Trends in Applied Sciences Research

ISSN 1819-3579

Academic
Journals Inc.

www.academicjournals.com

Trends in Applied Sciences Research 10 (3): 143-156, 2015
ISSN 1819-3579 / DOI: 10.3923/tasr.2015.143.156

A Measurement Scale for Evaluating Quality of Work Life: Conceptualization and Empirical Validation

Sultan O. Almarshad
College of Business Administration, Northern Borders University, Saudi Arabia

ABSTRACT

New strategies for attracting and retaining skilled workforce require organizations better evaluate Quality of Work Life (QWL) of their employees. They need more precise and more complete measurement instrument. Using the procedure specific to formative variables, this study employed multistage steps for investigation and analysis. The research results in a particularly comprehensive measurement index that culls four QWL dimensions (work stress, work occupy, job and career satisfaction and working conditions) from 30 items. The model has significant implications for the measurement as well as development of valid measures of QWL in Saudi Arabia and other countries with similar work environment.

Key words: Quality of working life, job satisfaction, work stress, job and career satisfaction, work occupy, working conditions

INTRODUCTION

The escalating body of research and the important academic concern in Quality of Work Life (QWL) come out of the value of this concept in administrative science. QWL is fundamentally a multidimensional concept and is a manner of reasoning about people and work structure and relations (Hsu and Kernohan, 2006; Haas, 1999). It is worth noting that a measurable quality practice is essential to an effective and outcome-driven administrative process (Ibrahim, 2011). Consequently, it is imperative for organizations to assess QWL to recover organizational management, reinforce employee affiliation and diminish employees' turnover.

Despite widespread recognition of the importance of the concept of QWL, there is a notable lack of consensus among scholars regarding its definition and measurement tools. This absence of a commonly used definition makes examining the abundant research on QWL a complicated task (Hsu and Kernohan, 2006). Yet, most researchers on QWL have so far concentrated on the drivers of the concept (Singhapakdi *et al*., 2015; Gillet *et al*., 2013) or on its outcomes (Noor and Abdullah, 2011; Narehan *et al*., 2014). By and large, the research that investigates QWL builds extensively upon the works of Walton (1975), Taylor (1978), Levine *et al*. (1984) and Brooks and Anderson (2005). However, these models can be criticized on methodological as well as psychometric grounds. In fact, some scholars affirm that efforts for building universal conceptualization of QWL may be in vain and ineffective (Lin *et al*., 2013; Mirkamali and Thani, 2011). Furthermore, some arguments have been advanced to prove that QWL model is associated to organizational culture and work settings (Lin *et al*., 2013). Therefore, to be of pragmatic value, a QWL must be either by industry or setting specific.

The premises steering this approach are anchored in the following points, (1) First, QWL research is considerably reliant on the quality of the operationalization, (2) Second, given the

countries' characteristics in addition to the cultural differences the research for universal conceptualization of QWL may be ineffective and (3) Third, the construct measurements are as important as the appraisal of substantive relations. For that reason, more willingly than using a standard methodology based on QWL measurement, the study builds up an instrument tailored to the case of Saudi environment.

The objective of the current investigation is to build a comprehensive model to measure QWL in a way that fits diverse professions in Saudi Arabia and to check its psychometric properties. The contribution of this research is twofold. First of all, the study identifies the key manifestations of QWL employees' perception. Second is to analyze some organizational implications for using this model for evaluating perceived QWL in applied research.

CONCEPTUALIZATION OF QWL

The QWL is a multi-dimensional concept which has been defined by scholars in diverse ways showing discrepancy on its constructs as well as components (Levine *et al*., 1984; Mirvis and Lawler, 1984; Taylor, 1978; Walton, 1975). Some studies associate the concept of QWL with employee's well-being (Lawler, 1982), conditions of work life (Elizur and Shye, 1990), income sufficiency, profit sharing, employee autonomy, social interaction, employee satisfaction, employee involvement, advancement and work relations (Mohan and Kanta, 2013). Walton (1975) highlighted eight dimensions of QWL, (1) Adequate and fair compensation, (2) Safe and healthy working conditions, (3) Immediate opportunity to use and develop human capacities, (4) Opportunity for continued growth and security, (5) Social integration in the work organization (6) Constitutionalism in the work organization (7) Work and total life space and (8) Social relevance of work life. Exploring the underlying structure of QWL, Taylor (1978) proposed additional items to integrate what society and employer think significant concerning QWL. As well by means of a step by step method, Levine *et al*. (1984) suggested seven important drivers for QWL, (1) The degree to which superiors treat employees with respect and have self-reliance in their talents, (2) Diversity in daily work schedule, (3) Challenge of work, (4) Present work leads to future work opportunities, (5) Self-esteem, (6) Extent to which life outside of work influences life at work and (7) The extent to which work accomplished by employees contributes to society.

Martel and Dupuis (2006) argued that a model of QWL consists of a complex set of organizational interventions and a type of work life by employees. According to Carayon (1997), QWL is as a complex interaction of work systematic elements including individual task, organizational factors, environment, tools and technology. On the other hand, Duyan *et al*. (2013) emphasized the importance of human considerations linking QWL to employee's mental, physical, psychological and spiritual needs. Also, Newstrom and Davis (1986) pointed out to QWL as the degree to which employees can meet and satisfy their essential personal needs through work. Davis (1983) defined the QWL as the quality of interactions between employees, work environment, economic factors and technology. Similarly, Hian and Einstein (1990) argued that QWL includes such factors as employee experience, autonomous work groups, work rewarding environment and organizational involvement.

Other researchers identified the key concepts captured in QWL as reward and compensation systems; benefit sharing, employees' growth, work relations and opportunity for better participations (Robbins, 1989; Havlovic, 1991; Wan and Chan, 2013). Sasser *et al*. (1997) measured the QWL by examining the feelings of employees towards work environment including job

satisfaction and interpersonal interactions. Islam and Siengthai (2009) defined QWL as the favorable condition and environment of employees with regard to benefit, welfare and management attitudes. In this sense, QWL includes components related to health and wellbeing, job security, job satisfaction, competence development and the balance between work and non-work life (Rethinam and Ismail, 2007). Danna and Griffin (1999) suggested that the dimensions of QWL should be beyond intrinsic factors of pay and reward to include dimensions connected to wellbeing such as clarity of goals, appraisal, recognition and personal development. Hackman and Oldham (1976) emphasized the importance of psychological growth as an essential dimension of QWL including skill variety, task identity, task significance, autonomy and feedback.

The above review reveals that QWL is a broad multidimensional concept encompassing different approaches and models reflecting a large number of inter-related organizational and human dimensions (Rethinam and Ismail, 2007). Despite this complexity it can be inferred that the concept of QWL revolves around the wellbeing of employees and that its dimensions in general, include employee's satisfaction with physical and psychological factors related to work and daily life. The QWL in this sense, reflects the interaction between employees and work environment. The perception of quality of work life can be referred to as the favorableness or unfavorableness of a job environment for people (Davis, 1983).

In Saudi Arabia, QWL research on the various professions is still in the developmental and piloting stages. Although QWL research in Saudi Arabia is very scarce, most studies focused on employees in healthcare industry and university faculty. In this context, Almalki *et al*. (2012) incorporated four dimensions model of QWL including work life, home life, work design, work context and work word. They found that improving these factors could lead to a higher QWL, increase retention and enhance performance and productivity. Recently, Kamel (2013) showed that the perception of work life among faculty members in Saudi Arabia were strongly affected by reward and compensation, equal opportunity for administrative grow, job security, work load and clarity of rules and procedures.

To summarize, the search for universal conceptualization of the QWL may be so effective however, the offered models have not been personalized to fit different professions in Saudi Arabia. Consequently, this analysis supposes that the dimensionality of QWL may not be similar to that of QWL in a specific service. So, the study considers it is of great interest to develop and empirically validate an instrument that assesses the QWL for different professions with appropriate cultural validity and reliability.

MATERIALS AND METHODS

The literature review has not recognized any study that operationalizes the perception of the QWL for varied professions in Saudi Arabia and accordingly, there was no previous validated scale that could be used. It was therefore considered valuable to build up a measurement instrument, in agreement with the method for scale development advocated by Anderson and Gerbing (1988) and Churchill (1979).

A list of items was generated by adapting the items of existing generic scales (Casio, 1992; Walton, 1975; Timossi *et al*., 2008; Kanten and Sadullah, 2012; Lin *et al*., 2013).

In-depth interviews to build up dimensions of quality of work life: Since the nature and the number of QWL dimensions is largely related to the countries' specificities as well as the cultural

differences as well due to the individual subjectivity of QWL, a qualitative research was performed to identify the dimensions which determine the QWL construct in Saudi Arabia. The study used in-depth interviews to allow participant to identify new items that could be significant to the investigation and was not employed in the past studies. Employees from different sectors were interviewed regarding many QWL topics: (1) How they perceive their QWL? (2) What factors that make them satisfied/unsatisfied with their work life? and (3) What tasks they take to manage or develop QWL? The convenience sample comprises people of both genders from ages 21-57.

In order to analyze the qualitative data thus collected, a content analytic method was employed. After the literature review and the qualitative research phases, 79 items collected.

Content and face validity check: The purpose of this step is to assess the content and the face validity via a team of experts and a field test (Ibrahim and Najjar, 2008). Face validity is the simple appearance that a measure is valid (Kaplan and Sacuzzo, 1993). In the present study, five academicians are consulted to judge the capacity of items to describe quality of work life and ensure that they are comprehensible to respondents. Some items were removed and others were reworded to keep away from confusion. This stage reduced the list of items to 62 (Appendix).

Data collection: Data was collected in 2014 in the Northern Borders Region (Saudi Arabia) from 241 employees representing different private and public organizations. Among the participants, 55 were female and 186 were male. Their median age was 26 years and the median working age was 4 years (range, 1-10). For answers to the statements of survey, a Likert-type metric, that is, expressions with five intervals has been used. Besides to the English format, the questionnaire was translated into Arabic using a translation and back-translation method and a committee technique.

RESULTS

Exploratory assessment of the measures: An exploratory factor analysis was conducted to identify the underlying dimensionality of QWL by exploring patterns of correlations among 62 items. Different cut off criteria were used to find out the derived dimensions, such as, item communalities percentage of variance, eigenvalues and factor loadings (Hair *et al*., 1998). Items with loadings under 0.4 and with loading exceeding 0.4 on more than one component were disregarded. A four factor solution with 30 items being maintained. Conspicuously, all of the Cronbach alphas were beyond the commonly accepted rule of thumb of 0.7 (Nunnally, 1978) which indicates a suitable internal consistency among items within each identified factor. Findings are presented in Table 1.

The KMO value was 0.854 and the Chi-square value of the Bartlett's test of sphericity was 4218.471 ($p<0.001$). The lowest value of communalities among the 30 items was 0.47 with most being larger than 0.50. The preliminary PCA analysis exhibited a four-factor outcome, accounting for 70.67% of variance and it was acknowledged as the optimal solution.

Among the four components, the first one conserved (32.84%) of the initial information, with a first eigenvalue of 6.89 and the last accounted for 10.6% with a primary eigenvalue of 1.27. Factor 1 incorporated four items and most of those described "Stress at work". Factor 2 contained five items chiefly concerning home-work interface; this dimension is named "Work occupy". All items related to "Job and career satisfaction" were loaded to Factor 3. Factor 4 included principally ten items with most being relevant to "Working conditions". The comprehensive outcomes from the PCA

Table 1: Factor loadings for the underlying dimensions of QWL in Saudi settings

Items	F1	F2	F3	F4
SW1: I am pressured to work long hours	-0.901			
SW2: I have unrealistic time pressures	-0.852			
SW3: I have unachievable deadlines	-0.758			
SW4: I often feel excessive levels of stress at work	-0.948			
WO1: I am able to achieve a healthy balance between my work and home life		0.884		
WO2: Work influence on leisure		0.871		
WO3: My organization's policy for vacations is appropriate for me and for my family		0.798		
WO4: Schedule of work and rest		0.912		
WO5: Work influence on family life/routine		0.799		
JCS1: I am satisfied with my job			0.689	
JCS2: Satisfaction of the company image			0.672	
JCS3: Satisfaction of communitarian integration			0.774	
JCS4: Satisfaction of work responsibility			0.698	
JCS5: Worker's commitment to work			0.748	
JCS6: Important of the work and tasks			0.888	
JCS7: I am enthusiastic about my job			0.714	
JCS8: Satisfaction of salary			0.686	
JCS9: Salary equality			0.661	
JCS10: Recompenses for performance			0.699	
JCS11: I am satisfied with the career opportunities available for me here			0.617	
JCS12: I am satisfied with the training i receive in order to perform my present job			0.663	
WC1: Freedom of expression				0.712
WC2: Respect of the worker's rights				0.779
WC3: My work is as interesting and varied as i would want it to be				0.732
WC4: Salubrity level				0.757
WC5: Security equipment and collective protection				0.719
WC6: Quantity of workload				0.781
WC7: I have the opportunity to use my abilities at work				0.701
WC8: I have a clear set of goals and aims to enable me to do my job				0.709
WC9: I am encouraged to develop new skills				0.799
Eigenvalue	6.89	4.74	2.01	1.270
Cumulative % variance	32.84	49.47	60.07	70.670
Cronbach's alpha	0.94	0.91	0.78	0.840

are depicted in Table 1. Reliability of the overall scale as well as subscales based on this model was acceptable. The Cronbach's alpha measures for the four subscales ranged from 0.78-0.94, whereas it was 0.93 for the overall QWL scale.

Next a confirmatory model was carried out on the residual 30 items. The measurement model makes out four components and depicts the relationships among the items and their related dimensions (Fig. 1). Assessment of the fit and the modification indices shows that the present measurement model is satisfactory (P^2 (145) = 517.918, p = 0.000, GFI = 0.951, AGFI = 0.942, CFI = 0.978, RMR = 0.061, RMSEA = 0.057<0.06).

Unidimensionality and reliability: Given these results it has been evidenced that the components are unidimensional, with each indicator reflecting one and only one underlying

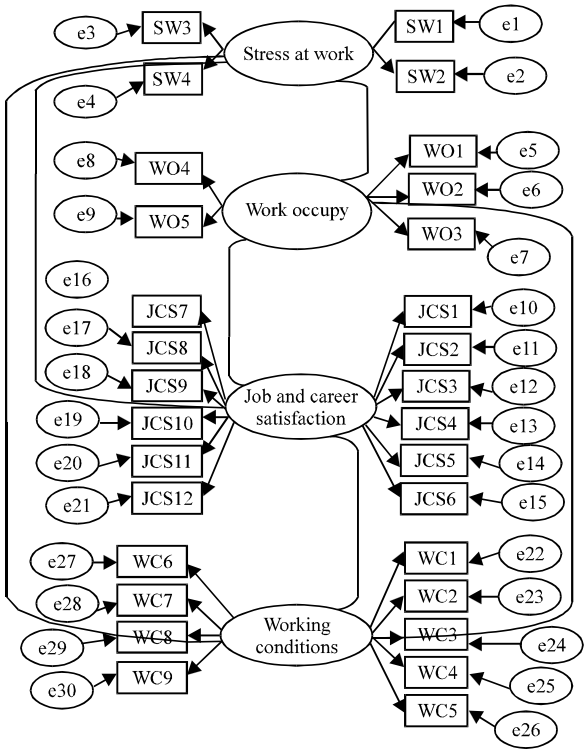

Fig. 1: Measurement model

construct (Gerbing and Anderson, 1988). Coefficient alpha ranging from 0.78-0.94 and the composite reliability ranging from 0.70-0.93 are considered suitable (Nunnally and Bernstein, 1994).

Convergent and discriminant validity: Convergent validity can evaluated using the measurement model by bearing out whether each indicator's estimated ML loading on the corresponding dimension is significant (Peter, 1981). As shown in Table 2 and in Fig. 2, QWL is a formative constructs. All confirmatory factor loadings surpass (0.65) and all are significant with t-values ranging from a low of 26.351 to a high of 292.14. Accordingly we have proof of convergent validity of our scales.

In addition, discriminant validity in the measurement model was assessed by examining a CFA model which included the four dimensions: "Stress at work", "Work occupy", "Job and career satisfaction" and "Working conditions". The procedure suggested by Anderson and Gerbing (1988) was used. First, in this base model the paths between the four constructs were freely estimated. After that, each correlation parameters was constrained to "one" independently and the correspondent models were assessed. The $)P^2$ values between the constrained models and the unconstrained model point out that the fit indicator of each of the constrained models was appreciably worse than the fit indicator of the base model (p = 5%). Therefore, a proof of discriminant validity was obvious in the measurement model, given that the probability that all combinations of the variables sufficiently represent the same construct is less than 0.05.

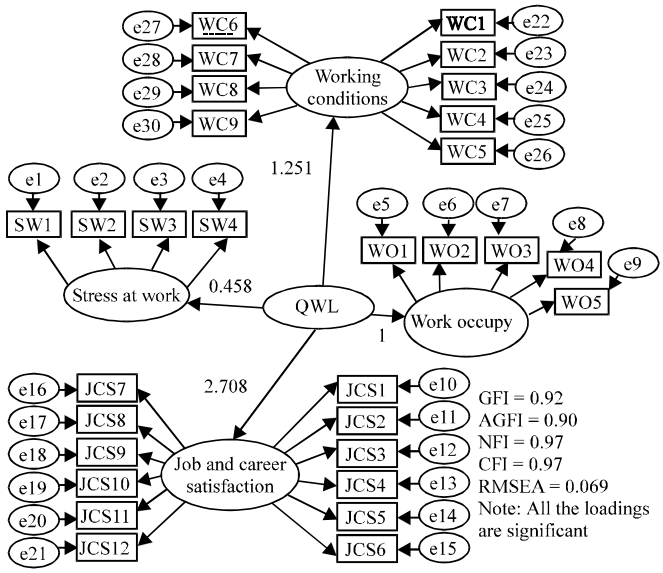

Fig. 2: Conceptualization of quality of work life as formative constructs

All components of the QWL concept have a significant as well as positive relationship with the second order construct. These results offer supplementary evidence that QWL has four dimensions.

Nomological validity: The proof of nomological validity is established by a construct's possession of diverse antecedents, outcomes, or modified circumstances and quantitative dissimilarities in the degree to which a construct is linked to drivers or consequences or differs across situations in showing consequential effects (Iacobucci *et al.*, 1995). Accordingly, the four QWL dimensions were investigated within a nomological network including employee commitment. Several authors support the significant relationship between QWL and employee commitment (Khan *et al.*, 2011; Chughtai, 2008). Morgan and Hunt (1994) investigated the concept of employee commitment within their conceptualization of commitment-trust. Committed employees are less likely to go away, are more motivated as well as they are more likely to engage in organizational citizenship behaviors (Morgan and Hunt, 1994). Prior research about employee commitment (Porter *et al.*, 1974) conceptualizes the concept as a unidimensional construct that illustrates employee identification with the organization. Nevertheless, not all forms of employee commitment are similar (Meyer *et al.*, 1993). Meyer and Allen (1991) suggested three-component model of employee commitment that includes emotional commitment, continuance commitment and normative commitment.

To operationalize employee commitment six items were used (5-point format ranging from "strongly disagree" to "strongly agree") employed in past research (Louis, 1998). The labels were: "I frequently take on extra tasks or responsibilities that I think will benefit the organization", "I wouldn't want to work in any other organization", "The reputation and performance of this organization is important to me", "I try very hard to show to clients/patients/citizens that I care about them", "It's important for me to know something about my clients/patients/citizens' families" and "I am always thinking about ways of improving my work" (Cronbach alpha = 0.71). The

Table 2: Properties of the confirmatory factor analysis for quality of work life

Items	Loading	t-statistics	Joreskog's Rho
Stress at work			0.90
SW1	1		
SW2	0.961	69.471	
SW3	0.837	63.214	
SW4	0.877	90.124	
Work occupy			0.82
WO1	1		
WO2	0.987	235.140	
WO3	0.951	103.840	
WO4	0.993	98.361	
WO5	0.901	96.213	
Job and career satisfaction			0.76
JCS1	1		
JCS2	0.925	58.300	
JCS3	0.921	191.850	
JCS4	0.845	96.213	
JCS5	0.928	47.140	
JCS6	0.863	238.210	
JCS7	0.828	26.351	
JCS8	0.873	78.450	
JCS9	0.984	91.482	
JCS10	0.893	78.215	
JCS11	0.895	124.980	
JCS12	0.918	220.441	
Working conditions			0.80
WC1	1		
WC2	0.824	127.230	
WC3	0.992	151.230	
WC4	0.650	292.140	
WC5	0.898	287.210	
WC6	0.986	177.410	
WC7	0.888	136.110	
WC8	0.998	338.310	
WC9	0.914	98.982	

structural model fit the data well and Fig. 3 illustrates the detailed results. The path between QWL and employee commitment is positive and significant (loading = 1.129, t-value = 121.027). It is worthy to note that this result gives support to the nomological validity of QWL constructs.

DISCUSSION

A basic principle of quality management is that to improve quality its basic elements must be made operationalized (Ibrahim, 2011). The current investigation suggests a multidimensional model of QWL. The QWL is a complex concept that has made a big debate in the academic literature about its conceptualization, operationalization and definition. The present research proves that QWL is a second-order factor. This scheme regarding measurement corresponds to the entity practicality of latent variable hypothesis as well as the ontological concept of validity, rather than the instrumentalism and the formative frameworks. This analysis conceptualizes employees' QWL as an attitude since the operation of measures on attitudes is more consistent with the reflective analysis (Iacobucci, 2010).

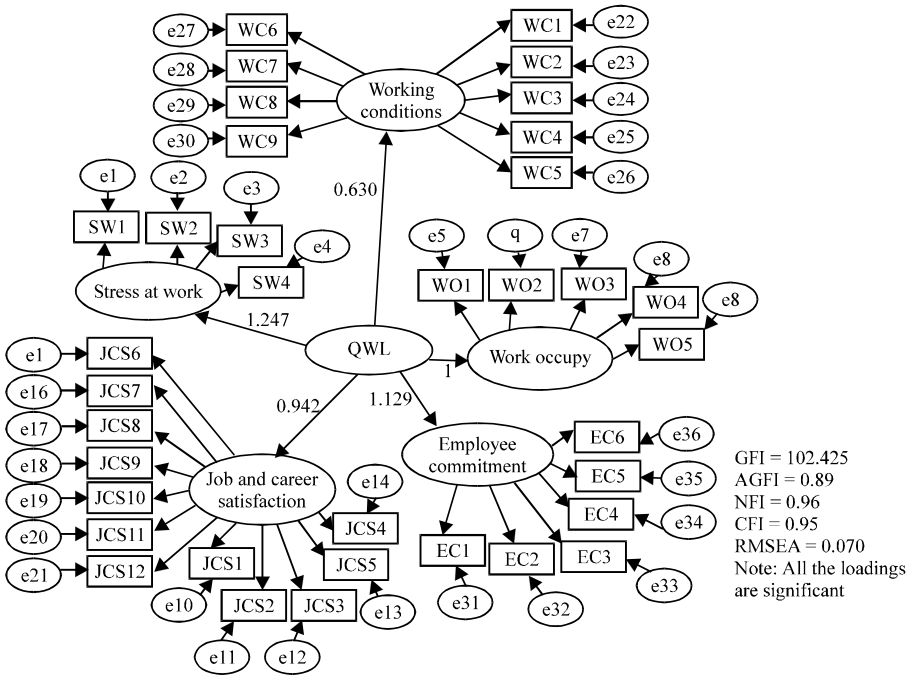

Fig. 3: Effect of QWL on employee commitment

By cautiously scrutinizing the rigorous validation modus operandi of formative constructs via the path analysis, the study results in a mainly wide-ranging measurement index. The employees formulate their attitudes towards QWL on the basis of a number of facets. They establish their evaluation of QWL dimensions on the assessment of the corresponding variables. The grouping of numerous factors corresponds to an employee's overall perception of QWL. Therefore, perceived QWL has a higher-order factor structure ("Stress at work", "Work occupy", "Job and career satisfaction" and "Working conditions") which are fashioned by 30 indicators. Managers can establish priorities in the decisions related to QWL improvement, in view of the comprehensive assessment in each key factor and regulating their strategies and plans to enhance their images in attracting and retaining employees, to recover organizational management, to reinforce employee identification to the organization and to diminish employees' turnover. The study's practical support upholds the psychometrical properties of the proposed measurement scale, its reliability, convergent, discriminant, as well as nomological validity. All the paths in the structural model are clearly established which confirms that each component is rightfully regarded as an aspect of QWL.

The use of sample from diverse organizations and different settings for the EFA and the CFA makes the study more accurate. Consistent with the findings, the four dimensions are not drivers of QWL but rather expressions of the complexity of the construct. QWL is a second-order factor underlying the components. Therefore, variations in the QWL produced by the change in the perception of one component will affect the perception of the rest of components because of the relationship between them.

The suggested multidimensional QWL model is a significant strategic instrument to detect the weak spot and strength of the organization performance. This index could be a diagnostic tool that will help managers to recognize quality of work life areas that are frail and need a particular consideration. The findings demonstrate that QWL is an important antecedent of employees' commitment. Developing any new instrument model is valuable for research as long as this work helps better explain a phenomenon by conforming to all psychometric criteria. Therefore, researchers save time and energy to concentrate on the crux of their investigations.

The QWL is related to several key organizational outcomes, for example work engagement (Kanten and Sadullah, 2012), organizational justice (Gillet *et al*., 2013), social networking (Omar *et al*., 2014) and Job satisfaction (Hosseinabadi *et al*., 2013). Hence, the study of QWL can offer organizations a vigorous tool for accomplishing their strategic objectives. Other academicians can replicate the proposed scale in different cultures so as to generalize results. The model is empirically tested on one only country (KSA) and there is a probability of a cultural bias playing a role in the findings of the study as perceptions of individuals may be different from country to country. Even though, some items are edited in accordance with past literature and the actual situation, there is no way of guaranteeing that other components were not omitted.

It is worth noting that manager should regularly deploy QWL questionnaires in order to get a dynamic illustration of evaluations and attitudes over time with the aim of enriching the dynamic analysis. Further investigations must take into consideration diverse variables in the examination of QWL assessments, such as the effect of governance as well as the role of leadership on QWL perception. These aspects also have to be considered in order to gain a more comprehensive view of QWL; as a result, employees' perception of QWL weakness or excellence must be assumed with watchfulness given that it could have been influenced by different aspects that are not a particular factor of QWL.

In order to gain a factual representative sample in the present investigation, female employees were not excluded. Consequently, QWL for both male and female employees might be parallel. In the future when the QWL scale is employed in large-scale, researchers should examine whether there are some discrepancies in QWL between male and female employees.

The main limitation of this research relates to the systematic nature of the analytical method. All the anticipated components need to be assessed in the suggested measurement scale and none can be deleted or added by the respondents. Lastly, one more limitation relates to the country and the organizations in which the scale is developed and tested. Replicating the index across many organizations from other countries than Saudi Arabia could help verify the reliability as well as the validity of the index.

ACKNOWLEDGMENTS

The analysis presented in this study is part of a broader research project conducted by the author aimed at understanding and evaluating the dimensions of QWL and its applications in Saudi work environment. The ultimate goal of such a project is to improve quality of work life, human performance and organizational effectiveness. The author appreciates the encouragement and financial support provided by the Northern Border University, represented by the Deanship of Scientific Research. The author also wishes to express thanks to Dr. Hafedh Ibrahim for valuable advice in statistical analysis.

Appendix: The whole list of items

I am satisfied with my job	My salary is adequate for my job, given the current job market conditions
My workload is too heavy	My organization's policy for vacations is appropriate for me and for my family
In general, society has an accurate image of my job	I am able to participate in decisions made by my supervisor
I am able to balance work with my family needs	I feel respected by my colleagues in my work
I receive sufficient assistance in my work	It is important to have a designed private break area for the staff
I am able to communicate well with my supervisor	I am happy with the physical environment where I usually work
I have adequate equipment	My employer provides adequate facilities and flexibility for me to fit work
My supervisor provides adequate supervision	in around my family life
It is important for my company to offer employees	I have sufficient opportunities to question managers about change at work
near childcare services	My employer provides me with what I need to do my job effectively
I have energy left after work	My current working hours suit my personal circumstances
In my job, I feel strong and vigorous	The working conditions are satisfactory
I am immersed in my work	I get a sense of achievement from doing my job
Time flies when I'm working	I receive support to attend continuing education and training programs
I get carried away when I'm working	I am recognized for my accomplishments by my supervisor
It is difficult to detach myself from my job	The security department provides secure working environment
I feel happy when I am working intensely	I would be able to find my same job in another organization with about the
At work, I feel full of energy	same salary and benefits
I can continue working for very long periods at a time	I feel safe from personal ham (physical, emotional or verbal) at work
I am enthusiastic about my job	I believe my job is secure
My job inspires me	I am satisfied with the overall quality of my working life
I am proud of the work I do	I am able to achieve a healthy balance between my work and home life
Friendships/relationships with my coworkers	I feel motivated to do my best in my current job
are acceptable	I am satisfied with the career opportunities available for me here
My work setting provides career advancement	I am satisfied with the training I receive in order to perform my present job
opportunities	I often feel under pressure at work
There is teamwork in my work setting	My work is as interesting and varied as I would want it to be
I experience many interruptions in my daily	I am pressured to work long hours
work routine	I have unachievable deadline
I have enough time to do my job well	I often feel excessive levels of stress at work
I feel a sense of belonging in my workplace	I am encouraged to develop new skills
The system of working hours negatively	When I have done a good job it is acknowledged by my line manager
affects my life	I am involved in decision that affects me in my own area of work
I am able to communicate with other coworkers	I have a clear set of goals and aims to enable me to do my job
I receive feedback on my performance from	I have the opportunity to use my abilities at work
my supervisor	

REFERENCES

Almalki, M.J., G. FitzGerald and M. Clark, 2012. The relationship between quality of work life and turnover intention of primary health care nurses in Saudi Arabia. BMC Health Serv. Res., Vol. 12. 10.1186/1472-6963-12-314

Anderson, J.C. and D.W. Gerbing, 1988. Structural equation modeling in practice: A review and recommended two-step approach. Psychol. Bull., 103: 411-423.

Brooks, B.A. and M.A. Anderson, 2005. Defining quality of nursing work life. Nurs. Econ., 23: 319-326.

Carayon, P., 1997. Temporal issues of quality working life and stress in human-computer interaction. Int. J. Human-Comput. Interaction, 9: 325-342.

Casio, W.F., 1992. Managing Human Resources: Productivity, Quality of Work Life, Profits. 3rd Edn., McGraw-Hill, New York.

Chughtai, A.A., 2008. Impact of job involvement on in-role job performance and organizational citizenship behavior. J. Behav. Applied Manage., 9: 169-183.

Churchill, Jr. G.A., 1979. A paradigm for developing better measures of marketing constructs. J. Market. Res., 16: 64-73.

Danna, K. and R.W. Griffin, 1999. Health and well-being in the workplace: A review and synthesis of the literature. J. Manage., 25: 357-384.

Davis, L.E., 1983. Design of New Organizations. In: The Quality of Working Life and the 1980s. Kolodny, H. and H. Van Beinum (Eds.). Praeger, New York, ISBN: 9780030633423, pp: 65-86.

Duyan, E.C., S. Aytac, N. Akyýldýz and D. Van Laar, 2013. Measuring work related quality of life and affective well-being in Turkey. Mediterranean J. Soc. Sci., 4: 105-116.

Elizur, D. and S. Shye, 1990. Quality of work life and its relation to quality of life. Applied Psychol., 39: 275-291.

Gerbing, D.W. and J.C. Anderson, 1988. An updated paradigm for scale development incorporating unidimensionality and its assessment. J. Market. Res., 25: 186-192.

Gillet, N., E. Fouquereau, A. Bonnaud-Antignac, R. Mokounkolo and P. Colombat, 2013. The mediating role of organizational justice in the relationship between transformational leadership and nurses' quality of work life: A cross-sectional questionnaire survey. Int. J. Nurs. Stud., 50: 1359-1367.

Haas, B.K., 1999. A multidisciplinary concept analysis of quality of life. Western J. Nursing Res., 21: 728-742.

Hackman, J.R. and G.R. Oldham, 1976. Motivation through the design of work: Test of a theory. Organiz. Behav. Hum. Perform., 16: 250-279.

Hair, Jr. J.F., R.L. Tatham, R.E. Anderson and W.C. Black, 1998. Multivariate Data Analysis. 5th Edn., Prentice Hall, Upper Saddle River, New Jersey, USA., ISBN-13: 9780138948580, Pages: 768.

Havlovic, S.J., 1991. Quality of work life and human resource outcomes. Ind. Relat.: J. Econ. Soc., 30: 469-479.

Hian, C.C. and W.O. Einstein, 1990. Quality of Work Life (QWL): What can unions do? SAM Adv. Manage. J., 55: 17-22.

Hosseinabadi, R., A. Karampourian, S. Beiranvand and Y. Pournia, 2013. The effect of quality circles on job satisfaction and quality of work-life of staff in emergency medical services. Int. Emergency Nurs., 21: 264-270.

Hsu, M.Y. and G. Kernohan, 2006. Dimensions of hospital nurses' quality of working life. J. Adv. Nurs., 54: 120-131.

Iacobucci, D., 2010. Structural equations modeling: Fit indices, sample size and advanced topics. J. Consum. Psychol., 20: 90-98.

Iacobucci, D., A. Ostrom and K. Grayson, 1995. Distinguishing service quality and customer satisfaction: The voice of the consumer. J. Consum. Psychol., 4: 277-303.

Ibrahim, H. and F. Najjar, 2008. Assessing the effects of self-congruity, attitudes and customer satisfaction on customer behavioural intentions in retail environment. Market. Intell. Planning, 26: 207-227.

Ibrahim, H., 2011. Assessing service quality within airport industry. Tecnia J. Manage. Stud., 5: 1-13.

Islam, M.Z. and S. Siengthai, 2009. Quality of work life and organizational performance: Empirical evidence from Dhaka export processing zone. Proceedings of the ILO Conference on Regulating for Decent Work, July 8-10, 2009, International Labour Organisation, Geneva, pp: 1-19.

Kamel, M.M., 2013. The mediating role of affective commitment in the relationship between quality of work life and intention to leave. Life Sci. J., 10: 1062-1067.

Kanten, S. and O. Sadullah, 2012. An empirical research on relationship quality of work life and work engagement. Procedia-Soc. Behav. Sci., 62: 360-366.

Kaplan, R.M. and D.P. Sacuzzo, 1993. Psychological Testing: Principles, Applications and Issues. 3rd Edn., Brooks/Cole Publishing Co., Pasific Grove, CA.

Khan, T.I., F.A. Jam, A. Akbar, M.B. Khan and S.T. Hijazi, 2011. Job involvement as predictor of employee commitment: Evidence from Pakistan. Int. J. Bus. Manage., 6: 252-262.

Lawler, E.E., 1982. Strategies for improving the quality of work life. Am. Psychol., 37: 486-493.

Levine, M.F., J.C. Taylor and L.E. Davis, 1984. Defining quality of working life. Hum. Relat., 37: 81-104.

Lin, S., N. Chaiear, J. Khiewyoo, B. Wu and N.P. Johns, 2013. Preliminary psychometric properties of the Chinese version of the work-related quality of life scale-2 in the nursing profession. Safety Health Work, 4: 37-45.

Louis, K.S., 1998. Effects of teacher quality of work life in secondary schools on commitment and sense of efficacy. J. School Effectiveness Improv.: Int. J. Res. Policy Pract., 9: 1-27.

Martel, J.P. and G. Dupuis, 2006. Quality of work life: Theoretical and methodological problems and presentation of a new model and measuring instrument. Soc. Indicators Res., 77: 333-368.

Meyer, J.P. and N.J. Allen, 1991. A three-component conceptualization of organizational commitment. Hum. Resour. Manage. Rev., 1: 61-89.

Meyer, J.P., N.J. Allen and C.A. Smith, 1993. Commitment to organizations and occupations: Extension and test of a three-component conceptualization. J. Applied Psychol., 78: 538-551.

Mirkamali, S.M. and F.N. Thani, 2011. 2011. A study on the Quality of Work Life (QWL) among faculty members of University of Tehran (UT) and Sharif University of Technology (SUT). Procedia-Soc. Behav. Sci., 29: 179-187.

Mirvis, P.H. and E.E. Lawler, 1984. Accounting for the quality of work life. J. Organiz. Behav., 5: 197-212.

Mohan, G.K. and K.N.M. Kanta, 2013. Quality of work life: An application of factor analysis. Sumedha J. Manage., 2: 4-12.

Morgan, R.M. and S.D. Hunt, 1994. The commitment-trust theory of relationship marketing. J. Market., 58: 20-38.

Narehan, H., M. Hairunnisa, R.A. Norfadzillah and L. Freziamella, 2014. The effect of Quality of Work Life (QWL) Programs on Quality of Life (QOL) among employees at multinational companies in Malaysia. Procedia-Soc. Behav. Sci., 112: 24-34.

Newstrom, J.W. and K. Davis, 1986. Human Behavior at Work. McGraw-Hill, New York.

Noor, S.M. and M.A. Abdullah, 2011. Quality work life among factory workers in Malaysia. Procedia-Social Behav. Sci., 35: 739-745.

Nunnally, J.C., 1978. Psychometric Theory. 2nd Edn., McGraw-Hill, New York, USA., ISBN-13: 9780070474659, Pages: 701.

Nunnally, J.C. and I.H. Bernstein, 1994. Psychometric Theory. 3rd Edn., McGraw-Hill, New York, USA., ISBN-13: 978-0070478497, Pages: 736.

Omar, A.S., W.E.W. Rashid and A.A. Majid, 2014. Motivations using social networking sites on quality work life. Procedia-Soc. Behav. Sci., 130: 524-531.

Peter, J.P., 1981. Construct validity: A review of basic issues and marketing practices. J. Market. Res., 18: 133-145.

Porter, L.W., R.M. Steers, R.T. Mowday and P.V. Boulian, 1974. Organizational commitment, job satisfaction and turnover among psychiatric technicians. J. Applied Psychol., 59: 603-609.

Rethinam, G.S. and M. Ismail, 2007. Constructs of quality of work life: A perspective of information and technology professionals. Eur. J. Soc. Sci., 7: 58-70.

Robbins, S.P., 1989. Organizational Behavior: Concepts, Controversies and Applications. Prentice Hall, New Jersey.

Sasser, W.E., L.A. Schlesinger and J.L. Heskett, 1997. The Service Profit Chain. Free Press, New York, ISBN: 9780684832562, Pages: 320.

Singhapakdi, A., D.J. Lee, M.J. Sirgy and K. Senasu, 2015. The impact of incongruity between an organization's CSR orientation and its employees' CSR orientation on employees' quality of work life. J. Bus. Res., 68: 60-66.

Taylor, J.C., 1978. An empirical examination of the dimensions of quality of working life. Omega, 6: 153-160.

Timossi, L., B. Pedroso, A. Francisco and L. Pilatti, 2008. Evaluation of quality of work life: An adaptation from the walton's QWL model. Proceedings of the 14th International Conference on Industrial Engineering and Operations Management, October 13-16, 2008, Rio de Janeiro, Brazil.

Walton, R.E., 1975. Criteria for Quality of Working Life. In: The Quality of Working Life, Davis, L.E. and A.B. Cherns (Eds.). The Free Press, New York, pp: 99-104.

Wan, Y.K.P. and S.H.J. Chan, 2013. Casino employees' perceptions of their quality of work life. Int. J. Hosp. Manage., 34: 348-358.