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Impact of COVID-19 on Teacher Well-Being In Higher Education Institutions

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Abstract

The COVID-19 pandemic has created significant challenges for higher education teachers, especially their well-being. A study was conducted to explore the well-being of teachers in higher education institutions and understand the impact of the pandemic. The study utilized a quantitative approach, surveying teachers and analyzing the data using PLS-SEM and CB-SEM. The results revealed three key factors impacting teacher well-being: accomplishment, physical health, and relationships. The study highlights the importance of supporting teacher well-being during the pandemic by prioritizing physical health, building relationships, and engaging in meaningful activities. The findings can inform the development of policies and programs that promote teachers' physical and emotional health in higher education institutions. In conclusion, this study provides valuable insights into teachers' experiences during the COVID-19 pandemic and highlights the need for greater support for their well-being.

**Keywords:** COVID-19; Teacher Well-Being; Higher Education Institutions; Work-Life Balance; Stress

1 Introduction

The COVID-19 pandemic has brought unprecedented challenges in all sectors, including education [1–3]. With 94,16,895 teachers in schools and colleges in India, the nationwide lockdown announced by the government has greatly affected the well-being of educators [4, 5]. The sudden shift from in-person teaching to virtual mode has posed various challenges for teachers, including concerns for their safety and health, changes in their work patterns, and difficulties balancing work and family demands.

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Well-being, in this context, refers to the physical, environmental, and social events that influence an individual's response to the situation [6]. The well-being of contemporary teachers is influenced by various factors, including workload, organizational support, job satisfaction, and opportunities for growth and development [7]. However, with the advent of the pandemic, digital experience, technological exposure, and access to digital devices have become critical components in determining the well-being of teachers. The sudden changes brought about by the pandemic have resulted in stress for many teachers, particularly regarding work-life balance [8]. There is a need for interventions that improve teachers' professional well-being and enhance their digital skills to address these challenges. The government and educational institutions must support teachers by reducing their workload, clearly defining their roles and responsibilities, and creating a positive work environment that promotes well-being. By doing so, a happier and healthier workplace can be ensured for teachers, resulting in a better learning experience for students. This paper explores teachers' experiences and identifies opportunities to foster their physical and emotional well-being.

## 2 Related Works

The teaching profession is facing unprecedented challenges due to the shift to remote teaching and home isolation caused by the COVID-19 pandemic, as well as fear and anxiety about personal health and safety [9]. It is imperative to address the well-being of teachers and foster positive relationships with students to create a supportive learning environment. Teachers with strong connections with students and colleagues tend to have greater well-being [9]. Well-being is an individual's reaction to environmental, physical, and social events and includes mental and physical health, job satisfaction, stress levels, and social connectivity [10, 11]. Mental well-being encompasses mental efficiency, positive emotions and attitudes, healthy relationships with reality, and peace of mind [12]. The lockdown has resulted in increased workloads for teachers with limited experience with online teaching and spending more time on preparation than teaching [13]. Teachers play a crucial role in determining the quality of education, and their well-being is closely tied to student performance [14, 15]. One effective way to promote teacher well-being is establishing Professional learning communities (PLCs). PLCs help build positive relationships and reinvigorate teachers' passion for teaching, leading to improved well-being for teachers and students [16]. The teaching profession is found to be one of the most stressful occupations due to the emotional involvement with students [17]. Several variables contribute to teacher well-being, including workload, organizational support, and relationships with peers and seniors [18–22]. This article aims to assess the well-being of teachers by considering various aspects of life, including accomplishment, engagement, physical health, positive emotion, relationships, work-related satisfaction, and more.

## 3 Methodology

The present study adopts a positivist paradigm and employs a quantitative approach to explore the impact of the COVID-19 pandemic on teachers' personal and work-related well-being in higher education institutions. Empirical observation and measurement form the cornerstone of this research philosophy, which seeks to provide quantitative evidence for the relationships between the variables of interest. The questionnaire survey method was employed to collect the data from 1,136 academicians from various higher education institutes. Partial least squares-based structural equation modeling (PLS-SEM) and covariance-based structural equation modeling (CB-SEM) were used to analyze the data. These are two well-established multivariate data analysis methods widely adopted in business management research fields, such as operations management, information systems, and marketing. PLS-SEM, in particular, is based on a factor analysis concept, is suitable for theory testing, and uses maximum likelihood estimation. The hypotheses were developed based on earlier studies associated with the variables of interest. The collected data were processed and analyzed to test these hypotheses and achieve the study's objectives, which pertain to the relationship between well-being and various factors affecting higher education teaching professionals during the COVID-19 pandemic. Interpretation of the results is a crucial part of this research, as it calls for a critical examination of the findings in light of all limitations. This is the only way to make the research meaningful and to draw meaningful conclusions from the analysis. One of the challenges in survey research is selecting an appropriate statistical model for the analysis. This study used PLS-SEM and CB-SEM to address this challenge and ensure that the results are reliable and statistically robust.

## 4 Results and Discussion

The demographic profile of the participants in this study is presented in Table 1. The table provides a summary of the distribution of the respondents based on gender, age, education qualification, marital status, usual living status, and presence of children. Of the 1,136 respondents, 59.9% are male, and 40.1% are female. Regarding age, the largest proportion of respondents (41.2%) falls in the age group of 31-40 years, followed by those in the age group of 41-50 years (23.7%). Regarding education qualification, 55.4% of the respondents hold a post-graduate degree, while 38.6% hold a Ph.D. Most respondents (70.2%) are married, while 28.5% are unmarried.

Table 1: Demographical Profile of the Respondents

Variable	Frequency	Percentage
Total	1136.00	100.00
Gender		
Female	455.00	40.10
Male	681.00	59.90
Age		
25 - 30 Years	277.00	24.40
31-40 Years	468.00	41.20
41 - 50 Years	269.00	23.70
50 - 60 Years	102.00	9.00
> 60 Years	20.00	1.80
Education qualification		
Graduation	69.00	6.10
Ph.D.	438.00	38.60
Post-Graduation	629.00	55.40
Marital status		
Married	797.00	70.20
Separated/Divorced/Widowed	15.00	1.30
Unmarried	324.00	28.50
Usual living status		
Joint family	489.00	43.00
Living alone	101.00	8.90
Nuclear family	546.00	48.10
Do you have children		
No	432.00	38.00
Yes	704.00	62.00
If yes, how many?		
1	315.00	43.70
2	361.00	50.10
>2	44.00	0.06

With regards to the usual living status, 48.1% of the respondents are living in a nuclear family setup, while 43% are part of a joint family. Additionally, 62% of the respondents have children, with 50% having 2 children. These results suggest a balanced representation of the population. Table 2 presents the survey results on the participants' perceptions and experiences during the lockdown. The results are organized based on a Likert scale ranging from "Strongly Disagree" to "Strongly Agree." The data shows that most participants (75%) have a positive outlook and mostly agree with the questions, while only 6% disagree.

Table 2: Results of the survey on the participants' perceptions and experiences

Codes	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
AC1	I achieved the important goals I had set for myself during the lockdown.	02	04	19	32	43
AC2	I know I can find ways to solve the problem, even when others want to quit.	01	02	15	37	46
AC3	I finished whatever I started during the lockdown.	01	05	17	35	42
AC4	I have the sense that I have developed a lot as a person during the lockdown.	01	03	19	34	43
AC5	Whenever I make a plan to get something done, I stick to it.	01	02	17	33	47
AC6	I was competent in my daily activities during the lockdown.	01	03	14	34	48
AC7	I often got a sense of accomplishment from what I did during the lockdown.	01	03	16	34	47
AC8	I work towards accomplishing my goals most of the time.	01	02	15	33	49

*Continued on next page*

Table 2 – Continued from previous page

Codes	Questions	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
ENG1	I often receive constructive feedback on my work during the lockdown.	03	05	16	34	42
ENG2	I have been working for very long periods during the lockdown.	03	05	18	28	46
ENG3	I often get completely absorbed in whatever I do during the lockdown.	02	05	19	31	42
ENG4	I often lose track of how much time has passed when I read or learn something new during the lockdown.	03	07	20	28	42
ENG5	I get so involved in activities that I often forget about everything else during the lockdown.	04	07	22	30	37
ENG6	I feel happy when I am completely absorbed during the lockdown.	03	06	20	30	41
MN1	I enjoy making plans for the future and working to make them a reality.	01	01	12	32	54
MN2	I understand my life's meaning.	01	01	12	29	57
MN3	My life has a clear sense of purpose.	01	01	14	28	56
MN4	Everything that I do in my life is valuable and worthwhile.	00	01	13	29	56
MN5	I have a sense of direction in my life.	01	01	11	30	57
PH1	I meditated/did yoga regularly during the lockdown.	15	13	19	20	34
PH2	I indulged in recreational activities regularly during the lockdown.	06	10	21	28	35
PH3	I was active most of the day during the lockdown.	02	06	19	31	42
PH4	I am physically fit.	01	03	17	27	52
PE1	I generally have been feeling enthusiastic during the lockdown.	04	05	21	28	42
PE2	I generally have been feeling strong during the lockdown.	03	05	19	30	42
PE3	I generally have been feeling inspired during the lockdown.	04	07	20	28	42
RL1	I believe in reinforcing strong interpersonal relationships during the lockdown.	01	02	17	30	49
RL2	I actively contributed to the happiness and well-being of others during the lockdown.	01	02	17	32	48
RL3	During the lockdown, my belief that there are people in my life who genuinely care got reinforced.	01	02	17	33	47
RL4	I am satisfied with my relationships.	01	01	10	31	57

The results highlight the participants' perceptions regarding their personal and professional development, engagement, mental and physical well-being, and relationships. For instance, most participants agreed that they were competent in their daily activities during the lockdown (48%) and often got a sense of accomplishment from what they did (47%). On the other hand, fewer participants disagreed that they often received constructive feedback on their work (5%) or were active most of the day (6%). The frequency distributions reveal that the participants had a positive outlook and experienced personal growth and well-being during the lockdown. The findings highlight the importance of promoting positive experiences and outlooks during difficult times and may have implications for future research. The survey questions' results in Table 3 provide valuable insight into the respondents' opinions on various activities during the lockdown. Regarding inculcating or reviving a hobby, 72% of the respondents confirmed that they have taken up a new hobby, while 28% have not. This highlights the importance of engaging in leisure activities to cope during difficult times. In terms of social media activity, 88% of the respondents reported being active on social media during the lockdown, whereas only 12% reported the opposite. This indicates the significance of social media as a platform for communication and connection during the lockdown.

Regarding the use of sanitizers, there was a near-equal split between those who reported using sanitizers routinely at home (46%) and those who reported not using them (54%). This suggests that there may be varying levels of concern and awareness regarding health and safety protocols during the lockdown. The results also show that 94% of the respondents reported attending or conducting a webinar during the lockdown, while only 6% reported otherwise. This suggests that technology, virtual learning, and professional development platforms were widely adopted during the lockdown. Finally, 79% of the respondents reported calling up their relatives, friends, or colleagues from work during the lockdown, while 21% reported not doing so. Additionally, 51% of the respondents reported noticing a change in their relationship with their family members, 37% reported not noticing a change, and 12% were unsure. These results suggest that the lockdown has significantly impacted interpersonal relationships and highlights the importance of communication and connection during such challenging times.

Table 3: Respondents' opinions on various activities during the lockdown.

Code	Question	No	Yes	Maybe
ACT1	Have you inculcated/revived any hobbies during this lockdown?	28	72	-
ACT2	Are you active on social media during this lockdown period?	12	88	-
PM1	Do you use sanitizer (95% isopropyl alcohol) routinely at home?	54	46	-
WR2	During the lockdown, have you attended/conducted any webinars?	06	94	-
RL5	Did you call up your relatives, friends, or work colleagues during this period?	21	79	-
RL6	Have you noticed any relationship changes with your family members during the lockdown?	37	51	12

The results of the relationship dynamics during the lockdown are presented in Table 4. The data shows that the majority of respondents, 62%, reported an improvement in their relationships with their parents, children, or siblings, while only 4% reported a strained relationship with their loved ones. In comparison, 46% of respondents noted an improvement in their relationship with their spouse, while a slightly smaller percentage, 33%, reported that their relationship remained unchanged. Notably, no respondents indicated that the relationship dynamics with their loved ones were not applicable. This data highlights the importance of family relationships during the lockdown and its impact on these relationships.

Table 4: Relationship dynamics during the lockdown

Relationship with	Parents/Children/Siblings	Spouse
Improved	62	46
Remained the same	34	33
Strained	4	5
Not Applicable	0	186

Table 5 sheds light on the change in physical activity levels during the lockdown. The data indicates that while a substantial number of respondents, about 16.4%, reported no physical activity, a significant proportion, about 20.7%, reported engaging in 2-5 hours of physical activity, an increase from 15.2% prior to the lockdown. Additionally, a small but noticeable fraction of respondents, about 3.4%, reported engaging in more than 10 hours of physical activity. The results also highlight the change in screen time and protective measures taken by the respondents. A considerable number of respondents, around 33%, reported spending 2-4 hours daily on digital devices, while a smaller proportion, around 27%, reported spending less than 2 hours. The data shows that most respondents, around 64%, only wore face masks while stepping out, while a smaller number, around 31%, wore both face masks and gloves.

Table 5: Hours/Week of Physical Activity

Hours/week of physical activity	Before	During
Nil	17.9	16.4
< 2 hours	57.8	50.7
2-5 hours	15.2	20.7
5-10 hours	6.3	8.8
>10 hours	2.8	3.4

Based on the factor loadings shown in Table 6, it can be seen that physical health (PH1, PH2, PH3, PH4) and positive emotion (PE1, PE2, PE3) have significant factor loadings, suggesting a correlation between these factors and well-being. However, the hours/week of physical activity was not found to have a significant factor loading, indicating a lack of correlation with well-being among higher education teaching professionals during the COVID-19 pandemic.

Table 6: Factor Loadings

(in life)	A	B	C	D	E	F	G	H	I	J
AC1	0.840	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC2	0.850	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC3	0.868	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC4	0.857	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
AC5	0.839	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACT1	0.00	0.921	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACT2	0.00	0.408	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ACT3	0.00	0.331	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENG1	0.00	0.00	0.845	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENG2	0.00	0.00	0.858	0.00	0.00	0.00	0.00	0.00	0.00	0.00
ENG3	0.00	0.00	0.888	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MN1	0.00	0.00	0.00	0.86	0.00	0.00	0.00	0.00	0.00	0.00
MN2	0.00	0.00	0.00	0.915	0.00	0.00	0.00	0.00	0.00	0.00
MN3	0.00	0.00	0.00	0.909	0.00	0.00	0.00	0.00	0.00	0.00
PH1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PH2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PH3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PH4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PE1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PE2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PE3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PM1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
PM2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RL1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RL2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RL3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
RL4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
WR1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.789	0.00
WR2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.787	0.00
WR3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.822	0.00
WR1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.912
WR2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.910
WR3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.907

Note - A: Accomplishment; B: Activities; C: Engagement; D: Meaning (in life); E: Physical health; F: Positive Emotion; G: Preventive Measures; H: Relationships; I: Well-being; J: Work-related

This finding highlights the importance of examining the relationship between physical activity and well-being, as physical activity has been shown to positively impact both physical and mental health, which is in agreement with the view of earlier researchers [23]. It is possible that the lack of correlation between physical activity and well-being among higher education teaching professionals during the COVID-19 pandemic could be due to the limited opportunities for physical activity and increased stress levels related to the pandemic.

Further research is needed to better understand the relationship between physical activity and well-being among higher education teaching professionals during the COVID-19 pandemic. The results of this study provide valuable information for higher education institutions and policymakers, who can use the findings to develop strategies and programs that support the well-being of higher education teaching professionals during the COVID-19 pandemic. By improving the well-being of higher education teaching professionals, institutions can improve the quality of education and the overall academic environment. In order to assess the consistency of the responses, the internal consistency indicator Cronbach's alpha was used to estimate the reliability of the questions. As seen in Table 7, the composite reliability and Cronbach's alpha for most of the constructs are greater than 0.7, indicating a high level of construct reliability. Additionally, the average variance extracted (AVE) for all constructs is greater than 0.5, which confirms convergent validity. All the constructs explain at least 50% of the variation in the corresponding questions, indicating that the data set is valid. The results in Table 7 support the validity of the data collected and allow for further analysis to be conducted confidently.

Table 7: Composite reliability and average variance explained.

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Explained (AVE)
Accomplishment	0.905	0.905	0.929	0.724
Activities	0.166	0.330	0.595	0.375
Engagement	0.83	0.833	0.898	0.746
Meaning (in life)	0.876	0.878	0.924	0.801
Physical Health	0.833	0.842	0.888	0.666
Positive Emotion	0.900	0.905	0.938	0.834
Preventive Measures	0.542	0.635	0.804	0.675
Relationships	0.866	0.866	0.909	0.714
Well-being	0.896	0.896	0.935	0.827
Work-related	0.727	0.753	0.639	

Table 8 presents the discriminant loadings and correlations between the identified constructs. To ensure that the constructs are indeed distinct and not overlapping, the square root of the average variance extracted (AVE) for each construct (the diagonal element in Table 8) was compared with the correlations between the construct and other constructs (non-diagonal elements in Table 8). The results indicate acceptable discriminant validity between each pair of constructs, as all the square roots of AVE are greater than the correlations between the constructs. This suggests that the constructs are indeed distinct from one another and do not overlap significantly.

Table 8: Discriminant loading and correlation.

	A	B	C	D	E	F	G	H	I	J
Accomplishment	0.851	-	-	-	-	-	-	-	-	-
Activities	-0.225	0.612	-	-	-	-	-	-	-	-
Engagement	0.658	-0.164	0.864	-	-	-	-	-	-	-
Meaning (in life)	0.741	-0.226	0.544	0.895	-	-	-	-	-	-
Physical Health	0.682	-0.310	0.542	0.578	0.816	-	-	-	-	-
Positive Emotion	0.611	-0.198	0.651	0.491	0.533	0.913	-	-	-	-
Preventive Measures	0.742	-0.222	0.618	0.752	0.587	0.542	0.822	-	-	-
Relationships	0.712	-0.198	0.612	0.728	0.601	0.613	0.677	0.845	-	-
Well-being	0.842	-0.191	0.570	0.693	0.667	0.531	0.688	0.686	0.910	-
Work-related	0.777	-0.232	0.689	0.762	0.632	0.659	0.809	0.747	0.714	0.800

Note - A: Accomplishment; B: Activities; C: Engagement; D: Meaning (in life); E: Physical health; F: Positive Emotion; G: Preventive Measures; H: Relationships; I: Well-being; J: Work-related

The structural model assessment was conducted to evaluate the validity and reliability of the relationships between the independent and dependent variables. The path coefficients were used to determine the significance and relevance of the relationships between the endogenous and exogenous variables. The  $R^2$  value was also calculated to assess the predictive accuracy of the model and the impact of the exogenous variables on the endogenous variables. The results of the structural model assessment are presented in Figure 1 and Figure 2, which illustrate the relationships between the factors and the dependent variables. This analysis provides crucial information on the validity and reliability of the results and helps understand the causal relationships between the factors and the outcomes. The structural model assessment also includes the evaluation of path coefficients to determine the significance and relevance of the model's relationships between the endogenous and exogenous variables. The path coefficients provide insight into the direct impact of the independent variables on the dependent variables. In our study, the path model was used to examine the relationship between the dimensions of well-being and their influencing factors.

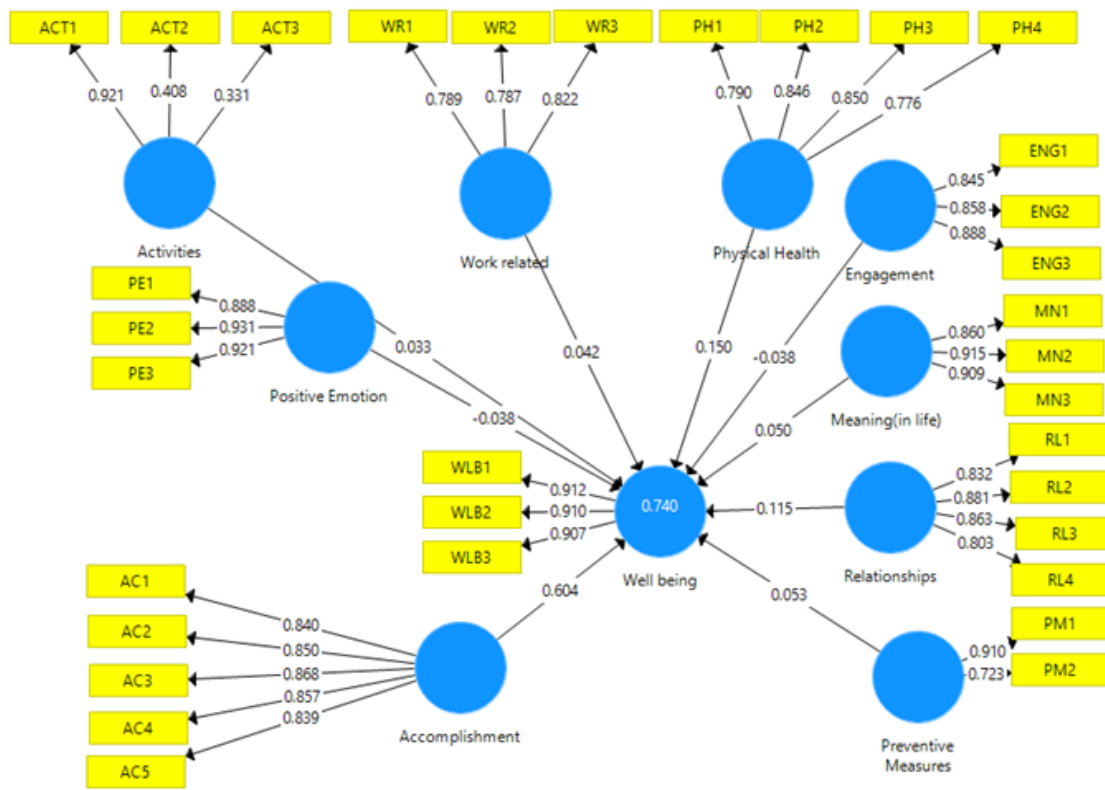


Figure 1: Structural Model Assessment

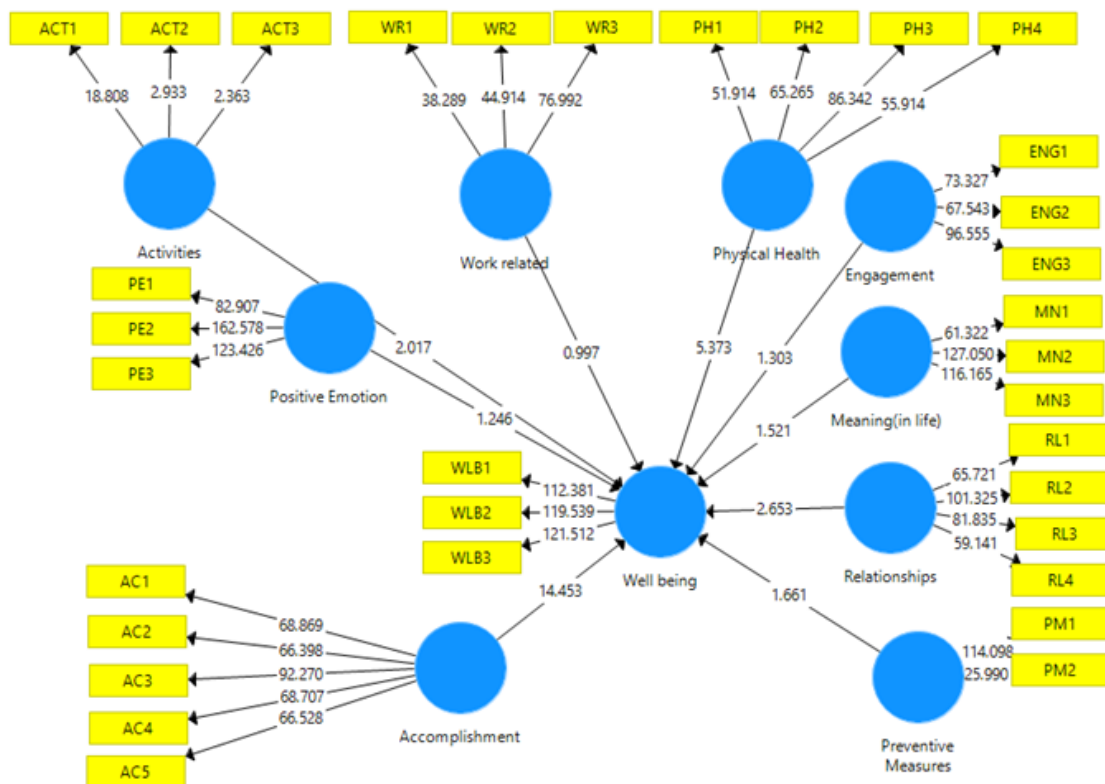


Figure 2: t-statistics

The results show a positive relationship between the dependent and independent variables, with accomplishment being the major contributor to teaching professionals' well-being, physical health, relationships, and activities. This supports the study's hypotheses and provides evidence for the importance of these factors in determining the overall well-being of teaching professionals.

Table 9 presents the results of the hypothesis testing for the relationships between various dimensions of well-being and their influencing factors. The hypothesis was tested using the t-statistics obtained from bootstrapping analysis in SmartPLS3. The results were evaluated based on the p-values, where a p-value less than 0.05 indicates significant results, while a p-value greater than 0.05 suggests that the hypothesis is unsupported. The results showed that hypothesis H1 (accomplishment → well-being) was supported



as the t-statistic was 14.453 with a p-value close to zero. This indicates that accomplishment has a strong and significant impact on well-being. Hypothesis H2 (activities → well-being) was also supported as the t-statistic was 2.07 with a p-value of 0.044, indicating that activities also significantly impact well-being. On the other hand, hypothesis H3 (engagement → well-being) was unsupported as the t-statistic was 1.30 with a p-value of 0.193, which suggests that engagement does not have a significant impact on well-being. Similarly, hypothesis H4 (meaning in life → well-being) was unsupported as the t-statistic was 1.521 with a p-value of 0.129. Hypothesis H5 (physical health → well-being) was supported as the t-statistic was 5.37 with a p-value close to zero, suggesting that physical health strongly impacts well-being. Hypothesis H6 (positive emotion → well-being) was unsupported as the t-statistic was 1.246 with a p-value of 0.213. Hypothesis H7 (preventive measures → well-being) was supported as the t-statistic was 1.661 with a p-value of 0.097, which suggests that preventive measures have a marginal impact on well-being. Hypothesis H8 (relationships → well-being) was supported as the t-statistic was 2.65 with a p-value of 0.008, indicating that relationships significantly impact well-being. Hypothesis H9 (work-related → well-being) was unsupported as the t-statistic was 0.997 with a p-value of 0.319.

Table 9: Statistical Comparison of Hypotheses

Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistics	P-Values	Support
H1	0.604	0.607	0.042	14.453	0.000	Supported
H2	0.033	0.030	0.016	2.017	0.044	Supported
H3	-0.038	-0.038	0.029	1.303	0.193	Unsupported
H4	0.050	0.050	0.033	1.521	0.129	Unsupported
H5	0.150	0.149	0.028	5.373	0.000	Supported
H6	-0.038	-0.037	0.030	1.246	0.213	Unsupported
H7	0.053	0.052	0.032	1.661	0.097	Supported
H8	0.115	0.114	0.043	2.653	0.008	Supported
H9	0.042	0.041	0.042	0.997	0.319	Unsupported

## 5 Conclusion

The results of our study highlight the important role that various factors play in determining the well-being of higher education teaching professionals during the COVID-19 pandemic. Our findings indicate that accomplishment, physical health, and relationships are crucial factors that significantly impact the well-being of these professionals. Additionally, participating in meaningful activities and taking preventive measures were also found to be important contributing factors. However, the obtained results from work also showed no statistical evidence to suggest that work-related aspects, positive emotion, engagement, and meaning in life significantly impact well-being. These conclusions underscore the need for teaching professionals to prioritize their well-being by focusing on accomplishments, maintaining physical health, building and strengthening relationships, engaging in activities that bring meaning, and taking appropriate preventive measures. By doing so, they can better protect their well-being, especially during the challenging times of the COVID-19 pandemic.

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The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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## Author Contribution

**S. Pavitra:** Conceptualization, Supervision, Writing- Original draft preparation, Writing- Reviewing; **Delaram Mahdaviamiri:** Conceptualization, Visualization, Investigation, Methodology, Data curation; **Nisha S. Tatkar:** Conceptualization, Supervision, Writing- Original draft preparation, Writing- Reviewing; **Namesh Malarout:** Conceptualization, Visualization, Investigation, Methodology; **Babita Singla:** Supervision, Methodology, Data curation, Writing- Reviewing; **Karthikeyan Parthasarathy:** Supervision, Methodology, Data curation, Writing- Reviewing; **Sonia Vaz:** Investigation, Methodology, Data curation; **Prithvi Hegde:** Investigation, Methodology, Data curation; **Annu Duhan:** Investigation, Methodology, Data curation.

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