

CONTRIBUTION OF SAFE AND HEALTHY WORKING CONDITIONS TO WORKER'S QUALITY OF WORK LIFE: A CASE OF TIRUPUR KNITTED INDUSTRY

¹P. MURUGAN

Assistant Professor in commerce, Vivekananda College, Tiruvedakam West

²DR. .R.RAJANBABU

Associate Professor of Commerce & Research Adviser, A.V.C.College (Autonomous),
Mannampanthal.

³DR.V.RENGARAJAN

Assistant Professor School of Management SATRA Deemed University Thanjavur

⁴DR. S.C. SIVASUNDARAM ANUSHAN

Visiting Professor, Department of Management Studies, Madurai Kamaraj University,
Madurai

Abstract

The present era is an era of knowledge workers and the society in which we are living has come, to be known as knowledge society. One must have both love and work in one's life to make it healthy. Gone are the days when the priority of employees used to be for physical and material needs. With the increasing shift of the economy towards knowledge economy, the meaning and quality of work life has undergone a drastic change. This study aimed at finding those aspects of Waltons second dimension for QWL safe and healthy working conditions which are significant to workers of Tirupur garment industry. Factor analysis was used to reduce 23 constructs for safe and healthy working conditions into seven important factors.

1. Introduction

Quality of work life improvement is a process through which the stakeholders in the organization management, unions and employees learn how to work together better to determine for themselves what actions, changes and improvements are desirable and workable in order to achieve the twin and simultaneous goals of an improved quality of life

at work for all members of the organization and greater effectiveness for both the company and the union.

2. Specific Issues in QWL

Trade unions claim that they are responsible for improvement in various facilities to workers whereas management takes credit for improved salaries, benefits and facilities. However, HR manager has specific issues in QWL besides normal wages, salaries, fringe etc. and takes lead in providing them so as to maintain higher order QWL. Klott, Mundick and Schuster suggest majority QWL issues. They are;

i. Pay and stability of employment: good pay still dominates most of the factors in employee's satisfaction. Various alternative means for providing wages should be developed in view of increase in cost of living index, increase in levels and rates of incomes tax and profession tax. Stability to a greater extent can be provided by enhancing the facilities for human resources development.

ii. Occupational stress: stress is a condition of strain on one's emotions, thought process and physical condition. Stress is determined by the nature of work, working environment, hours, pause in the work schedule, workers ability and nature and match with the job requirements. Stress is caused due to irritability, hype-excitation or depression, unstable behavior, fatigue, smoking and drug abuse. Stress adversely affects employee productivity. The HR manager, in order to minimize the stress, has to identify, prevent and tackle the problem.

iii. Organizational health programs: organizational health programs aim at educating employees about health problems, means of maintaining and improving health etc. these programs cover drinking and smoking cessation, hyper-tension control, other forms of cardiovascular risk reduction, family planning etc. effective implementation of these programs result in education in absenteeism, disability, excessive job turn over and premature death, it covers also health control and diet control.

iv. Alternative work schedule: alternative work schedule including work at home, flexible working hours, staged hours, reduced work week, part time employment which may be introduced for the convenience and comfort of the workers as the work schedule which offers the individual the leisure time, flexible hours of work is preferred.

v. Participative management and control of work: trade unions and workers believe that workers participation in management and decision making improves QWL. Workers also

feel that they are part of and that have control over their work, use their skills and make real contribution to the job if they are allowed to participate in the creative and decision making process.

vi. Recognition: recognizing the employee as a human being rather than as a laborer increases the QWL. Participative management, awarding the rewarding systems, congratulating the employee for their achievement, job enrichment, offering prestigious designation to the jobs, providing well furnished and decent work place and vehicles are some means to recognize the employees.

vii. Congenial worker-supervisor relations: harmonious supervisor-worker relations give the worker a sense of social association, belongingness, achievement of their work result etc. this in turn leads to better QWL.

viii. Grievances procedure: workers have as sense of fair treatment when the company gives them an opportunity to ventilate their grievances and present their cases succinctly rather than settling the problem arbitrary.

ix. Adequacy resources: resources should match with stated objectives; otherwise, employees will not be able to attain the objectives. This result in employee dissatisfaction and lower QWL.

x. Seniority and merit in promotion: seniority is generally taken as the basis for promotion in case of operating employees. Merit is considered as the basis for advancement for managerial people whereas seniority cum merit is preferred for promotion of ministerial employees. The promotion policies should be fair and just in order to ensure QWL.

xi. Employment on permanent basis: employment of workers on casual, temporary, probationary basis gives them a sense of insecurity. On the hand, employment on permanent basis gives them security and leads to higher QWL.

3. QWL Definitions

J. Richard and J. Loy define QWL as “the degree to which members of a work organization are able to satisfy important personnel needs through their experience in the organization.”

“QWL is a process of work organizations which enable its members at all levels to actively; participate in shaping the organizations environment, methods and outcomes. This value based process is aimed towards meeting the twin goals of enhanced effectiveness of organizations and improved quality of life at work for employees.” by The American Society

of Training and Development (1979).

Robbins in the year 1989 defined QWL as "a process by which an organization responds to employee needs by developing mechanisms to allow them to share fully in making the decisions that design their lives at work".

According to Nadler and Lawler "QWL is a way of thinking about people, work and organizations, its distinctive elements are (i) a concern about the impact of work on people as well as on organizational effectiveness, and (ii) the idea of participation in organizational problem-solving and decision making. "

According to Luthans "The overriding purpose of QWL is to change the climate at work so that the human – technological - organizational interface leads to a better quality of work life."

Benium defines "QWL is based on a general approach and an organization approach. The general approach includes all those factors affecting the physical, social, economic, psychological and cultural well - being of workers, while the organizational approach refers to the redesign and operation of organizations in accordance with the value of democratic society. "

4. Review of past literature

For Grayson, 1973, "both employers and employees now better appreciate the importance of the Quality of work life in an organization. Quality of work life is important to organizational performance".

For Ghosh, 1992, "Quality of work life is an important factor that affects motivation at work".

According to Gardon, 1984, "Quality of work life programmes has two objectives: to enhance the productivity and the satisfaction of employees. Quality of work life is the quality of the content of relationship between employees and their total working environment with human dimensions added to the usual technical and economic ones".

Glasier (1976) thinks that "quality of work life implies job security, good working conditions, adequate and fair compensation, more even than equal employment opportunity all together".

R. Gayathiri and Dr. Lalitha Ramakrishnan 2013 stated that "linking Quality of Work Life with Job Satisfaction and Performance is indeed a difficult task. The objective physical and structural design factors provide work place setting and intervening policy factors that

affect work process of employees. It is possible to study the relationship between the immediate effects psychology of employees (positive attitude, commitment and satisfaction) and ultimate effects on performance of organization are being considered”.

P. Rathamani and Dr. Rameshwari Ramchandra 2013 found that “the quality of work life involves job security, good working conditions, adequate and fair compensation and equal employment opportunity. It is suggested that the organization has to give equal importance to the achievements of the individuals. Participation of employees in decision making with their higher authority can be encouraged to avoid technical problems”.

S. Subhashini and C. S. Ramani Gopal 2013 indicated that “increase in quality of work life results in increase in productivity and recommended that an attractive pay scale can be offered and permissible leave limits can be extended”.

In their excessive literature review Katzell et al 1975, viewed quality of work life ‘more broadly as an individual’s evaluation of the outcome of the work relationship. They observed that a employee may be said to enjoy a high quality of working life when he has positive feelings towards his job and its future prospects, is motivated to stay on the job and performs well and feels his working life fits well with his private life to afford him a balance between the two in terms of his personal values”.

Walton 1974 suggested “eight major conceptual areas for understanding quality of work life. These were adequate and fair compensation, safe and healthy working conditions, development of human competencies, growth and security, social integration, constitutionalization and total life space and social reliance”.

D. Chitra et al (2012) used “three QWL variables such as meaningfulness, pessimism about organizational change and self - determination and job satisfaction. She further showed that these variables are significantly related to job - satisfaction and perception of employees towards QWL also directly related to Job satisfaction. There is no satisfaction towards other job related aspects such as health care benefits, working environment, flexible work, relationship with peers and superiors”.

5. Objective of the study

The main objective of the study contribution of working conditions on quality of work life of workers.

Research methodology

The descriptive study covered 425 workers of 42 knitted garments manufacturing

units of Tirupur city. A questionnaire was used to collect data.

6. Analysis and interpretation

The second dimension of Walton for estimating quality of work life is safe and healthy working conditions was studied and analyzed using 23 constructs.

6.1. Satisfaction towards working conditions

Table: 1

Satisfaction towards working conditions

Opinion	Number of respondents	Percentage
Highly dissatisfying	6	1.40
Dissatisfying	88	20.70
Neither satisfying nor dissatisfying	109	25.60
Satisfying	166	39.10
Highly satisfying	56	13.20
Total	425	100.00

(Source: Primary data)

6.2. Chi-square analysis between satisfaction towards working conditions and demographic and work related characteristics

Table: 2

Chi square analysis between satisfaction towards working conditions and the demographic and work related characteristics

Characteristics	Chi-square value	Significance
Gender	35.74	0.000
Marital status	87.62	0.000
Community	190.85	0.000
Nature of native Place	338.86	0.000
Educational status	250.57	0.000
Type of wage remuneration system	18.25	0.001
Job specialization	221.98	0.000
Mode of joining job	175.59	0.000

(* H_0 accepted)

Hypothesis: The level of satisfaction towards working conditions is not associated with the demographic and work related characteristics at 5%

6.3. One way ANOVA between satisfaction towards working conditions and demographic and work related characteristics

Table 3

One way ANOVA between satisfaction towards working conditions and demographic and work related characteristics

Demographic Characteristic	Source of variation	Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	11.611	4	2.903	5.083	.001
	Within Groups	239.834	420	.571		
	Total	251.445	424			
Income	Between Groups	21.346	4	5.336	33.752	.000
	Within Groups	66.405	420	.158		
	Total	87.751	424			
Number of dependents	Between Groups	13.988	4	3.497	5.972	.000
	Within Groups	245.928	420	.586		
	Total	259.915	424			
Tenure	Between Groups	8.576	4	2.144	5.234	.000
	Within Groups	172.068	420	.410		
	Total	180.645	424			

(* H_0 accepted)

Hypothesis 2: The satisfaction towards working conditions and demographic and work related characteristics do not vary at 5%.

6.4. Descriptive statistics for the statements that describe working conditions related aspects

Table 4

Descriptive statistics for the statements that describe working conditions related aspects

Statements	Mean	Std. Deviation
1. Workplace, equipment, devices and systems are maintained, in working order and in good condition	4.0518	.94277
2. Enclosed workplaces are ventilated and have enough fresh and purified air.	3.7388	.89286
3. Reasonable temperature is maintained inside the work space	4.2306	.63951
4. Lighting is suitable and efficient and natural	4.0259	.72149
5. Workplaces and furnishings clean without accumulation of wastages	3.9082	.89472
6. Workrooms have enough floor area, height and unoccupied space	4.3153	.67249
7. Workstations are suitable for the worker and work.	4.3247	.76354
8. Floors are even and not slippery	3.8165	1.07027
9. Handrails are provided on staircases	3.7835	1.16563
10. Pits and tanks are securely covered and fenced where there is a risk of a person falling into a dangerous substance	4.2400	.77326
11. Windows are transparent and translucent surfaces, consist of safe material, are clearly marked, and safe when open	4.1271	1.19663
12. Workplaces allow safe traffic circulation	3.8941	1.35479
13. Doors and gates are suitably constructed	3.8541	1.14817
14. Escalators function safely, are equipped with necessary safety devices	3.9553	.95185
15. Toilets are provided suitably and sufficiently with sanitary conveniences at readily accessible places	3.6494	.89648
16. Washing facilities are provided sufficiently at readily accessible places	3.5224	.91120
17. Adequate supply of wholesome drinking water and cups, readily accessible and conspicuously marked.	3.9835	.74112

18. Sufficient accommodation for clothing, as well as changing facilities where special clothing is worn.	3.8424	.92456
19. Suitable and sufficient rest room facilities at readily accessible places for workers to eat meals	3.9365	.85131
20. Suitable arrangements to protect non-smokers from discomfort	3.9435	.98891
21. Conditions on my job allow me to be as productive as I could be	4.0682	.76636
22. Suitable facilities must be provided for pregnant or nursing workers to rest	3.9482	.87262
23. The safety of workers is a high priority with management where I work	3.9459	1.08349

(Source: Computed from primary data)

6.5. Factor analysis of statements that describe working conditions related aspects

The thirteen variables describing Working conditions related aspects was subjected to exploratory factor analysis using principal component analysis and varimax rotation method with Kaiser Normalization to identify major factors for remuneration.

Table 5

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.713
Bartlett's Test of Sphericity	Approx. Chi-Square	10928.46
	df	253
	Sig.	.000

The KMO measures the sampling adequacy is 0.713 which mean the sample size is adequate. Bartlett’s test is another indication of the strength of the relationship among variables. This tests the null hypothesis that the correlation matrix is an identity matrix. From the above table, we can see that the Bartlett’s test of Sphericity is significant (0.000). That is, significance is less than 0.05. This means that correlation matrix is not an identity matrix.

Table 6

Rotated Component Matrix

Variable	Factor Component						
	1	2	3	4	5	6	7
Workplaces allow safe traffic circulation	.906	<i>Workplace allowing Safe traffic and non slippery floors</i>					
Floors are even and not slippery	.818						
Handrails are provided on staircases	.793						
Windows are transparent and translucent surfaces, consist of safe material, are clearly marked, and safe when open	.715						
Pits and tanks are securely covered and fenced where there is a risk of a person falling into a dangerous substance	.710						
Suitable arrangements to protect non-smokers from discomfort	.462						
Workplace, equipment, devices and systems are maintained, in working order and in good condition		.822	<i>Maintenance of work place, equipment , devices and systems in good condition</i>				
Enclosed workplaces are ventilated and have enough fresh and purified air.		.630					
Workplaces and furnishings clean without accumulation of wastages		.623					
Lighting is suitable and efficient and natural		.619					
Workrooms have enough floor area, height and unoccupied space		.619					
Reasonable temperature is maintained inside the work space		.579					
Conditions on my job allow me to be as productive as I could be			.748	<i>Provision of productive conditions, facilities for pregnant nursing workers, and</i>			
Suitable facilities must be provided for pregnant or nursing workers to rest			.744				

Suitable and sufficient rest room facilities at readily accessible places for workers to eat meals		.739	rest room for eating meals	
Sufficient accommodation for clothing, as well as changing facilities where special clothing is worn.		.664		
Escalators function safely, are equipped with necessary safety devices		.871	Provision of escalators and doors	
Doors and gates are suitably constructed		.782		
Washing facilities are provided sufficiently at readily accessible places		.870	Provision of washing facilities and toilets	
Toilets are provided suitably and sufficiently with sanitary conveniences at readily accessible places		.824		
The safety of workers is a high priority with management where i work		.527		
Workstations are suitable for the worker and work.	Providing workable work stations		.913	
Adequate supply of wholesome drinking water and cups, readily accessible and conspicuously marked.	Provision of drinking water			.923

6.6. Multiple regression model to estimate satisfaction towards working conditions from Working conditions factors extracted

Table: 7

Model summary for the multiple regression model to estimate satisfaction towards working conditions

R	R²	Adj. R²	S. E of the Estimate	F	Sig.
.806	.649	.643	0.599	110.25	.000

Table: 8

Multiple regression model to estimate the satisfaction towards working conditions

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.419	.029		117.535	.000*
Workplace allowing Safe traffic and non slippery floors	-.116	.029	-.115	-3.967	.000*
Maintenance of work place, equipment , devices and systems in good condition	.443	.029	.441	15.197	.000*
Provision of productive conditions, facilities for pregnant nursing workers, and rest room for eating meals	.076	.029	.075	2.598	.010*
Provision of escalators and doors	.229	.029	.228	7.859	.000*
Provision of washing facilities and toilets	-.369	.029	-.367	-12.657	.000*
Providing workable work stations	.176	.029	.175	6.042	.000*
Provision of drinking water	-.469	.029	-.468	-16.119	.000*

(*=significant at 5%)

7. Findings

1. 166 respondents forming 39.10% stated that the working conditions were satisfying, 56 respondents forming 13.20% stated that the working conditions were highly satisfying, 88 respondents forming 20.70% stated that the working conditions were dissatisfying, rest of the 109 respondents forming 25.60% % stated that the working conditions were neither satisfying nor dissatisfying and 6 respondents forming 1.40% stated that the working conditions were highly dissatisfying.
2. The satisfaction towards working conditions is associated with the demographic and work related characteristics such as gender, type of wage remuneration system marital status, community, nature of native place, educational status, job specialization and mode of joining job at 5%.

3. The satisfaction towards Working conditions and characteristics such as age, income, number of dependents and tenure do vary at 5%.
4. The statement with highest level of agreement is *'Workstations are suitable for the worker and work'* with a mean agreement score of 4.3247, followed by *'Workrooms have enough floor area, height and unoccupied space'* with a mean agreement score of 4.3153, and the third highest agreement is observed for the statement *'Pits and tanks are securely covered and fenced where there is a risk of a person falling into a dangerous substance'* with a mean agreement score of 4.2400. The statement with lowest level of agreement is *'Washing facilities are provided sufficiently at readily accessible places'* with a mean agreement score of 3.5224, followed by *'Toilets are provided suitably and sufficiently with sanitary conveniences at readily accessible places'* with a mean agreement score of 3.6494, and the third lowest agreement is observed for the statement *'Enclosed workplaces are ventilated and have enough fresh and purified air'* with a mean agreement score of 3.7388.
5. The statement with highest opinion variation is *'Workplaces allow safe traffic circulation'* with a standard deviation of 1.35479, followed by *'Windows are transparent and translucent surfaces, consist of safe material, are clearly marked, and safe when open'* with a standard deviation of 1.19663, and the third highest opinion variation is observed for the statement *'Handrails are provided on staircases'* with a standard deviation of 1.16563. The statement with lowest opinion variation is *'Reasonable temperature is maintained inside the work space'* with a standard deviation of 0.63951, followed by *'Workrooms have enough floor area, height and unoccupied space'* with a standard deviation of 0.67249, and the third lowest opinion variation is observed for the statement *'Lighting is suitable and efficient and natural'* with a standard deviation of 0.72149.

7. Conclusion

All the seven factors extracted such as workplace allowing safe traffic and non slippery floors, maintenance of work place, equipment , devices and systems in good condition, provision of productive conditions, facilities for pregnant nursing workers, and rest room for eating meals, provision of escalators and doors, provision of washing facilities and toilets, providing workable work stations and provision of drinking water are significant in the estimation of satisfaction towards working condition

References

1. D. Chitraa, V. Mahalakshmi (2012), a Panimalar Engineering College, Chennai, India: 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 -IIARTC, 1 (2)
2. Gardon, Herman (1984), Making sense of Quality of work life programmes, Business Horizons
3. Glasier, E (1976), State of the Art, Questions about Quality of Work Life, Personnel.
4. Gosh, Subrathesh (1992), Quality of Work Life in Two Indian Organizations Decisions, Vol.19, No.2, Pp -89-102.
5. Grayson, C.J (1973), Management Science and Business Practice, Harvard Business Review, Vol.51, No.4
6. Katzell, R.A., Yankelovich, D., Fein M., Ornate, D.A. & Nash, A. (1975), Work Productivity and Job Satisfaction, the Psychological Corporation, New York.
7. P. Rathamani and Dr. Rameshwari Ramchandra (2013), "A study on Quality of Work Life of Employees in Textile Industry – Sipcot, Perundurai", International Journal of Business and Management, Volume 8, No. 3 page no. 54- 59.
8. R. Gayathiri and Dr. Lalitha Ramakrishnan (2013) "Quality of Work Life – Linkage with Job Satisfaction and Performance" International Journal of Business and Management Invention ISSN (Online): 2319 – 8028, ISSN: 2319 – 801, Volume 2 Issue 1 January. 2013 PP.01-08
9. S. Subhashini and C. S. Ramani Gopal (2013) "Quality of work life among women employees working in Garment factories in Coimbatore district", Asia Pacific journal of Research, volume 1, issue XII PP.22-29
10. Walton, R. E. (1974). QWL indicators: Prospects and problems', In a Portugal (ed.), Measuring the quality of working life. pp.57 -70.

