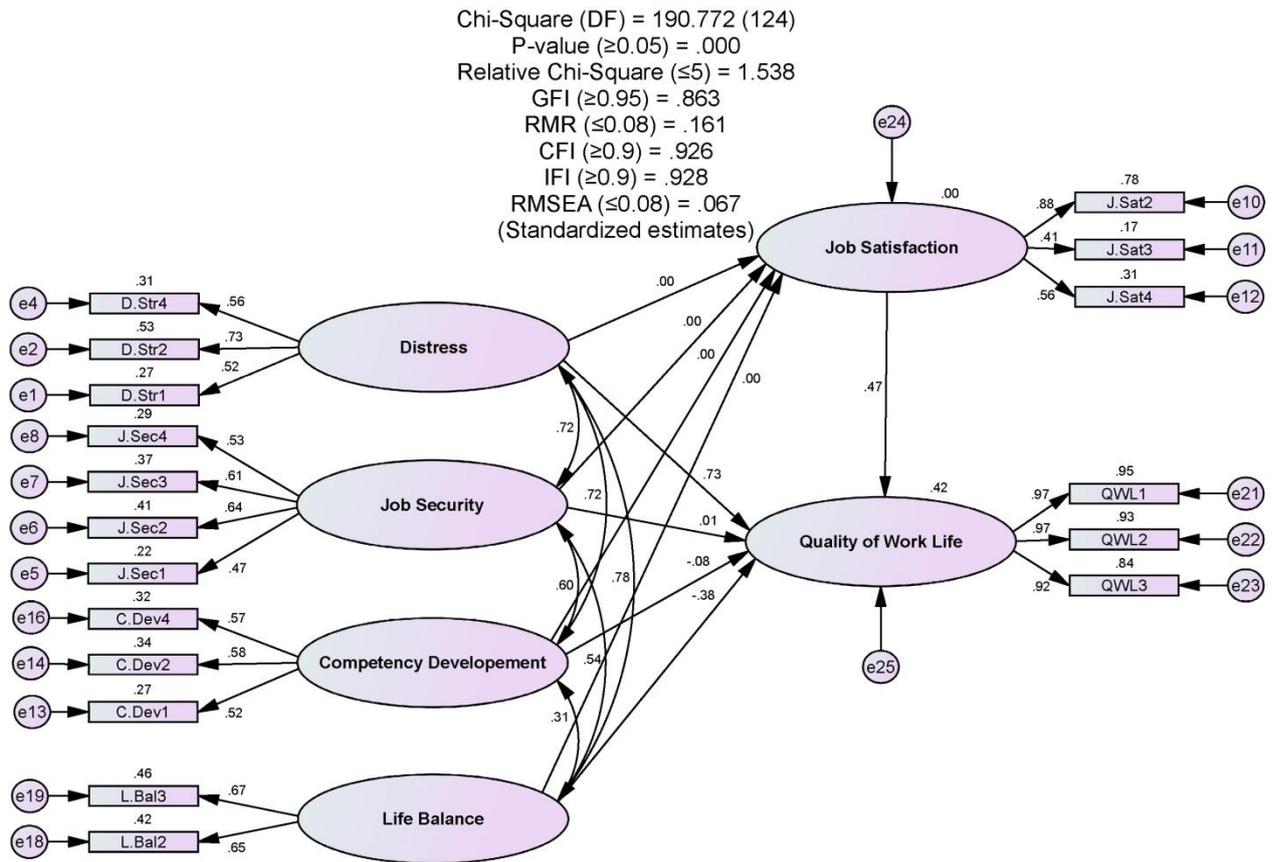


Figure 5. Other structural models (Direct and Indirect)

Results show that the direct model has better fitness indices than default and indirect models in the studied population. Moreover, the outputs of nested model comparisons show that both default and direct models can be obtained by constraining indirect model. Therefore, job satisfaction could be verified as a mediator.

Table 7. Assuming Default model to be correct

Model	DF	CMIN	P
Direct	4	60.259	.000
Indirect	4	1.023	.906

Analysis of the Population's Current Status

1. One Sample t test results ($H_1: \mu > 3, H_0: \mu \leq 3$)

To investigate the status of each research variable, the average value of every aspect was compared with the value of 3 (Likert mean) using t-test on the sample information. Results showed that except *job satisfaction* and *understanding QWL*, all research dimensions had a value of more than 3 in confidence level of 0.99 percent.

Table 8. One Sample t test results (Test value: 3)

Dimension tested	T-Statistic	Degree of Freedom	Single Domain Sig	Result
Health and well-being	13.72	119	0.000	H_0 rejected
Job security	8.419	119	0.000	H_0 rejected
Job satisfaction	0.693	119	0.245	H_0 accepted
Competency development	9.098	119	0.000	H_0 rejected
Balance between work and non-work life	11.427	119	0.000	H_0 rejected
Understanding of QWL	1.435	119	0.076	H_0 accepted

2. Independent Samples t Test results ($H_1: \mu_1 \neq \mu_2, H_0: \mu_1 = \mu_2$)

In this test, the research variables, the average of research sample members were compared in two different sections based on demographic information as two nominal variables. Results showed that *health and well-being* is more in the female sample as well as those who had related educational backgrounds to IT.

Table 9. Independent Samples t Test results

Dimension tested	Cut Point		Equity of variances	t	Degree of Freedom	2-Tailed Sig	Result
Health and well-being	Sex		rejected	-2.052	118	0.042	$\mu_1 > \mu_2$
	Female = 1	Male = 2					
Job security	IT Trained		rejected	-2.288	117	0.024	$\mu_1 > \mu_2$
	Yes = 1	No = 2					
Job satisfaction	--	--	--	--	--	--	--
Competency development	--	--	--	--	--	--	--
Balance between work and non-work life	--	--	--	--	--	--	--
Understanding of QWL	--	--	--	--	--	--	--

3. Correlation test between research variables and demographic variables ($H_1: R \neq 0, H_0: R = 0$)

In this test, the relationships were investigated based on Pearson correlation coefficient between research variables with scalar type and demographic variables with ordinal type. Results showed that there is a positive significant correlation (+0.224) between people' *age* and their degree of *health and well-being*.

Table 10. Correlation test between research variables and demographic variables

Research variable	Related variable	Sig	Correlation coefficient
Health and well-being	Age	0.007	0.224
Job security	--	--	--
Job satisfaction	--	--	--
Competency development	--	--	--
Balance between work and non-work life	--	--	--
Understanding of QWL	--	--	--

4. Execution of the second questionnaire (AHP)

To execute the second questionnaire, the authors explained theoretical concepts of the research variables to the respondents while asking them to rank variables on a paired comparison basis. After eliminating questionnaires with inconsistency rate of more than 0.1 and performing a Group AHP method, the results of ranking research variable based on sample members' opinions showed that the variables job satisfaction and health and well-being had the most and the least weight respectively.

Table 11. Weight of each variable in providing utility for the target population based on AHP

Variable	Weight
Health and well-being	0.17018
Job Security	0.20992
Job Satisfaction	0.22940
Competency Development	0.18755
Balance between work and non-work life	0.20294

Discussion and Conclusion

The main purpose of this research was to identify and study the factors that affect Work Life Quality enhancement for IT User Employees in universities based in Qom province in Iran. It was found based on verifying factor analysis on variables of the model that the variables *job satisfaction* has a direct impact and *health and well-being* has an indirect impact on employees' Quality of Work Life. Although other variables may have their say in the issue, they lost their significance when compared to the two mentioned variables.

On the other hand, according to the results of t-test in the population, job satisfaction has received less attention than other variables. Therefore, a value above average was not verified for it. Likewise, the variable *understanding level of QWL* did not gained a value above the average.

For the respondents, the utility of paying attention to the variable *job satisfaction* is more than any other variable. *Job security*, *balance between work and non-work life*, and *health and well-being* acquired the following ranks. These priorities could be regarded as a reflection of the existing deficiencies.

Comparing the averages using t-test showed that the degree of employees' perception of *health and well-being* criterion is lower than other criteria. This highlights the importance of adapting the employee with the job.

It could be inferred from all of the above-mentioned findings that paying attention to the content of jobs, employees' behaviors, and the way of compensation so that it could increase the level of satisfaction would finally lead in enhancement in

IT user employees' QWL. Managers should be aware of the implications of financial and non-financial rewards on the level of satisfaction among employees. They should use incentives such as raising wages, providing proper work conditions, appreciating employees, providing the sense of participation and affiliation in the works done, understanding along with communion and so on. Redesigning the way of changing financial rewards should be to benefit those who apply their skills and knowledge in line with organizational goals.

In addition, there should be a space for employees to perform their activities without disrupting stress and with comfort. IT related jobs require proper job descriptions, proper selection of employees and proper training due to their pressuring nature, since they require repetitive identical movements; they are complex and take long uninterrupted periods to perform the related duties.

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