

Quality of Work Life and differences in demographic characteristics among managerial staff in Algerian tertiary sector

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Abstract.

BACKGROUND: There is a consensus in the evidence literature on the importance of Quality of Work Life (QWL) as it is a prerequisite to increase employees' productivity and wellbeing [2], [1], [11]. While studies of the effect of demographic characteristics (gender, age, work experience and socio-professional categories) on QWL have conflicting results [1], [14], [15], [16], particularly in the services (tertiary) sector of activity, which is economically considered as the most important sector, as it encompasses a large spectrum of activities.

OBJECTIVE: This paper aims to measure the level of QWL and to study the differences in demographic characteristics (gender, age, work experience and socio-professional category) among managerial staff.

METHODS: Managerial staff members in the Algerian tertiary sector (N = 252) participated in the study. Data were collected using a questionnaire.

RESULTS: The analysis of the results suggested that the level of QWL was average ($\bar{x}=253.61$, $SD=46.775$), on an ordinal scale ranging from a score value of 75 (min.) to 375 (max.) as shown in Table 2, and, there were no statistically significant differences in QWL between demographic characteristics categories: (1) gender, (2) age, (3) work experience and (4) socio-professional categories. The results are discussed in the light of previous researches.

CONCLUSIONS: The study concluded that the QWL needs more attention from management levels in the public sector in Algeria.

Keywords: Level of QWL, dimensions of QWL, employees' wellbeing, public sector

1. Introduction

During the last two decades Quality of Work Life (QWL) has gained the attention of the research community, for it is "becoming an imperative issue to achieve the goals of the organization in every sector" (p. 71) [1]. There is a consensus in the evidence literature on the importance of QWL as it is a prerequisite

to increase employees' productivity and wellbeing. "As a result, high QWL organizations may enjoy better sustainable efficiency, productivity and profitability" (p. 43) [2].

As a research issue, QWL has been defined in a variety of ways [3], and the term QWL includes quality of work and employment quality [4]. Walton [5], one of the early researchers of QWL, asserted that the concept suggested comprehensiveness and was broader than the aims of the unionization movement, labor laws, or equal employment struggles". While, Sirgy et al. [6] define QWL "as employee satisfaction

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with a variety of needs through resources, activities, and outcomes stemming from participation in the workplace” (p. 242). Hence, Sirgy et al. [6] shifted the conceptualization of QWL dimensions from the traditional Walton’s approach who proposed eight major conceptual categories relating to QWL dimensions [7], to the need-hierarchy theory [8]. Sirgy et al. [6] identified seven dimensions of QWL. These are: (1) health and safety needs, (2) economic and family needs, (3) social needs, (4) esteem needs, (5) actualization needs, (6) knowledge needs, and (7) aesthetic needs.

These conceptual categories of QWL dimensions has gained a consensus among researcher community [9–13], as they are important to both employees and management, who should find the appropriate ways to meet the perceived needs of employees.

Many dimensions of QWL were thoroughly investigated through a search of the evidence literature; their effects on QWL were studied, while studies of the effect of demographic characteristics (gender, age, work experience and socio-professional categories) on QWL have conflicting results [1, 14–16]. Thus, the question needs to be thoroughly investigated, particularly in different cultural contexts, and among different socio professional categories.

Measuring the level of QWL was a challenge to many researchers as it embodies many dimensions [1, 11, 14] and it enhances cultural and organizational ingredients, in different sectors of occupational activity. QWL “is an umbrella term which includes many concepts. QWL means the sum total of values, both materials and non-materials, attained by the worker throughout his life” (p. 71) [1].

Pioneers of QWL studies found the industrial sector to be a good breeding ground for their research activities. In a later stage, the tertiary sector aroused the interest of studies [1, 17], as it encompasses a broad spectrum of professional activities, private and public sector. According to Martins et al. [17] public sector does not invest enough in QWL. Previous studies [18] have shown that the organizational culture in public sector is a decisive factor in the QWL.

In the Algerian case, the situation is still ambiguous, especially in the services (tertiary) sector of activity, which is economically considered as the most important sector. According to the Algerian National Office of Statistics [19] the tertiary sector contributes nearly 48% of GDP and employs nearly 60% of the labor force. The share of services in GDP has increased recently, well ahead of agriculture (13%

of GDP and employs 10.8% of the labor force) and industry (39% of GDP and employs almost a third of the workforce). The tertiary sector encompasses a large spectrum of activities, among which: transport, distribution, sale of goods and the provision of services.

The aim of the present paper is to measure the level of quality of work life (QWL) and to study the relationship between QWL and some demographic characteristics (gender, age, work experience, and socio-professional category) among managerial staff in two public settings from tertiary sector based in Oran, Algeria.

Based on the reviewed literature, the dimensions of the QWL adopted in this study can be classified into seven categories as seen in Fig. 1.

1.1. Research framework and hypotheses

To examine the relationship between QWL and demographic characteristics of managerial staff, a research framework was developed for the purposes of the present study, based on Bolhari et al.’s [20] study, as illustrated in Fig. 2.

The main hypothesis (MH) of this study was formulated as follows: The level of QWL among managerial staff of the present sample is low.

While relationships of demographic characteristics with QWL were formulated through the following hypotheses:

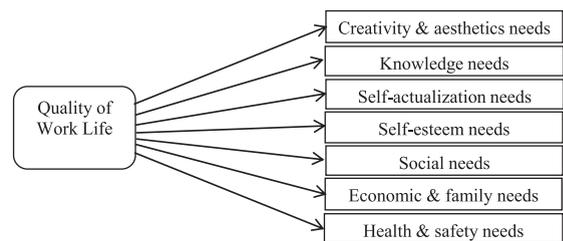


Fig. 1. The QWL dimensions.

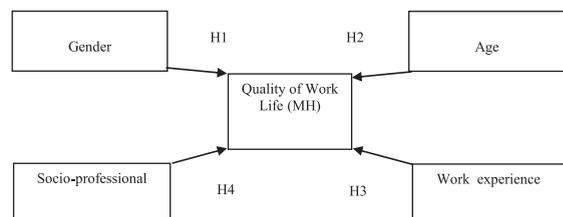


Fig. 2. Research framework (adopted from Bolhari et al. [20]).

H1: There are no statistically significant differences between males and females in QWL.

H2: There are no statistically significant differences between age groups in QWL.

H3: There are no statistically significant differences between work experience categories in QWL.

H4: There are no statistically significant differences between socio-professional categories in QWL.

2. Method

2.1. Sample

A random sample of managerial staff members from two service companies based in Oran, Algeria (N=252) participated in the study, during the period from November 2015 to March 2016. Their demographic characteristics are shown in the Table 1. Institutional Review Board approval was obtained prior to conducting the study from the Algerian committee on ethics [21]. Further, research ethics were considered, starting with information regarding the purpose of the study, followed by the informants' informed consent, beside the official permission from the companies where the study took place.

Participants filled in the questionnaires, in the presence of researchers, during approximately a half-hour session, depending on their availability.

2.2. Tool

To measure the seven dimensions of the QWL, a structured questionnaire was designed, inspired from previous studies [6, 9, 11, 13, 22]. It consisted of two sections; the first section dealt with demographic characteristics of the sample, namely: gender, age, Work experience in the organization, Socio-professional category. The second section, consisted of 75 items, dealt with the following dimensions of the QWL:

1. Health & safety needs consisted of 14 items
2. Economic & family needs consisted of 11 items
3. Social needs consisted of 10 items
4. Self-esteem needs consisted of 10 items
5. Self-actualization needs consisted of 10 items
6. Knowledge needs consisted of 10 items
7. Creativity & aesthetics needs consisted of 10 items

Respondents were asked to rate their level of agreement on each statement on a *five-point Likert scale*, from "1" as "strongly disagree" to "5" as "strongly agree". Hence, the level of QWL was determined from mean value of the respondents' attitudes towards items of the questionnaire as follows (Table 2).

The reliability of the questionnaire was assessed on a sample of 100 respondents by Cronbach's alpha, which assumes a range from $r=0$ to 1, with $r=0.7$ or greater considered as sufficiently reliable; results are illustrated in Table 3.

While, the internal consistency validity was assessed on the same sample of 100 respondents using Pearson's coefficient of correlation between the value of each QWL dimension and the overall value of the questionnaire are describes in Table 3.

2.3. Data analysis and research findings

The data were analysed using the Statistical Package for the Social Sciences (SPSS), version 20.0.

3. Results

Results of the study are presented along the following subsections:

3.1. Level of QWL among managerial staff

Results of the evaluation of the level QWL among participants in the study are presented in Table 4.

As shown in Table 4, the mean total score of QWL was 253.61 (SD = 46.775), this value is greater than the theoretical mean (225), which means that respondents attitudes towards QWL dimensions were at a medium level.

3.2. Gender differences in QWL

Results on gender differences in QWL are presented in Table 5.

3.3. Age differences in QWL

Results on age differences in QWL are presented in Table 6.

Table 1
Demographic characteristics of the sample ($n = 252$)

Characteristics		No. of Respondents	(%)
Gender	Male	138	54.8
	Female	114	45.2
Age	21–30	64	25.4
	31–40	127	50.4
	41–50	43	17.1
	≥ 51	18	7.1
Work experience in the organization	<5	92	36.5
	5–9	78	31.0
	≥ 10	82	32.5
Socio-professional categories	A senior executive	31	12.3
	Middle class manager	186	73.8
	Supervisor	35	13.9

Table 2
Determining values of the level of QWL

Meaning	Very low level	Low level	Average level	High level	Very high level
Mean value (total of items)	75–135	135.75–195	195.75–255	255.75–315	315.75–375

Table 3
Reliability and validity tests for QWL questionnaire

QWL dimensions	Number of items	Reliability (Cronbach's α)	Pearson's (r)
Health & safety needs	14	0.668	0.710**
Economic & family needs	11	0.755	0.771**
Social needs	10	0.633	0.730**
Self-esteem needs	10	0.807	0.854**
Self-actualization needs	10	0.855	0.871**
Knowledge needs	10	0.834	0.746**
Creativity & aesthetics needs	10	0.878	0.824**
Total	75	0.946	

**Significant at the 0.01 level.

Table 4
The level of QWL among managerial staff ($n = 252$)

Indicators	Mean	SD	Min. score	Max. score	Theoretical mean	Level of QWL
Scores of QWL	253.61	46.775	106	375	225	Mediumlevel

Table 5
The difference between males ($n = 132$) and females ($n = 114$) in QWL

Indicators	Gender	n	Mean	SD	Degrees of freedom	T test value	Sig. or P-value	Level of significance
Scores of QWL	Male	138	257.71	48.992	250	1.536	0.126	n.s.
	Female	114	248.64	43.640				

Tabulated T = 1.972, $df = 250$, $\alpha = 0.05$.

Table 6
The QWL in different age groups, work experience and socio-professional categories

	Test	Sum of squares	Degrees of freedom	Mean square	F test value	Sig. or P-value	Level of significance
Age ¹	Between Groups	5570.161	3	1856.720	0.847	0.469	n.s.
	Within Groups	543597.946	248	2191.927			
	Total	549168.107	251				
Work experience years ²	Between Groups	1178.402	2	589.201	0.268	0.765	n.s.
	Within Groups	547989.705	249	2200.762			
	Total	549168.107	251				
Socio-professional categories ²	Between Groups	352.038	2	176.019	0.080	0.923	n.s.
	Within Groups	548816.069	249	2204.081			
	Total	549168.107	251				

¹Tabulated F = 2.63, df = 3, 248, $\alpha = 0.05$.

²Tabulated F = 3.02, df = 2, 249, $\alpha = 0.05$.

3.4. Work experience differences and QWL

Results on work experience differences in QWL are presented in Table 6.

3.5. Differences of socio-professional categories in QWL

Results of the differences between socio-professional categories in QWL are presented in Table 6.

4. Discussion

4.1. Level of Quality of Work Life

As shown in Table 4, the mean total score of quality of work life was 253.61 (SD = 46.775), this value is greater than the theoretical mean (225), which means that respondents attitudes towards QWL dimensions were at a medium level.

Although, comparisons with other studies might be misleading, for the diverse forms of work organization, and the marked differences between countries in their characteristic work systems, their occupational legislations and degrees of technical and economic development are key determinants of QWL, we try to compare the results of the present study with findings of similar studies.

To the best of our knowledge, the only study, which, evaluated the level of QWL in Algeria, is that

of Boukhemkhem [23] where the results revealed a low/unfavorable level of QWL among both male and female university employees.

The experience of job insecurity is known to be a source of psychological stress, as unemployment itself, and have clear implications for employee welfare [24]. Thus, the medium level of QWL among managerial staff in our sample can be explained, firstly, by the fact that, managerial staff do not experience job insecurity, as both enterprises of the present study have the monopole of gas and water transportation and distribution, and, have no threat of any sort of competition. Secondly, the managerial regime, which can be described as inclusive regime, where trade unions have their say in daily life of the organization. As has been pointed out by Gallie [25]: "The quality of work, it is suggested, will be better in inclusive regimes where trade unions have high levels of participation in national decision making, than in dualistic regimes where they protect only core employees or in Liberal market regimes where regulation is generally very weak" (p. 228).

In some similar context of developing countries, Bolhari et al.'s [20] findings in Iran, on a sample of Information Technology Staff, and that of Salah [26] in Saudi Arabia among university teaching staff, were similar to the results of the present study. While, Eslamian et al. [27] study on nursing staff in emergency departments, revealed a low level of quality of work life, associated with workplace violence. Rastegari et al.'s [28] study on a similar population showed a moderate to low level of QWL, associated

with moderate nurses' task performance. Differences between the results of the present study, and previous research findings, can be explained by the difference in socio economic contexts, in which these studies were conducted.

The results of the present study, there for, advocate for new management strategies to enhance the level of QWL among managerial staff in the two setting under study. The scope of the study was limited to public economic service sector; future researches may undertake studies in organizations of the civil service sector, like the public health service and education, which are nowadays knowing many unrest movements in Algeria (strokes, turnover, etc.).

4.2. Gender differences in QWL

As shown in Table 5, there were no significant differences in terms of QWL that are attributable to gender ($P=0.126 > \alpha=0.05$).

In a similar study on QWL among University employees in Algeria, Boukhemkhem [23] found no significant difference in the level of QWL between male and female employees. Thus, the results of the present study agree with the findings of previous researches [16, 20, 23, 29], in terms of gender effect on QWL, in other terms, male and female employees are experiencing the same level of Quality of work life. However, differs from that of Tabasum et al. [30], on employees of private commercial banks, where, they showed male employee's perception of QWL differs from the female employees.

This result was not expected, as the general belief word-wide, especially in developing countries is that most women at work are exerting themselves in combining work and home responsibilities, and at the same time, aspire towards self-actualization in their career, as Rani & Kritika [31] pointed out. Particularly in traditional societies, as advocated by feminist movements. In the case of the present study, managerial staff, of both gender categories were issued from the same university education levels, and belonging to middle class backgrounds, working under the same work legislation rules, particularly gender equality aspects, which are applied under the control of strong union movements.

4.3. Age differences in QWL

As shown in Table 6, there were no significant differences in terms of QWL that are attributable to age ($P=0.469 > \alpha=0.05$). This result confirms

previous research findings, where age variable had no significant influence on Quality of Work Life among specific categories of employees, like university teaching staff [32, 33]. However, differ from results of other studies on Information Technology Staffs [20], university teachers [34] the SME sector employees [35], where there were significant differences among employees belonging to different age categories in their perception towards QWL and Work-life balance aspects.

The reason behind these conflicting results have to be further investigated, as age factor of an employee is synonym to his / her work experience and career perspectives.

4.4. Work experience differences in QWL

As shown in Table 6, there were no significant differences in terms of QWL, that are attributable to work experience ($P=0.765 > \alpha=0.05$). This same finding is on line with Salah's [26] results on faculty teaching staff, and Xhakollari's [36] results on mental health workers. Nevertheless, findings of the present study on the effect of work experience on QWL differ from Bolhari's et al. [20] study on Information Technology Staffs, Indumathy & Kamalraj [16] study on textile industry workers, Tabasum et al. [14] on faculty members of private universities, and Aarthy & Nandhini [32] on engineering faculty members.

As for age, work experience ought to be deeply investigated, for the content behind the term "work experience", which is not only the number of years spent in one organization, but the term embraces other variables, like, education qualification, skills level, job content, job opportunities, career growth and development, employment traits and personal characteristics of each employee.

4.5. Differences between socio-professional categories in QWL

As shown in Table 6, there were no significant differences in terms of QWL, that are attributable to socio professional categories ($P=0.923 > \alpha=0.05$). This result, can be explained by the fact that, the three professional categories of the present study (a) senior executives, (b) middle class managers and (c) supervisors are belonging to the managerial class, which work under similar conditions.

Although, the result confirms previous findings [37, 38], we point out differences with findings of other studies [20, 39] which might be attributed to environmental, organizational culture and climate,

activity sector and size of the setting, as these factors differ from one study to another.

Regardless of their age, gender, work experience and socio professional category, managerial staff of the present study showed the same level of QWL. The demographic variables have no effect on QWL, as an independent variable. A possible explanation of this result, may reside in the type of organizational culture or management methods, work conditions, rules and work procedures, which, equally apply for all members of the sample in the same way. As, these factors are known to be important ingredients of QWL.

Results of research works, on the relationship between Quality of Work Life and demographic characteristics of employees, are conflicting. In their analysis, of the literature on the subject Yadav & Khanna [1] pointed out that 6 out 25 evidence-based articles reported that there was no relationship between gender and QWL, age affected the QWL according to 4 out of 25 literature works, whereas, experience gave a positive relation with QWL in four evidence-based articles.

The main methodological drawback, we noticed on previous research work, is that most of the studies on QWL and demographic characteristics of the populations from which study samples were drawn, did not clearly describe the socioeconomic, cultural and organizational contexts of the samples, as these contexts are key determinants of employees attitudes towards QWL.

In terms of limitations, the current study was confined, only to the managerial Staff, in two Algerian public service companies. Further studies on other socio professional categories, in both public and private sectors, may throw more light on different issues of QWL, in a large spectrum of industries and among different working populations.

Another limitation is a low response rate, which was partly due to the high number of questions (75 items) with some sensitive nature, for example, the question: "my supervisor cares that I have a life outside of work" could raise insecurity and reduce participants' willingness to provide their ratings.

Furthermore, the results are limited to global scores of QWL, rather than, the detailed scores of each dimension and specific differences among demographic groups, for the study was a part of a larger project on QWL and total quality management in a number of Algerian companies covering a large spectrum of activities belonging to private and public sector.

5. Conclusion

The study revealed a medium level of quality of work life among managerial staff, and no significant differences in the QWL that are attributable to demographic variables were obvious. These are in agreement with some previous studies, while differences with other studies in some issues of the QWL, were also noticed. Hence, our findings should be treated with some reserve, as organizational socio cultural contexts are known to influence QWL dimensions.

Although, the results of the present study are a useful tool for elaborating new management strategies and programs to enhance the level of QWL and promote a better QWL, other salient variables which were not in the scope of this study, should be included in such strategies. In addition, more complex interactions of QWL with demographic characteristics, and other variables, among managerial staff should be examined.

The comparison between QWL levels in different professional categories seems to be a promised theme for future research, as it gives a general view on the health state of the organization in terms of QWL of its employees.

Conflict of interest

None to report.

References

- [1] Yadav R, Khanna A. Literature review on quality of work life and their dimensions. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*. 2014;19(9):71-80.
- [2] Mosadeghrad AM. Quality of working life: An antecedent to employee turnover intention. *International Journal of Health Policy and Management*. 2013;1(1):43-50.
- [3] Ilgan A, Ata A, Zepeda SJ, Ozu-Cengiz O. Validity and reliability study of Quality of School Work Life (QSWL) scale. *International Journal of Human Sciences*. 2014;11(2): 114-37.
- [4] Carayon P, Sainfort F, Smith MJ. Macroergonomics and total quality management: How to improve quality of working life? *International Journal of Occupational Safety and Ergonomics*. 1999;5(2):303-34.
- [5] Walton RE. Quality of Work Life: What is it? *Sloan Management Review*, Fall. 1973;11-21.
- [6] Sirgy MJ, Efraty D, Siegel P, Lee DJ. A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. *Social Indicators Research*. 2001; 55(3):241-302.

- [7] Walton RE. Criteria quality in work life. In: Davis LE, Cherns RL. (eds.) *The Quality of Working Life: Problems, Prospects, and the state of Art*. Vol. 1, Free Press; 1975.
- [8] Maslow AH. *Motivation and personality*. New York: Harper & Row; 1970.
- [9] Lee DJ, Singhapakdi A, Sirgy MJ. Further validation of a need-based quality-of-work-life (QWL) measure: Evidence from marketing practitioners. *Applied Research Quality Life*. 2007;2(4):273-87.
- [10] Mortazavi S, Yazdi SVS, Amini A. The role of the psychological capital on quality of work life and organization performance. *Interdisciplinary Journal of Contemporary Research in Business (IJCRB)*. 2012;4(2):206-17.
- [11] Marta JKM, Singhapakdi A, Lee DJ, Sirgy MJ, Koonmee K, Virakul B. Perceptions about ethics institutionalization and quality of work life: Thai versus American marketing managers. *Journal of Business Research*. 2013;66(3): 381-9.
- [12] Elamparuthi D, Jambulingam S. Need satisfaction and Quality of Work Life in Chennai Automobile Industry. *International Journal of Economics, Commerce and Management*. 2014;2(3):1-7.
- [13] Viljoen A, Kruger S, Saayman M. Understanding the role that Quality of Work Life of food and beverage employees plays in perceived service delivery and productivity. *Southern African Business Review*. 2014;18(1):27-52.
- [14] Tabassum A, Rahman T, Jahan K. An evaluation of the quality of work life: A study of the faculty members of private universities in Bangladesh. *ABAC Journal*. 2012;32(3): 36-57.
- [15] Sandhya Nair GS. A study on the effect of quality of work life (QWL) on organizational citizenship behaviour (OCB) – With Special reference to College Teachers in Thrissur District, Kerala. *Integral Review- A Journal of Management*. 2013;6(1):34-46.
- [16] Indumathy R, Kamalraj S. A study on quality of work life among workers with special reference to textile industry in tirupur district –A textile hub. *International Journal of Multidisciplinary Research*. 2012;2(4):265-81.
- [17] Martins JC, Pereira MG, Pinheiro AG. The contemporary acceleration as demarcation of styles and quality of working life among healthcare professionals. *Lusophone Journal of Cultural Studies*. 2013;1(2):322-337.
- [18] James G. Quality of working life and total quality management. *International Journal of Manpower*. 1992;13(1): 41-58.
- [19] ONS (2014), *Statistical yearbook of Algeria, EDITION 2014, Résultats 2010 / 2012, Volume n° 30*, <http://www.ons.dz/IMG/pdf/AnRes10-12No30.pdf>. retrieved: 10/11/17.
- [20] Bolhari A, Rezaeean A, Bolhari J, Bairamzadeh S, Soltan AA. The relationship between quality of work life and demographic characteristics of information technology staffs. *International Conference on Computer Communication and Management Proc of CSIT*. 2011;5:374-8.
- [21] Committee on ethics: Thematic agency of research in health sciences. *ATRSS, cite du chercheur. Route de l'aéroport, Es-Sénia, Oran, Algeria*. <https://www.Atrss.dz>
- [22] Johansen T, Lund T, Jensen C, Momsen AH, Eftedal M, Øyeflaten I, et al. Cross-cultural adaptation of the work role functioning questionnaire 2.0 to norwegian and danish. *Work*. 2018;59:471-8.
- [23] Boukhemkhem D. Quality of work life: Theoretical concepts and evaluation Case study of employees of Jijel University. *Journal of Economie & Société*. 2015;11(11): 131-62. Available from: <https://www.asjp.cerist.dz/en/article/1975> [Accessed 10th January 2018].
- [24] Burchell B. A temporal comparison of the effects of unemployment and job insecurity on wellbeing. *Sociological Research Online*. 2011;16(1):9. Available from: <http://www.socresonline.org.uk/16/1/9.html> [Accessed 15th February 2018].
- [25] Gallie D. The quality of work in a changing labour market. *Social Policy and Administration*. 2017;51(2):226-43. Available from: Doi: 10.1111/spol.12285
- [26] Salah, AA. Quality of work life among faculty of education teaching staff [in arabic]. *Journal of Arabic Studies in Education and Psychology*. 2013;2(39):158-89.
- [27] Eslamian J, Akbarpoor AA, Hoseini SA. Quality of work life and its association with workplace violence of the nurses in emergency departments. *Iran J Nurs Midwifery Res*. 2015;20(1):56-62. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4325414/> [Accessed 16th March 2018].
- [28] Rastegari M, Khani A, Ghalriz P, Eslamian J. Evaluation of quality of working life and its association with job performance of the nurses. *Iran J Nurs Midwifery Res*. 2010;15(4):224-8. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3203281/> [Accessed 16th March 2018].
- [29] Jnaneswar K. A study on the level of quality of work life experienced by the employees of public sector units in kerala. *Journal of Institute of Public Enterprise*. 2016;6(1/2): 51-61.
- [30] Tabassum A, Rahman T, Jahan K. Quality of work life among male and female employees of private commercial banks in bangladesh. *International Journal of Economics and Management*. 2011;5(1):266-82.
- [31] Rani A, Kritika. Quality of Work Life of Female Employees in Universities of Haryana, 2013. Available from: https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=IAFFE2013&paper_id=38&file_type=slides [Accessed 16th March 2018].
- [32] Aarthy M, Nandhini M. A study on Quality of Work Life among the engineering college faculty members in COIMBATORE DISTRICT. *International Journal of Management Research & Review*. 2016;6(8):1051-7.
- [33] Arunkumar B, Saminathan R. Work life balance among women teachers of self financing colleges (SFC) in thanjavur district, Tamilnadu. *Journal Of Humanities And Social Science (IOSR-JHSS)*. 2017;22(7):48-55. Available from: www.iosrjournals.org [Accessed 15th April 2018].
- [34] Rao T, Arora RS, Vashisht AK. Quality of work life: A study of JAMMU University teachers. *Journal of Strategic Human Resource Management*. 2013;2(1):20-5.
- [35] Richert-Kázmiarska A, Stankiewicz K. Work–life balance: Does age matter? *Work*. 2016;55(3):679-88.
- [36] Xhakollari L. Quality of work life and mental health professionals in albania. *Mediterranean Journal of Social Sciences*. 2013;4(1):529-34.
- [37] Rajasekar D. An empirical research on quality of work life among executive level employees in shipping industry. *ELK Asia Pacific Journals-4th IHRC*. 2017:1-13.
- [38] Balaji R. A study on quality of work life among employees. *International Journal of Innovative Research in Science, Engineering and Technology*. 2013;2(2):470-3.
- [39] Johnsrud LK. Studied on quality of faculty work life. *The University of Hawaii*. 2006.