



Quality of work life – evidence from auto-component industry in India

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Abstract

Recently the study on Quality of Work Life (QWL) has gained attention of many researchers. It is a well-known fact that employees are main asset for an organization. One of the major challenges for an organization in these competitive business environments is to attract and retain skilled and talented workforce. The present study attempts to critically analyze the level of QWL of employees in auto component industries in India. The data was collected using a survey instrument and it was analyzed using descriptive and inferential statistical methods. The research revealed that educational qualification, designation and salary paid were not significantly associated with QWL. Further it was found that majority of employees were highly satisfied with the organizational culture and relationship and co-operation component.

Keywords: Quality of work life, auto component industry, work environment, designation, salary paid, organizational culture, level of satisfaction.

Introduction

In 1979, Quality of Work Life (QWL) was defined as a process of organization, which enables its members at all levels to actively participate in shaping the organization's environments, methods and outcomes by the American Society for Training and Development. It is an approach in which employees treated as vital resources to achieve organization objectives. Most often, the challenge faced by organizations these days is to create a work environment that can enhance QWL of employees that leads to increased performance and productivity levels. In other words, organizational environment should be such that it should support to satisfy both organizational and personal needs of employees. The QWL was first introduced by Davis in International QWL conference held in Toronto in 1972 and in the same year international council for QWL was established. Richard E Walton, defines QWL by using following conditions of employment such as: Adequate and fair compensation, Opportunity to use and develop human capacities, Special relevance of work, Safe and healthy working condition, Opportunity for career growth, Constitutionalism in the work organization, Social integration in the work force, Work and quality of life. These terms create a pathway to achieve desirable QWL of employees in any organization.

Since the auto-component sector has gained a great momentum in the recent decade with a growth rate of 8.5-10% in the current financial year as against 2.8% in the last year. The auto-component industry is a flourishing industry and awareness about QWL program was first initiated at United Auto-Workers and this sector of industry has faced many workforce issues and challenges in the form of conflicts between trade unions and

management, strikes and so on¹. Since the primary focus of QWL was on employee well-being to meet organizational goals which in turn minimizes the conflicts, unpleasant situations by providing conducive work environment. Since the literature reveals dearth in research studies on QWL in auto-component industry and India is the growing hub for many automobile giants. Hence this empirical study aims at measuring the status of employees QWL in auto-component industries in India.

Literature Review: In the area of social science, the research on QWL has gained more prominence, because of its dual effect on individual level as well as at organization level. Every organization expects higher levels of output by using least input and this is possible only through capable and satisfied workforce. Hence, organizations need to provide a favorable work environment where employees feel comfortable and satisfied. Many researchers and HR professionals have conducted several studies in the area of QWL to address various issues and implication of QWL. In this context, a extensive literature revolving around QWL was conducted as mentioned in the section below.

The American Society of Training and Development defined QWL as a "process of work organizations which enable to take part in shaping the organizations environment, methods and outcomes. This process is directed towards meeting the twin goals of enhanced effectiveness of organizations and improved quality of life at work for employees". QWL is a multidimensional concept, with multiple interrelated factors which needs careful consideration to conceptualize and measure². The vital QWL components includes the basic extrinsic work-related aspects such as salary, number of

working hours and working conditions; and intrinsic features such as the nature of performing the work³. Further, the work environment will be able to fulfill employees' personal needs and it provides a positive interaction effect, resulting in excellent QWL⁴. The study proved strongly association between QWL with job satisfaction, wages rates per hour and working conditions⁵. While another study revealed that, if rewards from the organization meet the employees expectations then their personal needs are satisfied⁶. Further, an improved relationship between supervisors and subordinates can improve QWL of employees⁷. The QWL status is important for any organizations in order to improve their employee's job satisfaction and commitment levels⁸.

The empirical study in small and medium firms revealed following are the crucial factors which will persuade QWL and the factors were work environment, personal growth and advancement, group dynamics, motivation and organizational

climate⁹. Another study identified the most often used QWL drivers to be reward given to employees, career-development, benefits and compensation, effective communication and safety and security¹⁰. The Table-1 below exhibits the different components of QWL in and related outcomes in the view of different researchers.

From the extensive literature review, it can be stated that QWL is a multidimensional construct and it has positive association with variables such as organizational performance, efficiency, commitment and job-satisfaction³². Based on frequency of consideration by different researchers the following QWL components were selected for the present study. The components are: Work Environment, Compensation and Reward, Job Satisfaction and Security, Relationship and Cooperation, Organization Culture, Training and Development, and Facilities, Autonomy of Work / Opportunities for Use, Development of Skills and Adequacy of Resources.

Table-1: QWL Components Considered By Various Researchers.

Industry	QWL Components considered	Outcome/ Conclusion	Reference
University of Medical Sciences	Occupational health, Safety standards at work, Monetary compensation, Career prospect, Work Environment.	The study results revealed that most of the employees expressed their dissatisfaction towards the occupational health and safety.	11
Technical institution	Cooperation, Job security, Relationship, Training and Career development.	The study outcome concluded that employee's QWL alone is not sufficient to measure the employees job satisfaction in technical institutions.	12
Technical institution	Nature of Job, Job Security, Career Prospect, Opportunity for Growth and Security, Safety and Healthy Work Condition.	The QWL study in technical institution revealed that good QWL will ensure most favorable operational freedom and leads to overall faculty's development.	13
Technical institution	Organizational Behavior, Work Environment, Job Security, Satisfaction	Study establishes the role of moderating variable.	14
Technical institution	Adequate and fair compensation, Help new comers adapt to new environment, Safe and healthy working conditions, Willing to help co-workers in solving work- related problems.	The study concluded by stating that, employees are the major driving force behind the success of any organization.	15
Eastern University	Attention to job design, Safe and healthy working environment, Employee relations, Adequate and fair compensation, Opportunities to develop human capacities, Job security, Opportunities for continuous growth, Flexible work schedule.	The QWL will provide valuable implications for the banking sector in maintaining gender equality.	16
Apparels	Adequate and fair compensation, Social relevance of work, Work and personal life, Opportunity to use and develop human capacities, Opportunity for career growth, Constitution in work organization, Safe and healthy working conditions, Social integration in work-force.	The research outcomes indicate that, the management of apparel industry has considered work environment to be the important factor to make their employees feel happy.	17
Technical Institution	Opportunities to develop human capacities, Adequate and Fair compensation, Opportunities for career growth, Safe and healthy working conditions.	The study results indicated that to creating a good QWL is important to develop, enhance and utilize employees effectively for improving the productivity and product/service quality.	18

Industry	QWL Components considered	Outcome/ Conclusion	Reference
Private Colleges	Proactively, Work- Life Balance, Human Relation, Learning organization, Social integration in the work, Opportunity for career growth.	The study results revealed moderate work-stress amongst the teachers in private colleges in Oman.	19
Public sector	Constitutional protection, Social integration in the work, Opportunity for career growth, Relevance of work.	QWL is not the sole responsibility of the management but enlarges on workers, Union Leaders, Govt officials.	20
Banking and Education Sector	Flexible working hours, Counseling program, Promotion opportunity, Fair pay, Advancement opportunities, Empower Employees, Fair policy, Supportive management.	The research results indicated that work life balance and job satisfaction are on-going issues to be managed in any organization.	21
Textile Industry	Training, Freedom at work, Participation in managerial decision- making, Working hours, Feedback and appreciation from supervisors, Transportation facilities, Free health check-ups.	The research results revealed that if employees are happy and healthy their can give their best by effectively contributing towards the company's goals.	22
Manufacturing industry	Job satisfaction, Compensation, Work culture, Health and safety working, Working environment, Opportunities for use and development of skills and ability, Welfare related measures.	The study results revealed that the QWL status of work-force in small-scaled enterprises is not good.	23
Health Sector	Behavior Cooperation, Organizational Oriented, Individual proactive behaviours, Proactive behaviours, Co-workers oriented, Role-prescribed, Pro-social behaviours.	The study revealed that QWL is considered to be a critical component in health care sector to stay successful and for gaining sustainable competitive advantage.	24
Technical institution	Adequate and fair compensation, Social integration, Opportunities for growth and security, Immediate opportunity to use and develop human capacities, Safe and healthy work environment.	Majority of the IT professionals considered for this study are in their early or mid-career stage.	25
Automotive industry	Job-satisfaction, Safety and healthy working condition, Overall QWL, Welfare measures, Social relationship, Work environment, Compensation, Opportunity for use and development of skills and abilities.	The results revealed that, QWL is significantly associated with employee's performance.	26
Technical institution	Work environment, Rewards, Compensation, Job security, Relationship with work.	The study results identified that age of the teachers is associated with the QWL.	27
Pharmaceuticals limited company	Safe and healthy working environment, Constitutionalization in the work environment, Adequate and fair compensation, Job Satisfaction, Organizational Commitment, Career Development.	There is an association between organizational Commitment and components of QWL.	28
Small-scale industry	Interpersonal relations, Hygiene factor, Supervision and recognition, Company policies, Working conditions, Motivators, Salary advancement, Status growth, Job security.	The study revealed that it is employers need to provide necessary facilities for employees to improve QWL in small scale firms.	29
Marketing Unit and BPCL	Working Conditions, Work Safety, Behavior of Superiors, Adequate Bonus, Fair Wages, Performance based Promotion, Job Security.	The study results revealed that it is possible to retain skilled and good workers by maintaining high level of QWL and job satisfaction.	30
Steel manufacturing plant	Job satisfaction, Training and Development, Career anticipation, Employee welfare, Working condition, Home work-interface / work -life balance, Compensation	The research concluded by stating that, creating a good work environment for employees will result in good QWL which results in enhancing their performance levels.	31

Objectives: i. To investigate the status of QWL in auto-component industry. ii. To know and evaluate the effect of demographic factors on QWL of employees. iii. To analyze the association between QWL and its components.

Methodology

QWL motivates employees to perform better by satisfying their economic, social and physiological needs. It assimilates the conflicting issues i.e. the claim regarding the employees well-being and job satisfaction levels. QWL entail both content and context aspect and it is said to affect both personal attitudes and behaviors of individual and group. The study comprises of responses collected from 48 Auto-Component industries. A structured questionnaire was prepared to collect the data for analysis. The data collected was analyzed using descriptive and inferential statistical test such as graphs, percentage analysis, chi-square test, correlation analysis and regression analysis.

Data collection: The requirement for the research is supported by Primary and Secondary sources of data, primary is for structured questionnaire and secondary i.e. scholarly articles, website, journals, thesis and company public documents etc. The researcher collected the data personally. The questionnaire consisted of two sections: section 1: general information such as: qualification, age, salary, experience, designation and gender of respondents and section: 2 questions related to nine QWL components (50 questions). The questionnaire was distributed among 50 auto component firms of which only 48 questionnaires were valid and rest were rejected due to incomplete data.

The questions were given weighted score of 5, 4, 3, 2 and 1 on basis of Likert scale where 1 refers to strongly disagree and 5 refers to strongly agree. The design of questionnaire was done in such a way that it would make easy for the respondents to

disclose as much information as possible about motivation, adaptability to changes in working environment etc...

Results and discussion

QWL and demographic factors: This section focuses on different demographic factors has its effect on QWL in SMEs. Organizations provide different QWL in different combinations keeping in view demographic factors like Gender, Experience, Educational Qualification, Average salary paid, Designation, Age, and Marital Status. The following section presents effect of demographic factors on level of satisfaction of QWL.

Gender and QWL Satisfaction: Gender is considered as one of the important variables in various researches. Gender-wise distribution is grouped as: i. Male, ii. Female.

From Figure-1, it is inferred that male employees are significantly higher in number when compared to female employees. Around 59% of the male employees expressed satisfaction towards QWL, while with respect to female employees it was only 20%.

Experience of Employee: The experience is tenure of work and it is grouped as: i. Between 1 to 5 years ii. Between 6 to 9 years iii. Above 10 years.

From Figure-2, Employees having work experience of 6-9 years are completely satisfied with the QWL, whereas employees having work experience of above 10 years exhibit satisfaction level up to 80% while the remaining employees are least satisfied with their QWL.

Educational Qualification and QWL: The education qualification refers to the successful completion of a course of study/training program. Educational qualification of respondents are grouped as: i. Graduation, ii. Diploma, iii. ITI.

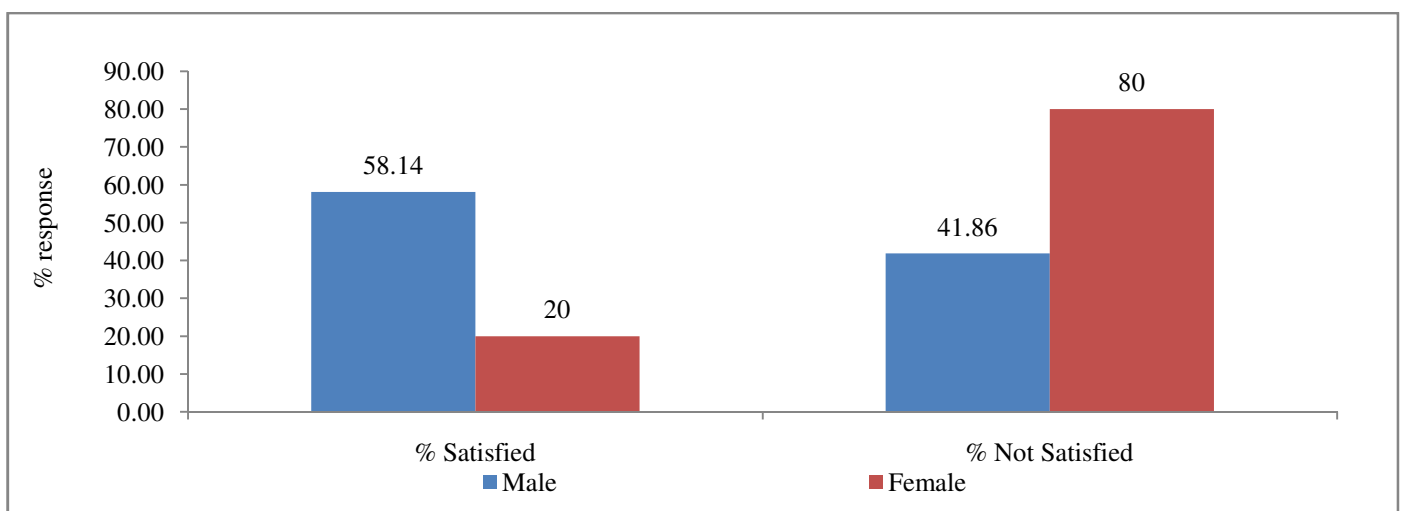


Figure-1: Employee Gender v/s QWL.

From Figure-3, Diploma holders as well as the graduates exhibit complete QWL satisfaction, whereas the majority of the ITI employees exhibit the least satisfaction level.

Average salary and QWL: The Salary is the compensation paid to an employee for by the company in return for work done. The average salary paid to employees is grouped as: i. Between 10000 rupees-20000 rupees, ii. Between 20000 rupees -30000 rupees, iii. Above 30000 rupees.

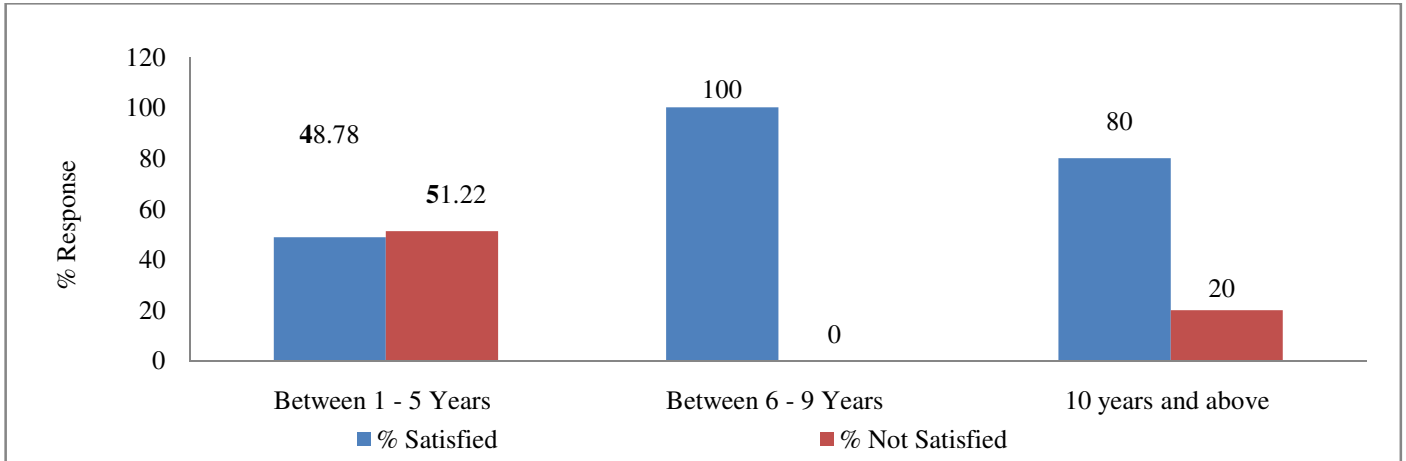


Figure-2: Experience of Employee vs. QWL.

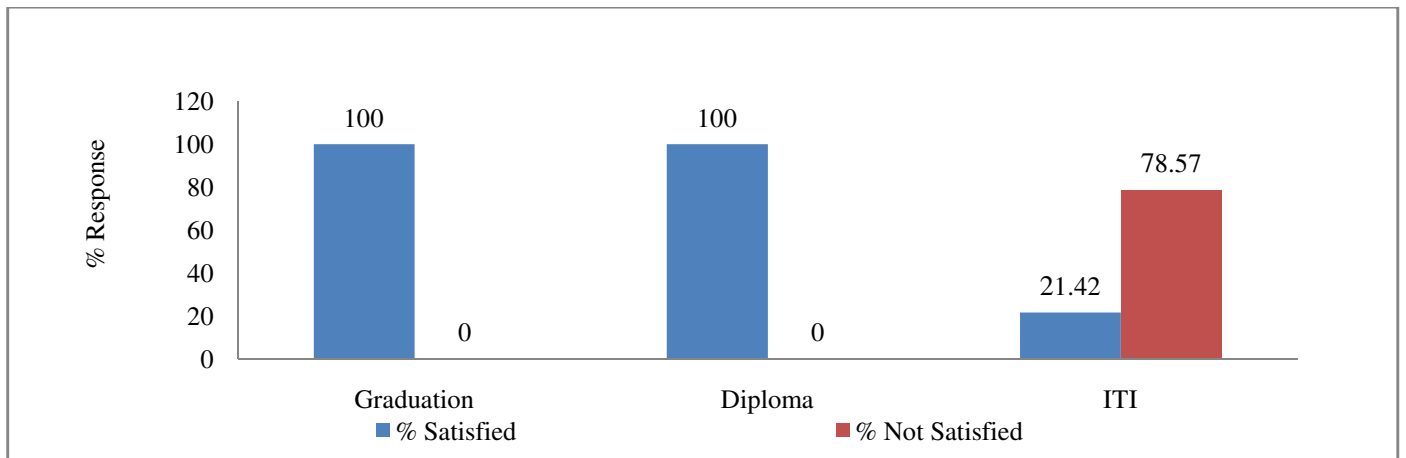


Figure-3: Educational qualification of employee's v/s QWL in %.

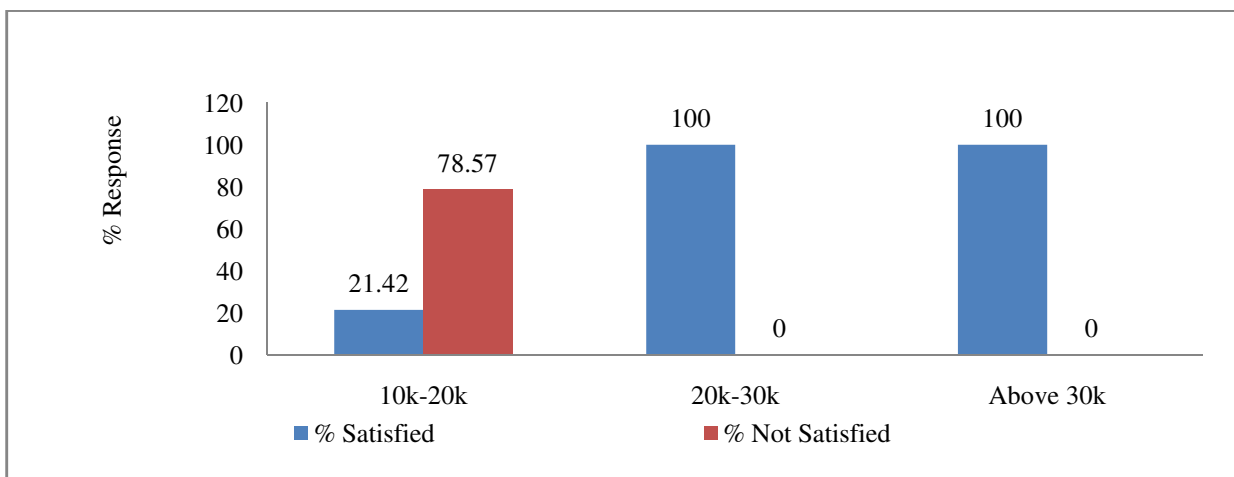


Figure-4: Average Salary paid to employee's v/s QWL.

From Figure-4, it concludes that employees earning an average wage above Rs. 20k are completely satisfied with their QWL, whereas employees earning an average salary below Rs. 20k are least satisfied with their QWL.

Designation of Employee and QWL: Designation is classification of an individual on basis of different category from that of others in the organization. Designation is grouped as: i. ITI, ii. Diploma, iii. Manager.

From Figure-5, Employees from diploma and managing sector exhibit complete level of satisfaction whereas the employees from ITI sector exhibit the least level of satisfaction.

Age of Employee and QWL: Many traits are considered when hiring a new employee. Such as Work history, Education, etc. Age also plays a major role. Age of employee is grouped as: i. Age between 20-25 years, ii. Age between 26-30 years, iii. Aged between 31-35 years.

From Figure-6, Employees aged between 31-35 years exhibit broad level of satisfaction whereas the employees aged between 26-30 years exhibit 70% QWL satisfaction level while the remaining employees in the age range of 20-25 years are least satisfied with their QWL.

Marital Status of Employee and QWL: The marital status of employees are grouped into: i. Married, ii. Unmarried.

From Figure-7, Employees who are married exhibit higher level of satisfaction whereas employees who are unmarried least satisfaction level of their QWL.

Relationship between QWL of Employees with Demographic Factors: To understand the association between QWL and demographic factors chi square test was done.

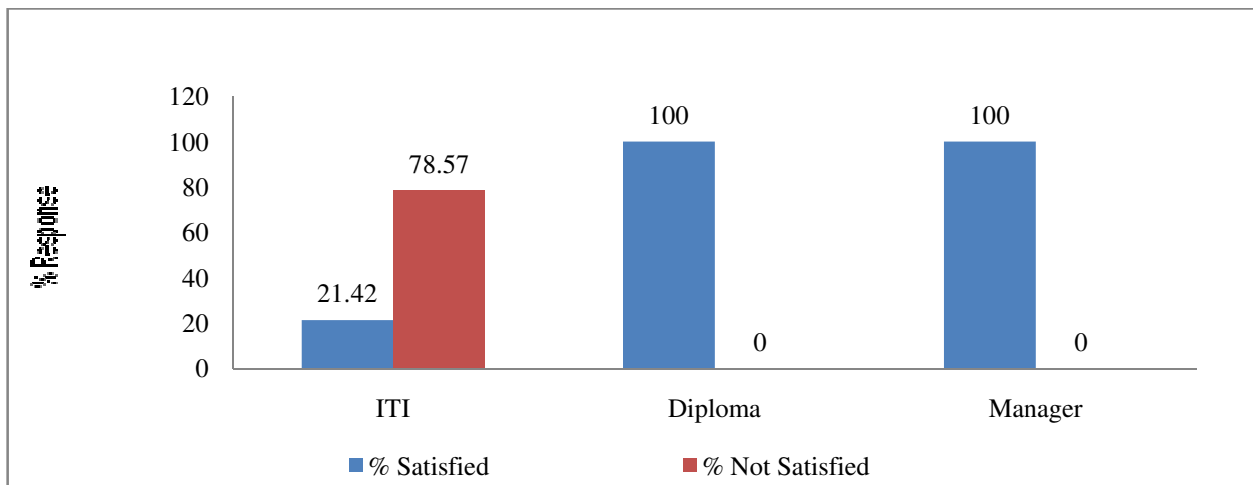


Figure-5: Designation of employee v/s QWL.

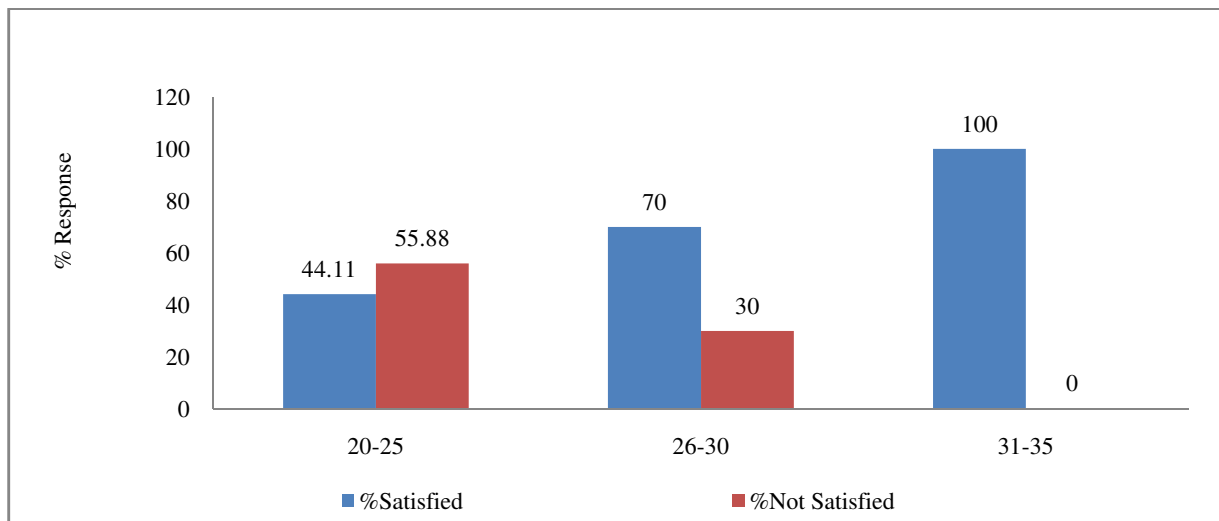


Figure-6: Age of employee v/s QWL in %.

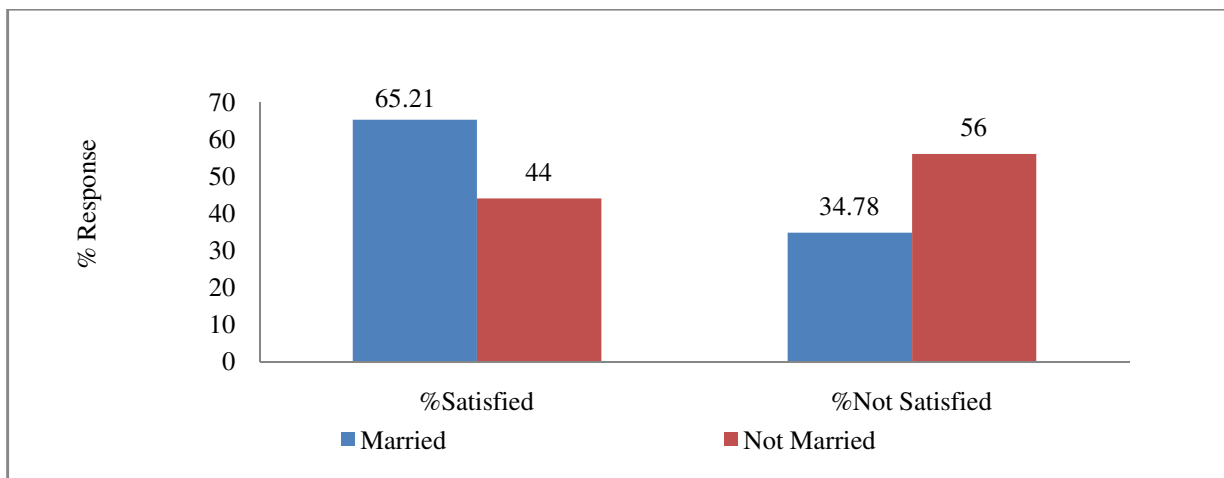


Figure-7: Marital Status of Employee Vs QWL.

Table-2: Relationship between QWL and Demographic factor.

Demographic Factors		p-value	Significance Level
Respondent Gender	Male	2.624	Significant
	Female		
Respondent Age	Age between 20 to 25 yrs	5.777	Significant
	Age between 26 to 30 yrs		
	Age between 31to 35 yrs		
Marital Status	Married	2.172	Significant
	Unmarried		
Experience	Between 1 - 5 yrs	3.515	Significant
	Between 6 - 9 yrs		
	Above 10 yrs		
Educational Qualification	Graduation	29.011	Not Significant
	Diploma		
	ITI		
Designation	ITI	29.011	Not Significant
	Diploma		
	Manager		
Average Salary paid	Between Rs. 10000-20000	29.011	Not Significant
	Between Rs. 20000-30000		
	Above Rs. 30000		

As shown in the above Table-2, based on p-value it is apparent that the gender, age, marital status, and experience of respondents were significantly associated with QWL. It indicates that QWL is dependent on between gender, age, marital status, and experience, while it is independent with respect to educational qualification, designation and salary.

Status of QWL: The status of QWL in auto component industry was determined based on collective scores of responses that were collected. The grand mean was considered as a cut-off score for the Likert scale^{33,34}. The calculated grand mean for the present study was 4.32 and the values above 4.32 were classified as satisfied and below are considered as not satisfied.

Table-3: Status of QWL components.

QWL Components	QWL Status	
	% Satisfied	% Not Satisfied
Work Environment	54.17	45.83
Organizational Culture	68.75	31.25
Relationship and Cooperation	68.75	31.25
Training and Development	43.75	56.25
Compensation and Reward	43.75	56.25
Facilities	58.33	41.67
Job Satisfaction and Security	43.75	56.25
Autonomy of Work	54.17	45.83
Adequacy of Resource	54.17	45.83

From the Table-3 it can be inferred that, employees expressed higher level of satisfaction with respect to organizational culture (68.75%), Relationships and cooperation (68.75%) and regarding Facilities (58.33%) provided by the firm. While, they expressed lower levels of satisfactions towards training and development (43.75%) imparted, compensation and rewards (43.75%) along with Job satisfaction and security (43.75%).

Relationship between nine QWL components: The F-test was conducted to test the relationship between QWL and components of QWL. To test the relationship following hypotheses were formulated: i. H₀₁: The Work environment is not associated with QWL of employees, ii. H₀₂: The Organization Culture is not associated with QWL of employees, iii. H₀₃: The Relationship and cooperation is not associated with QWL of employees, iv. H₀₄: The Training and development is

not associated with QWL of employees, v. H₀₅: The Compensation and reward is not associated with QWL of employees, vi. H₀₆: The Facilities is not associated with QWL of employees, vii. H₀₇: The Job satisfaction and security is not associated with QWL of employees, viii. H₀₈: The Autonomy of work is not associated with QWL of employees, ix. H₀₉: The Adequacy of resources is not associated with QWL of employees.

The F-test values were used to decide upon whether to accept null hypothesis or to reject it. Results of F-test procedures are presented in following sections below.

Table-4: F-Test results for QWL components.

QWL Components	F Cal	F Critical	Significance Level **
Work environment (WE)	0.3500	0.6159	Not Significant
Organization Culture (OC)	1.8066	1.6238	Significant
Relationship and cooperation (RC)	0.5020	0.6159	Not Significant
Training and development (T&D)	0.5405	0.6159	Not Significant
Compensation and reward (CR)	2.6243	1.6238	Significant
Facilities (F)	0.9539	0.6159	Significant
Job satisfaction and security (JSS)	1.6125	1.6238	Not Significant
Autonomy of work (AW)	2.1826	1.6238	Significant
Adequacy of resources (AR)	3.3694	1.6238	Significant

** 95% significance level.

The Table-4 present the consolidated results of F-test for all the nine QWL components with F-critical value and F-calculated values. From F-Test, it can be inferred that organizational culture, compensation and reward, facilities, autonomy of work and adequacy of resources have significant association with QWL.

Regression equation: The regression analysis basically used to determine the statistical association between variables of interest. This analysis will determine the linear association between multiple independent variables and a single dependent variable. In the present research nine QWL components are independent variables and QWL of employees is the dependent variable. To analyze the influence of independent variable on overall QWL of employees the linear regression was performed and the results are indicated in Table-5.

Table-5: Linear Regression Analysis.

Predictor variables	Co-efficient	Standard Error Co efficient TP
Constant	-3.65524	0.00000 * *
WE	1.14958	0.00000 * *
OC	-0.0166096	0.0000000 * *
RC	0.136032	0.000000 * *
T and D	0.409196	0.000000 * *
C and R	-0.0100525	0.0000000 * *
Facilities	0.00571336	0.00000000 * *
JSS	0.0571860	0.0000000 * *

The regression equation is: $QWL = - 3.66 + 1.15 WE - 0.0166 OC + 0.136 RC + 0.409 T \text{ and } D - 0.0101 C \text{ and } R + 0.00571 \text{ Facilities} + 0.0572 JSS$.

From the regression equation the R^2 value (coefficient of multiple determination) is 1 and adjusted R^2 is 1 which reveals that the regression model is a good fit. It indicated that 100% of the variation in dependent variable (QWL) is explained by the seven independent variables as shown in the Table-5. From the table it can be inferred that WE i.e. Work Environment is the predominant component contributing to the QWL of employees. While, the compensation and rewards paid to the employees had less contribution towards QWL. Note: The components facilities and Job satisfaction and security were omitted.

Conclusion

The concept of QWL is gaining attention of many researchers, HR professional in almost all the sector. It is an important concept for motivating employees and improving their job satisfaction. A contented and healthy workforce will contribute positively towards organizational goals. A good QWL will not only attract young and new talents but also helps to retain the experienced workforce. QWL depends on demographic characteristics of employees³⁵ and hence, it is imperative to analyze and evaluate the QWL status in different demography. The current research was undertaken to study the QWL of employees in auto-component industries in India. The research outcomes indicate that four out of seven demographic factors show significant influence on QWL and remaining factors show least significance. For better QWL, it is necessary to bring improvements in Training, job security, career development and providing rewards for the work done by employees. Present study reveals least satisfaction level for the above-mentioned components and hence it is essential to meet higher satisfaction level for the betterment of organization.

It has been suggested that organizational success is based on satisfaction level and well being of its employees. The QWL is the foundation to increase the employee satisfaction³⁶ and hence it is essential for organizations to periodically assess QWL status of its employees to ensure better performance and productivity. Such empirical studies can assist employers to take corrective measures to enhance their employees QWL to stay competitive.

References

1. Robbins S.P. (1998). Organizational Behavior: Concepts, Controversies, and Applications. Prentice-Hall, Englewood Cliffs, NJ.
2. Rethinam G.S. and Ismail M. (2008). Constructs Of Quality Of Work Life: A Perspective Of Information Technology Professionals. *European journal of social sciences*, 1.
3. Taylor J.C., Cooper C.L. and Mumford E. (1979). The Quality of Working Life in Western and Eastern Europe. ABP.
4. Hackman J.R. (1980). Work redesign and motivation. *Professional Psychology*, 11(3), 445.
5. Mirvis P.H. and Lawler III E.E. (1984). Accounting for the quality of work life. *Journal of Organizational Behavior*, 5(3), 197-212.
6. Cunningham J.B. and Eberle T. (1990). A Guide to Job Enrichment and Redesign. *Personnel (AMA)*, 67(2), 56-61.
7. Bertrand W.S. (1992). Designing quality into work life. *Quality Progress*, 25(6), 29-33.
8. Normala D. (2010). Investigating the relationship between quality of work life and organizational commitment amongst employees in Malaysian firms. *International journal of business and management*, 5(10), 75.
9. Kenny B. and Reedy E. (2006). The Impact of Organisational Culture Factors on Innovation Levels in SMEs: An Empirical Investigation. *Irish Journal of Management*, 27(2).
10. Anwar Abdellah Mejbel, Mahmoud Khalid Almsafir, Rusinah Siron and Ahmad Salih Mheidi Alnaser (2013). "The Drivers of Quality of Working Life (QWL): A Critical Review". *Australian Journal of Basic and Applied Sciences*, 7(10), 398-405
11. Saraji G.N. and Dargahi H. (2006). Study of quality of work life (QWL). *Iranian journal of public health*, 35(4), 8-14.
12. Chitraa D. and Mahalakshmi V. (2012). A Study on Employees' Perception on Quality of Work Life and Job Satisfaction in manufacturing organization—an Empirical study. *International Journal of Trade and Commerce*, 1(2), 175-184.
13. Pani D. (2015). A Study on Quality of Work Life with Special Reference to Private Engineering College Teachers

- in the District of Rayagada. *Journal of Management and Science*, 5(3), 81-90..
14. Nair G.S. (2013). A Study on the effect of Quality of Work Life (Qwl) on organisational Citizenship Behaviour (OCB)- With Special reference to College Teachers in Thrissur District, Kerala. *Integral Review: A Journal of Management*, 6(1).
 15. Varghese S. and Jayan C. (2013). Quality of work life: A dynamic multidimensional construct at work place-part II. *Guru Journal of Behavioral and Social Sciences*, 1(2), 91-104.
 16. Tabassum A., Rahman T. and Jahan K. (2011). A comparative analysis of quality of work life among the employees of local private and foreign commercial banks in Bangladesh. *World Journal of Social Sciences*, 1(1), 17-33.
 17. Pothigaimalai P.V., Buvanewari R. and Sudha K. (2014). A study on human resource planning with special reference to ARR Products Ltd., at Kumbakonam. *International Journal of Advanced Research in Management and Social Sciences*, 3(7), 181-190.
 18. Jayakumar A. and Kalaiselvi K. (2012). Quality of work life-an overview. *International Journal of Marketing, Financial Services and Management Research*, 1(10), 140-151.
 19. Hans A., Mubeen S.A., Mishra N. and Al-Badi A.H.H. (2015). A Study on Occupational Stress and Quality of Work Life (QWL) in Private Colleges of Oman (Muscat). *Global Business and Management Research*, 7(3).
 20. Subhashini S. and Gopal C.R. (2013). Quality of work life among women employees working in garment factories in coimbatore district. *Asia pacific journal of research*, 1.
 21. Yadav R.K. and Dabhade N. (2014). Work life balance and job satisfaction among the working women of banking and education sector-A comparative study. *International Letters of Social and Humanistic Sciences*, 21, 181-201.
 22. Indumathy R. (2012). A study on quality of work life among workers with special reference to textile industry in Tirupur district-A textile hub. *Journal of Contemporary Management Research*, 6(1), 78.
 23. Kannaiah D. and Sasikumar G. (2014). Quality of work life of employee in small scale industries. *Asian journal of business management (ISSN: 2321-2802)*, 2(04), 107-134.
 24. Kanten P. (2014). Effect of quality of work life (qwl) on proactive and prosocial organizational behaviors: a research on health sector employees. *Suleyman Demirel University Journal of Faculty of Economics and Administrative Sciences*, 19(1).
 25. Nayak T. and Sahoo C.K. (2015). Quality of work life and organizational performance: The mediating role of employee commitment. *Journal of Health Management*, 17(3), 263-273.
 26. Jerome S. (2013). A study on quality of work life of employees at Jeppiaar Cement Private Ltd: Perambalur. *International Journal*, 1(4).
 27. Rao T., Arora R.S. and Vashisht A.K. (2013). Quality of Work Life: A Study of Jammu University Teachers. *Journal of Strategic Human Resource Management*, 2(1), 20.
 28. Jain Y. and Thomas R. (2016). A study on quality of work life among the employees of a leading pharmaceuticals limited company of Vadodara district. *IJAR*, 2(5), 926-934.
 29. Verma D.S. and Doharey A.K. (2016). A study to identify the factors affecting the quality of work life in small scale industries. *Imperial J. Interdisciplinary Res*, 2(6), 45-56.
 30. Patro C.S. (2015). A Study on the Impact of Faculty QWL on Quality of Education in Academic Institutions. *International Journal of Knowledge Society Research (IJKSR)*, 6(1), 1-16.
 31. Velayudhan T.M. and Yameni M.D. (2017). Quality of Work Life-A Study. In *IOP Conference Series: Materials Science and Engineering* (Vol. 197, No. 1, p. 012057). IOP Publishing.
 32. Saklani D.R. (2004). Quality of work life in the Indian context: An empirical investigation. *Decision (0304-0941)*, 31(2).
 33. Jerome S. (2013). A study on quality of work life of employees at Jeppiaar Cement Private Ltd: Perambalur. *International Journal of Advance Research in Computer Science and Management Studies*, 1(4), 49-57.
 34. Srinivas R. and Swamy D. (2013). Quality Management Practices In Rural And Urban SMEs-A Comparative Study. *International Journal for Quality Research*, 7(4), 479-492.
 35. Bolhari A., Rezaeean A., Bolhari J., Bairamzadeh S. and Soltan A.A. (2011). The relationship between quality of work life and demographic characteristics of information technology staffs.
 36. Usha S. and Rohini V. (2018). Impact of Quality of Work Life on Work Outcome of Employees in Automobile Companies in Chennai. *International Journal of Pure and Applied Mathematics*, 118(20), 787-799.