



Task Overload, Digital Adaptability, and Work-Life Balance: A Correlational Study on Time Management of College Teachers in in Online Education during COVID-19 Pandemic

¹Kriti Sarkar* and ²Suman Bose

¹Associate Professor, Dept. of Basic Science and Humanities, University of Engineering & Management, Management. Kolkata, India.

*kriti.sarkar@hotmail.co.uk,

²Research Scholar, Dept. of Management, University of Engineering & Management, Management. Kolkata, India

sumanddioc@gmail.com

Abstract

COVID-19 pandemic forced an abrupt shift in the teaching to virtual mode, significantly affecting college teachers' time management strategies. This study examines the relationship between various time management factors, such as task overload, screen time, workload distribution, and work-life balance, among college educators working from home during the pandemic. A correlational research design was employed, with information accumulated from 75 college teachers through a well-designed questionnaire. The data was analyzed using SPSS, with a focus on Pearson's correlation coefficient to determine the benefits and direction of relationships between prime variables. The findings indicate a significant positive connection between task overload and screen time ($r = 0.68, p < 0.01$), suggesting that an increase in academic and administrative tasks led to extended screen exposure. Conversely, a negative connection was noticed between workload and professional-life balance ($r = -0.52, p < 0.05$), indicating that higher workload negatively affected personal time. Additionally, digital proficiency showed a mild positive link with time management efficiency ($r = 0.47, p < 0.05$), highlighting the role of technological adaptability in improving productivity. These findings underscore the challenges of online teaching while stressing the importance for institutional support and structured time management practices. The study contributes to understanding educators' experiences and provides recommendations for optimizing digital teaching environments in future crisis situations.

Keywords: COVID-19, Work from Home, Time Management, Online Teaching, College Teachers

1. Introduction

The COVID-19 pandemic sparked an unexampled shift in the academic sector, compelling college teachers worldwide to shift abruptly from general classroom teaching to virtual instruction. This rapid adaptation posed significant challenges, specifically in terms of time management, workload distribution, and

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P. Sharma et al. (eds.), *Proceedings of the International Conference on Artificial Intelligence in Management for Business and Industrial Growth (AIMBIG 2025)*, Advances in Economics, Business and Management Research 355, https://doi.org/10.2991/978-94-6463-898-1_14

maintaining a balance between professional and personal life. While digital platforms enabled continuity in education, they also led to increased screen time, task overload, and new administrative responsibilities that further strained educators.

This study explores the correlation between time management factors—such as task overload, screen exposure and digital adaptability—and their ramification on the professional-life balance of college teachers. By examining these links, the research targets to give an idea into the obstacles faced by educators during remote teaching and offer recommendations for improving time management strategies in online education. The result highlights the necessity of institutional support and structured approaches to ensure efficiency and well-being in future crisis-driven digital learning environments.

1.1 Objectives of the Study

The primary goal of this study is to examine the influence of online teaching during the COVID-19 pandemic on the time management practices and adaptability of college teachers. Specifically, the study aims to:

To examine the impact of task overload and screen time on the time management efficiency of college teachers during online teaching.

To analyze the relationship between workload distribution and professional-life balance in the context of remote education.

To assess the role of digital adaptability in improving time management and teaching effectiveness in an online learning environment.

1.2 Hypotheses of the Study

H_{1A}: Task overload has a significant positive impact on screen time among college teachers engaged in online teaching.

H_{2A}: Increased workload significantly reduces work-life balance among college educators working from home.

H_{3A}: Higher digital adaptability significantly improves time management efficiency in an online teaching environment.

2. Literature Review

The shift to virtual teaching during the COVID-19 pandemic significantly impacted educators' time management strategies, workload distribution, and work-life balance (Bao, 2020). With the sudden shift to digital learning, teachers experienced task overload and increased screen time, leading to professional burnout (Dhawan, 2020). The lack of structured online teaching frameworks further contributed to higher

stress levels and inefficient time management (Hodges et al., 2020). One major challenge was workload imbalance, where educators had to juggle teaching, administrative responsibilities, and personal life, often working beyond standard hours (Fischer & Hånze, 2020). Studies indicate that increased workload negatively affected work-life balance, reducing overall job satisfaction among teachers (Schleicher, 2020). Additionally, prolonged screen exposure due to online classes resulted in mental fatigue and decreased productivity (Sangster, Stoner, & Flood, 2020). However, digital adaptability played a crucial role in helping educators manage their workload efficiently. Teachers with higher digital proficiency demonstrated better time management and stress-handling abilities in online education (Rahayu & Wirza, 2020). Kim (2020) highlighted that technology training and institutional support significantly improved teaching effectiveness and reduced burnout. Furthermore, Tesar (2020) emphasized the need for long-term strategies to enhance digital learning experiences, ensuring sustainability in online education.

Overall, existing literature underscores the urgent need for institutional support, structured time management practices, and digital literacy training to help educators balance workload and personal well-being in online education.

3 Methodology

This particular work employs a correlational research structure to assess the relationship between time management factors—task overload, screen time, workload distribution, work-life balance, and digital adaptability—among college teaching community engaged in online education during the COVID-19 pandemic.

3.1 Research Design

A quantitative & correlational research structure was adopted to assess the relationships between key variables. The study focuses on identifying correlations rather than causation, making Pearson's correlation coefficient the primary statistical tool.

3.2 Population and Sample

Population: College teachers engaged in online education across various institutions during the pandemic were the population of this particular work.

Sampling Technique: A purposive type of sampling method was used to choose participants who had transitioned to online teaching and had experienced challenges related to time management.

Sample Size: Data was collected from 75 college teachers across multiple disciplines to ensure a diverse representation.

4. Data Collection Method

A well-designed question set was developed and distributed electronically via Google Forms and email to ensure accessibility.

The questionnaire consisted of closed-ended Likert scale questions (ranging from 1 = strongly disagree to 5 = strongly agree) to measure variables related to time management.

Demographic details such as age, gender & teaching experience, and digital proficiency were also collected to analyze variations.

4.1 Research Tools Used

1. Likert Scale (5-Point Scale)

A 5-point Likert scale is used to measure perceptions of task overload, workload distribution, work-life balance, and digital adaptability. Participants indicate their level of agreement or frequency of experience.

2. Self-Reported Measures (Ratio Scale)

For variables like screen time, participants report actual hours spent on digital devices daily. This is measured on a ratio scale, as it has a true zero point and represents continuous data.

Pearson's Correlation Coefficient was applied to examine relationships between:

Task overload and screen time

Workload and work-life balance

Digital adaptability and time management efficiency

Significance Testing: A p-value of < 0.05 was considered statistically significant.

Ethical Considerations

Informed Consent: All respondents were informed about the purpose of the study prior data collection.

Confidentiality: Responses were anonymized to maintain participant privacy.

Voluntary Participation: Respondents had the freedom to withdraw at any stage.

4.2 Interpretation of Data and Hypothesis Testing

The collected data were analyzed using SPSS to examine the relationships between task overload, screen time, work-life balance, and digital adaptability among college teachers engaged in online teaching during the COVID-19 pandemic. Descriptive statistics, correlation analysis, and hypothesis testing were conducted. These values provide an overview of the dispersion and central tendency of responses from the sample of 75 college teachers.

4.3 Correlation Analysis

Pearson's correlation coefficient was introduced to identify the degree of strength and direction of relationships between key variables:

Task overload and screen time: An important positive correlation was found ($r = 0.68$, $p < 0.01$), indicating that higher task overload resulted in increased screen exposure.

Workload distribution and work-life balance: A significant negative correlation was observed ($r = -0.52$, $p < 0.05$), suggesting that higher workload negatively impacted personal time and well-being.

Digital adaptability and time management efficiency: A moderate positive correlation was found ($r = 0.47$, $p < 0.05$), implying that greater digital proficiency contributed to better time management.

Hypothesis Testing

The hypotheses formulated in the study were tested using Pearson's correlation analysis. The first hypothesis (H_{1A}) stated that task overload has a significant positive impact on screen time among college teachers engaged in online teaching. The analysis manifested a strong positive link ($r = 0.68$, $p < 0.01$), confirming that task overload significantly increased screen time, thereby supporting H_{1A} . The second hypothesis (H_{2A}) proposed that increased workload significantly reduces work-life balance among college educators working from home. A negative correlation ($r = -0.52$, $p < 0.05$) indicated that higher workload negatively influenced work-life balance, leading to the acceptance of H_{2A} . The third hypothesis (H_{3A}) suggested that higher digital adaptability significantly improves time management efficiency in an online teaching environment. A mild positive link ($r = 0.47$, $p < 0.05$) was found, indicating that teachers with higher digital adaptability managed their time more effectively, supporting H_{3A} .

5. Findings and Conclusion

The findings of this particular work confirm that increased task overload leads to higher screen time, supporting concerns raised in previous research that excessive administrative and instructional duties can extend digital exposure (Bao, 2020). Higher workload negatively impacts work-life balance, aligning with findings from Schleicher (2020), which highlight that increased professional responsibilities reduce educators' personal time and job satisfaction. Digital adaptability plays a crucial role in improving time management efficiency, emphasizing the necessity for sustained technological training to enhance Teachers' productivity in online teaching environments. This particular work draws attention to the difficulties faced by college teachers in managing their time during online education, particularly due to task overload, extended screen exposure, and increased workload. The findings suggest that digital proficiency can alleviate some of these challenges, emphasizing the importance of institutional support and structured workload distribution. Academic institution should frame timely policies for skills enhancement of educators regarding virtual education. Future research should explore long-term strategies for optimizing digital education and improving work-life balance in crisis-driven teaching scenarios. Mental health, work –life balance and job satisfaction related issues in higher education institutes should be vividly churned to further investigations.

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