Assessing Quality of Work Life of Teachers of Higher Education Institutions during Pre and Post COVID-19 Pandemic

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Abstract

With COVID-19 the entire trajectory of Higher Educational Institutions (HEIs) has witnessed a rapid change over to online modality that has resulted in increased work stress and imbalance between work and family lives. Teachers must experience a healthy Quality of Work Life (QWL) to curate and deliver the pedagogy effectively to student community. High QWL is important for teachers of HEIs to improve the quality of education. The aim of the research is to assess the QWL of teachers of HEIs pre and post COVID-19 and also to explore the factors that affect their QWL. The study was surveyed based and data was collected from 218 teacher's pre COVID-19 and 326 teachers of HEIs post COVID-19. It was found that, 48.62% of teachers were satisfied with their QWL during pre COVID-19 and 50.31% expressed satisfaction towards their QWL during post-COVID-19. We found that gender and monthly income are the strong predictors of QWL of teacher during pre-COVID-19 while the work experience was single most predictor of QWL of teachers during post-COVID-19. The confirmatory factor analysis (CFA) results indicated that work environment, compensation and rewards, work life balance, relationship and cooperation were the major factors of QWL as perceived by teachers of HEIs during pre COVID-19. During post-COVID-19, job satisfaction and security, training and development, flexibility, autonomy of work and work load were the major QWL factors which shaped the QWL of teachers of HEIs. The present study highlights the status and dominant factors of QWL that shape the QWL of teachers working in HEIs during pre and post COVID-19 pandemic. Practically, the study sheds light on possible implications of low satisfaction of QWL and factors that management of HEIs must focus on for enhancing the QWL of teachers.

Keywords: Quality of Work Life, Higher Technical Institutions, Teachers, COVID-19, Confirmatory factor analysis

Introduction

The outbreak of the pandemic COVID-19, has changed the lifestyle of people across the globe and as affected all the activities. The COVID-19

pandemic has impacted the socio-economic status of both developed and developing countries like India due to the lockdown situation. To overcome this impact, organizations from all sectors including educational sectors have migrated to Work from Home (WFH) concept (Dubey and Tripathi, 2020) to continue their functions in the absence of global connectivity. The Higher Education Institutions (HEIs) sectors are no exception. In India, HEIs play a vital role in the development of the cultural, social and economy of the country. Education is imperative but life and health are much more important. With lockdown being imposed across the country, the management and teachers of HEIs were forced to work from home to curb the spread of pandemic and to continue lessons for students. The traditional classroom teaching was ceased and it was replaced by online mode (Jena et al., 2020) to keep the students engaged. This has resulted in unprecedented challenges for management, teachers and students of HEIs. Although in today's digital era, teachers and students are prone to many challenges such as lack of readiness of teachers and students; limited access to the right technological tools and skills to use equipment for online education, improper internet facilities and others has affected the teachers work life. This has caused a paradigm shift from teaching centric to learning centric system. The lockdown has caused professional setbacks for teachers and has also affected their personal life. Almost a century back, world had witnessed similar pandemic situation due to Influenza during 1981. The teachers then sent reading homework for students with less school work. But in 21st century, with access to various technological tools the teachers are required to design their own course material and effectively deliver the pedagogy to students to ensure continuous learning. Apart from regular teaching, faculty are involved in multiple activities related to institution. During COVID-19, as work has shifted to home, many teachers are facing difficulty to differentiate between and balance their work and home lives. In total the COVID-19 has affected the Quality of Work Life (QWL) of teachers.

The concept of Quality of Work Life revolves around balance between two important aspects of human namely work and family. Undoubtedly, work is integral part of human, the work, workplace and family life of an

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individual has a unique interdependence. The antecedents of QWL distinguish between the work life and family life. The QWL is a strategic mechanism which HEIs must embrace for improving the relationship between teachers with their personal life and work life. The teachers are the key resources, as success of the academic institutions depends on their performance. In the same context, many researchers reported that quality of education depends on quality of teachers (Kaplan and Owings, 2002, Hay McBer, 2000, Sharplin, 2008, Manju, 2014) and it is directly associated with QWL of teachers (Singh et al., 2015, Bashir, 2017). QWL would increase the creativity and competency of teachers (Bhatnagar and Soni, 2015) by improving their performance (Rose et al., 2006). The experienced and talented teachers can deliver the pedagogy effectively thereby improving student's effectiveness and satisfaction and this can help educational institutions to gain competitive advantage (Fajemisin, 2002). Hence, QWL is not just the responsibility of the educational institution but it's a collective responsibility of teachers and society at large (Pugalendhi, 2010). The empirical studies in academia and other sectors, have acknowledged that QWL program can improve workers job satisfaction and self esteem (Hackman and Suttle, 1977) and enhances the effectiveness of employees and employers (Singh and Srivastav, 2012).

Teachers are bounded by the social responsibility of developing, equipping and nurturing the youths to cater to the needs of unpredictable world of tomorrow. Although the digitization has percolated into various sectors including academia, but HIEs across the globe largely believe in effectiveness of face to face blackboard teaching. Given the pandemic situation and declaration of lockdown, the teachers and students forced to connect digitally to continue the pedagogy delivery. Apart from regular teaching, teachers are involved in many academic activities and their roles went beyond teaching and this has affected the teachers' personal life. This has caused imbalance in work life and personal life which has resulted in high stress levels, absenteeism, low performance and retention rate. In the era where technology is becoming cheaper and maintaining manpower is a costly affair, attracting and maintaining the skilled and experienced teachers is the

important of HEIs. Further, the quality of education is dependent on highly qualified and experienced teachers, hence it is necessary for to motivate and maintain the teachers which can add more value for HEIs (Solomon et al., ,2015). With this background, this study has been undertaken to compare the QWL perception of teachers working in HEIs pre and post COVID-19 pandemic outbreak. From the literature it is evident that QWL is a multidimensional approach and many theories like Maslow's hierarchy theory, Herzberg two factor theory etc... argue that QWL is a dynamic dependent variable. For the present study the QWL scale developed by Swamy et al., (2015) was used for the present study.

Research Objectives

The objectives of the present study includes assessing the perceptions of teachers of HEIs on their QWL status, to identify the association, if any, between teachers demographics and the perception of QWL and to compare the level of QWL satisfaction, find the QWL factors that influences teachers QWL during pre and post COVID-19 pandemic and finally to check if there any impact of COVID-19 on QWL of teachers working in HEIs.

Methodology

The prime objective of this paper is to explore the impact of COVID-19 on the QWL of teachers working in the HEIs; an instrument is designed to enumerate the QWL of teachers for both pre and post COVID data collection. The study was exploratory in nature, the statistical techniques used were Exploratory factor analysis (EFA) and Confirmatory Factor Analysis (CFA) using Structural Equation Modeling (SEM) approach with AMOS software to find the predominant dimensions and validate them separately for

pre and post COVID pandemic. The Pearson correlation analysis was conducted to find the relationships between the QWL dimensions and Chi Square analysis to investigate the impact of COVID-19 on QWL of teachers.

Data Collection

The data was collected from teachers of HEIs pre and post COVID-19 lockdown using a survey instrument consisting of socio-demographic profile of respondents and nine QWL factors with 50 items The nine QWL factors are: Work environment, Organization culture and climate, Relation and co-operation, Training and development, Compensation and Rewards, Facilities, Job satisfaction and Job security, Autonomy of work and Adequacy of resources. All the QWL items were all on 5-point Likert scale, 5 being strongly agree and 1 indicated strongly disagree, respectively.. The data was gathered from teachers of HEIs pre and post COVID-19. Initially, for pilot-study, data was collected from 50 teacher's pre and post COVID-19 using 9-QWL factors scale to collect the feedback about 50 QWL items, its appropriateness and to finalize the QWL scale. The unit of analysis for the present study is the teachers of HEIs. Considering the opinions from academicians and few senior teachers, the QWL survey instrument was finalized. The survey instrument was administered to teachers through by contacting personally each and every respondent and a total of 218 responses were collected pre COVID-19. For gathering the data during post COVID period, the survey instrument was administered using Google forms as it was a lockdown period. A total of 326 teachers took part in the post COVID OWL survey. The Table-1 presents socio-demographic information on the respondents who took part in the survey.

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Table-1 Socio-Demographic Profile of Respondents

Demographical characteristics			Respondents distributions					
		Pre COV	TD(218)	Post COVID (326)				
		Number	%	Number	%			
*** 1 5	Less than 10 years	168	77.06	135	41.41			
Work Experience of the Respondent	Between 11 to 20 years	40	18.35	128	39.26			
of the Respondent	More than 21 years	10	4.59	63	19.33			
Gender of the	Male	134	61.47	190	58.28			
Respondent	Female	84	38.53	136	41.72			

		Respondents distributions					
Demogr	Demographical characteristics		TD(218)	Post COVID (326)			
		Number	%	Number	%		
D : 1: C1	Assistant professor	198	90.83	124	38.04		
Designation of the Respondent	Associate professor	10	4.59	22	6.75		
	Professor	10	4.59	16	4.91		
	Less than Rs. 40000	10	4.59	1	-		
	Between Rs. 41000-50000	128	58.72	82	25.15		
Monthly Income	Between Rs.51000-60000	14	6.42	-	-		
of the Respondent	Between Rs.61000-70000	14	6.42	-	-		
	Between Rs.71000-80000	42	19.27	-	-		
	More than Rs. 80000	10	4.59	244	74.85		

Table-1 provides the details on shows the sociodemographic and job characteristics of the respondents. Majority of the respondent's age is less than 10 years, large numbers of the male employees were involved in the research, majority of the respondents were the in the cadre of assistant professor were involved in the study both in case of Pre COVID and Post COVID study.

Exploratory Factor Analysis (EFA):

The reliability coefficient of items in the survey instrument was 0.875 Cronbach's alpha value, which indicated that all nine-QWL factors had acceptable reliabilities (Kline, 1998). From the collected data, predominant factors were extracted through EFA using SPSS version 22 software,

separately for pre COVID and post COVID data.

Exploratory Factor Analysis (EFA) Pre and Post COVID-19

The 9 factors of QWL with 50 items on five-point Likert scale were subjected to EFA using SPSS software. Before conducting EFA, the adequacy of sample data collected for the study was checked using Kaiser-Meyer-Olkin (KMO) test. The KMO test statistic indicated the value of 0.792 and 0.949 for pre and post COVID data sample respectively as indicated in the Table-2. This ascertains that the pre and post QWL data sample is adequate (Kaiser and Rice, 1974) for performing factor reduction technique EFA.

Table- 2 KMO and Bartlett's Test Statistics – Pre-COVID-19 data sample

KMO and Bartlett's Test						
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		Pre-COVID	Post-COVID			
		.792	.949			
	Approx. Chi-Square	3006.368	5599.203			
Bartlett's Test of Sphericity	Df	351	465			
	Sig.	.000	.000			

In the next level, the EFA was conducted on 9-QWL factors for pre and post COVID data separately to discover the underlying dimensions by grouping the variables logically. By employing Principal Component Analysis (PCA) with varimax rotation was used to find the essential QWL items for each factor. This process reduced the data into 8 QWL factors explaining a total variance of 70.858 for pre-COVID data and for post COVID data yielded 7 QWL factors with variance of 65.798. Based on Kaiser Criterion, the factors with eigenvalues greater than 1 with item loadings more than 0.5 on each QWL factors were considered and they are assigned

with following names as presented in Table-3 along with item loadings and variances. The factor loading of individual items were represented in the Table-3. The QWL factors were named as Work Environment (WE), Compensation and rewards (CR), Organizational Culture (OC), Facilities (FA), Stress (ST), Autonomy of Work (AW), Work Life Balance (WLB) and Relationship and Cooperation (RC) with factor loading above 0.5. Therefore, these 8 QWL factors were assumed to be critical for further analysis. Similarly the EFA on post COVID data revealed 7 QWL factors as shown in the Table-4.

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Table-3 Factor loadings of QWL factors by EFA for pre-COVID

QWL Items	Item loadings	QWL factors	Eigenvalues	Variance	Cumulati ve Variance
I have an opportunity to develop my own special abilities	.778				
The work environment is motivating	.727				
All the departments in our college cooperate with each other	.694	Work			
In college there is a balance between stated objectives and resources provided	.684	Environment (WE)	7.900	13.846	13.846
I am satisfied with the working conditions provided by the college	.651				
Conditions on my job allow me to be as productive as I could be	.564				
I feel quite secure about my job	.838			13.129	
I feel comfortable and satisfied with my job	.755		2.666		
My earnings are fair when compared to others doing the same type of work	.739	Compensatio n and rewards (CR)			26.976
The job security is good	.706	- iewaras (eit)			
I feel that my work allows me to do my best in a particular area	.573				
My organization will pay salary by considering responsibilities at work	.733		1.849	10.246	
Promotions are handled fairly	.725	Organization			
Our college communicates to us the every new change that takes place	.695	al Culture (OC)			37.221
College does a good job of linking rewards to job Performance	.628				
College provides with social security benefits like EPF/Medical reimbursement	.785				
Good transportation facilities are provided by our college.	.760	Facilities	1.639	9.511	46.732
Safety measures adopted by the college are good	.664	(FA)			
I feel that the training programs should be conducted more extensively	.648				
I am unable to attend to my personal needs due to the demand made by my boss/colleagues	.811	Stress (ST)	1.606	6.588	53.320

QWL Items	Item loadings	QWL factors	Eigenvalues	Variance	Cumulati ve Variance
I find my work quite stressful	.771				
In our job, we are involved in making decisions that affect us	.743	Autonomy of	1 225	6.343	50 ((2
I am proud to be working for my employer	.683	Work (AW)	1.335		59.663
We need a strong Teachers' Association to protect our interests	.862	Work Life	1 121	5.606	(5.250
Hard to take time off during work to take care of personal or family matters	.709	Balance (WLB)	1.131	5.696	65.359
The relationships with my sub-ordinates are good	.765	Relationship & Cooperation (RC)	1.005	5.499	70.858

Table-4 Factor loadings of QWL factors by EFA for post-COVID

QWL Items	Item loadings	QWL factors	Eigen values	Variance	Cumulative Variance
I feel quite secure about my job	.793				
The job security is good	.780				
My earnings are fair when compared to others doing the same type of work	.748				
The wage policies adopted by the college are good	.739				
college provides us with social security benefits like EPF/Medial reimbursement	.686				
I feel comfortable and satisfied with my job	.684				
I am given adequate and fair compensation for the work I do	.671	Job			
Conditions on my job allow me to be as productive as I could be	.668	satisfaction and Security	12.609	25.299	25.299
M y Overall opinion about college is excellent	.645	(JSS)			
The procedure followed for job rotation is good	.641				
Fringe benefits provided in this organization are good	.637				

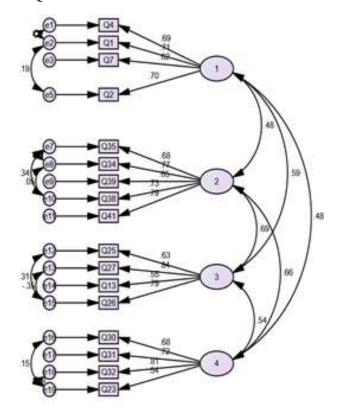
QWL Items	Item loadings	QWL factors	Eigen values	Variance	Cumulative Variance
Promotions are handled fairly	.596				
We need a strong Teachers' Association to protect our interests	.594				
In college there is a balance between stated objectives and resources provided	.588				
The relationships with my sub-ordinates are good	.755				
The relationship with my immediate superior is good	.733				
There is a harmonious relationship with colleagues at college	.679	Relation and Cooperation (RC)	1.713	11.260	36.559
All the departments in our college cooperate with each other	.639				
There is a true sense of belongingness that increases with cooperation	.608				
The training programs help in improving relationship among employees	.750				
Training programs helps improve my skills for performing the job efficiently	.700	Training and development (T&D)	1.592	8.720	45.279
Have ample training opportunities that I need to do my job safely & competently	.603				
I am ready to take additional responsibilities with my job	.713	Autonomy			
My job lets me use my skills and abilities	.657	of work	1.208	7.276	52.555
I feel that my work allows me to do my best in a particular area	.578	(AW)			
I work at home as part of my job	.776	E1:1-:1:4			
I am allowed to change my starting and ending time on a daily basis	.773	Flexibility (FLX)	1.198	4.932	57.487
It is hard to take time off during our work to take care of personal or family matters	.830	Work load			
I am unable to attend to my personal needs due to the demand made by my boss/colleagues	.711	Work load (WL)	1.061	4.522	62.009
Good welfare measures/activities are provided by our college	.772	Welfare and facilities	1.016	3.789	(F 700
Good transportation facilities are provided by our college.	.654	(W&F)	1.010	3.709	65.798

The EFA for post COVID extracted seven QWL factors and the factors were named based on the items grouped on each factors. The factors are: Job satisfaction & Security (JSS), Relationship and co-operation (R&C), Training and Development (T&D), Autonomy of work (AW), Flexibility (FLX), Work load (WL) and Welfare and facilities (W&F). The item loadings and explained variances for each factor are indicated in the Table-4.

Confirmatory Factor Analysis (CFA) Pre and Post COVID-19

The CFA was conducted using evaluates the extracted factor from EFA and validate the same (Zakuan et al., 2009) based on variance co-variance matrix (Van Prooijen and Van Der Kloot, 2001). In order to validate the 8-QWL factors with 34 items resulted from EFA, the CFA through Structural Equation Modeling (SEM) using Analysis of Moment Structures (AMOS) 22 software was performed with maximum likelihood method. During the analysis, all those items with loading coefficients less than 0.5 were

FIGURE-1 Path diagram for 4-factors QWL Model Pre COVID-19



eliminated. For the purpose of assessing the model fit the following model fit indices like Tucker-Lewis coefficient (TLI), Goodness of Fit Index (GFI), Comparative Fit Index (CFI), Adjusted Goodness of Fit Index (AGFI), Incremental Fit Index (IFI) and Root Mean Square Error of Approximation (RMSEA) were determined. According to Byrne, (2013) all the fit indices close to 1.0 and error approximation in data indicated by RMSEA must be below 0.08 (Browne and Cudeck, 1993). For the data sample of pre-COVID, the CFA confirmed 4-QWL factors model namely Work Environment (WE), Compensation and Rewards (C&R), Work Life Balance (WBL), Relationship and Cooperation (R&C) and for post-COVID data confirmed 5-QWL factors model namely Job Satisfaction and Security (JSS), Training and Development (T&D) Flexibility (FLX) Autonomy of Work (AW) and Work Load (WL) with satisfactory model fit as shown in Figure 2 and 3 respectively. The model fit indices for pre and post COVID data is presented in the Table-5.

FIGURE-2 Path diagram for 5-factors QWL Model Post COVID-19

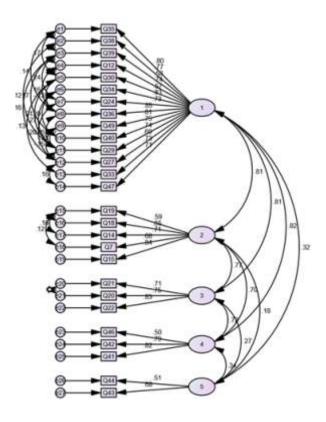


Table-5 Model Fit Indices	QWL Model Pre and Post COVID
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Model Fit Indices	QWL FACTORS Pre COVID	QWL FACTORS Post COVID	Acceptable criterion range
χ^2/df	2.635	1.475	Less than 3
GFI	.909	.911	
AGFI	.921	.883	Greater than 0.9
CFI	.999	.974	or close to 1
IFI	.901	.974	Close to 1
TLI	.968	.968	
RMSEA	.077	0.038	Less than 0.08

From the Table: 5 the chi-square statistics $\chi 2/df$ ratio, GFI, AGFI, IFI, TLI, CFI indices are > 9 which indicates good model fit and RMSEA=0.096 and 0.06 respectively for pre and post COVID data. (Errors of approximation, smaller is better). From this it can be concluded that the CFA model of pre and post COVID QWL model indicated good fit. Hence, the WE, C&R, WLB and R&C are the key determinants of QWL of teachers working in HEIs during pre COVID. Whereas, JSS, T&D, FLX, AW and WL that are assumed to be the critical QWL factors of teachers of HEIs that shapes the perception of QWL of teachers during post COVID situation.

Status of QWL of teachers working in HEIs

The status of QWL of employees were determined based on the grand mean, many researcher like Anand, (2013); Srinivas, (2013) and Jerome, (2013), explored that for the Likert scale grand mean can be considered as a cut-off, for the present study the grand mean was 3.20 and 3.82 for pre and post COVID data sample respectively. The mean value above grand mean is considered as satisfied and below the grand mean is considered as dissatisfaction satisfied.

Table-6 Status of QWL of Teachers working in HEIs

Status of QWL	Pre COVID		Post COVID		
	Number	%	Number	%	
Satisfaction	106	48.62	164	50.31	
Dissatisfaction	112	51.38	162	49.69	

The Table-6 presents the QWL satisfaction scores of teacher working in HEIs pre and post COVID. The satisfaction scores for pre COVID was 48.6% and for post COVID it was 50.31%. The mean satisfaction scores revealed that HEIs teachers are more satisfied during post COVID compared to pre-COVID.

Demographic factors and QWL of teachers Pre COVID-19

In order to determine the influence of demographic characteristics and QWL of teacher's pre and post COVID-19, the chi square analysis was conducted. The statistics of the chi square analysis for pre and post COVID is represented in the Table-7 and 8.

Table-7 Demographic Characteristics and QWL (Pre COVID-19)

Demographic Characteristics		Status	Status of QWL		χ Cal	D Walna	Decision
	_	SAT	DISSAT	value	value	P-value	Decision
Work	Less than 10 years	80	88				
Experience of	11 to 20	18	22	5 99	4.210	0.121	NS
the Respondent	More than 21 years	8	2	2.77	1.210	0.121	110

Demographic Characteristics		Status	Status of QWL		χ Cal	D 17-1	D:	
	•	SAT	DISSAT	χ _{Tab} value	value	P-Value	Decision	
Gender of the	Male	74	60	3.84	6.064	0.014	5%	
Respondent	Female	32	52	3.04	0.004	0.014	370	
Designation of	Assistant professor	92	106					
the	Associate professor	6	4	5.99	4.828	0.089	NS	
Respondent	Professor	8	2					
	Less than Rs. 40000	6	4					
	Between	54	74	74				
	Rs. 41000-50000	34			19.07		5%	
Monthly	Between	2	12					
Income of the	Rs.51000-60000	2	12	16.92		0.002		
Respondent	Between	10	4	10.92		0.002		
Respondent	Rs.61000-70000	10	4					
	Between	26	16					
	Rs.71000-80000	20	10					
	More than Rs. 80000	8	2					

SAT- Satisfaction; DISSAT- Dissatisfaction

Table-7 present the chi-square analysis on demographic factors and QWL of teachers during pre COVID-19. The chi square analysis revealed that, the demographic factors like gender and monthly income of respondents have influence on QWL because the p value is less than 0.05.

However work experience and designation of respondents had no influence on QWL of teacher working in HEIs. Similarly the chi-square analysis on demographic factors and QWL of teachers during post COVID-19 is shown in the Table-8.

Table-8 Demographic Characteristics and QWL Post COVID-19

Demographic characteristics		Status of QWL		χ Tab	χ Cal	P-	Danisia
		SAT	T DISSAT	value	value	Value	Decision
Work Experience of the Respondent	Less than 10 years	59	76	5.99	6.747	0.034	5%
	Between 11 to 20 years	65	63				
	More than 21 years	40	23				
Gender of the Respondent	Male	97	93	3.84	0.101	0.750	NS
	Female	67	69				
Designation of the Respondent	Assistant professor	118	124	5.99	1.171	0.557	NS
	Associate professor	24	22				
	Professor	22	16				
Monthly Income of the Respondent	Less than Rs. 50000	35	47	3.84	2.346	0.126	NS
	More than Rs.100000	128	116				

SAT- Satisfaction; DISSAT- Dissatisfaction

For post COVID sample, chi-square analysis revealed that the only work experience of teachers had influence on QWL while all other characteristics (gender, designation, monthly income) had no influence on QWL.

QWL of teacher's pre and post COVID-19 pandemic

To check if there was a difference in QWL of teacher pre and post COVID, chi-square analysis was conducted; a null hypothesis was designed and verified for the acceptance. The test statistics were represented in the Table-9.

H0: There is no change in QWL of teachers of HEIs pre and post COVID-19

Table: 9 Impact of COVID-19 on QWL of teachers

Status of QWL	Pre COVID		Post COVID		P Value	Decision
Status of QWL	Number	%	Number	%		
Satisfaction	106	48.62	164	50.31	0.776	NS
Dissatisfaction	112	51.38	162	49.69		

The test statistics shows that p value is more than 0.05; this indicates that there is no evidence to reject the null hypothesis. The chi-square analysis reveals that there is no change in QWL of teachers, pre and post COVID-19, at 5% level of significance. It means that COVID-19 had no influence on QWL of teachers.

Conclusion and Discussion

With the advent of COVID-19 pandemic the work life and home lives has come under one roof. The pandemic has created huge impact on all the sectors and its employees across the globe. Among them is higher education sector is one that has witnessed major impact wherein the black board teaching was transformed into online teaching. In order to continue educating and support the student fraternity to pursue their career the teachers have adapted to online educational resources during the COVID-19 Pandemic.

The present study was conducted to compare the level of QWL during pre and post COVID-19 pandemic among the teachers working in HEIs and also to find the associated factors of QWL. This is imperative because as majority of teachers across the world are being forced to work from home due to pandemic situation. It is a guessing game as to how they are experiencing the new method of delivering the pedagogy using online tools by being at home. It is important for a teacher to strike a balance between work and family life else not it results in burn out. Hence it is necessary for HEIs to attract and retain the competent

teacher who have a vital role to play in developing next generation engineers to rebuild the India post COVID-19. Additionally, a good QWL can improve teacher's morale, effectiveness and recognition for institution. As teachers were not prepared for this current surge of online mode of work, it was necessary to study the impact of COVID-19 on QWL of teachers. As unfolded by the mean cutoff scores, 50.13% teachers expressed satisfaction during post COVID-19 while in pre COVID-19, only 48.16% of teachers expressed satisfaction towards their QWL. However, the level of QWL among academia seems to less compare to other sectors. The findings of the present study are substantiated the earlier studies in teaching environment from different parts of India that reported most of the teacher are not satisfied withs their QWL (Devi, 2006; Rao et al., 2013; Bashir, 2017).

This study indicated that the QWL among teachers of HEIs was influenced by gender and monthly income during pre COVID. In opposition, the study by Pugalendhi, (2010) reported that gender and monthly income is not associated with QWL of teachers. Although, teaching is female dominated sector, from the study it was found that majority of the female teachers expressed dissatisfaction (62%) towards their QWL and results corroborate with the study on QWL of teachers in private technical institution by Nanjundeswaraswamy and Swamy, (2013). The reason for this might be that females have combined responsibilities to manage home as well as job. The monthly income of respondents had a significant influence on QWL. About

70% of respondents reported less than Rs. 60000 as their monthly income. Majority of teachers reported that their monthly income was not adequate and apt given the nature of the job, knowledge and work experience. Generally, human basically depends on his monthly income to satisfy his needs and to afford a good standard of living. The results are in line with the results reported by Sturman, (2003) on QWL of teachers in England. The work experience and designation of respondents had no influence on QWL. This is in line with the results reported on QWL of teachers in Mysore city by Manju, (2014). The study findings revealed that mostly the teachers who were assistant professors expressed high level of dissatisfaction towards their QWL and it is corroborated by the study done by Rao et al., (2013) on teachers of Jammu University.

In case of post COVID sample, the QWL was influenced by experience of respondent. More specifically, teachers with less experienced were prone to dissatisfaction while senior teachers with more work experience reported high satisfaction towards their QWL. These findings are in line with the study conducted by Sturman, (2003) on QWL of teachers in England concluded that senior staff are more satisfied with their QWL. Additionally study findings revealed that teachers perceived that gender, designation and monthly income had no influence on their QWL. The findings were supported by the earlier study conducted by Bharathi et al., (2010) on QWL of technical education teachers in Tamilnadu state.

The current study demonstrated the impact of COVID-19 on QWL of teachers working in HEIs. It appears strange as the study findings indicated that there was no impact of COVID-19 pandemic on QWL of teachers. It means that teachers of HEIs were more flexible, well equipped and adaptive to the changes and managed the crisis very well.

Another important interpretation of this comparative study was that, the QWL factors perceived by the teachers during pre and post COVID were entirely different. The pre COVID sample revealed that a healthy work environment, fair compensation and rewards, good work life balance and the amiable relationship and cooperation shared with the peers and management are assumed to the significant QWL factors by the teachers of HEIs. The study findings are

supported by many researchers who have acknowledged the importance of these QWL factors perceived by academia (Ishak et al., 2018).

Whilst, during post COVID period, the teachers have attached more importance to job satisfaction and security, training and development, flexibility in work, the autonomy of work and the work load and how these factors have enhanced the QWL. The study findings are in line with the study by Sirgy et al., (2008) which reported that to job satisfaction and security, training and development, flexibility in work, the autonomy of work and the work load can improve the work life. During COVID-19, the concept of work from home has ascertained a good QWL, as teachers were involved in self learning or training by trial and error attempts to use tech-tools to create the study materials and deliver the pedagogy. Additionally, remote working provided high level of work autonomy and flexitime helped especially female teachers to manage/balance both work and household chores evidently with increased work load. All the factors would act as catalyst to increase the job satisfaction and security of teachers.

Post COVID-19, the HEIs have added responsibility to produce more effective, dynamic and skilful young minds to repair the damage caused by the pandemic and to rebuild the Indian economy. A teacher is said to plays a critical role in developing, fostering and transforming the young minds into future human resource. Therefore, the HEIs should make ways for improving QWL of their teachers as highly qualified and dedicated teachers have a tendency to deliver their best by building a good rapport with student's community thereby promoting a good teaching learning process. Such positivity expressed by teachers would enhance the commitment towards their institutions (Sirgy et al., 2001).

It is important to ensure that teachers experience a good QWL as it helps them to realize their potential and contribute their best for the growth and development of the HEIs. To improve QWL of teachers, it is quintessential for management of HEIs to identify and satisfy those factors which teachers presume to be important during their stay at work (Ishak et al., 2018). The QWL dimensions are based on perpetual state of mind of human and it intend to vary

based on given situation. The management of HEIs must focus identified QWL factors for the post COVID-19 sample and ensure that these factors are satisfied to improve teachers QWL.

Practical Implications

With the outrage of COVID-19 Pandemic runs its course, yet the management and teachers of many HEIs are forced to operate/function remotely by working from home for education continuity for the benefits of students. This has rapidly upended the normal working style of teachers and also caused teachers to migrate from conventional black board teaching to technology enabled teaching by designing and developing their own academic materials.

This has caused many challenges for teachers due to issues pertaining to lack of technological facilities and space constraints with regard to family status at home to attend to work. Further, they often find it more difficult to distinguish between work life and home lives (Ramarajan and Reid, 2013). This would affect the teachers work life and low satisfaction of QWL can results in poor performance, detached work engagement, unauthorized leaves and frequently change of jobs (Efraty, et.al, 2000). During this crisis, it is important for HEIs to retain and motivate the teachers as they are vital resources for growth and success of the institution. As teaching is thought of to be a noble and valued profession as teachers play a significantly role in creating the future human capital. Hence it is important for management of HEIs must support their staff to enhance their lifestyle by periodically measuring the employees QWL (Duyan et, al., 2013). Such periodic assessment will have a huge impact on improving the teacher's commitment levels, productivity and to upload the image of the institution.

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