



The Quality of Work Life Scale: A Psychometric Study and its Application for the Employee

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Abstract

The purpose of this study is to analyze the validity and reliability of the construct of quality of work life, and to find the dimensions that make up the construct of quality of work life. Quality of work life is measured by six dimensions, namely job and career satisfaction, general well-being, homework interface, stress at work, control at work and working conditions. The subjects of this study were 50 employees in the "X" religious social organization. Data collection methods using a scale of quality of work life. The research data were analyzed using Structural Equation Modeling (SEM) SmartPLS 3.2.8 with reflective constructs through the 2nd Order CFA. Based on the analysis, the dimensions and indicators that make up the quality of work life are valid and reliable. The dominant dimension that reflects the construction of quality of work life is job and career satisfaction. The lowest dimension that reflects the quality of work life is stress at work. This shows that all dimensions and indicators are able to reflect and shape quality of work life. Thus the measurement model can be accepted because the theory that describes the quality of work life is in accordance with empirical data obtained from the subject.

Keywords: Control at Work; General Well-Being; Job and Career Satisfaction; Homework Interfac; Quality of Work Life; Stress at Work; Working Conditions.

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1. Introduction

Human resource management in an organization includes the activities of recruitment, selection, acceptance, development, and utilization of human resources, this is done to achieve organizational goals [1]. Organizational goals can be achieved when employees are able to show good performance, workers pay attention and carry out regulations, procedures, carry out tasks without supervision and try to achieve the best results [2]. Reference [3] states that to improve the best performance can be realized by developing quality of work life. Quality of work life is one of the main problems that deserves the attention of the organization [4]. That is because by having a quality of work life, a company or organization can enjoy increased productivity and get higher growth opportunities in line with better participation from its human resources [5].

Quality of work life is able to describe the individual's perceived condition of the work environment, whether or not he has been able to meet the personal needs of the individual, so that the individual will feel satisfied with the work environment and have good feelings towards his work [6]. Reference [7] states that quality of work life will foster a sense of satisfaction in employees who come from the treatment of the organization so that employees have the desire to remain and survive in the organization. Management interactions in meeting employee needs can be reflected in the Quality of work life [8].

Quality of work life is a state of how far employees feel that they can meet personal needs through experience in the organization and feel satisfied with their work [9]. The existence of quality of work life in employees can bring job satisfaction, increase positive work attitudes, reduce stress and form a balance between life at work and family [10]. This statement is supported by [11] which states that high quality of work life can make employees feel comfortable with their work. While the quality of work life that is not considered and low will cause employees to feel bored and lose enthusiasm for work [12]. The term "quality of work life" appeared in research and press journals in the United States in the 1970s and the term quality of work life was introduced by Louis Davis at the first international quality of work life conference held in Toronto in 1972 [13]. Quality of work life is rooted in the theories of Maslow, Herzberg and McGregor, which were preceded by theories about the need for fulfillment as well as Abraham Maslow's theory of motivational needs. Then Walton added good working conditions, career planning, and growth in human capacity development, appreciation, opportunities to use abilities and challenging work to complete the needs of self-actualization in the hierarchy of needs [13]. Quality of work life is a complex, multidimensional and generic concept [14]. Most of the available literature on quality of work life comes from industrial and organizational disciplines [14]. Quality of work life has previously been defined by researchers in different ways, but the results obtained have shown similar equations such as quality of work, job functions, employee welfare, quality of relationships between employees, work environment, and the balance between demands and work decisions or a balance between control needs and control capacity [15,4]. Further evaluation of the measurement of quality of work life in various cultures is currently being carried out [16,17].

The quality of work life is related to conditions and environment that are favorable and supportive and promote employee satisfaction, thus quality of work life can be seen as a basis for seeing the company's loyalty, profitability, job satisfaction and productivity [18]. Studies conducted at professional academies from

universities in Bangladesh show that quality of work life has a positive correlation with job satisfaction [19]. Quality of work life is also related to various results expected by the organization such as low absenteeism, low turnover rate, less frequency of delay, improved performance [20]. With regard to turnover rates, Quality of work life has a negative relationship with turnover intentions as measured by employee perceptions at work, so that the level of quality of work life can be used as a reference to predict turnover rates [21]. Research by [22,23] show that quality of work life has a significant relationship with organizational commitment.

The quality of work life is a state of the extent to which employees feel they can meet personal needs through experience in the organization and feel satisfied with their work [9]. In general the conceptual definition of quality of work life is similar to employee welfare or job satisfaction, but employee welfare and job satisfaction only represent the domain at work [24]. Reference [25] defines quality of work life as the process of the organization to respond to the needs of employees by developing mechanisms that enable organizations and workers to jointly have a role to make decisions together in the workplace. Whereas [26] states that quality of work life is a feeling that employees have about their performance, work, colleagues, and organization, so that if employees have good feelings about work, colleagues, and employees then this shows that they are happy to do the work and it shows a good quality of work life. Reference [27] defines quality of work life as employee satisfaction on various needs including resources, activities, and results derived from participation in the workplace. Another opinion states that quality of life is influenced by the context of individual work experience in a broad sense, through direct and indirect factors, starting from organizational policies to personality, from feelings of general well-being to working conditions is the definition of quality of work life [28].

The scale of quality of work life continues to be developed one of them by [28] conducted on students in the UK. The results obtained indicate an alpha value of 0.91. Quality of work life as explained in western literature, an adaptation process is needed so that the scale of quality of work life is relevant for use in other countries and cultures [29].

Reference [28] have proposed six dimensions to reflect the quality of work life, namely: job and career satisfaction, general well-being, homework interface, stress at work, control at work, and working conditions. Job and career satisfaction refers to an individual's satisfaction with his job and the opportunity to develop his work career. Examples are a sense of achievement, high self-esteem and fulfillment of potential, so that individuals feel happy about their ability to do work. General well-being is related to general welfare which assesses the extent to which a person feels good or is satisfied with his life in general, whether that affects or is influenced by work. The homework interface explains the extent to which organizations can understand and try to help employees deal with pressures outside of work. Employees have control over the balance in work, as well as the shared interests of individuals, businesses and families or the fulfillment of work-life [28].

Stress at work is the degree to which an individual experiences stress or excessive pressure at work. One definition of work stress is the physical and emotional response that occurs when the workload does not match the abilities, resources, or needs of employees. Stress at work is now considered one of the five occupational health problems. Control at work relates to awareness, control over decisions at work, how individuals feel involved in decisions that affect the workplace, including opportunities to contribute to decision making.

Working conditions are related to the physical work environment of individuals characterized by; individual feelings of pleasure in working conditions, the extent to which employees are satisfied with fundamental resources, working conditions and security in doing work effectively [28]. H: Dimensions of quality of work life, namely: job and career satisfaction, general well-being, homework interface, stress at work, control at work, and working conditions are able to form the construct of quality of work life.

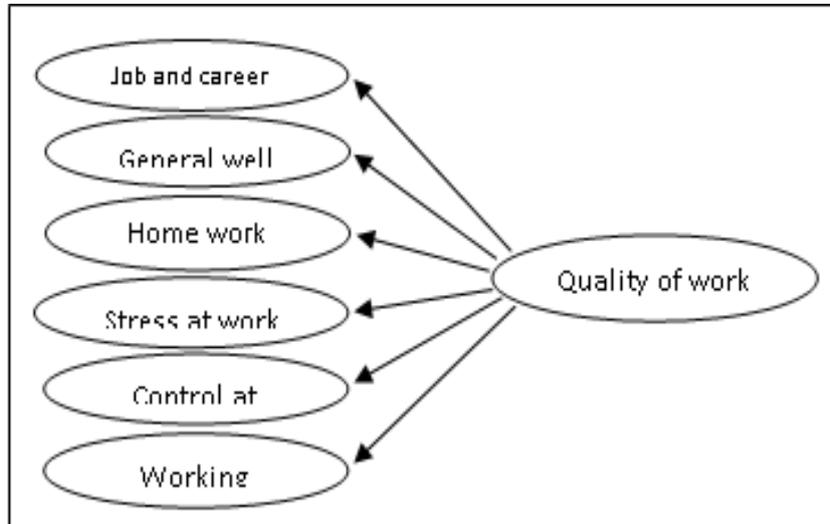


Figure 1: Conceptual framework of work life variables

One approach that can be used in testing the construction of a measuring instrument is Confirmatory Factor Analysis. Confirmatory Factor Analysis (CFA) is one of the main approaches in factor analysis. CFA can be used to test the dimensionality of a construct. This test is used to measure the model (measurement model) so that it can describe the dimensions and indicators of behavior in reflecting latent variables namely quality of work life by looking at the factor loading of each d that forms a construct. Confirmatory Factor Analysis (CFA) is also used to test the validity of the extracts and the reliability of the constructs of the indicators (items) forming latent constructs [30]. The CFA used in this study is a second order confirmatory factor analysis (2nd Order CFA), a measurement model that consists of two levels. The first level of analysis is carried out from the latent construct of the dimensions to the indicators and the second analysis is carried out from the latent construct to the dimension constructs [30]. Based on the description above, it can be concluded that the quality of work life is important in the organization. Considering the importance of quality of work life, the formulation of the problems in this study are: 1) is the quality of work life valid and reliable? And 2) are the dimensions of job and career satisfaction, general well-being, home-work interface, stress at work, control at work, and working conditions able to form constructs or variables of quality of work life? Based on the description above, this study aims to test the construct validity and the construct reliability of quality of work life from the point of view of countries and cultures that are different from previous studies. Seeing the importance of the quality of work life variable, research on the reliability and validity of the quality of work life scale construct is important to be carried out considering the understanding of the quality of work life construct always develops as a multidimensional construct. In accordance with the statement of [31] where quality of work life is a multidimensional concept whose nature is relative and cannot be defined precisely and measured.

2. Research Method

2.1. Participant

Subjects in this study are individuals who work under socio-religious organizations in institution X with a total of 50 people who are employees with criteria of Islamic subjects, work in institutions affiliated with socio-religious organizations X, aged 20-35 years and are willing to participate in research.

2.2. Research Design

The design in this study is semi-construction, where the scale design will be done using theoretical collaborative studies with information directly obtained from field data. The advantage of using this semi-construction design is to strengthen existing theories and reproduce as many behavioral indicators as possible. Then testing the psychometric properties, including content validity analysis, discriminating power, confirmatory factor analysis, and external concurrency validity test [32].

2.3. Instrument

The Quality of work life scale was compiled by the authors themselves based on the dimensions of Quality of work life proposed by [28]. These dimensions include job and career satisfaction, general well-being, homework interface, stress at work, control at work and working conditions. The scaling method on the quality of work life scale uses a Likert scale model developed by researchers using four answer choices. This scale consists of 48 statements with two directions statements namely favorable and unfavorable. The score in the statement can be seen in the table:

Table 1: Score of work quality life scale

Statement	Favorable	Unfavorable
SS	4	1
S	3	2
TS	2	3
STS	1	4

Examples of statements of job and career satisfaction dimensions are “Appreciation is given by superiors when I do my job well” and “The organization supports me in developing new skills”. Examples of statements of the general dimension of well-being are “I feel happy in carrying out my current life” and “My current work makes me a better person”. Examples of statements on the dimensions of the home-work interface are “My working hours or work patterns currently fit my personal conditions” and “My boss promotes flexible work hours or work patterns”. Examples of statements of the stress at work dimension are “the organization has attention to the needs of workers in the workplace” and “there is an assistance mechanism from the organization to deal with workers who have problems at work” Examples of statements of the control at work dimension are “The organization has a clear evaluation system for workers” and “Regulations in the organization are the result of collective agreement”. Examples of statements of the dimensions of working conditions are “My boss gives me what I need to do work effectively” and “There are policies from organizations that have a negative impact on

workers in the workplace”.

Table 2: Blue print from quality of work life scale

No	Dimensions	Indicator	Item	
			Favorable	Unfavorable
1	Job and career satisfaction	a. High self esteem at work b. Feel happy about his ability to do work c. Fulfillment and opportunities to develop themselves	1,7,13,19,25,31	37,43
2	General well-being	a. Feeling good or satisfied with life in general at work-outside of work b. Work affects the situation of the individual he thinks is good	2,8,14,20,26,32	38,44
3	Homework interface	a. Organizations can understand and try to help employees with pressures outside of work. b. Employees have control over work balance. c. The organization has a common interest for individuals and families or fulfillment of work life.	3,9,15,21,27,33	39,45
4	Stress at work	a. Excessive stress or pressure at work. b. Work requirements that are not in accordance with the abilities, resources, or needs of employees.	4,10,16	22,28,34,40,46
5	Control at work	a. With regard to awareness, control, over decisions at work b. Individual involment in decisions the affect the workplace c. Opportunities to contribute to decision making	5,11,17,23,29,35	41,47
6	Working conditions	a. Feel happy with working conditions b. The organization provides working conditions and safety for workers in carrying out work Effectively	6,12,18,24,30,36	42,48
Amount			33	15

2.4 Construct Validity and Construct Reliability

2.4.1 Construct Validity

The validity test of this research uses the validity of reflective constructs that are confirmatory in nature to show how well the results obtained from the use of measuring instruments with a theoretical reference are used to define a construct. There are 2 validity tests in construct validity: Convergent validity, measuring the magnitude of the correlation between item scores and construct scores, is assessed based on loading factors. According to [33] the higher the loading factor score, the more important the loading role will be in interpreting the factor matrix with a loading value > 0.5 considered significant, then the average variance extracted (AVE) value > 0.5 [34].

Discriminant validity is carried out because different constructor gauges should not correlate with height, which is expected to increase the cross loading value between constructs and items more than the other construct values. The trick is to compare the AVE roots of a construct must be higher than the correlation between latent variables [34].

2.4.2 Construct Reliability

The validity test of this research uses the validity of reflective constructs that are confirmatory in nature to show how well the results obtained from the use of measuring instruments with a theoretical reference are used to define a construct. There are 2 validity tests in construct validity: Convergent validity, measuring the magnitude of the correlation between item scores and construct scores, is assessed based on loading factors. According to [33] the higher the loading factor score, the more important the loading role will be in interpreting the factor matrix with a loading value > 0.5 considered significant, then the average variance extracted (AVE) value > 0.5 [34].

2.4. Data Analysis

Data in this study were analyzed using the SmartPLS 3.2.8 program with reflective constructs through the 2nd Order CFA. According to [35] PLS is a variance-based structural equation analysis (SEM) that can simultaneously test measurement models to test the validity and reliability.

3. Result

Based on the results of the analysis of the outer model test on the scale of quality of work life conducted using the SmartPLS 3.2.8 program, it can be seen the results as shown in the figure below:

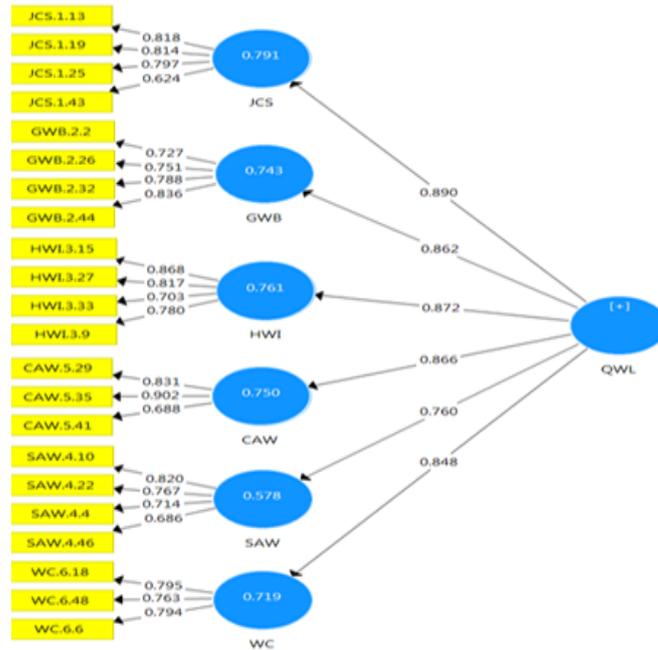


Figure 2: Output test for construct model of quality of work life

3.1. Convergent Validity

Based on the test of convergent validity on the outer model, it was found that the factor loading values from variables to dimensions have values > 0.5 shown in table 3

Table 3: Loading factor (variable-dimension)

Dimension	Loading factor	Information
Job and career satisfaction	0.890	Valid
General well-being	0.862	Valid
Homework interface	0.872	Valid
Stress at work	0.760	Valid
Control at work	0.866	Valid
Working conditions	0.848	Valid

Based on the test of convergent validity on the outer model, it was found that the factor loading value from the dimensions to the indicators has a value > 0.5, which is shown in the table 4.

Based on the convergent validity test values show the average variance extracted or AVE in the construct of quality of work life of 0.523 with the average variance extracted or AVE value in each dimension can be seen in table 5.

Table 4: Loading factor (dimension-item)

Item	Value of loading factor	Information
JCS 1.13	0.818	Valid
JCS 1.19	0.814	Valid
JCS 1.25	0.797	Valid
JCS 1.43	0.624	Valid
GWB 2.2	0.727	Valid
GWB 2.26	0.751	Valid
GWB 2.32	0.788	Valid
GWB 2.44	0.836	Valid
HWI 3.9	0.780	Valid
HWI 3.15	0.868	Valid
HWI 3.27	0.817	Valid
HWI 3.33	0.703	Valid
SAW 4.4	0.714	Valid
SAW 4.10	0.820	Valid
SAW 4.22	0.767	Valid
SAW 4.46	0.686	Valid
CAW 5.29	0.831	Valid
CAW 5.35	0.902	Valid
CAW 5.41	0.688	Valid
WC 6.6	0.794	Valid
WC 6.18	0.795	Valid
WC 6.48	0.763	Valid

Table 5: The AVE value of quality of work life

Dimension	AVE value	Information
Job and career satisfaction	0.589	Valid
General well-being	0.603	Valid
Homework interface	0.631	Valid
Stress at work	0.560	Valid
Control at work	0.659	Valid
Working conditions	0.615	Valid

3.2. Discriminant Validity

Based on the discriminant validity test values, the root results of the Average Variance Extracted or AVE in each dimension are higher than the average variance extracted root or AVE in other dimensions, so that the discriminant validity criteria are met. Root Average Variance Extracted (AVE) value of the construct of quality of work life can be seen in the table 6.

Table 6: AVE root value of quality of work life

Dimension	Job and career satisfaction	General well-being	Homework interface	Stress at work	Control at work	Working conditions
Job and career satisfaction	0.812	0.745	0.684	0.748	0.566	0.724
General well-being	0.745	0.777	0.771	0.744	0.628	0.709
Homework interface	0.684	0.771	0.794	0.690	0.630	0.687
Stress at work	0.748	0.744	0.690	0.767	0.632	0.725
Control at work	0.566	0.628	0.630	0.632	0.748	0.700
Working conditions	0.724	0.709	0.687	0.725	0.700	0.784

Validity Construct in SEM (Confirmatory Factor Analysis or CFA) shows that all four indicators are valid with a loading factor value (λ) ≥ 0.5 .

3.3. Construct Reliability Test

Based on the results of the construct reliability test that has been done, the Composite Reliability and Cronbach’s Alpha values > 0.7 can be obtained so that the items used in this study are reliable.

Table 7: Value composite reliability and cronbach alpha construct quality of work life

Dimension	Composite reliability	Cronbach alpha	Information
Quality of work life	0.938	0.928	Reliable

The results of construct reliability testing using Confirmatory Factor Analysis 2nd Order in Table 6 above show that constructs have good reliability and give meaning that the dimensions that measure constructs or latent variables of quality of work life meet unidimensional criteria [33]. This is indicated by the value of Composite Reliability 0.938 and Cronbach’s Alpha 0.928. The validity and reliability test of the construct produces valid and reliable items that are able to reflect the dimensions of quality of work life, namely the items in numbers 2, 4, 6, 9, 10, 13, 15, 18, 19, 22, 25, 26, 27, 29, 32, 33, 35, 41, 43, 44, 46, 48, while the items that are not able to reflect the quality of work life are the items in numbers 1, 3, 5, 7, 8, 11, 12, 14, 16, 17, 20, 21, 23, 24, 28, 30, 31, 34, 36, 37, 38, 39, 40, 42, 45, 47. Based on the processing and analysis of research data on the dimensions of the variable of construct quality of work life formed using the 2nd Order Confirmatory Factor Analysis, the results show that the model is acceptable, because all dimensions are able to reflect the variables or construct formed.

4. Discussion

Based on the analysis of construct validity and construct reliability, the dimensions and indicators that make up quality of work life are declared valid and reliable. This shows that all dimensions and existing indicators are able to reflect and target quality of work life. Job and career satisfaction is the most dominant in describing the quality of work life. Through this research, it is proven that the dimensions of job and career satisfaction have the highest loading factor value (that is 0.890) as constructor or variable of quality of work life compared to the other five dimensions, namely the dimension of homework interface with loading factor of; 0.872, Control at work with a loading factor of; 0.866, General well-being with a loading factor of; 0.862, Working conditions with a loading factor of; 0.848 and stress at work with a loading factor of; 0.760. Job and career satisfaction is shown by employee have high self esteem at work, fell happy about their ability to do work , and have opportunities to develop themselves, they are able to carry out work well, feel satisfied with career opportunities available in the organization, and the absence of concerns that arise when workers carry out the tasks of the work given. Valid and reliable indicators show that subjects feel that supervisors give appreciation when they complete their assignments well, the organization provides support to develop employee skills, employees are satisfied with the career opportunities available in the organization, and they satisfied with the training provided by the organization. Stress at work is shown by feelingl excessive stress or pressure at work, and feeling that work requirements that are not in accordance with the abilities, resources, or needs of employees. Good organization must have good attention to the needs of workers in the workplace, there is a mechanism of assistance from the organization to deal with workers who have problems at work, there is no pressure on workers at work and the feeling of enthusiasm that arises when starting a job. Valid and reliable indicators show that subjects feel that The organization pays attention to the needs of workers in the workplace, The organization provides assistance to workers who have problems at work, although workers also feel pressure at work and feel lazy to start working The findings in this study support the theory or concept explained by [36] that quality of work life can be formed through job and career satisfaction, general well-being, homework interface, stress at work, control at work and working conditions. In addition, the findings in this study also support the results of empirical studies conducted by [37] which prove that quality of work life meets reliability requirements with Cronbach's alpha value of 0.940 with job and career satisfaction dimensions 0.940, general well-being 0.820, homework interface 0.720, stress at work 0.500, control at work 0.830 and working conditions 0.880. research by [38] with instrument reliability 0.916, and research by [16] with instrument reliability of 0.890. The results of this study are expected to provide an overview of the validity and reliability of the construct of quality of work life in the context of employees working under religious social organizations so that it can be used as a reference in subsequent studies related to the construct variable of quality of work life. The finding result is expected to give the picture of the construct validity and reliability of the subjective well-being in context of teacher educational in Yogyakarta so there it can be used as the preference of further research related to subjective well-being.

5. Limitation and Recommendation

This research has several limitations, the research carried out is limited to one organization with a small of subject, so the results of this study cannot be generalized to all types of organizations. Afterward, the data

analysis techniques are used to build the model so that this model has not been maximally tested. The next researcher is expected to be able to examine the quality of work life in a more diverse organizational context with a greater number of subjects so that research results can be generalized. Thererupon, the data analysis technique used can be improved to confirm the theory so that the resulting model is more than adequate.

6. Conclusion

Based on the results of the analysis and discussion, it can be concluded that: 1) Variable quality of work life meets the validity and reliability of good constructs, and 2) All dimensions and indicators can form variables of quality of work life, where dimensions that have a dominant influence on quality of work life is job and career satisfaction. Thus, the findings of this study are able to provide theoretical implications I n developing the theory of quality of work life and practical implications for applying to employees working under socio-religious organizations, and for subsequent researchers, to be able to test the quality of work life model in relation to other variables, expanding research units or using different contexts so that the reseawrrch results obtained can be generalized.

Acknowledgements

The author would like to thank Ahmad Dahlan University and the Master of Psychology Programme University of Ahmad Dahlan for supporting the implementation of this research

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