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Quality of Work Life: A Conceptual Model

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Abstract—Having a high quality work life (QWL) is crucial to any workplace. It's more than a desire, it is part of the overall strategic plan and critical to achieving the vision of becoming a long-term, reliable, and highly productive organization. Organizations that focus on ensuring best possible quality of work probably have an advantage over the others thus resulting in increased organizational performance and reduced turnover. The purpose of the present study is to identify and propose a list of few vital factors of QWL for the benefit of researchers and the organization.

To achieve the purpose, the article published between the period from 2001-2017 were reviewed in a systematic way and a snapshot of the same was prepared. After identifying a number of factors, a quality tool 'Pareto Analysis' was applied for the construction of a conceptual framework. However until now, no study has attempted to use Pareto analysis as a method in identifying the most relevant factors of QWL. This will perhaps be the first study in which Pareto analysis is employed to identify those factors (vital few) that have the greatest cumulative effect, and thus screen out the less significant factors (trivial many). Out of the 27 identified factors, 13 factors namely: Adequate and fair compensation, Opportunity for growth, Safe working condition, Work & Total Life space, Social integration, Supervision, Human progress capacities, Constitutionalism, Reward and Recognition, Job security, Autonomy & Control, Participation in decision making and Communication have been found to be the important factors of QWL. The absence of such study encourages the use of Pareto analysis to get deeper understanding of the concept of QWL. The author has tried to identify the gaps and present the suggestions for further exploration of the concept.

Keywords: Quality Work Life, Pareto Technique, Performance

1. INTRODUCTION

Work has been considered to play a vital part in every human beings life. As employees spend a lot of time and energy at their workplace, it is important that the organization provides them with a better QWL so as to make them satisfied with their life at work. The 21st century saw the effect of globalization on the economy leading towards the services and information technologies, thus making organization's most valuable asset[1]. They constitute the organizations soft assets and are the hidden values of the company. The contemporary business scenario shows that companies are trying to adapt to changes in the business environment leading to investment in people rather than on product and services [2]. The importance of QWL is unquestionable. The concept of QWL originated during 1960s

– 70s in the United States and Scandinavia. It was in the year 1972, during an International Labour Relations conference, that the concept of QWL was first introduced [3]. QWL has become an issue of critical importance as a result of today's increasing business demands and family structure as well [4]. It must be admitted that QWL is not the easiest thing in the world to discuss intelligently [5] and that the demise of QWL will result in the loss of important concepts and valid approaches [6]. Movements to improve QWL will lead to changes in the whole system and ethics of work, capitalism and overall change in the society at large. The rising concept of two-income households where both the male and female need to take care of home and work together has resulted in concerns regarding employees' quality of work life. Thus it is important to provide better QWL so as to promote overall wellbeing of the employees [7].

2. QUALITY WORK LIFE

2.1. Defining Quality Work Life

Every society has its own culture which shapes the basis of their philosophy. The diverse culture has encouraged researches to modify and measure QWL differently [8]. Despite being multifaceted and context-based concept, a universally accepted definition of QWL is still lacking [8-9, 10-11,12-13].

Beinum (1974) has defined "QWL in terms of relation between man and his task" [14]

Boisvert(1977) defined QWL as set of valuable consequences of work life affecting individuals, organization and society[15].

Carlson(1981) considered QWL to be a *goal* (organization commitment to work improvement), a *process* (involvement of people within the organization for the realization of these goals through individual and organizational developmental methods in the process), and a *philosophy* (acknowledging the individuals dignity within the organization). [16]

Nadler and Lawler(1983) tried to extensively dig into the concept of QWL and came out with potential definitions of QWL. QWL has been considered (i) a variable (1969-1972),

(ii) an approach (1969-1975), (iii) a method (1972-1975), (iv) a movement (1975-1980), (v) everything (1979-1982) and,(vi) nothing. It is a way of thinking about people, work and organization [6]

Kiernan & Knutson (1990) states that an individual is determined, designed and evaluated by one-self. It is individual's interpretation of his/her role in the workplace and the interaction of that role with the expectations of others. It differs from one individual to another depending upon ones age, career stage, and/or position in the organization [17].

A new definition based on need satisfaction has been developed by Sirgy*et al* (2001). QWL has been defined in terms of employee satisfaction with higher-order need and lower order needs [18].

2.2 Factors of Quality Work Life

Although the concept of QWL is semi-centennial but the curiosity in the construct has not diminished completely. The changing business environment has raised its significance to the organization and its human resources [19]. Predictors of QWL have been uncovered by different researchers but it has not been fully explored [6]. The factors of QWL are varied [20] and difficult to conceptualize [21], hence presenting a unique challenge to understand the dimensions of QWL [10].

Three most predominant work in the area of QWL is of (i) Walton(1975), (ii) (Taylor, 1978) and (iii)Levine et al(1984). Walton has identified 8 factors contributing to QWL. These include adequate and fair compensation (ii) safe and healthy working (iii) Opportunity for growth (iv) opportunity to develop human capacities (v) Social integration (vi) constitutionalism (vii) Social relevance (viii) Work and total life space [22].

Taylor (1978) empirically examined the dimensions underlying QWL for the first time by employing the factor analysis method. The factors were common to Walton's model except that two more dimensions including employer and society, as recommended by Seashore(1975), were identified separately in the model [23].

Levine *et al* (1984) measured QWL from the perspective of White-collar employees in the insurance company. He identified seven significant predictors namely: (a) the degree to which superiors treat employees with respect and have confidence in their abilities, (b) variety in daily work routine, (c) challenge of work, (d) present work leads to future opportunities, (e) self-esteem, (f) extent to which life outside of work affects life at work, and (g) the extent to which work contributes to society [24].

Ghosh (1992) carried out research on QWL at micro-level in India. The dimensions covered all the work related domains including work environment, job enrichment, participation, compensation, benefits and welfare measures [25].

Sirgy et al (2001) conducted a need based measure of QWL conceptualizing constructs in terms of employees satisfaction with two sets of needs: Lower-order need constituting (i) health/safety needs, (ii) economic/family needs and higher-order needs constituting (i) social needs, (ii) esteem needs, (iii) self-actualization needs, (iv)knowledge needs, and (v) aesthetic needs [18]

Martel and Dupuis (2006) concluded that measurement of QWL must involve organizational, human and social aspects of job [26].

Yeo & Li (2011) identified eight factors that influence QWL and have implications for career advancement and HRM. These include (I) organization culture, (ii) leadership, (iii) communication,(iv) teamwork, (v) job identity, (vi) performance, (vii) reward, and, (viii)training and development with implications for career development and human resource management [27].

Yadav&Naim (2017) examined QWL of employees in Indian power sector. He identified seven dimensions of QWL namely supervisory support, freedom from stress, pay and benefits, Job satisfaction, collegial relationship, involvement and responsibility at work communication and job security [28].

3. RESEARCH GAP

The following gaps were identified:

- The literature on QWL reveals the fact that it is extensively based on the work of (i) Walton(1975), (ii) Taylor(1978) and (iii) Levine et al (1984). They are decade old concepts employed in the early 1980-90's. Its relevance might be diminished as the work settings have changed dramatically over the years. Thus there is a need to explore factors that affect the current state of QWL.
- There is over abundance of research in this area but there has been no encouraging work in identifying relevant factors of QWL because of its broad and varied concept [20].
- Despite the plethora of research on the subject, the efforts on the part of the researchers to identify the factors of QWL in the Indian context have not been encouraging [29].

4. OBJECTIVE OF THE RESEARCH

- To determine the factors/dimensions by reviewing relevant literature on QWL.
- To analyse and prioritise through the use of Pareto Analysis, the factors of QWL.
- To finally propose a conceptual model of QWL.

5. RESEARCH METHODOLOGY:

In order to identify the existing literature on QWL an exhaustive online library search was conducted. The initial online search yielded more than 2500 journal articles. As the search yielded massive result, time-specific and keywordsensitive techniques were employed. The study limits the search to the most recent, almost 15 years, of publication, between 2001-2017 in order to omit redundancy and maintain relevancy of the topic at hand. After a brain storming session generic keywords were predetermined by the author. These include "Quality of working life", "QWL", "Work-life Quality", "Quality of Life at work", "Factors of QWL" and "antecedents/consequences of QWL". These generic terms would be found in the title, the keywords, and/or the abstract of ajournal article. In the end, a total of 91 journal articles (34 journals from 2001-2010 and 57 journals from 2011-2017) were selected for the presentreview. The factors identified from the 91 selected journal articles are summarised in Table 1 in the appendix below.

6. PARETO ANALYSIS

It was in the 19th century that a great economist VilffredPareto, postulated that a large share of wealth is owned by a small percentage of the population. It was then popularised by Dr J. M. Juran when he recognized the principles of the 'vital few' and the 'trivial many' [30]. The vital few(major factor) accounted for 80 percent of the occurrence frequency while the trivial many (minor factor) accounted for remaining 20 percent. The Pareto analysis is a methodology commonly used in decision-making. Various areas of management have applied the Pareto analysis as a means to identify major factors that can be individually dissected into minor and more manageable factors [31].

Thus the present study aims to identify and propose a list of few vital factors of Quality work life by using a quality tool 'Pareto technique'. However, until now no study has attempted to use Pareto technique to identify the factors of QWL. The absence of such study encourages the use of Pareto analysis to inspire more understanding of QWL.

6.1 Pareto Analysis Methodology

In order to address the second objective of analysing and prioritising the factors of QWL, firstly we identify the factors present in literature on OWL. Similar studies have been carried out by Fotopoulos et al (2011) & Talibet al (2015) in different industrial context [32-33]. Secondly, we group the factors with similar meanings by using semantic/ linguistic techniques. Various terms were categorised into individual groups that signify similar meaning. The compilation resulted in 27 factors with their respective frequency of occurrence mentioned. They are presented in Table 1 in the appendix. Thirdly, once the occurrence of these factors was identified, they were sorted in descending order based on frequency of occurrence. Cumulative frequency followed by cumulative percentage was calculated which is presented in Table 2 in the appendix. Based on the cumulative percentage, the major (80 percent; vital few) and minor (20 percent; trivial many) factors were identified. This is represented in Figure 1 below.

In terms of the major factors contributing to QWL, the results from Table 2 point out that13 major factors are responsible for 79 percent while 21 percent explains the minor factors. Our result is consistent with the findings of Saklaini(2003) in the Indian Context and Marti &Dupius (2006), thus suggesting that the Pareto analysis technique can be applied in determining the factors contributing to QWL.

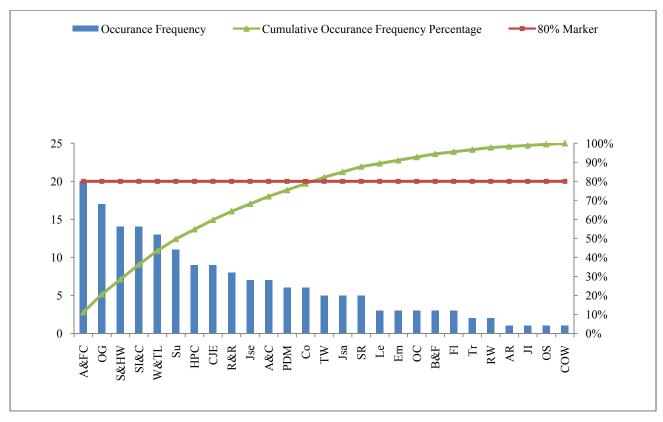


Figure 1: Pareto chart of QWL factors

7. CONCEPTUAL MODEL:

The Pareto analysis has resulted in identification of 13 major factors of QWL out of a set of 27 factors explored through literature. The conceptual model has been presented in Figure 2 below.

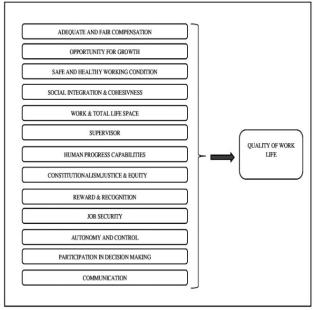


Figure 2: Conceptual Model of QWL

8. CONCLUSION

This part of the paper discusses the findings that emerged from the Pareto analysis presented in the previous section. Through the systematic review and synthesis of relevant literature on QWL, the study yields 27 broad factors of QWL. These include adequate and fair compensation, opportunity for growth, safe and healthy working condition, work & total life space, social integration, supervision, human progress capacities, constitutionalism, reward and recognition, job security, autonomy & control, participation in decision making and communication. By using Pareto analysis, it was easy to refine the factors into 13 major QWL factors. We argue that the findings from the present study offer a more comprehensive understanding of the QWL factors.

In general, the findings enhances the understanding of QWL in the 21st century as the review involves data from journals from 2001-2017. For researchers and academicians, this study could be beneficial to them as it assembles the most recent literature. Specifically, the outcome of this study adds to a growing body of literature on QWL. Being consistent with other studies on QWL, this study proves that the Pareto analysis is a reliable technique in identifying critical pieces of information and that it is also applicable in various fields.

9. LIMITATIONS

Journals of last 15 years were considered thus restricting the broad understanding of the concept of QWL.Some scholars affirm that efforts for building universal conceptualization of QWL may be in vain and ineffective as they are industry and setting specific, so application of same model in different industrial settings can be inappropriate.

10. FURTHER SCOPE

Furthermore, the factors outlined from this study could assist researchers and academicians in developing research instruments. The model can be tested empirically in different settings. We can further identify the mediators/ moderators and incorporate them in the study to complete the model. We can also extend the scope by examining the effect of QWL on its consequences.

REFERENCES

- [1] Narehan, H., Hairunnisa, M., Norfadzillah, R. A., &Freziamella, L. (2014). The Effect of Quality of Work Life (QWL) Programs on Quality of Life (QOL) among Employees at Multinational Companiesin Malaysia. *Procedia- Social and Behavioural Sciences*, 112, 24-34.
- [2] Timossi, L. D. S., Pedroso, B., & Francisco, A. De. (2008). Evaluation of Quality of Work Life: an Adaptation from the Walton's Qwl Model. XIV International Conference on Industrial & Operations Management, 1–17.
- [3] Hian, C. C., &Einstein, W. O. (1990). Quality of work life (QWL): What can unions do? S.A.M. Advanced ManagementJournal, 55 (2), 17-22
- [4] Abu Taher, M. (2013). Variations of quality of work life of academic professionals in Bangladesh. European Journal of Training and Development, 37(6), 580–595. http://doi.org/10.1108/EJTD-05-2013-0060
- [5] Review Reviewed Work (s): The Quality of Working Life by Louis E. Davis and Albert B. Cherns Review by: Joseph Gies Source: Technology and Culture, Vol. 17, No. 3 (Jul., 1976), pp. 581-583 Published by: The Johns Hopkins University Press an. (2016), 17(3), 581-583.
- [6] Nadler, D. A., & Lawler, E. E. (1983). Quality of work life: perspectives and directions. *Organizational Dynamics*, 11(3), 20–30. http://doi.org/10.1016/0090-2616(83)90003-7
- [7] Rose, R. C., Beh, L. S., Uli, J., &Idris, K. (2006). An analysis of Quality of work life(QWL) and career related variables. *American Journal of Applied Sciences*, 3(12), 2151-2159.
- [8] Yaghi, I., &Yaghi, A. (2014). Quality of Work Life in the Postnationalization of Human Resources: Empirical Examination of Workforce Emiratization in the United Arab Emirates. International Journal of Public Administration, 37(4),224–236.
- [9] Kruger, P., Brazil, K., Lohfeld, L., Edward, H.G., Lewis, D., Tjam, E., 2002. Organization specific predictors of job satisfaction—findings from a Canadian multi-site quality of work life cross-sectional Survey. BMC Health Services Research 2 (6).

[10] Kandasamy, I., &Ancheri, S. (2009). Hotel employees' expectations of QWL: A qualitative study. *International Journal of Hospitality Management*. 28, 328–337. http://doi.org/10.1016/j.ijhm.2008.11.003

- [11] Shahbazi, B., Shokrzadeh, S., Bejani, H., Malekinia, E., &Ghoroneh, D. (2011). A survey of relationship between the Quality of Work life and performance of Department Chairpersons of Esfahan University and Esfahan Medical Science University. *Procedia Social and Behavioral Sciences*. 30, 1555–1560.
- [12] Khanifar, H., Alimadadi, A. &Fard H.M.S. (2012). 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). *InnovaCiencia*. *1*(1), 1–3.
- [13] Dargahi, H. &Seragi N, J. (2007). An Approach Model for Employees' Improving Quality of Work Life (QWL). *Iranian J Publ Health*, 36 (.4), 81-86.
- [14] Beinum, H. V. (1974), *Interim Report on International Summer School*, Plevoord, Holland.
- [15] Boisvert, M.: 1977, La qualite' de vie au travail (E' cole des Hautes E' tudesCommerciales, Montre' al).
- [16] Carlson, H. C. (1981). Quality of work life model. *Education* + *Training*, 23(4), 99–100. http://doi.org/10.1108/eb002061
- [17] Kiernan, W. E. and K.Knutson: 1990, 'Quality of work life', in R. L. Schalock, M. J. Begab (eds.), Quality of Life: Perspectives and Issues (American Association of Mental Retardation, Washington, DC, US: xii).
- [18] Sirgy, M. J, Efraty, D., Siegel, P., & Lee, D. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. *Social Indicators Research*. 55, 241-302
- [19] Chan, K. W., & Wyatt, T. A. (2007). Quality of Work Life: A Study of Employees in Shanghai, China. Asia Pacific Business Review. 13 (4), 501-517.
- [20] Joshi, R. J. (2007). Quality of work life of women workers: role of trade unions. *Indian Journal of Industrial Relations*, 42(3), 355–382.
- [21] Seashore, S. E. (1975). Defining and measuring the quality of working life. In L. E. Davis & A. B. Cherns (Eds.), *The quality of working life* (pp. 105-118). New York: The Free Press.
- [22] Walton. R. (19751. Criteria for quality of work life. In L. E. Davis & A. B. Cherns (Eds.). The quality of working life (Vol. 1) New York: Free Press.
- [23] Taylor, J. C. (1978). An empirical examination of the dimensions of quality of working life. *Omega: The International Journal of Management Science*. 6(2), 153–160.
- [24] Levine, M. F., Taylor, J. E., & Davis, L. EE. (1984). Defining the Quality of Working Life. *Human Relations*. 37 (1), 81-104.
- [25] Ghosh, S., 1992. Quality of working life in two Indian organizations: implications of case-studies. *Decision 19* (2), 89–102.
- [26] Martel, J., & Dupuis, G. (2006). Quality of work life: theoretical and methodological problems, and measuring instrument. *Social Indicators Research*. 77, 333-368. Retrieved from
- [27] Yeo, R. K., & Li, J. (2011). Working out the quality of work life: A career development perspective with insights for human resource management. Human Resource Management

- International Digest. 19(3), 39–45. http://doi.org/10.1108/09670731111125952
- [28] Yadav, M., &Naim, M. F. (2017). Searching for 00quality in the Quality of work life: an Indian power sector perspective. *Industrial and Commercial Training*, 49(4), 164–174. http://doi.org/10.1108/ICT-01-2017-0003
- [29] Gani, A. ., & Ahmad, R. (1995). Correlates of Quality of Work Life: An Analytical Study. *Indian Journal of Industrial Relations*. 31(1), 1–17.
- [30] Juran, J.M. (2005), "The non-Pareto principle; mea culpa", in Stephens, K.S. (Ed.) Juran, Quality, and A Century of Improvement, ASQ Quality Press, Milwaukee, WI, pp. 185-189.
- [31] Cervone, H.F. (2009). Applied digital library project management: Using Pareto analysis to determine task importance rankings. OCLC Systems & Services. 25 (2), 76-81.
- [32] Christos Fotopoulos DimitriosKafetzopoulosKaterinaGotzamani, (2011), "Critical factors for effective implementation of the HACCP system: a Pareto analysis. *British Food Journal. 113*(5), 578 597
- [33] Talib, M. S., Hamid, A. B., & Chin, T. A. (2015). Motivations and limitations in implementing Halal food certification: a Pareto analysis. *British Food Journal*, 117(11), 2664-2705
- [34] Saraji, N.S., &Daragahi, H.(2006). Study of quality of work life (QWL). Iranian J Publ Health, 35(4), 8-14.
- [35] Celik, D. A., & Oz, E. U. (2011). The Effects of Emotional Dissonance and Quality of Work Life Perceptions on Absenteeism and Turnover Intentions among Turkish Call Center Employees. *Procedia - Social and Behavioral Sciences*, 30, 2515–2519.
- [36] Mirkamali, S. M., &Thani, F. N. (2011). A study on the Quality of Work Life (QWL) among faculty members of University of Tehran(UT) and Sharif university of technology (SUT). Procedia - Social and Behavioral Sciences, 29, 179–187.
- [37] Kanten, S., &Sadullah, O. (2012). An Empirical Research on Relationship Quality of Work Life and Work Engagement. Procedia - Social and Behavioral Sciences, 62, 360–366. http://doi.org/10.1016/j.sbspro.2012.09.057
- [38] Voirol, C., & Dupuis, G. (2010.). Fluctuations in Weekly Brief Measures of Quality of Working Life and Prediction of Quality of Working Life Systemic Inventory (QWLSI) Results After Four Months, Using the Internet. *Journal of Workplace Behavioral Health*. 25 (4), 37–41.
- [39] Lewis, D., Brazil, K., Krueger, P., Lohfeld, L., Tjam, E., Stumpf, S. A., Tjam, E. (2001). Extrinsic and intrinsic determinants of quality of work life Extrinsic and intrinsic determinants of quality of work life. *Leadership in Health Services.14* (2), 9-15
- [40] Surienty, L., Ramayah, T., Lo, M. C., &Tarmizi, A. N. (2014). Quality of Work Life and Turnover Intention: A Partial Least Square (PLS) Approach. *Social Indicators Research*, 119(1), 405–420. http://doi.org/10.1007/s11205-013-0486-5
- [41] Ojedokun, O., Idemudia, E. S., &Desouza, M. (2015). Perceived external prestige as a mediator between quality of work life and organisational commitment of public sector employees in Ghana. SA Journal of Industrial Psychology, 41(1), 1–17. http://doi.org/10.4102/sajip.v41i1.1216
- [42] Ramstad, E. (2009). Promoting performance and the quality of working life simultaneously. *Journal of Productivity and Performance Management*. 58 (5). 423-436

- [43] Layer, J. K., Karwowski, W., &Furr, A. (2009). The effect of cognitive demands and perceived quality of work life on human performance in manufacturing environments. *International Journal of Industrial Ergonomics*, 39(2), 413–421.
- [44] Fontinha, R., Van Laar, D., & Easton, S. (2016). Quality of working life of academics and researchers in the UK: the roles of contract type, tenure and university ranking. *Studies in Higher*http://doi.org/10.1080/03075079.2016.1203890
- [45] Arif, S., &Ilyas, M. (2013). Quality of work-life model for teachers of private universities in Pakistan. *Quality Assurance in Education*, 21(3), 282–298.
- [46] Nanjundeswaraswamy, T.S. &Swamy, D.R. (2013). Quality of worklife of employees in private technical institutions. *International Journal for Quality Research*, 7(3), 3-14.
- [47] Nayak, T., Sahoo, C. K., Mohanty, P. K., &Sundaray, B. K. (2016). HR interventions and quality of work life of healthcare employees: an investigation. *Industrial and Commercial Training*, 48(5), 234-240. doi:10.1108/ict-02-2015-0019
- [48] Andries, F., Smulders, P. G. W., &Dhondt, S. (2002). The use of computers among the workers in the European union and its impact on the quality of work. *Behaviour and Information Technology*, 21(6), 441–447.
- [49] Saklani, D. R. (2003). Quality of Work Life: Instrument Design. *Indian Journal of Industrial Relations*, 38(4), 480-503.
- [50] Permarupan, P. Y., Mamun, A. A., &Saufi, R. A. (2013). Quality of Work Life on Employees Job Involvement and Affective Commitment between the Public and Private Sector in Malaysia. Asian Social Science, 9(7). doi:10.5539/ass.v9n7p268
- [51] Rai, G. S. (2015). Organizational Justice and Quality of Working Life: A Road That Leads to a Virtuous Organization. *Journal of Social Service Research*, 41(2), 269–294. http://doi.org/10.1080/01488376.2014.987942
- [52] Jokinen, E., &Heiskanen, T. (2013). Is the Measured Good Quality of Working Life Equivalent to Strategically Strong HRM System? Procedia - Social and Behavioral Sciences, 81, 131–141.
- [53] Farahbakhsh, S. (2012). The Role of Emotional Intelligence in Increasing Quality of Work Life in School Principals. *Procedia - Social and Behavioral Sciences*, 46, 31–35. http://doi.org/10.1016/j.sbspro.2012.05.062
- [54] Aziz, R. A., Nadzar, F. M., Husaini, H., Maarof, A., Radzi, S. M., & Ismail, I. (2011). Quality of work life of librarians in government academic libraries in the Klang Valley, Malaysia. *The International Information & Library Review, 43*(3), 149-158. doi:10.1016/j.iilr.2011.07.002

APPENDIX

Table1: List of Identified Factors of Quality Work Life from Literature Review and their frequency of occurrence in descending order.

Sl No:	Factors of QWL	Sources	Occurr ence
1	Adequate and fair Compensation (A&FC): Pay, Salary, Fair Pay, Compensation, Monetary and Non- monetary compensation	Saklani(2003),(Saraji& Dargahi, 2006), Seraji&Dargahi (2007), (Joshi, 2007),Timossi et al (2008), Shahbaziet al (2011) (Celik & Oz, 2011), (Mirkamali & Thani, 2011), (Kanten & Sadullah, 2012), Nanjundeswaraswamy&Swamy(2013), Permarupan et al(2013), (Kandasamy & Ancheri, 2009), Yadav & Naim (2017), (Voirol & Dupuis, n.d.), (Lewis et al., 2001)(Surienty, Ramayah, Lo, & Tarmizi, 2014), (Ojedokun, Idemudia, & Desouza, 2015), (Yaghi & Yaghi, 2014), Martel & Dupius (2006), Taher (2013)	20
2	Opportunities for Growth(OG): Career Development, Training, Training and Development, Career prospect, Promotion opportunities, Learning, Growth & advancement,	(Lewis et al., 2001), Saraji&Dargahi (2006), Timossi et al (2008), Ramstad (2009), (Layer, Karwowski, & Furr, 2009), Celik et al(2011), (Shahbazi et al., 2011), Yeo & Li (2011), (Mirkamali & Thani, 2011), (Kanten & Sadullah, 2012), Permarupan et al(2013),Nanjundeswaraswamy&Swamy(2013),(Yaghi & Yaghi, 2014), (Joshi, 2007), (Kandasamy & Ancheri, 2009), Saklani 2003, (Martel & Dupuis, 2006),	17
3	Safe & Healthy Working Condition (S&HW): Physical environment, Working Condition, Ergonomics, Environment, Healthy Physical Condition, Work environment	(Andries, Smulders, & Dhondt, 2002), Saklani (2003), Saraji&Dargahi (2006), (Joshi, 2007), Timossi et al (2008), (Shahbazi et al., 2011), (Mirkamali & Thani, 2011), (Kanten & Sadullah, 2012), Permarupan et al(2013), (Kandasamy & Ancheri, 2009), Nanjundeswaraswamy&Swamy(2013), Yaghi&Yaghi 2014, (Rai, 2015), Taher (2013)	14
4	Social integration & Cohesiveness(SI&C): Social Interaction, Social aspect of work, work Group relation, Community, Relation with boss, Union-Management Relation, Relation & Cooperation, Social relation, Cooperation, Relations with superior, Relation with co-worker, Human Relation	Saklani (2003), Saraji&Dargahi (2006), Timossi et al (2008), (Shahbazi et al., 2011), (Mirkamali & Thani, 2011)Kanten&Sadullah (2012), Nanjundeswaraswamy&Swamy(2013), (Kandasamy & Ancheri, 2009), Ramstad (2009), (Surienty et al., 2014),Yaghi&Yaghi 2014, Martel & Dupuis 2006, (Farahbakhsh, 2012), (Voirol & Dupuis,2010.)	14
5	Work & Total Life space (W&TL): Balance of Work and Life, Work Life Balance, Time for Family and Social Obligations, Friends and Family, Family life, Home-work Interface, Work Occupy	Saklani (2003), (Saraji & Dargahi, 2006), 'Timossi et al (2008), (Shahbazi et al., 2011), (Mirkamali & Thani, 2011), (Kanten & Sadullah, 2012), (Ojedokun et al., 2015), (Surienty et al., 2014), (Fontinha, Van Laar, & Easton, 2016), (Kandasamy & Ancheri, 2009), Khanifar et al (2012), (Arif & Ilyas, 2013), Nayaket al (2016)	13
6	Supervisor(Su): Social support Supervisor, Supervisor Behaviour, Supervision, Supervisory Work, Supervisory treatment of the Staff,	(Lewis et al., 2001), Seraji&Dargahi (2006), Saraji&Dargahi (2007), (Layer et al., 2009), Yaghi&Yaghi 2014, (Surienty et al., 2014), (Ojedokun et al., 2015), (Joshi, 2007), Yadav & Naim (2017), , (Jokinen & Heiskanen, 2013), (Voirol & Dupuis, 2010.)	
7	Human Progress Capacities(HPC): Opportunity to use and Develop Human Capacities, skill and knowledge, Skill Development, Knowledge Development, Competency Development, Development of skill	Saklani (2003), Timossi et al (2008), (Shahbazi et al., 2011), (Mirkamali & Thani, 2011), Kanten&Sadullah (2012), Yaukthamarani et al(2013), Ramstad (2009), Khanifar et al (2012), Martel & Duiius2006	9
8	Constitutionalism, Justice and Equity (CJE): Constitutionalism in working environment, Work ethics, Nature of Justice and equity, Grievance handling, Sexual Harassment and Discrimination,	Saklani (2003), Saraji&Dargahi (2006), Timossi et al (2008), Shahbazi et al (2011), Mirkamali & Thani (2011), Kanten&Sadullah (2012), Yaghi&Yaghi (2014), Joshi (2007), Martel &Dupius(2006)	9

	Fairness at work		
9	Rewards and Recognition(R&R): Recognition of efforts, Appreciation of the task Recognition through promotion, Rewards, Recognition	Saklani (2003), Saraji&Dargahi (2006),Celik& Oz (2011), Yeo & Li (2011), Nanjundeswaraswamy&Swamy(2013), Voirol & Dupuis(2010.) ,Dargahi&Seragi (2007), Layer <i>et al</i> (2009)	
10	Job Security (JSe): Security of Job, Employment security	Saklani(2003), Saraji&Dargahi (2006), (Farahbakhsh, 2012), Nanjundeswaraswamy&Swamy(2013), Rama Joshi(2007), Khanifar et al (2012) Yadav & Naim (2017)	
11	Autonomy & control at work (A&C): Autonomy at work, Task Control, Responsibility, Skill Discretion, job control,	Andries, Smulders&Dhondt(2002,) Saraji&Dargahi (2006), Nanjundeswaraswamy&Swamy(2013), (Fontinha et al., 2016), Martel &Dupius 2009, Rai 2015, Lewis <i>et al</i> (200),	
12	Participation in decision-making (PDM): Employee participation, Decision latitude, Involvement of employee Decision authority	Lewis et al (2001), Saklani (2003), Yaghi&Yaghi (2014), Yadav & Naim (2017), Martel &Dupius (2006), Narehanet al (2014	
13	Communication (Co): Communication, Two-way Communication, Open communication, work group communication, Organizational communication, Communication between managers and Employees, Communication between man and man	Lewis et al (2001), Saraji&Dargahi (2007), Yeo & Li (2011) Nayaket al (2016), Yadav & Naim (2017), Martel &Dupius (2006)	
14	Teamwork (TW): Teamwork, Co-workers Support, Team Spirit	Lewis et al (2001), Yeo & Li (2011), Ramstad (2009),Nayaket al (2016), Yadav & Naim (2017)	
15	Job satisfaction (JSa): Satisfaction with Job, Satisfaction, Career satisfaction	Layer <i>et al.</i> (2009), Nanjundeswaraswamy&Swamy(2013), Fontinha <i>et al</i> (2016), Yadav & Naim (2017), Rai (2015)	5
16	Social relevance in work life (SR): Social relevance of employer, CSR, Relevance to society	Saklani (2003), Timossi et al (2008), Shahbazi <i>et al</i> (2011), Mirkamali & Thani (2011), Kanten&Sadullah (2012)	
17	Leadership(Le): Leadership Style, Leadership behaviour, Leadership	Saraji&Dargahi (2007), Celik & Oz (2011), Yeo & Li (2011)	3
18	Empowerment (Em): Empowerment, Authority	Layer et al(2009)Arif & Ilyas, 2013),Nayaket al (2016)	3
19	Organizational Culture (OC): Organizational Culture	Yeo & Li (2011), Farahbakhsh (2012), Nanjundeswaraswamy&Swamy(2013)	3
20	Benefits & Facilities (B&F): Welfare facilities, Fringe benefits & welfare measures, Benefits and Facilities	Saklani (2003), Nanjundeswaraswamy&Swamy(2013), Martel &Dupius(2009)	
21	Flexibility (FI): Flexibility in work schedules, Flexible schedules, work flexibility	Farahbakhsh (2012), Martel & Dupius (2006), Azizet al (2011).	
22	Trust(Tr): Trust, Trust in Senior Management	Seraji&Dargahi (2006) Saraji&Dargahi (2007)	
23	Respect at work(RW): Respect, Respect at work	Saraji&Dargahi (2007), Joshi (2007)	
24	Adequacy of resource-(AR): Adequacy of resource	Nanjundeswaraswamy&Swamy(2013)	
25	Job identity(JI): Job identity	Yeo & Li (2011)	1
26	Organization Structure (OS): Organization Structure	Narehanet al (2014	1
27	Creativity outside work(COW): Creativity outside work	Taher 2013	1

Table 2: Parteto Analysis- Factors with their cumulative occurrence frequency percentage

Sl No:	QWL Factors	Occurrenc e	Cumulative Occurrence	Cumulative Occurrence
		frequency	Frequency	Frequency
				%
1	A&FC	20	20	11%
2	OG	17	37	21%
3	S&HW	14	51	28%
4	SI&C	14	65	36%
5	W&TL	13	78	44%
6	Su	11	89	50%
7	HPC	9	98	55%
8	CJE	9	107	60%
9	R&R	8	115	64%
10	Jse	7	122	68%
11	A&C	7	129	72%
12	PDM	6	135	75%
13	Co	6	141	79%
14	TW	5	147	82%
15	Jsa	5	152	85%
16	SR	5	157	88%
17	Le	3	160	89%
18	Em	3	163	91%
19	OC	3	166	93%
20	B&F	3	169	94%
21	F1	3	171	96%
22	Tr	2	173	97%
23	RW	2	175	98%
24	AR	1	176	98%
25	JI	1	177	99%
26	OS	1	178	99%
27	COW	1	179	100%