Journal of Research and Reflections in Education
December 2019, Vol.13, No 2, pp 273-281
http://www.ue.edu.pk/jrre

Measuring Professional Life Quality of University Teachers: Scale Construction and Validation

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ABSTRACT

Teachers are demanding quality in the teaching profession. It is noble and prominent fields due to this it demands standard quality life at each level. Teachers can perform better only when their professional life is satisfactory in the institution. Their basic professional needs are full filled and healthy environment is provided by the department. This study was conducted to measure and validate the scale regarding teachers' professional life satisfaction by using a structural equation model. Validation was ensured by a factor analysis of the instrument. The study was quantitative and descriptive. The university teachers were respondents. They responded to the questions on a Likert type scale. Path analysis was conducted by SmartPLS. The findings of the study confirm the authenticity of the scale and ensure its validity. Factors are showing a strong positive association with quality of honourable teaching profession under the umbrella of outer loadings. The R-value also shows the goodness of fit model that supports the scale validation. Scale validation is most important and considered the backbone for authentic study. Therefore, researchers need to pay attention to the validation and reliability of scale before conducting a study on a big canvas. Head of the institutions may involve in the sample of the study because he or she may give more authentic and reliable information regarding teachers' professional life.

Keywords: *teaching profession, life, satisfaction, healthy environment, fit model*

Introduction

The personal satisfaction is important in current society and fundamental to improving social strategies associated with individuals, groups or society in general (Phillips, 2006). Personal satisfaction is innately human and fulfils several parts of life. It is a capacity to combine social components specific to cultural thinking about standards of solace and prosperity. The term incorporates numerous facets like learning, knowledge, and estimations of people and collectivities identified on various occasions, differing spots and stories, largely a brand of socializing relativity (Minayo, Hartz, & Buss, 2000). Life quality is a broader term and professional life is limited to quality standards of the job (Cummins, 2005; Snyder et al., 2010; Walters, 2009). The common appraisal of life excellence incorporates the physical, resources, communal, and success of an individual it also encompasses different happenings and progress of a human being (Pino, 2003). The objective of individual fulfilment is to explore aspects that are important in day-to-day survives of people, empower them to show their gratification or disillusionment along with basic necessities of life (Ferrans & Powers, 2012). Bakas et al. (2012) stated that a variety of models related to individual fulfilment or life quality exist at work; where some study the quality work-life term as *individualistic belief system* (Ferrans,

1996, p. 293) where "individuals are the principle credible judge of their own fulfilment since they contrast in their qualities and regard." Thus, a personal approach should be utilized to gauge the concept of personal satisfaction with the plan to explore the individual and at some abstract level her personal satisfaction and work-life quality (Minayo et al., 2000). A limited number of studies are available that explore personal satisfaction of teaching faculty in universities however literature is growing. Available studies show teachers who have high-level quality life at the job are more satisfied in their profession than those who are not (Snyder et al., 2010). What constitutes the standards for measuring life quality of job Ishak, Razak, Hussin, Fhiri, and Ishak (2018) propose the following factors:

1. A satisfactory and reasonable reward
2. Job environment
3. Hiring and training of personnel
4. Professional development
5. Socialization at workplace
6. Life standard at job
7. Social pertinence of work

Professional life quality of teachers was measured by six factors (fair incentives, safe working conditions, opportunities of socialization, office place, friendly environment, and space to improve things) of the institution. There are a lot of factors which affect the professional life of personnel but researchers selected particularly these six elements because these are compatible and common in all academic higher institutions. In the progressing world of present-day innovative development, the traditional idea of the teaching profession is exposed to fast changes. An individual who appreciates the work and infers fulfilment can perform in the best immaculate way. The satisfaction of individual needs and objectives prompts fulfilment prosperity and bliss. In any case, how far and to what extent an employee could be satisfied in the profession if it is loaded with work and job anxiety.

Significance of the Study

Quality of education involves planning career work that upgrades the quality of life for professional educators. Therefore, a need is there to develop and validate the scale that could measure this quality of life. In addition, the scale would be useful to the local context measuring the professional quality of life for Pakistani teachers.

Research Objectives

The purpose of the study was to attain the following objectives:

1. To explore the relationship between professional life and its dimensions through partial least square structural equation model (PLS-SEM) path analysis.
2. To assess the construct reliability and validity of the professional life instrument.
3. To check the discriminant validity of professional life instrument.

Method

Research Design

Quantitative method was used in this current study. It was descriptive and survey research. The basic drive was to check the instrument validation.

Participants

The research participants were teaching faculty of universities (2 public and 2

private). Four common departments were selected from four universities. Specifically two hundred members were nominated randomly. There were 120 male and 80 female teachers. All subjects of study fall in the series of lecturers to professors.

Materials

After taking the experts opinions on questionnaire, it was distributed to teachers to complete the process of pilot testing. Questionnaire relating professional life of teachers was used to obtain information from respondents. It was consisted of six sub-dimensions. Researchers mentioned two statements of each dimension for readers' understanding. (Living space; a) I am satisfied with job, b) do not want change in professional life; Sound job environment; a) job safety, b) pleasant environment for health; Improving capacity; a) career opportunities are there, b) take part in professional activities; Socialization; a) cooperative environment, b) sharing different things with colleagues; Democratic environment; a) I do not feel hesitation to discuss things, b) I can talk with seniors easily; and Fair Compensations; a) reward based upon efficiency, b) professional commitment is effected by unbiased remuneration). Items were developed against each dimension and validated by relevant experts. Language expert reviewed questionnaire and gave his opinions on scale. Partakers responded the items on 5-point Likert type scale. Overall reliability was .85. It showed good and significant desired value of internal consistency.

Results

Collected data were analyzed by using Partial Least Square-Structural Equation Model (PLS-SEM) path analysis (SmartPLS) (Hair, Hult, Ringle, & Sarstedt, 2017).

Data Analysis

A brief data analysis is shown below:

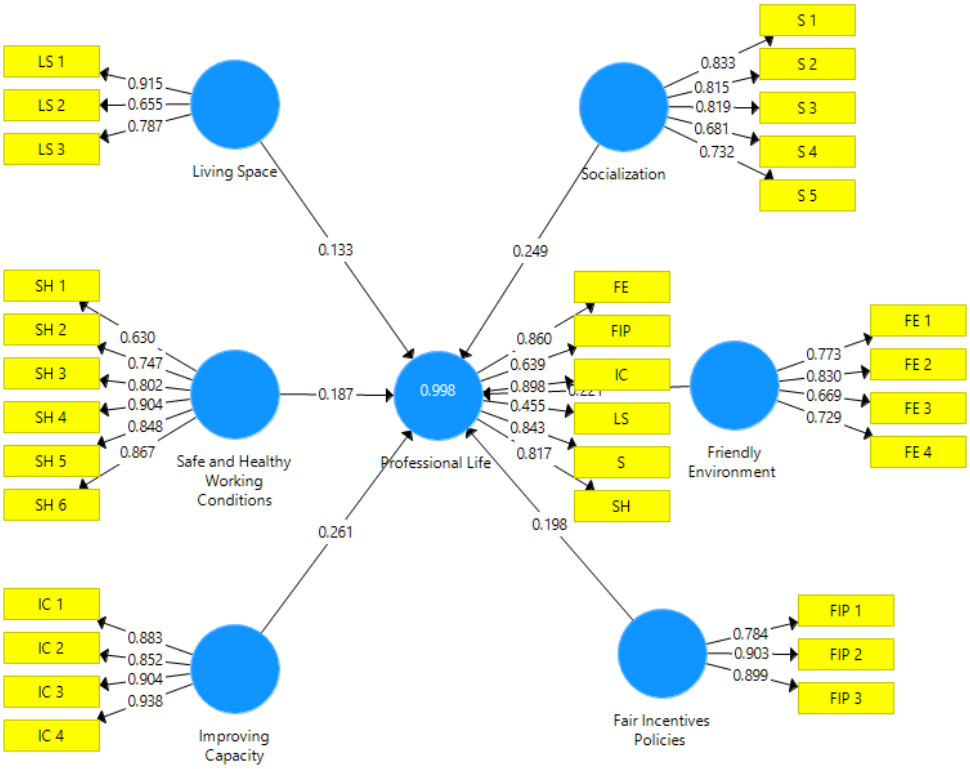

Figure 1: PLS-SEM structural model

Figure 1 determined the relationship among all factors. There is main variable in the form of professional life and it has six sub dimensions. The connection between factors appeared in the inward model and factor stacking estimations of every factor appeared in external model. Educators' living space satisfaction is r = 0.13 with professional life. Safe and healthy working conditions r = 0.18 are basic requirement of an institution. Administrations pay attention on job atmosphere r = 0.26 with the passage of time. Workplace environment is improved with organizational socialization r = 0.25. And this thing comes into existence when institutions have friendly environment r = 0.22. Teachers' working life is also effected by departmental fair compensations and rewards r = 0.19.

Table 1
Path Coefficients of Factors of Professional Life for the Outer and Inner Model

Factors	Outer Model	Inner Model
Living space	0.13	0.46
Safe working conditions	0.19	0.82
Improving capacity	0.26	0.90
Socialization	0.25	0.84
Friendly environment	0.22	0.86
Fair incentives policies	0.20	0.64

Table 1 shows the path coefficients relationship of professional life quality for the outer and inner model. Path coefficient is equal to the liaison among constructs and its dimensions. There are six sub-dimensions of professional life in above table. All factors have moderating positive connection with main construct in outer model. Inner model shows strong relationship of sub-dimensions with professional life factor except one dimension. Inner model shows the value of sub-factors to measure the life quality of teaching profession.

Table 2
Latent Variable Correlations through Cross Loading

Factors	*1*	*2*	*3*	*4*	*5*	*6*	*7*
1. Professional Life		0.56	0.83	0.90	0.86	0.87	0.64
2. Living space			0.54	0.37	0.25	0.45	0.41
3. Safe working conditions				0.74	0.67	0.61	0.47
4. Improving capacity					0.73	0.77	0.50
5. Socialization						0.81	0.40
6. Friendly environment							0.33
7. Fair incentives policies							

Table 2 shows relationship among factors through cross loading. The primary purpose of cross loading is to cross match the values of factors. In which, each construct shows maximum value with itself, but lesser with other variables. All constructs are showing maximum values with its own and less with others.

Table 3
Construct Reliability and Validity

Factors	*CA*	*rho_A*	*CR*	*AVE*
Professional Life	0.85	0.88	0.89	0.59
Living space	0.72	0.92	0.83	0.63
Working conditions	0.89	0.91	0.92	0.65
Improving capability	0.92	0.92	0.94	0.80
Socialization	0.84	0.85	0.88	0.61
Pleasant environment	0.74	0.75	0.84	0.57
Incentives policies	0.83	0.83	0.90	0.75

Table 3 demonstrates the factors (one main factor and other six its sub-factors) validity and reliability. Reliability was checked by three different methods (Cronbach's Alpha, rho_A, and Composite Reliability). According to Hair (2014), reliability values are acceptable at 0.7. In above table all constructs have values above than threshold. It seems constructs are showing good and statistical significant values under the umbrella of internal consistency and composite reliability. Wah-Yap, Ramayah, Nushazelin, and Wan-Shahidan stated in (2012) that AVE displays fact about convergent validity. Hair (2014) described that AVE value is acceptable at 0.5. It is minimum standard higher values show strong validity of the constructs. In current

study, all factors have AVE values above than .5, which indicates strong convergent validity.

Table 4
Discriminant Validity

Factors	*1*	*2*	*3*	*4*	*5*	*6*	*7*
Professional Life	0.77						
Living space	0.56	0.79					
Working conditions	0.83	0.45	0.81				
Improvement	0.90	0.37	0.73	0.89			
Socialization	0.86	0.25	0.66	0.73	0.78		
Pleasant environment	0.86	0.45	0.61	0.77	0.81	0.75	
Incentives policies	0.64	0.41	0.47	0.50	0.40	0.33	0.86

Table 4 demonstrates the discriminant validity of factor and sub-factors. Surienty, Ramayah, Lo, and Tarmizi, (2014) different researchers and data analysts described discriminant validity. According to them this validity shows distinct concepts of dimensions and their constructs. They said values should be greater than 0.6 in this validity. As a researcher in my point of views this validity shows the discrimination of factors with other constructs. Each variable has maximum value but it shows less value with other variables. Thus, it is concluded from the results that factor and its all dimensions have discriminant validity. Below figure also highlights the detail discrimination among constructs.

Table 5
Bootstrapping Path Coefficients

Factors	*SM*	*SD*	*T*	*P*
Living space	0.13	0.06	2.05	.04
Working conditions	0.19	0.03	5.41	.01
Improving capacity	0.25	0.03	8.45	.01
Socialization	0.25	0.03	7.97	.01
Environment	0.21	0.04	6.04	.01
Incentives policies	0.19	0.03	6.19	.01

Table 5 displays outcomes of bootstrapping. Therefore, in current study values of six sub-dimensions living space, $T = 2.05$, $P = .04$; safe working conditions, $T = 5.40$, $P = .01$; improving capacity, $T = 8.45$, $P = .01$; socialization, $T = 7.97$, $P = .01$; friendly environment, $T = 6.04$, $P = .01$; and fair incentives policies, $T = 6.19$, $P = .01$. All constructs show positive, strong and significant values which are bigger than threshold. It means that goodness of fit exists. It is decided that professional life and its dimensions have sound connection.

Discussion

The reason to direct this research was the instrument validation of professional life in universities. Scale was validated by using structural equation model. Different techniques (path analysis, outer loading, cross loading, internal consistency, and

composite reliability) were used to validate the instrument. Discriminant validity was also explored. The value of internal consistency was .85. That is statistical important and adequate. This finding is aligned and higher from the study results of Converso, Loera, Molinengo, Viotti and Guidetti (2018). They conducted a study related to scale confirmation of life quality in profession in Italy. Findings showed that there was strong bonding among statements. Instrument was valid due to high level of internal consistency. Item analysis was also confirmed the instrument validation. It seems the certification and authenticity of the life quality instrument in this context.

Conclusion

Life quality is important in every field of work. It is utmost vital in the teaching profession especially at university level. Teachers' professional satisfaction depends upon institutional environment and workplace facilities. Public and private both sectors are confirming the better standard of teachers professional life. They know very well that it is the significant and crucial factor to compete the competitive world. Teachers demand better living space in the institution where they can focus on their academic responsibilities. They seek better working conditions with having improving capacity with the passage of time. Safe and sound working environment is a need of an academic institution and its faculty members. Healthy environment enables workforce to perform better and put their maximum effort to achieve desired goals. Fair incentives policies are required in the modern era. The research purpose was to validate life quality scale. This scale consisted of six sub-dimensions which discussed in this study. Validity and internal consistency were measured by applying different statistical tests (PLS-SEM model, path coefficient, outer loadings, latent variables associations through cross loadings, *R* square value, reliability, discriminant validity, and bootstrapping path coefficient) through path analysis. University teachers were respondents of the study. They responded different statements regarding their own professional life quality. Path analysis showed linkage of life quality factor and its sub-dimensions. All factors have moderating positive connection with main construct. All factors are showing solid positive connection with quality of teaching profession expect living space under the umbrella of outer loadings. It means all factors are compulsory to measure the teachers' professional life. The *R*-value shows that goodness of fit model is also exist that confirms the scale validation. Instrument has strong internal consistency among items. Validity was also ensured by exploring discriminant validity and bootstrapping of the scale. Therefore, findings of the study approve the validation of the professional life instrument. It is concluded that instrument is reliable and valid in local context.

Recommendations

This paragraph consists of recommendations. The researchers used Smartpls to validate the scale, future researcher might be checked validation through other software. Data were collected from university teachers, scale may be tested on school and college teachers. Organizational employees may be involved

in the study as participants. Head of the institutions may involve in the sample of the study because he or she may give more authentic and reliable information regarding teachers' professional life. Authority persons may make it clear about faculty space and improving capacity of the institutions. Democratic environment is needed to enhance the professional satisfaction of workforce at job. Scale validation is most important and considered backbone for authentic study. Therefore, researchers need to pay attention on validation and reliability of scale before conducting study on big canvas.

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