# Quality of Work Life – Development and Scale Validation for Textile Sectors in India

## Vanishree Beloor, T S Nanjundeswaraswamy, Swamy D R



ABSTRACT: Employee Retention is one of the challenging task faced by textile industries s today. To retain dexterous and adapted employees an acceptable QWL is the requirement by employees and this QWL is marked with intricate dimensions inclined by numerous alterable factors. QWL instrument was applied to their research by many researchers but all of them measure total variance of less than 60%. Therefore it is through the current study that drives the components for a measuring tool that outfits textile sector. This is a survey based study carried out through questionnaires targeting 341 employees working in textile sector. It was then proceeded with analysis part containing EFA to minimize the number of items then followed by confirming the instrument through Confirmatory Factor Analysis (CFA) using SPSS16. In the light of defining interrelationships among the drawn components via EFA ,SEM was done using AMOS. The results of EFA came out with 6 marking dimensions that described 61% of the total variance. The instrument was validated and confirmed through CFA. The six components were Compensation, Work Environment, Relation and Co Operation, Job Security, Facilities and Training and Development which together summed up to total variance of 61 percent. All the necessary fit indices were satisfied with the acceptable range noting chi-square statistics of 3650.935 (df = 351 and p = 0.000),  $\chi^2$  /df ratio=10.40, GFI = 0.910, AGFI = 0.900, NFI = 0.899, IFI = 0.950, CFI = 0.908, TLI = 0.902 are more than 0.9 and RMSEA = 0.071. A six factor QWL model with 27 items has construct validity. A reliable and valid tool was developed. This instrument is more useful to measure QWL in textiles.

Keywords : Confirmatory Factor Analysis, Exploratory Factor Analysis, Structural Equation Modelling, Textiles, Quality of Work Life,

#### I. INTRODUCTION

Indian Textile industries are gaining much attention now days due to their inability to provide Quality work life to workers. According to a report by Somo and the India Committee of the Netherlands (ICN)(2012) described working conditions in Indian textile factories as a ruining one for lower level employees working in this sector. Textiles industries are driving major work force in developing

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countries like India, China and Bangladesh and these labor oriented industries are facing problems related to their retention rate and due to which topics related to their retention rate is becoming popular that are being considered for study. This sector has become the second largest employment provider after Agriculture in India. In spite of being so the working conditions in this sector are questioning and workers here are still fighting for their basic needs and human rights for which justice is a long awaited need. This need has led to the following study being carried out to provide a measuring instrument that quantifies the status of QWL in this sector.

Quality of Work Life is the standard of workers performing comfortably in an organization by satisfying their personal needs through the facilities provided to them by the management. Their level of involvement and commitment is increased by enhancing their QWL factors. This high level of involvement can be achieved by providing an employee the necessary benefits and making him more involved as a decision taker in major organizational matters. This means implementing policies and procedures that make an employee have a stress less work life bounded by the necessary benefits thereby providing them a Quality life. This not only benefits an employee but also employer as it has a direct effect on productivity. Therefore, the objectives set by an organization and its victory in relevant areas can be achieved only after needs at individual level are satisfied. For satisfying individual needs QWL concept has to be studied in which employees are given prime importance and conditions are better provided.

#### **II. LITERATURE REVIEW:**

Nanjundeswaraswamy and Swamy (2015) examined the association between QWL and styles of leadership at SMEs in and around Bengaluru region by considering the 9 components of QWL as Autonomy of work, Adequacy of resources, Compensation and Rewards, Facilities, Job satisfaction and Job Security, Organization culture and climate Work environment, Relation and co-operation, Training and Development under Transactional and Transformational styles of Leadership. Findings of the analysis divulges about a substantial rapport between Styles of leadership and QWL.

Akter and Banik (2018) studied employees status of QWL in RMG units at Bangladesh. The factors taken into account were career and growth opportunities, fair Payment, Job Security and safety, leave and holiday benefits, social and psychological support Work Environment, with the outcome that suggested saying ,Work Environment should be improved that is effecting the Quality of working life of employees.



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Published By: Blue Eyes Intelligence Engineering & Sciences Publication Haque et al. (2015) assessed the Quality of Work Life of Employees in Garments at Dhaka, Bangladesh by considering the factors like career growth opportunity, compensation, informal relationship, job security, job design, and participation in decision making, working environment where in the results of the study disclosed that workers are impartial with the work environment providing them profits of Quality of Work Life.

Ellah Mejbel et al.(2013) explored the factors such as benefits and compensation, career development, cohesion of work and life, employee motivation, communication, employee motivation reward, job satisfaction, safety and security, top management involvement and revealed about the most frequent drivers used by previous studies are rewards, benefits, compensation, career development, communication, and safety and security whereas cohesion of work and life, employee motivation, job satisfaction, top management involvement are not frequently used by researchers.

Zare et al. (2012) evaluated the QWL in residents at seven infirmaries considering the factors such as diversity and flexibility in job, facilities, issues related to health and safety, salary of an employee, participating in decision making, management approach. The outcome of the study disclosed a positive response of employees regarding Attitude and expertisation of their seniors, conditions for promotion, professional training, and hygienic domestic zone at the infirm place.

Subhashini and Gopal (2013) measured the status of QWL of women employees in apparels in Coimbatore district of Tamilnadu by considering the elements such as co-worker relationship, Health and safety benefits, grievance handling procedure ,workload, Respect at work place, Satisfaction about feedback given, Training Working hours. The measurements concluded with the outcome of female population being more gratified with Grievance handling procedures, Work atmosphere, and job security measures and unhappy with the Salary, Health and Safety measures provided permitted leave.

Rose et al. (2006). envisaged QWL as career-related measurement and considered career satisfaction, career achievement and career balance for transnational companies and SME's in Malaysia. The outcome of the study specified the exogenous variables considered for the study are related with Quality of Work Life.

Hosmani and Shambhushankar (2014) revealed performance and Quality of work life (QWL) of employees in central Railways considering measurements of QWL as opportunities for career development, conditions at work place, welfare and safety measures with the outcome of the study stating job performance and job satisfaction level of employees are enhanced with acceptable measures of QWL programs

Swamy, Nanjundeswaraswamy, and Rashmi (2015). developed a QWL Scale by taking into account nine main dimensions namely Work Autonomy, Adequacy of resources, Compensation and Rewards, Job satisfaction and Job security, Facilities, Organization culture and climate, Relation and co-operation, Training and development, Work environment and validated instrument that showed satisfactory total variance.

Narehan et al.(2014) established association between QWL and QOL among personnel at transnational companies in Malaysia's Bintulu, Sarawak, by considering

the factors of QWL as Work Environment, Job facets and QOL factors as employees emotional wellbeing, interpersonal relations, personal development, social inclusion that resulted in noteworthy relationship between QWL programs and QOL.

According to Rubel and Kee (2014) considered job satisfaction as forerunner of QWL and it is pointedly related with employee in-role performance. The measures of QWL were job character, compensation and benefits, behaviour of supervisor, balance between work life and personal life.

Daud, N. (2012) determined the relationship between Quality of Work Life and Organizational Commitment among employees. OWL measurements were Growth and Development, Pay benefits, Physical Environment, Participation, supervision and Work place combination. The findings indicated QWL level as favourable one and commitment to organization is moderate among employees. Rathamani and Ramchandra (2013) marked out the factors influencing QWL in garment sector Perundurai by making use of variables namely Job freedom and security, Motivational acumens, individual growth and more chances in career and conditions of work Environment that resulted in the fact that Motivational acumen is the chief feature impacting QWL of employees where as better pay benefits influenced employees efficiency.

According to Yadav and Khanna(2014) from their review of literature identified seven frequently used QWL components namely Development and Growth, commitment to organization, satisfaction in job,Pay and benefits, Supervision,Safety and healthy environment. The results of review revealed OCB, growth and profitability of organization are the factors that are not taken considered for study which may be used by future researchers.

Indumathy (2012) discovered the factors like work environment, attitude, job nature, ostudied Quality of Work Life among workers with special reference to textile industry in Tirupur district and found out that attitude, environment, opportunities, level of stress, career prospects and reward ,challenges, growth and development, work risk are chief components that impact QWL.

Ramachandran(2018) study aimed in discovering the elements of QWL of personnel in private companies of Ernakulum District. Results revealed policies of compensation, organization culture, career growth related opportunities lead to satisfaction of employees ensuring organizational productivity.

According to Kanakarathinam (2016) the status of QWL in textile firms of Tirupur district in Tamil Nadu and identified factors with low relationship such as job satisfaction and working conditions , incentives, development and encouragement, handling of grievances, training. Wheras Autonomy , Work life balance has low positive association with employee satisfaction and Wage structure shows a negative association with employee satisfaction.

Sinha(2012)considered factors of QWL such as complete direction and self-determination, innovative and expertised direction, direction of relationship-sustenance that played the most important role in fulfilling the wants of the personnel and how different facets are prioritized in management at intermediate level in employing, to bring up high quality of Working life.

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Dhamija, et al(2019) quantified job satisfaction using QWL factors in Banking sector such as Awareness about job and commitment, Satisfaction of Employees and persistance, adverse work Environment, Professed Job Instigators and Organizational Culture whereas measures of job satisfaction are Colleagues, Conditional Rewards, Communication, pay, upgradement in job, Management, Benefits, , Functioning Procedures, Nature of Work. The results of the study showed that adverse work environment is not positively linked with job satisfaction.

Elisaveta (2006) surveyed the relationship among perceptions of QWL components like experience in work, job attributes, work environment and job satisfaction. The outcome of the study showed a noteworthy association between QWL and JS.

Kang and Deepak (2013) study analysed level of QWL between the veterinarians of Punjab. The results declared that 'Economic importance, Work place communality, 'Work constitutionalism, job pride, Permitting present performance and future requirements, Security and Safety, unbiased management of supervisors, 'Working space and conditions, 'problem solving abilities are positively associated with

QWL where as 'Job nature' is negatively linked with QWL and creative and perplexing work and uninformed users do not show any association with QWL.

Roopa and Narayanan (2014) assessed the sense of QWL, detailed out the magnitudes of QWL based on replicas and previous studies in Information Technology Industry in India. The magnitides of QWL are Reward, satisfaction in job, Human Relation, Condition of work, handling of grievances, nature of competance, Stress and welfare facilities that resulted in saying that QWL in Information Technology sector is provocating employees and companies.

Nayak et al (2015) apertured by appraising the conciliating role of Quality of Work Life between authorization at workplace and commitment of employees in hospital employees in Odisha. The results of the study clarified the fact about QWL partially arbitrating between authorization at work place and employee commitment. The study guaranteed that workplace authorization can accelerate employee perception and elevate their level of obtained QWL.

Author	Components	Outcomes
Nanjundeswaraswamy. Swamy (2015)	<ul> <li>Adequacy of resources</li> <li>Autonomy of work,</li> <li>Compensation and Rewards,</li> <li>Facilities,</li> <li>Job satisfaction and Job Security,</li> <li>Organization culture and climate,</li> <li>Relation and co-operation,</li> <li>Training and Development,</li> <li>Work environment,</li> </ul>	Substantial link with the components and QWL.
Akter and Banik (2018)	<ul> <li>career and growth opportunities</li> <li>Fair Payment</li> <li>Job Security</li> <li>leave and holiday benefits</li> <li>safety</li> <li>Social and Psychological support.</li> <li>Work Environment</li> </ul>	Work Environment should be improved that is affecting the Quality of working life of employees.
Haque et al. (2015)	<ul> <li>Career growth opportunity</li> <li>Compensation</li> <li>Informal relationship</li> <li>Job design</li> <li>Job security</li> <li>Participation in decision making</li> <li>Work load</li> <li>Working environment</li> </ul>	Adequate feeling towards their QWL initiatives provided by management in their work environment.

Table:1 Dimensions of Quality of Work Life used by different researchers



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Author	Components	Outcomes
Ellah Mejbel et al.(2013)	<ul> <li>Benefits and Compensation</li> <li>Career Development</li> <li>Cohesion of work and life</li> <li>Communication</li> <li>Employee Motivation</li> <li>Job Satisfaction</li> <li>Reward</li> <li>safety and security</li> <li>Top management involvement</li> </ul>	Frequently used components of QWL are safety and security, communication, career development, payments, profits and compensation other drivers that are limitedly used are top management cohesion of work and life, employee motivation, participation, job satisfaction.
Zare et al. (2012)	<ul> <li>Employee salary,</li> <li>Facilities,</li> <li>Health and Safety issues,</li> <li>Job Diversity and Flexibility.</li> <li>Management approach and</li> <li>Participating in Decision Making,</li> </ul>	Residents were satisfied with the promotion facilities, training, Job knowledge and behaviour of their supervisors.
Subhashini and Gopal (2013)	<ul> <li>grievance handling procedure</li> <li>Health and Safety measures</li> <li>Opinion about working hours</li> <li>Opinion about workload</li> <li>Relationship with co-worker</li> <li>Respect at work place</li> <li>Satisfaction about feedback given</li> <li>Training</li> </ul>	Analysis depicted about women employees of the garment factory being satisfied with Grievance handling procedures, Work atmosphere, job security measures and were dissatisfied with the Salary, Health and Safety measures, permitted leave.
Rose et al. (2006).	<ul> <li>career contentment,</li> <li>career attainment</li> <li>career stability</li> </ul>	contentment, attainment and stability in career are associated with Quality of Work Life.
Hosmani and Shambhushankar (2014)	<ul> <li>career development opportunities</li> <li>safety measures, welfare practices,</li> <li>working conditions</li> </ul>	Employee job satisfaction and performance level were improved by providing acceptable measures of QWL programs.
Swamy, Nanjundeswaraswamy, and Rashmi (2015)	<ul> <li>Adequacy of resources</li> <li>Autonomy of work,</li> <li>Compensation and Rewards,</li> <li>Facilities,</li> <li>Job satisfaction</li> <li>Job security,</li> <li>Organization culture and climate</li> <li>Relation and co-operation,</li> <li>Training and development,</li> <li>Work environment,</li> </ul>	Developed and validated QWL scale that showed suitable total variance.
Narehan et al.(2014)	<ul><li>Work Environment</li><li>Job facets</li></ul>	A substantial association between QWL programs and QOL.
Rubel and Kee (2014)	<ul> <li>compensation and benefits</li> <li>Job character.</li> <li>supervisor behaviour</li> <li>work life balance</li> </ul>	QWL was significantly related to employee in-role performance when job satisfaction was a forebear of QWL.





Author	Components	Outcomes
Daud(2012)	<ul> <li>Growth and Development</li> <li>Participation</li> <li>Physical Environment</li> <li>supervision and Pay benefits.</li> <li>Work place integration</li> </ul>	QWL is strongly associated and commitment to organization is moderate among staff.
Rathamani and Ramchandra (2013)	<ul> <li>Job freedom and security</li> <li>Motivational insights</li> <li>Personal growth and career opportunities</li> <li>Working Environment,</li> </ul>	QWL of employees is impacted by Motivational visions and Higher compensation that enhances the output and efficiency of workforce.
Yadav and Khanna(2014)	<ul> <li>Growth and development</li> <li>Job satisfaction</li> <li>Organisation commitment</li> <li>Pay and benefits</li> <li>Safety and healthy environment</li> <li>Supervision</li> </ul>	Organization's advancement, success, and OCB are the factors that are not taken considered for study which may be used by future researchers.
Indumathy (2012)	<ul> <li>Attitude</li> <li>career prospects, challenges</li> <li>environment, opportunities</li> <li>growth and development and</li> <li>nature of job</li> <li>people</li> <li>risk involved in the work and reward</li> <li>stress level</li> </ul>	Identified these as important measurements of QWL.
Ramachandran(2018)	<ul> <li>Advancement in career</li> <li>Payment rules</li> <li>Values of organization appropriate</li> </ul>	Values of organization, appropriate Payment rules, Advancement in career are important factors that impact QWL of employees.
Kanakarathinam (2016)	<ul> <li>Autonomy</li> <li>development ,encouragement</li> <li>grievance redressal</li> <li>incentives</li> <li>job satisfaction</li> <li>training</li> <li>Pay structure</li> <li>Work life balance</li> <li>Working conditions</li> </ul>	Balance between work and life, Self ruling authority are considered to be insignificant having poor relationship with employee satisfaction whereas Pay structure is not related with QWL.

It is concluded from the literature that QWL is a comprehensive concept consisting of several dimensions, tactics and prototypes with inter-related managerial and social extents (Rethinam and Ismail, 2007). Also it is understood from review that QWL studies have used various devices to quantify the status of employees QWL, but they amount for not more than 65% of total variance. Therefore there is a requirement for developing and validating Quality of Work Life Scale to measure the status of QWL.

#### **III. METHODOLOGY**

The study was conducted in forty textile industries where survey forms or responses were directed to 341 workers. Then EFA was applied to the data obtained from the records of the survey after responses from employees to lessen the questions and to validate the instrument, Confirmatory Factor Analysis (CFA) was done using SPSS16. Further QWL model was generated using Structural Equation Modeling (SEM) to check the link between obtained components using Amos.

#### **4.1** Components selection

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Review of the literature resulted in 40 important Quality of Work Life dimensions obtained through repetitive usage by previous researchers in their study that accounted for the following dimensions like Work Environment, Work speed and routine, Task related interaction, Work complexity, Work life balance, Communication, Motivational insights, Encouragement of creative talent, Job Enrichment, Self control, Opinion about workload, opinion on working hours, Opinion about respect at workplace, Alternative work schedule, Job design, Implementing suggestion system, Healthy Working conditions,



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Salary, Fair Compensation, Compensation and benefits, Relation and Co operation with co workers, Satisfaction with management, Socialization and realization, Human relations and Social integration, Grievance handling procedure, Safety Measures, Welfare measures, Transportation and rest time, Job security, Opportunity to develop human capabilities, Opportunity for career growth, Recognition, Personal growth and opportunity, Employee involvement in taking organizational decisions, satisfaction in Work, intrinsic satisfaction, Job Involvement, Training Programmes, Autonomy.

## 4.2 Design of Questionnaire:

Analysis of the research started with survey method adopted for study. The quantifying instrument were Questionnaires on Likert scale with five-point taken as "1" strongly disagree, "2" somewhat Agree, "3" Neutral, "4" Agree and "5" Strongly agree. The gauging tool considered reliant variable as QWL and 40 components of QWL were measured as self-regulating variables, it consists of 160 items. The tool consists of two sections. Demographical factors became the beginning part of the QWL tool followed by 160 items of 40 QWL components. To be impartial throughout survey few of items were intentionally negatively worded. The opinions of these responses were inversely counted. To upkeep the quality of questionnaire it was seen that the double barrel questions are dodged.

**4.3 Major Quality of Work Life Components:** In the current work , to check the dimensionalities of 160 items from 40 QWL components EFA was done and data was subjected to Principal Component Analysis, from varimax rotation, 6 chief factors were identified. This current work uses Exploratory Factor Analysis and resulted in 6 components having Eigen values greater than 1 which were taken into account consisting of Compensation, Work Environment, Relation and Cooperation, Job Security, Facility, Training and Development.

To confirm the adequacy of the responses collected KMO test was done. Here obtained KMO value is 0.772, acceptable value as it greater than 0.6, it is considered to be satisfactory (Kaiser and Rice, 1974). The values are proved to be substantial via Barlett's Test of Sphericity statistics (1890.736, dof. 105, Sig.0.000) proving an ample beginning for continuing with the analysis of factors.

Table 2. Results of KMO and Bartle	tt's Test results
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KMO and Bartlett's Test						
Kaiser-Meye	er-Olkin	.772				
Measure of S						
Adequacy.						
	Approx.	3650.935				
Bartlett's	Approx. Chi-Square					
Test of	df	351				
Sphericity						
	Sig.	.000				

Table 2 represents the summary of Principal Component Analysis grounded on Exploratory Factor Analysis, all the 6 constituents having their Eigen value more than 1 were chosen for further analysis.

1. Compensation

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- 2. Facilities and
- 3. Job Security
- 4. Relation and Co Operation
- 5. Training and Development
- 6. Work Environment

The unities obtained from factor analysis were studied to measure the implication of the statistics. The set of data was suitable as the obtained values are betweeen the range of 0.520 to 0.880, the item loading is more than 0.5, it puts forward that the data set was suitable. (Stewart 1981). 27 items were pulled out for final measurement tool on the grounds of several variables having a loading of atleast 0.5.

Table 4 summarized the extraction of six components through the factor analysis.

To check consistency of the tool alpha value was calculated the obtained Cronbach's alpha value is 0.875, any Cronbach alpha value more than 0.7 is acceptable, as prescribed by Nunnally (1978). This made clear about the measuring device has good and reliable values that are applicable for further statistical computation.

Applying EFA to the first set of responses collected that measured item loadings of single item to pragmatically develop the QWL model. Eigen values were reviewed upon which six components had values more than 1 that together explained a variance of 61%.





	Total Variance Explained								
Com	Ir	itial Eigenval	ues	Extra	action Sums of	Squared	Rotation Sums of Squared		
pone		-			Loadings	Loadings			
nt	Total	% of	Cumulati	Total	% of	Cumulativ	Total	% of	Cumul
		Variance	ve %		Variance	e %		Varianc	ative
								e	%
1	4.775	17.686	17.686	4.775	17.686	17.686	3.988	14.771	14.771
2	3.968	14.697	32.382	3.968	14.697	32.382	3.892	14.413	29.184
3	2.604	9.646	42.028	2.604	9.646	42.028	2.516	9.317	38.501
4	1.988	7.362	49.390	1.988	7.362	49.390	2.157	7.991	46.491
5	1.730	6.408	55.798	1.730	6.408	55.798	2.135	7.909	54.400
6	1.411	5.227	61.025	1.411	5.227	61.025	1.789	6.625	61.025
7	.929	3.440	64.465						
8	.848	3.140	67.605						
9	.816	3.024	70.628						
10	.739	2.738	73.366						
11	.714	2.643	76.009						
12	.630	2.334	78.343						
13	.598	2.214	80.558						
14	.565	2.093	82.651						
15	.519	1.924	84.575						
16	.510	1.888	86.462						
17	.485	1.797	88.259						
18	.441	1.633	89.893						
19	.412	1.527	91.419						
20	.387	1.432	92.851						
21	.362	1.341	94.192						
22	.343	1.269	95.461						
23	.310	1.149	96.610						
24	.271	1.004	97.614						
25	.249	.924	98.537						
26	.210	.779	99.316						
27	.185	.684	100.000						
Extrac	ction Meth	nod: Principal	Component	t Analysis	5.		-	•	

## Table 3 Summary of Principal Component Analysis

 Table 4: Factor Analysis Summarized table

Factors	Measurable values	Weights	Eigenvalues	Variance	Accumulated
Compensation	Fair salary	.799			
	Annual increments	.760			
	Allowances	.754		14771	14771
	Wage Policies	.741	3.988	14.771	14.771
	Fine	.736			
	Fair promotion Policy	.709			
	Rewards	.649			
Work	Working Conditions	.783			
Environment	Rules & Regulations	.779			
	Self growth	.773			
	Work empowerment	.733	3.892	14.413	29.184
	Motivational insights	.707			
	Work life balance	.680			
	Work Complexity.	.662			
Relation and	Harmonious relationship	.759		0.217	29 501
Cooperation	Disputing and struggling with workmates	.731	2.516	9.317	38.501



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Factors	Measurable values	Weights	Eigenvalues	Variance	Accumulated
	Relationship with an incompetent co-worker	.724			
	Support from sub ordinates	.679			
Job security/	Secured Job	.812			
freedom	Work from home	.754	2.157	7.991	46.491
	Conditions of job	.720			
Facilities	Medical Facilities	.806			
	Safety measures	.682			
	Fringe benefits	.675	2.135	7.909	54.400
	Transportation Facilities	.650	2.155		
Training and Development	Sufficient Training Programmes	.818	- 1.789	6.625	61.025
-	Outcome from Training Programmes	.795	1.789	0.625	01.025

Table 5: Components of QWL in final measuring tool.

Sl No	Components of QWL	Inquiry number in the Survey form	Negative Inquiry number in the Survey form	Cronbach's alpha value
1	Compensation	1,2,3,4,5,6,7	2,5,7	0.864
2	Work Environment	8,9,10,11,12,13,14	9,11,13,14	0.791
3	Relation and Cooperation	15,16,17,18	16,17	0.785
4	Job security/ freedom	19,20,21	21	0.795
5	Facilities	22,23,24,25	22,25	0.788
6	Training and Development	26,27	27	0.792

#### 4.4 QWL Components Validated through Confirmatory **Factor Analysis.**

The outcomes are authenticated from the results of EFA, Confirmatory factor Analysis (CFA) through Structural Equation Modeling (SEM) using AMOS software was done. QWL model consisting of six components was verified for authentication through CFA which resulted in six component of QWL model with 27 items and the factors are Work Compensation, Environment, Relation and Cooperation, Facilities, Job security, Training and Development. The first order 6 factor QWL measurement model revealed an adequate fit as shown in Figure 1. All the required fit indices namely Chi Square statistics was 100.704 with CMIN was 2.728 which is less than 3, Goodness of fit index = 0.910, Adjusted Goodness of fit Index = 0.900, Normal Fit Index = 0.899, Incremental Fit Index = 0.950, Comparative Fit Index = 0.908 with Tucker Lewis Index = 0.902 are more than 0.9 and RMSEA = 0.071 less than 0.08 revealed acceptable and good values indicating good model fit.

# 4.5 Convergent Validity:

Cross validate the scale with another set of data sample through Convergent validity by assessing the loadings on items, Composite Reliability (CR) and Average Variance Extracted (AVE). It is explained as the degree of discrepancy shared between the items of identical concepts (Hair et. al., 2010). The value of CR must be 0.7 and above and AVE equal to .7 or above (Hair et al., 2006, p.777) to confirm the same. In current analysis, all the 6 factors of Quality of Work Life measurement model have AVE and CR value above the acceptable criterion and it is shown in the Table:7 and item loadings are indicated in Table 11.



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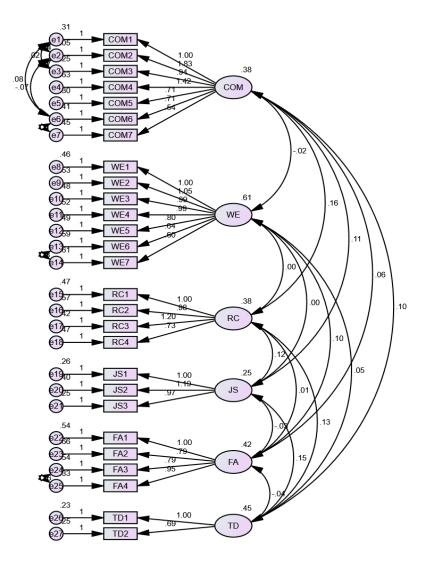


Fig 1: QWL Dimensional model

# Table:6 Standardized Coefficient Estimates and R<sup>2</sup> values of Measurement Model

Parameters	QWL Components						Acceptable
	C1	C2	C3	C4	C5	C6	criterion range
	1.00	1.00					
	1.83	1.05	1.00		1.00		Convergent velidity
Estimates of Consistent factors	0.95	0.99	0.98	1.00	0.79	1.00	Convergent validity
	1.42	0.99	1.20	1.19		0.69	showed if it is more
	0.71	0.8	0.73	0.87	0.79	0.09	than 0.30
	0.71	0.64			0.95		ulali 0.50
	0.84	0.60					
	0.31	0.46					
	0.65	0.63	0.47		0.54		
	0.25	0.48	0.47	0.26	0.54	0.23	
Regression coefficient	0.63	0.62	0.07	0.40	0.60	0.23	
	0.30	0.49	0.42	0.25	0.04	0.23	
	0.41	0.69	0.47		0.55		
	0.45	0.61					



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Table:7 Convergent Validity of QWL Mo
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Proposed Quality of Work life Components	Comp osite Reliab ility (CR)	Average Variance Explained (AVE)
Compensation	0.892	0.542
Work Environment	0.889	0.536
Relation and Cooperation	0.814	0.523
Job security/ freedom	0.806	0.582
Facilities	0.796	0.498
Training and Development	0.788	0.650

#### 4.6 Discriminant Validity

If the square root of AVE is greater than correlation values then discriminant validity is satisfied. (Sosik,2009). The Table:13 below indicate that square root of AVE values for all 6 factors are greater than its correlation value, thereby confirming Discriminant validity.

#### Table: 8 Discriminant Validity of EC Measurement Model

	СОМ	WE	RC	JS	FA	TD
COM	0.74					
WE	0.21	0.73				
RC	0.29	0.20	0.72			
JS	0.24	0.22	0.29	0.78		
FA	0.12	0.14	0.02	0.36	0.79	
TD	0.14	0.06	0.19	0.33	0.47	0.75

## **IV. CONCLUSION**

The existing work is an effort to design an QWL measuring instrument and authenticate the same. Through EFA six components of QWL were discovered they are: Compensation, Work Environment, Relation and Cooperation, Facilities, Job security, Training and Development. Later it disclosed that 6 types collectively explicated the total variance of 61%.

Confirmatory factor analysis was done for next data set using 6 components that were taken out and authenticated for the device and they were: Compensation, Work Environment, Relation and Cooperation, Facilities, Job security, Training and Development. The aimed tool has shown both high reliability and legitimacy.

The scale developed in this study has its use restricted to textile sector. As per the availability of workforce and conditions in market different constituents may be added and deleted.

The outcome of the study and analysis will help the establishers and examiners to quantify the prominence of QWL in Textile sector.

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nnexui	re 1						
	1.	My annual salary increments are satisfactor					
	2.	Annual increments are harder to get at my company.(N)					
	3.	I am satisfied with the allowances provided by my companyOur company follows a fair promotion polic					
	4.	The wage policies adopted by my company are good					
	5.	My company encorporates fine policy for any due work. (N)					
	6.	. Promotion policies provided by the company are fair.					
	7.	7. My company does not reward me for any outstanding work accomplished. (N)					
	8.	Working conditions are good in my company My company work environment is good					
	9.	The company's Rules and regulations are harder to follow(N)					
		My company offers sufficient opportunities to develop my own abilities.					
	11.	I am given a lot of work empowerment to decide about my pace of work.					
	12.	My company work environment is highly motivating.					
	13.	It is difficult to balance work and family matters.					
	14.	The work to be carried out is comparatively Complex in nature					
	15.	There is a harmonious relationship with my colleagues					
	16.	Bickering and fighting with co-workers					
	17.	There is too much of bickering at work(N)					
	18.	I find I have to work harder at my job because of the incompetence of people I work with(N)					
	19.	I get good support from my sub-ordinates					
	20.	I feel quite secured about my job					
	21.	A part of my job is allowed to be done at home					
	22.	Conditions on my job do not allow me to be as productive as I could be(N)					
	23.	Company provides the social security benefits like EPF/Medical Reimbursement and so on					
	24.	Safety measures adopted by the company are Good					
	25.	Fringe benefits provided are good					
	26.	Transportation facilities provided by the Company are not satisfactory(N)					
		My company arranges sufficient number of training programs					
		The training programmes conducted do not help me for a better outcome(N)					



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# Quality of Work Life - Development and Scale Validation for Textile Sectors in India

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