



Post-Pandemic Transition and Teacher Well-Being: A Study of Mental Health, Sleep, and Quality of Life in Delhi

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Abstract

Background: The COVID-19 pandemic significantly disrupted educational systems globally, forcing educators to transition rapidly from traditional classroom settings to digital platforms. With the gradual return to offline teaching, the psychological and physiological toll of this transition on educators remains underexplored.

Objective: This study investigates the mental health status, sleep quality, and quality of life (QoL) of educators in Delhi during the shift from online to offline teaching following the COVID-19 pandemic.

Methods: A cross-sectional survey was conducted among 78 school and university educators aged 30–50 years in Delhi. Standardized tools—Depression, Anxiety and Stress Scale (DASS-21), Pittsburgh Sleep Quality Index (PSQI), and the Quality of Life Enjoyment and Satisfaction Questionnaire-Short Form (Q-LES-Q-SF)—were employed.

Results: The findings revealed moderate levels of depression ($M = 13.94$), low anxiety ($M = 2.44$), and low stress ($M = 1.88$). Sleep quality was poor (PSQI global score $M = 7.55$), and QoL was average (Q-LES-Q-SF score $M = 65.24\%$). A statistically significant positive correlation was observed between mental health and QoL ($r = 0.349$, $p = 0.002$), while no significant association was found between mental health and sleep quality or between sleep quality and QoL.

Conclusion: Mental health challenges among educators post-pandemic correlate with diminished QoL, although sleep quality appears independently affected. There is a pressing need for systemic support and occupational health interventions to ensure educator well-being.

Keywords: COVID-19, mental health, sleep quality, quality of life, occupational therapy

Introduction

The COVID-19 pandemic, declared a global health emergency by the World Health Organization in early 2020, disrupted nearly every aspect of societal functioning, with the educational sector facing unprecedented challenges. Teachers and educators found themselves at the frontline of an unplanned digital revolution, as institutions around the world abruptly transitioned to online learning to comply with physical distancing measures and lockdowns. This shift, although necessary, had profound implications on educators' mental, emotional, and physical well-being.

Teaching, even under normal circumstances, is a profession associated with high stress, emotional exhaustion, and burnout. Prior to the pandemic, studies had already shown that educators commonly experienced job-related stress, anxiety, depression, and poor sleep due to administrative pressures, workload, student behavior issues, and limited institutional support (Travers & Cooper, 1993; Cartwright & Cooper, 2014; García-Carmona et al., 2019). The introduction of remote teaching not only exacerbated these pre-existing challenges but also introduced new stressors such as technological barriers, lack of training, prolonged screen time, and the blurred lines between professional and personal spaces (Lizana & Vega-Fernández, 2021; Palma-Vásquez et al., 2021).

The pandemic particularly impacted the mental health of educators. Global surveys during the height of COVID-19 reported elevated levels of anxiety (10% to 49.4%), depression (15.9% to 28.9%), and stress (12.6% to 50.6%) among teachers across countries like India, Brazil, the USA, China, and Spain (Silva et al., 2021; Ozamiz-Etxebarria et al., 2021). Female teachers and those involved in teaching younger students were reported to be more susceptible. Furthermore, the sudden imposition of remote instruction without adequate support led to emotional fatigue, reduced motivation, and perceived loss of efficacy (Toto & Limone, 2021).

As schools reopened and offline teaching resumed, a new set of challenges emerged. Teachers had to readjust once again to in-person classroom dynamics, manage students' learning gaps, and navigate their own fears about exposure to the virus. The return to physical classrooms, although widely viewed as a positive development, may have triggered new stress responses or aggravated unresolved psychological distress stemming from earlier phases of the pandemic.

Another critical factor influenced by the pandemic was sleep quality. Poor sleep was reported in over 35% of the general population during COVID-19, with health professionals and educators being significantly affected (Jahrami et al., 2020). Sleep disturbances, when coupled with high stress and emotional exhaustion, create a vicious cycle that affects cognitive

performance, emotional regulation, and interpersonal effectiveness—skills that are essential for teachers. Impaired sleep may also directly contribute to lower life satisfaction and diminished overall quality of life (Mollayeva et al., 2016).

Quality of life (QoL) is a multidimensional construct encompassing physical health, psychological state, social relationships, and environmental context. Teachers' QoL during the pandemic took a sharp downturn due to occupational stress, lack of work-life balance, and insufficient support systems. In Chile, for example, over 78% of teachers reported increased work hours and 86% reported negative impacts on family life due to teleworking, correlating strongly with lower scores on QoL indices (Lizana et al., 2021). The same challenges are mirrored in the Indian context, especially in urban centers like Delhi, where educators faced both institutional and infrastructural inadequacies.

Despite these known stressors, there is limited empirical data from India—especially from Delhi—assessing the holistic impact of the transition from online to offline education on educators' mental health, sleep quality, and quality of life. Most studies have focused on student outcomes or broad professional groups like healthcare workers, often neglecting the specific challenges faced by educators.

Hence, this study aims to fill that research gap by systematically evaluating the mental health status, sleep quality, and quality of life among teachers in Delhi who experienced the transition from online to offline teaching during the COVID-19 pandemic. By analyzing the interrelationships among these domains, this study seeks to inform policy-makers, occupational therapists, and educational administrators about the urgent need for systemic interventions that support educators' well-being in the post-pandemic landscape.

Methodology

This study employed a quantitative, cross-sectional survey design to assess the mental health status, sleep quality, and quality of life among educators in Delhi during the transition from online to offline teaching following the COVID-19 pandemic. The sample consisted of 78 educators, including 53% males and 47% females, aged between 30 and 50 years. Participants were selected using a convenience sampling method. Inclusion criteria required participants to be actively engaged in online teaching during the pandemic and to have no previous diagnoses of psychiatric or sleep disorders.

To evaluate the key variables, three standardized self-report instruments were used. The Depression, Anxiety, and Stress Scale-21 (DASS-21) was employed to assess negative emotional states. This scale contains 21 items divided into three subscales, each reflecting depression, anxiety, or stress, rated on a 4-point Likert scale. It has demonstrated excellent internal consistency, with reported Cronbach's alpha coefficients ranging from 0.81 to 0.89 (Coker, 2018).

The Pittsburgh Sleep Quality Index (PSQI) was utilized to measure subjective sleep quality. This tool assesses seven domains, including sleep latency, duration, efficiency, disturbances, and daytime dysfunction. A global PSQI score greater than 5 is indicative of poor sleep quality (Mollayeva et al., 2016).

To measure the participants' overall life satisfaction and enjoyment, the Quality of Life Enjoyment and Satisfaction Questionnaire–Short Form (Q-LES-Q-SF) was administered. This 16-item instrument evaluates various life domains such as physical health, work, mood, social relationships, and general well-being. Total scores range from 14 to 70, with higher scores signifying greater satisfaction and quality of life (Endicott et al., 1993). Data were gathered via structured questionnaires and analyzed using SPSS v20. Descriptive statistics were reported as means and standard deviations. Pearson's correlation coefficient was used to identify relationships among variables.

Results

The demographic analysis of the participants revealed that the mean age of the educators was 38.42 years ($SD = 6.56$), with an average body mass index (BMI) of 22.44 ($SD = 3.33$), which falls within the normal weight range. The participants had an average teaching experience of 9.5 years ($SD = 6.14$), indicating a moderately experienced group of educators.

In terms of mental health status, the findings showed a moderate level of depression with a mean score of 13.94 ($SD = 6.44$), while anxiety and stress levels were relatively lower, with mean scores of 2.44 ($SD = 2.72$) and 1.88 ($SD = 1.82$), respectively, as measured by the DASS-21. These values suggest that although depression symptoms were more prevalent, overall stress and anxiety levels were comparatively minimal.

Regarding sleep quality, participants demonstrated generally poor sleep health, with a mean global PSQI score of 7.55 ($SD = 2.90$), exceeding the threshold of 5 that typically indicates significant sleep disturbances. This suggests that many educators experienced compromised sleep quality during the transition period.

The Quality of Life, as assessed by the Q-LES-Q-SF, revealed a moderate level of life satisfaction among participants. The mean raw score was 50.74 ($SD = 10.49$), with the maximum percentage score averaging 65.24% ($SD = 18.61$), indicating that while some degree of enjoyment and satisfaction was retained, it was below optimal levels (Figure 1 Table 1).

Pearson correlation analysis demonstrated a statistically significant positive relationship between mental health (as measured by DASS-21) and quality of life (Q-LES-Q-SF), with a correlation coefficient of $r = 0.349$ ($p = 0.002$). This suggests that better mental health is associated with higher perceived quality of life among educators. However, no significant correlations were found between mental health and sleep quality ($r = 0.178$, $p = 0.119$), or between quality of life and sleep quality ($r = -0.039$, $p = 0.733$). These findings indicate that while mental health strongly influences life satisfaction, its impact on sleep quality—and the relationship between sleep quality and QoL—was not statistically evident in this sample.

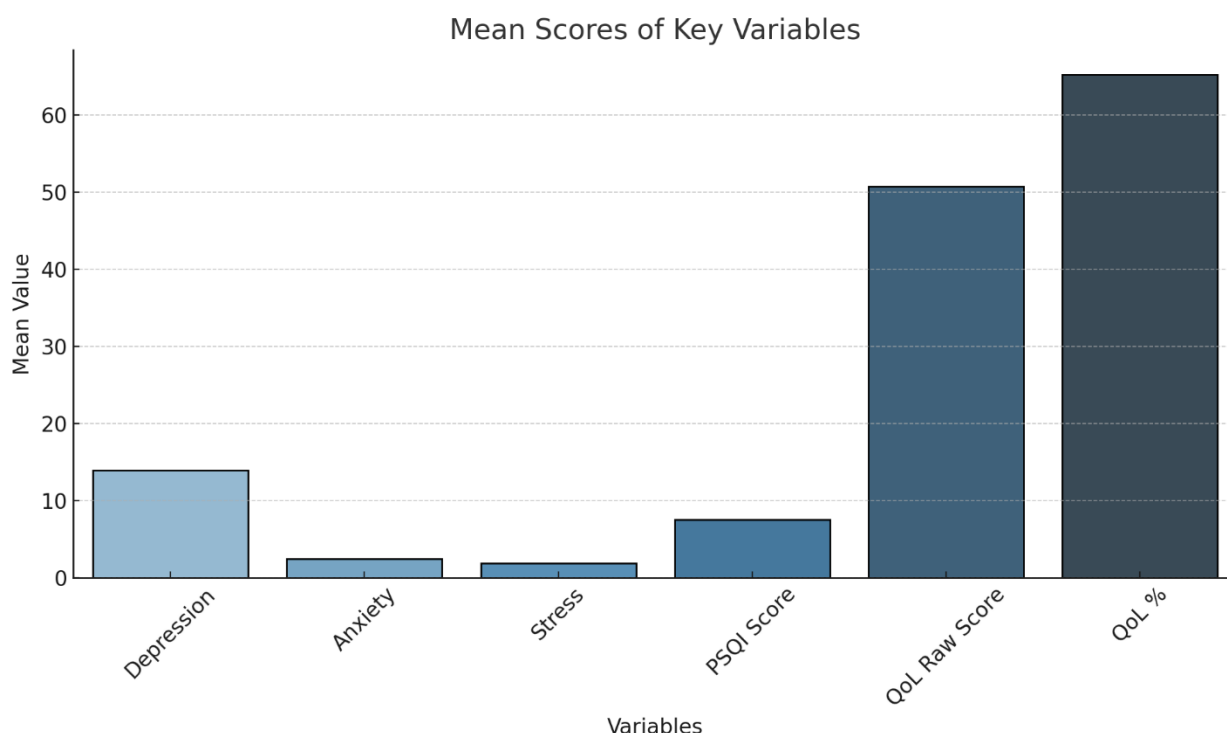


Figure 1 average values of Depression, Anxiety, Stress, Sleep Quality (PSQI), and Quality of Life (QoL) scores

Table 1 Descriptive Statistics of Key Variables

Variables	Mean	SD
Depression	13.94	6.44
Anxiety	2.44	2.72
Stress	1.88	1.82
PSQI Score	7.55	2.90
QoL Raw Score	50.74	10.49
QoL %	65.24	18.61

Discussion

The findings of this study provide critical insights into the psychological and functional well-being of educators in Delhi as they transitioned from online to offline teaching following the COVID-19 pandemic. Educators reported moderate levels of depression, low levels of anxiety and stress, poor sleep quality, and only moderate levels of quality of life (QoL). These results highlight the lingering effects of the pandemic on educators' mental health and daily functioning, even after the return to physical classrooms.

The moderate depression scores found in this study align with previous global research indicating that educators experienced sustained emotional burden during the pandemic. The prolonged exposure to remote teaching challenges—such as technical barriers, isolation, and the pressure to adapt without formal training—may have contributed to psychological fatigue that persisted even after schools reopened. While stress and anxiety scores were comparatively lower, this could reflect either emotional resilience developed over time or underreporting due to normalization of stress within the profession. Similar patterns were observed in studies conducted in Spain and Latin America, where teachers exhibited long-term psychological symptoms after transitioning back to traditional teaching formats (Ozamiz-Etxebarria et al., 2021; Lizana & Vega-Fernández, 2021).

Sleep disturbances were prevalent among the participants, as reflected by the mean PSQI score above the clinical threshold. This suggests that many educators continued to experience poor sleep quality, possibly due to disrupted circadian rhythms, work-life imbalance, or residual stress. Interestingly, no significant correlation was observed between sleep quality and either mental health or QoL in this sample. This contradicts existing literature which often links poor sleep with increased emotional distress and reduced life satisfaction (Jahrami et al., 2020). One explanation for this discrepancy may be that educators have adapted to poor sleep as a chronic condition, perceiving it as a normal part of their occupational routine.

A significant positive correlation was observed between mental health (DASS-21 scores) and QoL (Q-LES-Q-SF scores), indicating that educators with better psychological well-being reported greater life satisfaction. This finding is consistent

with prior studies, which emphasize that psychological distress negatively affects not only individual well-being but also social and occupational functioning (Kim et al., 2022). The absence of a relationship between sleep and QoL, however, suggests that other factors—such as job satisfaction, family support, and coping strategies—may play a mediating role in how educators evaluate their quality of life.

These findings underscore the urgent need for institutional strategies to support educator well-being. Schools and universities should provide structured mental health resources, such as counseling services and stress-reduction workshops, alongside promoting a healthy work environment. From an occupational therapy perspective, integrating wellness programs into schools can empower teachers to develop healthier routines, improve emotional resilience, and manage work-related demands more effectively.

while the return to offline teaching marks a positive shift in education delivery, the psychological impacts of the pandemic on educators are far from over. Prioritizing teacher well-being through sustained support systems is vital for the overall health of the education sector and the students it serves.

Conclusion

The findings of this study highlight a critical need for ongoing mental health support and sleep hygiene education for educators transitioning out of the pandemic's digital teaching phase. The psychological impact of prolonged remote instruction and the return to in-person classes continues to influence teachers' well-being. To address these challenges, it is essential for occupational therapists, school administrators, and policymakers to implement targeted interventions. These should include emotional resilience workshops to equip educators with coping strategies, institutional support mechanisms to promote work-life balance, periodic psychological screening to identify at-risk individuals, and the integration of comprehensive wellness programs within school settings. Such initiatives not only support the health and well-being of educators but also contribute to improved student outcomes and the overall quality of education.

Despite the valuable insights gained, this study is not without limitations. The small sample size ($n = 78$) reduces the generalizability of the results, as the findings may not represent the broader educator population across different regions or educational levels. Additionally, reliance on self-reported measures introduces the potential for recall and response biases, which may affect the accuracy of reported mental health and sleep quality. The sample also had an unequal gender distribution, limiting the ability to draw meaningful gender-based comparisons.

Future research should aim to overcome these limitations by including a larger and more diverse sample of educators from various regions of India. Longitudinal studies would be beneficial to track mental health, sleep quality, and quality of life trends over time as the post-pandemic educational landscape continues to evolve. Furthermore, incorporating objective assessments—such as actigraphy or wearable sleep trackers—alongside self-reported tools could provide more accurate data regarding sleep patterns and their relationship with psychological well-being. These future directions will help build a more comprehensive understanding of the long-term effects of the COVID-19 pandemic on educators and inform effective intervention strategies.

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