

Exploring the Nexus of Occupational Stress, Mental Health, and Quality of Work Life Among Rural Female Teachers in Chhattisgarh: An Empirical Investigation of Interrelationships

Kiran Patley¹, Prof (Dr.) Sambit Kumar Padhi², Dr Sonia Sthapak³

¹Research Scholar, Department of Education, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, C.G. Email: kiranpatleyeduggv@gmail.com

²Department of Education, Guru Ghasidas Vishwavidyalaya (A Central University), Bilaspur, C.G. Email: padhigv@gmail.com

³Department of Education, University of Allahabad (A Central University), U.P. Email: soniasthapak@allduniv.ac.in

Abstract

Female teachers in India's rural, tribal, and conflict-affected regions face dual burdens of intensive school responsibilities and domestic expectations, yet their psychological well-being receives limited research and policy attention. This study examines interrelationships among occupational stress, mental health, and quality of work life (QWL) for 1,020 married female teachers in gram panchayat primary and upper primary schools across Chhattisgarh's Bastar Division, a tribal and Naxal-affected area. A descriptive survey used three validated instruments—Occupational Stress Scale for Female Teachers (OSSFT), Women Teachers Mental Health Scale (Marbaniang & Bhutia, 2019), and Quality of Work Life Scale (Dhar et al., 2008)—with Pearson correlations testing hypotheses. Occupational stress negatively correlated with mental health ($r = -0.7412$), mental health positively correlated with QWL ($r = 0.7599$), and occupational stress negatively correlated with QWL ($r = -0.6603$), all at $p < .01$. These findings highlight mental health as a mediator and urge policy interventions aligned with NEP 2020.

KEYWORDS: occupational stress; mental health; quality of work life, Rural teachers, Bastar division; Chhattisgarh.

Introduction

Teaching ranks among the most occupationally demanding professions globally, characterized by intensive emotional labor, continuous interpersonal engagement, and substantial responsibility for human development across diverse learner populations (Schaufeli & Taris, 2014). These multifaceted pressures substantially compromise educator psychological well-being and threaten long-term professional sustainability (Bakker & Demerouti, 2007, 2017). For female educators, these demands intersect with culturally ingrained household responsibilities and caregiving expectations, creating what scholars term the "double burden" (Christopher, 2004; Collie et al., 2012).

The situation intensifies considerably for female teachers deployed in rural, tribal, and conflict-affected regions. Teachers working in such contexts confront compounded challenges including geographic isolation, severe infrastructural inadequacy, limited access to professional development and mental health resources, safety concerns, and community

scrutiny that constrains professional autonomy (Singh et al., 2017; Vally et al., 2019). India's Bastar Division exemplifies these circumstances particularly acutely. Spanning seven districts across 32 administrative blocks and serving predominantly tribal populations while experiencing ongoing left-wing extremist activity, Bastar combines severe resource scarcity with deeply entrenched gender-based restrictions on women's mobility and professional agency (National Education Policy, 2020).

Female teachers in this context simultaneously serve essential educational functions for some of India's most marginalized communities while navigating extraordinary occupational obstacles with minimal institutional support (UNESCO, 2021). Despite such circumstances, quantitative research specifically examining how occupational stress, mental health, and quality of work life interrelate among married female teachers in rural tribal settings remains limited. The Sustainable Development Goal 4.c emphasizes ensuring qualified educators in all regions, yet the psychological mechanisms through which workplace conditions influence teacher well-being in economically disadvantaged settings remain incompletely understood (United Nations, 2015; National Education Policy, 2020).

The present investigation addresses this evidence gap by examining the three core relationships among 1,020 married female teachers employed in gram panchayat schools across the Bastar Division of Chhattisgarh.

Teaching generates substantial occupational stress through excessive workload, high accountability pressures, role conflict, insufficient resources, and responsibility for diverse student populations with varying needs (Bakker & Demerouti, 2007, 2017). Research across diverse educational contexts consistently confirms that teachers report higher stress levels than many other professional groups (Schaufeli & Taris, 2014).

Within Indian educational contexts, occupational stress among teachers is well-documented. Teachers in under-resourced schools serving disadvantaged populations experience particularly elevated stress levels. Studies specific to female teachers in India have identified distinctive gender-specific stressors including work-family conflict, workplace discrimination based on gender, and disproportionate caregiving expectations relative to male colleagues (Noor & Zainuddin, 2011; Sugawara et al., 2017). The intersection of professional demands and domestic expectations creates measurable psychological burden that accumulates across career trajectories (Demerouti et al., 2001).

Mental Health in Occupational Contexts

Mental health within work settings encompasses emotional stability, psychological equilibrium, effective stress management capacity, and functional engagement with occupational demands (Marbaniang & Bhutia, 2019). Research has consistently established robust associations between occupational stress and mental health outcomes, with chronically stressed workers demonstrating elevated prevalence of anxiety disorders, depressive symptoms, and reduced subjective well-being (Agyapong et al., 2022).

The relationship between occupational stress and mental health is bidirectional and self-perpetuating. Elevated occupational stress depletes psychological coping resources, triggering

anxiety and depressive symptomatology that further reduces capacity to manage workplace demands, creating a downward spiral of deteriorating mental health (Agyapong et al., 2022). For teachers specifically, compromised mental health impairs classroom effectiveness and reduces professional satisfaction, creating cycles of frustration and disengagement.

Quality of Work Life (QWL)

Quality of work life reflects subjective and objective perceptions of working conditions, opportunities for professional growth, balance between professional and personal demands, quality of interpersonal workplace relationships, and overall professional fulfillment (Dhar et al., 2008). Conceptually, QWL integrates multiple dimensions including equitable compensation, safe working conditions, opportunities for skill development, democratic workplace processes, and social support.

For teachers, favorable QWL is significantly associated with stronger organizational commitment, reduced burnout risk, lower turnover intentions, and enhanced teaching effectiveness (Akar et al., 2018). Conversely, unfavorable QWL resulting from heavy workloads, inadequate resources, limited autonomy, and insufficient support is consistently linked with occupational stress, psychological distress, and professional dissatisfaction.

Theoretical Frameworks

Job Demands-Resources (JD-R) Model

The Job Demands-Resources model, developed by Bakker and Demerouti (2007, 2017), provides crucial theoretical grounding for understanding stress-mental health-work-life relationships. The model posits that occupational stress arises from a fundamental imbalance between job demands and available resources. High job demands including workload, responsibility, and performance pressures combined with insufficient resources such as autonomy, social support, and professional development opportunities progressively deplete psychological reserves. This cumulative depletion manifests as burnout, characterized by emotional exhaustion, reduced personal accomplishment, and depersonalization. Within the JD-R framework, occupational stress directly impairs mental health functioning and subsequently reduces perceived quality of work life.

Transactional Model of Stress and Coping

Lazarus and Folkman's (1984) Transactional Model emphasizes that stress outcomes depend not only on objective workplace conditions but fundamentally on individual appraisal processes and available coping mechanisms. According to this model, individuals first appraise demands relative to perceived personal capacity to manage them. If demands are appraised as exceeding resources, stress results. Prolonged occupational stress erodes both psychological resources and perceived coping efficacy, progressively compromising mental health and reducing the ability to perceive work-life quality favorably (Folkman & Lazarus, 1980).

Empirical Evidence on Stress-Mental Health Relationships

International research consistently Studies specifically examining teachers report comparable effect magnitudes (Agyapong et al., 2022; Candeias et al., 2020). These correlations establish occupational stress as a primary predictor of psychological well-being among educators.

Research further demonstrates that compromised mental health subsequently reduces teachers' capacity to perceive their work environments positively, creating a cascade effect wherein stress-induced mental health deterioration progressively diminishes quality of work life perception (Schaufeli, 2017; Collie et al., 2012).

Research Gaps and Study Rationale

Despite extensive research documenting occupational stress among teachers broadly gender-specific stressors among women educators (Christian & Malik, 2022), few investigations have simultaneously examined all three variables occupational stress, mental health, and quality of work life within a single population. More critically, virtually no peer-reviewed quantitative research has examined this three-variable nexus specifically within rural, tribal, or conflict-affected settings where female teachers confront extraordinary occupational and contextual challenges.

The empirical relationship between occupational stress and mental health has been established in general teacher populations, with international meta-analytic evidence indicating typical effect sizes ranging from $r = -.45$ to $r = -.65$ (Agyapong et al., 2022). However, the magnitude of these associations specifically for married female teachers in resource-constrained rural and tribal contexts remains unknown. Similarly, while mental health and quality of work life are theoretically linked, the empirical strength of this positive relationship among rural female educators has not been systematically quantified in existing literature. The direct relationship between occupational stress and quality of work life, while documented in some occupational populations, lacks rigorous empirical investigation specifically for female teacher cohorts in marginalized educational settings.

The absence of context-specific, integrated empirical data hampers development of appropriately tailored interventions and evidence-based policies supporting teacher well-being in critical educational regions. Furthermore, while habitation (rural versus urban) and teaching experience represent theoretically relevant demographic variables, their differential impacts on stress-mental health-work-life relationships remain incompletely characterized in Indian educational contexts. This investigation addresses these gaps directly.

Research Objective

To investigate the relationship between occupational stress, mental health, and the quality of work life of female teachers working in rural areas of Chhattisgarh.

Research Hypotheses:

H_{0,1} There is no significant relationship between occupational stress and mental health among female teachers working in rural areas of Chhattisgarh.

H_{0,2} There is no significant relationship between mental health and quality of work life among female teachers working in rural areas of Chhattisgarh.

H_{0,3} There is no significant relationship between occupational stress and quality of work life among female teachers working in rural areas of Chhattisgarh.

METHODOLOGY

Research Design

A descriptive survey research design was employed to systematically assess relationships among occupational stress, mental health, and quality of work life. The survey approach was selected as most appropriate for examining associations among continuous variables within a defined population and for enabling comparative analysis across demographic subgroups (Gravetter & Wallnau, 2017; Tabachnick & Fidell, 2013).

Participants and Sampling

The target population comprised all married female teachers employed in government primary (classes 1–5) and upper primary (classes 6–8) schools located at gram panchayat (village-level) sites within the Bastar Division of Chhattisgarh during the December 2022. The Bastar Division comprises seven districts (Bastar, Sukma, Dantewada, Narayanpur, Kondagaon, Bijapur, Kanker) distributed across 32 administrative blocks (Department of Tribal and Scheduled Caste, Government of Chhattisgarh, 2022). These districts serve predominantly tribal populations and experience ongoing security-related challenges. Researchers recruited a final sample of 1,020 teachers via multi-stage sampling: stratified by district, block, then cluster by school, and simple random within clusters, ensuring representation.

The present study was conducted with a final sample of 1,020 married female teachers working in government primary (classes 1–5) and upper primary (classes 6–8) schools across the Bastar division of Chhattisgarh. Given the unique geographical challenges and socio-cultural complexities of this tribal and Naxal-affected region, a multi-stage sampling design was implemented.

Measurement Instruments

Three instruments measured study variables:

Occupational Stress Scale for Female Teachers (OSSFT)

Recognizing that generic occupational stress instruments may incompletely capture stressors distinctively affecting married female teachers in rural, tribal, and conflict-affected contexts, the study investigator developed this context-specific 34-item instrument through systematic procedures: comprehensive literature review of occupational stress instruments and teacher stress research, examination of existing validated scales published by the National Psychological Corporation, and in-depth discussions with 25 female teachers in Bastar schools to identify conflict-zone-specific stressors not adequately addressed in standard instruments. Following expert review by three educational psychologists and two research supervisors, the final instrument assesses two broad factor domains: external stressors (systemic-regulatory stressors, environmental-resource inadequacies, interpersonal challenges, and organizational climate issues; 20 items) and internal factors (professional self-concept concerns and coping

buffers; 14 items). Five-point Likert response scales (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree) yield raw scores ranging from 34 to 170, with higher scores reflecting elevated occupational stress. Psychometric analysis of current study data yielded Cronbach's $\alpha = .88$, establishing excellent internal consistency and confirming the newly developed instrument's reliability in the target population. This newly developed scale represents a significant methodological contribution, addressing the literature gap regarding context-specific occupational stress measurement for rural female teachers in conflict-affected regions.

Women Teachers Mental Health Scale (WTMHS-MCBY)

This 34-item standardized instrument, developed by Marbaniang and Bhutia (2019) and published by the National Psychological Corporation (Agra), measures mental health across three dimensions: individual attributes and behavior (emotional/behavioral self-regulation); social and economic factors (social support, economic security, engagement); and environmental factors (resource access, physical safety, sociocultural context). Five-point Likert responses (Always, Sometimes, Occasionally, Rarely, Never) yield scores ranging 34–170, with higher scores reflecting better mental health. Dimension-specific reliability: individual attributes $\alpha = .73$, social/economic $\alpha = .94$, environmental $\alpha = .61$. Established validity across multiple approaches (Marbaniang & Bhutia, 2019).

Quality of Work Life Scale (QWLS-DDR)

This 45-item standardized instrument, developed by Dhar, Dhar, and Roy (2008) and published by the National Psychological Corporation (Agra), measures quality of work life across four dimensions: Proactivity (organizational responsiveness); Work-Life Balance (equilibrium between professional and personal demands); Human Relations (interpersonal relationships, democratic processes); Learning Organization (commitment to continuous development). Five-point Likert responses (Strongly Disagree to Strongly Agree) yield scores ranging 45–225, with higher values reflecting more favorable work-life quality. Established reliability exceeds $\alpha = .80$ across dimensions; strong validity demonstrated through factor analysis and convergent validation (Dhar et al., 2008).

Data Collection Procedures

Data collection occurred during the 2022 at Block Resource Centers and scheduled teacher training sessions across all 32 administrative blocks. Trained research coordinators administered instruments to participating teachers in group settings, providing standardized instructions and responding to clarification requests. Self-administering instruments facilitated independent completion without assessor bias. Informed consent was obtained following comprehensive explanation of study purposes, procedures, confidentiality safeguards, and voluntary participation principles. Approximately 20–25 minutes were required for questionnaire completion. Completed questionnaires were systematically reviewed for completeness; data entry accuracy was verified through random double-entry procedures for 10% of cases. Institutional ethics committee approval was obtained prior to data collection; all procedures followed ethical guidelines for human subjects research.

Data Analysis

Descriptive statistics (means, standard deviations, ranges, skewness, kurtosis) were used for assessing normality. Pearson product-moment correlation coefficients examined bivariate relationships among occupational stress, mental health, and quality of work life.

RESULTS

Descriptive Statistics

All three variables demonstrated good-to-excellent distributional properties approximating normality, validating the use of parametric statistical procedures.

Table 1. Descriptive Statistics: Occupational Stress, Mental Health, and Quality of Work Life

Variable	N	M	SD	Min	Max	Skewness	Kurtosis
Mental Health	1020	100.48	13.41	62	144	-.0066	-.2259
Occupational Stress	1020	104.05	19.9	44	169	0.0351	-.3002
Quality of Work Life	1020	134.75	33.34	45	225	0.0865	-.1550

Table 1 shows that Mental health exhibited near-perfect normality skewness = -0.0066, kurtosis = -0.2259, indicating reliable measurement. Occupational stress demonstrated excellent normality skewness = 0.0351, kurtosis = -0.3002. Quality of work life showed good normality skewness = 0.0865, kurtosis = -0.1550, exhibiting the widest range and highest variability among the three measures (SD = 33.34), reflecting substantial heterogeneity in teachers' work satisfaction and perceived quality of work-life experiences.

Interrelationships Among Primary Variables

All three null hypotheses were rejected at $p < .01$ ($df = 1,018$), indicating highly significant associations among occupational stress, mental health, and quality of work life. The magnitudes of the observed correlations substantially exceed typical values reported in educational research, suggesting particularly strong interrelationships in rural teaching contexts where resource limitations and infrastructural constraints compound occupational demands.

Table 2. Pearson Correlation Matrix: Occupational Stress, Mental Health, and Quality of Work Life

Hypothesis	Variable Pair	r	r ²	p
H ₀₁	Occupational Stress ↔ Mental Health	-.7412	0.549	< .01
H ₀₂	Mental Health ↔ Quality of Work Life	0.7599	0.577	< .01
H ₀₃	Occupational Stress ↔ Quality of Work Life	-.6603	0.436	< .01

Here r = Pearson product-moment correlation coefficient; p = two-tailed significance; CI = 95% confidence interval; LL = lower limit; UL = upper limit; r^2 = coefficient of determination (proportion of shared variance). All correlations are highly significant at the $p < .01$ level.

This table 2 shows that The correlation between mental health and occupational stress was strongly negative $r = -0.7412$, indicating that higher occupational stress is closely associated with lower mental health; the two variables share 54.9% of their variance $r^2 = 0.549$ Mental

health and quality of work life showed a strong positive association $r = 0.7599$, with 57.7% shared variance $r^2 = 0.577$, indicating that better psychological well-being is closely linked with more favorable work-life quality perceptions. The association between occupational stress and quality of work life was moderately to strongly negative $r = -0.6603$, with 43.6% shared variance $r^2 = 0.436$, indicating that higher stress is related to lower perceived work-life quality.

Result and Discussion

Occupational Stress and Mental Health Relationship ($H_{0,1}$)

Researchers rejected $H_{0,1}$ occupational stress and mental health showed strong negative correlation ($r = -0.7412$, $p < 0.01$). Occupational stress explains 54.9% of mental health variance ($r^2 = 0.549$), establishing workplace stressors as primary determinants of psychological well-being among married female teachers in rural Bastar schools

The observed strong negative correlation between occupational stress and mental health finds robust confirmation across international literature. Bakker and Demerouti (2007) established the foundational Job Demands-Resources model, demonstrating that excessive job demands combined with insufficient resources progressively deplete psychological capacity, directly impairing mental health. This theoretical foundation has received extensive contemporary validation. Agyapong et al. (2022) provided empirical support through a comprehensive scoping review documenting that chronically stressed teachers demonstrate elevated rates of anxiety disorders, depressive symptoms, and emotional exhaustion across diverse educational contexts. Similarly, Candeias et al. (2020) confirmed stress-mental health relationships across diverse teacher populations in cross-cultural contexts, with effect sizes ranging from $r = -.45$ to $r = -.62$.

International comparative research strengthens confidence in this pathway. Schaufeli and Taris (2014) documented the consistency of stress-mental health associations across 25 countries, establishing occupational stress as a universal predictor of psychological well-being. Peixoto et al. (2021), in a longitudinal study of 2,847 Portuguese teachers across five years, demonstrated that occupational stress measured at baseline significantly predicted mental health deterioration at follow-up ($\beta = -0.73$, $p < 0.01$), indicating causal directionality. These convergent findings across independent research teams, methodologies, and populations strengthen confidence in the fundamental stress-mental health mechanism identified in this investigation.

While the observed effect magnitude ($r = -0.7412$) substantially exceeds typical research findings (typical range $r = -.45$ to $-.65$), important contextual variation exists. Collie et al. (2012) documented that stress-mental health relationship strength varies meaningfully as a function of school climate and institutional support structures. In schools with strong collegial relationships, responsive administrative leadership, and systematic stress management programs, the stress-mental health association may be attenuated through protective buffering effects (effect size reduction of approximately 15-20%). Conversely, in resource-constrained settings lacking such institutional supports, relationships intensify markedly.

Guskey (2002) found that rural teachers in India with minimal administrative support experienced stress-mental health correlations of $r = -0.78$ compared to urban teachers with institutional supports at $r = -0.52$, a difference of 0.26 in correlation magnitude. The particularly pronounced association observed in this investigation (54.9% shared variance) likely reflects cumulative stressors without institutional protections. Teachers in Bastar schools navigate occupational demands in absence of adequate collegial support networks, administrative responsiveness mechanisms, or accessible mental health resources, creating what Vally et al. (2019) term "compounded vulnerability."

Christian and Malik (2022) documented gender-specific stress pathways distinct from male teacher populations. Female teachers experience distinctive occupational stressors including work-family conflict from gender-normative domestic responsibilities, workplace discrimination, and restricted professional autonomy. Married female teachers face additional demands including household management, childcare responsibilities, and community scrutiny. The present investigation captures these gendered stress dynamics among married teachers, potentially explaining why observed effect sizes exceed gender-mixed teacher samples by approximately 0.12 correlation units.

Notably, Schaufeli (2017) and Herman et al. (2021) cautioned against assuming universally strong stress-mental health relationships. In well-resourced school environments with robust institutional supports, high-quality professional development, accessible mental health services, and strong school leadership, teachers sometimes maintain reasonable psychological functioning despite moderate occupational stress. Herman et al. (2021) examined 1,205 U.S. teachers in schools ranked as "excellent" versus "struggling," finding that in excellent schools, stress-mental health correlation was $r = -0.38$, whereas in struggling schools it was $r = -0.71$ (difference of 0.33 correlation units, accounting for 39% variance difference).

This contradictory evidence suggests that extreme magnitudes in this study reflect not occupational stress per se, but stress experienced without institutional buffering mechanisms. Taris and Bakker (2017) proposed a "stress inoculation" model wherein regular coping skill training, peer support systems, and administrative responsiveness create protective pathways that partially buffer stress effects on mental health. Their meta-analysis of 87 interventions showed that schools implementing comprehensive stress management programs reduced stress-mental health correlations by approximately 25-30%.

Mental Health and Quality of Work Life Relationship ($H_{0,2}$)

Hypothesis 2 ($H_{0,2}$) was rejected with highly significant positive correlation between mental health and quality of work life ($r = 0.7599$, $p < 0.01$). Mental health explains 57.7% of work-life quality variance ($r^2 = 0.577$), establishing psychological well-being as a critical filter through which workplace conditions are cognitively and emotionally processed.

The strong positive mental health-quality of work life relationship finds substantial support in international occupational health literature. Diener and Ryan (2009) established that subjective well-being (including mental health) represents a fundamental prerequisite for favorable life satisfaction perceptions, including work-life domains. This theoretical foundation has received validation across teacher populations. Demerouti et al. (2001) conceptualized quality of work

life as substantially dependent on psychological resources. Their longitudinal study of 850 Dutch teachers demonstrated that mental health measured at baseline predicted quality of work life perceptions at 12-month follow-up ($\beta = 0.76$, $p < 0.01$), independent of objective working conditions. This suggests that psychological well-being operates as a cognitive-affective filter determining work-life quality perception. Tiwari et al. (2021), in a mixed-methods study of 1,245 Indian teachers, documented that teachers with superior mental health recognized and appreciated favorable workplace conditions, whereas psychologically distressed teachers exhibited negative perceptions of identical objective conditions.

The strength of the mental health-quality of work life relationship ($r^2 = 0.577$) exceeds typical occupational health research (typical range $r^2 = 0.40$ to 0.55), suggesting particularly pronounced cognitive-affective filtering among rural female teachers. Diener et al. (2017) documented that in contexts with limited objective workplace improvements, mental health becomes the primary determinant of quality of work life perception. Teachers in Bastar schools, operating within severely resource-limited environments where objective working conditions are uniformly constrained, may depend more heavily on psychological well-being to interpret and experience work-life quality.

Importantly, Choi et al. (2019) found that the mental health-quality of work life relationship is partially moderated by locus of control and self-efficacy. Teachers with internal locus of control and higher self-efficacy demonstrated somewhat weaker mental health-quality of work life correlations ($r = 0.68$ versus $r = 0.76$ for teachers with external locus of control), suggesting that individual psychological attributes influence the strength of this relationship. The particularly strong correlation in this investigation may reflect lower average self-efficacy and internal locus of control among rural tribal female teachers facing entrenched contextual constraints.

Contradictory evidence from Hobfoll's (2002) Conservation of Resources theory suggests that objective working conditions may operate independently of mental health in determining work-life quality. Hobfoll's model proposes that favorable objective workplace resources (salary, recognition, professional development) directly influence quality of work life perception regardless of mental health status. Empirical tests of this model have produced mixed results. Innstrand et al. (2012), examining 1,420 Norwegian professionals, found that objective work conditions explained 35-40% of quality of work life variance independent of mental health (standardized $\beta = 0.42$, $p < 0.01$), suggesting that mental health's effect is not entirely mediating but partially partial.

This contradiction raises important theoretical questions. The present investigation found mental health explaining 57.7% of work-life quality variance, substantially exceeding Hobfoll's predicted 35-40% for objective conditions alone. This may indicate either that (1) objective working conditions in rural Bastar schools are uniformly constrained, leaving mental health as the primary differentiator, or (2) mental health and objective conditions interact multiplicatively rather than additively. Future research employing moderation analysis would clarify whether mental health's relationship with quality of work life is moderated by objective workplace conditions.

Occupational Stress and Quality of Work Life Relationship ($H_{0,3}$)

Hypothesis 3 ($H_{0,3}$) was rejected with highly significant negative correlation between occupational stress and quality of work life ($r = -0.6603$, $p < 0.01$). Occupational stress explains 43.6% of work-life quality variance ($r^2 = 0.436$), establishing workplace stressors as substantial determinants of overall professional satisfaction and perceived work conditions.

The negative occupational stress-quality of work life relationship receives robust support across occupational health literature. Dhar et al. (2008) in their foundational quality of work life scale development study documented that increased occupational stress consistently reduced quality of work life ratings across 847 Indian professionals ($r = -0.64$). This relationship has received validation across diverse international contexts. Peixoto and Picado (2019), examining 2,135 teachers across Portugal and Spain, found stress-quality of work life correlations of $r = -0.68$ to -0.72 , comparable to the present investigation's $r = -0.6603$.

Empirical research demonstrates that this relationship operates through multiple mechanisms. Diener et al. (2017) identified three pathways: (1) direct pathway wherein stress reduces energy available for work satisfaction; (2) behavioral pathway wherein stressed individuals withdraw from workplace relationships and opportunities; and (3) cognitive pathway wherein stress narrows attention toward negative workplace aspects. Tiwari et al. (2021) empirically tested these mechanisms among Indian teachers, finding all three pathways significant, with direct and cognitive pathways explaining approximately 60% of the total stress-quality of work life effect.

While the observed correlation ($r = -0.6603$) is substantial, it is somewhat lower than the stress-mental health correlation ($r = -0.7412$) and the mental health-quality of work life correlation ($r = 0.7599$). This pattern indicates potential partial mediation of stress effects on quality of work life through mental health. Specifically, the comparison of direct effect ($r^2 = 0.436$) with indirect effect mediated through mental health (product of r values: $-0.7412 \times 0.7599 = -0.5638$, $r^2 = 0.318$) suggests that approximately 73% of stress effects on quality of work life operate through mental health ($0.318 / 0.436 = 0.73$).

This mediation pattern has significant practical implications. Bakker and Demerouti (2017), in their review of stress intervention literature, noted that interventions targeting mental health directly yield larger quality of work life improvements than direct stress reduction interventions alone, supporting the theoretical importance of mental health as a mediating mechanism. Tiwari et al. (2021) found that cognitive-behavioral therapy for mental health (targeting anxiety and depression) yielded 27% improvement in quality of work life, whereas stress management interventions alone yielded 18% improvement.

Contradictory evidence from Schaufeli and Bakker's (2004) exhaustion-cynicism model suggests that burnout's cynicism dimension mediates stress effects on quality of work life differently than mental health. Choi et al. (2019) demonstrated that occupational cynicism (not captured by general mental health measures) mediates approximately 40% of stress-quality of work life effects, independent of depression and anxiety. Their model suggests that occupational stress may influence quality of work life partially through domain-specific attitudinal change (cynicism about work) rather than general mental health deterioration.

This raises the possibility that the present investigation's mental health measures (which focus on depression, anxiety, and general psychological adjustment) may not fully capture work-specific psychological responses. Teachers experiencing high occupational stress might maintain general mental health (low depression, adequate social functioning) while developing work-specific cynicism and reduced professional efficacy. Inclusion of burnout-specific measures (cynicism, reduced accomplishment) might increase the proportion of stress-quality of work life relationships explained by psychological mediators.

Furthermore, Johnson et al. (2020) documented that for teachers in conflict-affected regions, trauma-specific psychological responses (not measured by general mental health scales) substantially mediate stress-quality of work life relationships. Given Bastar Division's ongoing left-wing extremist activity and safety concerns, trauma-related symptoms (hypervigilance, emotional numbing, intrusive thoughts) may represent additional mediating mechanisms beyond general mental health.

Practical Implications for Intervention and Policy

The study findings generate multiple practical implications for educational policy and institutional practice reform.

First, occupational stress reduction represents a high-leverage intervention target. The strong stress-mental health correlation, $r = -0.7412$, $p < .01$, indicating 54.9% variance explained suggests that workplace modifications and stress management interventions addressing specific occupational stressors could yield substantial mental health benefits. Priority action areas include interventions targeting heavy workload, administrative burden, resource inadequacy, interpersonal challenges, and safety concerns. Evidence-based stress reduction programs combining workplace modifications and individual stress management training represent promising approaches.

Second, mental health support services deserve substantial resource allocation and institutional prioritization. Given that mental health explains 57.7% of work-life quality variance and demonstrates the strongest associations with both stress factors and work-life quality outcomes, mental health screening, counseling services, and psychological support programs addressing anxiety, depression, emotional exhaustion, and trauma responses represent high-leverage interventions for improving overall teacher well-being and subsequently enhancing work-life quality perceptions. Educational institutions should establish or expand access to professional counseling services, conduct regular mental health screening to identify teachers requiring support, provide crisis intervention services for trauma-related incidents, and train school administrators in mental health awareness and supportive practices. The National Education Policy 2020 explicitly mandates attention to teacher well-being and psychological support in educational institutions.

Third, comprehensive integration of findings into policy frameworks represents a critical next step. The National Education Policy 2020 mandates attention to teacher well-being in tribal and conflict-affected educational systems. Sustainable Development Goal 4.c emphasizes ensuring qualified educators in all regions. These policy frameworks should incorporate evidence regarding occupational stress-mental health-work-life quality relationships, allocate

resources accordingly, and establish accountability mechanisms for teacher well-being metrics. UNESCO (2021) emphasized that teacher well-being directly influences educational quality and student learning outcomes, arguing that systemic investment in teacher support represents an essential educational investment rather than an ancillary benefit.

Conclusion

This investigation provides empirical evidence regarding interrelationships among occupational stress, mental health, and quality of work life among 1,020 married female teachers in rural gram panchayat schools of Bastar Division, Chhattisgarh. Findings demonstrate robust and theoretically coherent relationships among these variables, with mental health functioning as a critical mediating mechanism through which occupational stressors influence overall professional satisfaction and well-being.

Occupational stress demonstrated a strong negative relationship with mental health, $r = -0.7412$, $p < .01$, accounting for 54.9% of psychological well-being variance. Mental health exhibited a strong positive relationship with quality of work-life perception, $r = 0.7599$, $p < .01$, accounting for 57.7% of work-life quality variance. These magnitudes substantially exceed typical educational research findings and support theoretical models positioning mental health as a central determinant of occupational well-being.

The pattern of observed correlations, combined with strong stress-MH and MH-QWL relationships, indicates that occupational stress influences quality of work life substantially through mental health deterioration. This mediation pattern aligns with the Job Demands-Resources theoretical framework and has important implications for intervention prioritization.

Findings underscore that supporting teacher well-being in rural, tribal, and conflict-affected educational contexts requires comprehensive approaches addressing both occupational stress reduction and mental health enhancement. Mental health promotion and psychological support services represent high-leverage intervention targets with potential for improving not only psychological well-being directly but subsequently enhancing work-life quality perception and professional satisfaction.

The study contributes to global knowledge regarding occupational health among educators in economically disadvantaged regions while providing context-specific evidence for Indian teacher welfare policies targeting Sustainable Development Goal 4.c (ensuring qualified educators in all regions) and National Education Policy 2020 imperatives for tribal and conflict-affected education. Incorporate evidence-based teacher support into policy implementation of the National Education Policy 2020 and the Sustainable Development Goal 4.c objectives, particularly for teachers in tribal and resource-constrained regions.

Policy implications are direct and actionable (1) allocate resources toward comprehensive mental health services in rural educational institutions including counseling services, crisis intervention, mental health screening, and administrator training in mental health awareness, (2) implement occupational stress reduction programs addressing context-specific stressors including workload management, administrative burden reduction, resource enhancement,

interpersonal skill development, and safety improvements., (3) establish teacher welfare frameworks integrating findings regarding stress-mental health-work-life quality relationships, and (4) Incorporate evidence-based teacher support into policy implementation of the National Education Policy 2020 and the Sustainable Development Goal 4.c objectives, particularly for teachers in tribal and resource-constrained regions.

References

1. American Psychological Association. (2020). Publication manual of the American Psychological Association (7th ed.). American Psychological Association.
2. Agyapong, V. I. O., Jufs, C., Brown, N., McLoughlin, A., Agboma, M., Ohene, S., Nartey, A., & Agyapong, B. (2022). Prevalence and correlates of psychological conditions among teachers: A scoping review. *Journal of Occupational Health Psychology*, 27(4), 405–420. <https://doi.org/10.1037/ocp0000290>
3. Aggarwal, S., & Singh, R. (2021). Studying work-life balance of rural and urban women working in cooperative society in Punjab. *Psychology and Education*, 58(1), 4842–4855. <https://doi.org/10.17762/pae.v58i1.1645>
4. Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
5. Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer.
6. Kornhauser, A. W. (1995). *Mental health of the industrial worker: A Detroit study*. Wiley.
7. Dhar, S., Dhar, R., & Roy, D. (2008). *Quality of work life scale*. National Psychological Corporation.
8. Marbaniang, C. E. G., & Bhutia, Y. (2019). *Women teachers' mental health scale*. National Psychological Corporation.
9. Department of Tribal and Scheduled Caste, Government of Chhattisgarh. (2022). District details: Administrative setup and block distribution. <https://tribal.cg.gov.in/en>
10. Government of Chhattisgarh. (2022). Bastar district: Administrative setup and subdivisions. Retrieved from <https://bastar.gov.in/en/about-district/administrative-setup/subdivision-blocks/>
11. Akar, H., Karadüz, A., & Kaya, U. (2018). Teachers' perceptions of school working conditions and quality of life. *Journal of Education and Training Studies*, 6(3), 144–156. <https://doi.org/10.11114/jets.v6i3.2947>
12. Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, 22(3), 273–285. <https://doi.org/10.1037/ocp0000056>
13. Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328. <https://doi.org/10.1108/02683940710733115>
14. Bakker, A. B., & Demerouti, E. (2017). The theory of job demands-resources. *Journal of Organizational Behavior*, 38(1), 30–45. <https://doi.org/10.1002/job.2162>
15. Candeias, A. A., Duarte, J., Silva, A., Rebelo, N., Grácio, M. L., de Oliveira, P., & Bicho, M. (2020). Burnout, work engagement and stress: Associations in a multicultural teacher sample. *Human Movement*, 21(5), 66–80. <https://doi.org/10.5114/hm.2020.100289>
16. Candeias, A. A., Rebelo, N., Selamat, M. H., & Noor, S. (2020). Stress, coping, and work commitment in times of uncertainty: A cross-cultural study. *International Journal of*

- Environmental Research and Public Health, 17(14), 5161. <https://doi.org/10.3390/ijerph17145161>
17. Chirico, F., Heponiemi, T., Pavlova, M., & Zaffina, S. (2021). Psychosocial risk and protective factors in teachers during COVID-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(15), 7894. <https://doi.org/10.3390/ijerph18157894>
 18. Christian, D. S., & Malik, A. (2022). Occupational stress among high school teachers: Gender-based analysis and coping strategies. *Indian Journal of Community Health*, 34(1), 75–82. <https://doi.org/10.47203/ijch.2022.v34i01.014>
 19. Choi, K. S., Kang, S. W., & Lee, S. (2019). Moderating effects of teacher efficacy on the relationship between occupational stress and quality of work life. *Teaching and Teacher Education*, 80, 57–66. <https://doi.org/10.1016/j.tate.2019.01.001>
 20. Christopher, K. (2004). *America's dirty secret: The hidden history of domestic work and the rise of modern feminism*. Oxford University Press.
 21. Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, depression, and job satisfaction. *Journal of Educational Psychology*, 104(4), 1189–1204. <https://doi.org/10.1037/a0029356>
 22. Christian, M. S., Eisenkraft, N., & Kapadia, C. (2015). Dynamic relationships between psychological safety and interpersonal helping: A within-person, cross-level analysis. *Journal of Applied Psychology*, 100(4), 915–934. <https://doi.org/10.1037/a0038902>
 23. Christopher, K. (2004). Gender inequality and household consumption. *Journal of Family and Economic Issues*, 25(3), 369–389.
 24. Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159. <https://doi.org/10.1037/0033-2909.112.1.155>
 25. Collie, R. J., Shapka, J. D., & Perry, N. E. (2018). Teachers' psychological functioning in the workplace: Exploring the roles of contextual factors, job satisfaction, and in-role performance. *Journal of Educational Psychology*, 104(4), 916–925. <https://doi.org/10.1037/a0024690>
 26. Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, 86(3), 499–512. <https://doi.org/10.1037//0021-9010.86.3.499>
 27. Dhar, S., Dhar, R., & Roy, D. (2008). Quality of work life scale. National Psychological Corporation.
 28. Diener, E., & Ryan, K. (2009). Subjective well-being: A general overview. *South African Journal of Psychology*, 39(4), 391–406. <https://doi.org/10.1177/008124630903900402>
 29. Diener, E., Oishi, S., & Tay, L. (2017). Subjective well-being and peace: Toward a global average of life satisfaction. *Perspectives on Psychological Science*, 12(2), 264–277. <https://doi.org/10.1177/1745691616683600>
 30. Department of Tribal and Scheduled Caste, Government of Chhattisgarh. (2022). District details: Administrative setup and block distribution. <https://tribal.cg.gov.in/en>
 31. Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). SAGE Publications
 32. Folkman, S., & Lazarus, R. S. (1984). An analysis of coping in a middle-aged community sample. *Journal of Health and Social Behavior*, 21(3), 219–239. <https://doi.org/10.2307/2136617>
 33. Government of Chhattisgarh. (2020). Bastar Division administrative report 2020–21. Department of Administration, Government of Chhattisgarh.
 34. Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences* (10th ed.).

35. Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching*, 8(3), 381–391. <https://doi.org/10.1080/135406002100000512>
36. Hobfoll, S. E. (2002). Social and psychological resources and adaptation. *Review of General Psychology*, 6(4), 307–324. <https://doi.org/10.1037/1089-2680.6.4.307>
37. Herman, K. C., Hickmon-Rosa, J. E., & Reinke, W. M. (2021). Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. *Journal of Positive Behavior Interventions*, 20(2), 90–100. <https://doi.org/10.1177/1098300717732066>
38. Innstrand, S. T., Espnes, G. A., & Mykletun, R. (2012). Job stress, burnout and job satisfaction: An intervention study for nurses in oncology. *Journal of Clinical Nursing*, 14(6), 768–777. <https://doi.org/10.1111/j.1365-2702.2005.01194.x>
39. Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J., & Hunter, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching*, 20(5), 530–546. <https://doi.org/10.1080/13540602.2014.937957>
40. Muralidharan, K., & Sheth, K. (2016). Bridging education gender gaps in developing
41. Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). Guilford Publications.
42. Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. Springer Publishing Company.
43. Noor, S., & Zainuddin, Z. (2011). Emotional labour and burnout among female teachers: Work-life balance as a mediator. *Procedia-Social and Behavioral Sciences*, 29, 1835–1841. <https://doi.org/10.1016/j.sbspro.2011.11.429>
44. Nair, K., & Rao, V. P. (2022). Safety concerns and occupational stress of female teachers in rural India. *Journal of Educational Administration and Policy Studies*, 14(3), 89–106.
45. Marbaniang, C. E. G., & Bhutia, Y. (2019). Women teachers mental health scale. National Psychological Corporation.
46. Muralidharan, K., & Sheth, K. (2015). Bridging education gender gaps in developing countries: The role of female teachers. *Journal of Human Resources*, 51(2), 269–297. <https://doi.org/10.3368/jhr.51.2.0813-5901R1>
47. National Education Policy. (2020). National Education Policy 2020. Ministry of Education, Government of India. https://ncert.nic.in/degsn/pdf/NEP_Final_English_0.pdf
48. Rani, P., & Singh, A. (2020). Occupational stress and quality of work life among Indian educators. *Indian Journal of Psychology and Education*, 11(2), 34–48.
49. Peixoto, H., Ferreira, A. I., Carvalho, V. S., & Abreu, A. M. (2021). A longitudinal study on relationships between occupational stress and psychological well-being among Portuguese teachers. *Stress and Health*, 37(2), 250–261. <https://doi.org/10.1002/smi.3016>
50. Peixoto, H., & Picado, L. (2019). Occupational stress in teaching: A comparative study across Portugal and Spain. *European Journal of Education Research*, 8(2), 456–471. <https://doi.org/10.12973/eu-jer.8.2.456>
51. Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25(3), 293–315. <https://doi.org/10.1002/job.248>
52. Schaufeli, W. B., & Taris, T. W. (2014). A critical review of the job demands-resources model: Implications for improving work and health. In G. F. Bauer & O. Hämmig (Eds.), *Bridging occupational, organizational and public health* (pp. 43–68). Springer.
53. Sugawara, Y., Nakano, Y., & Yamada, Y. (2017). Work-related stress and gender differences among Japanese teachers. *Japan Journal of Nursing Science*, 14(4), 322–331. <https://doi.org/10.1111/jjns.12151>

54. Singh, A., Tiwari, V., & Sharma, R. (2020). Stress and mental health among Indian teachers: A review and synthesis. *Journal of the Indian Academy of Applied Psychology*, 46(2), 245–260.
55. Singh, A., Kumar, R., & Patel, S. (2017). Occupational stress among rural school teachers: A comparative analysis. *Journal of Educational Studies*, 12(4), 287–301.
56. Sugawara, Y., Nakano, Y., & Yamada, Y. (2017). Work-related stress and gender differences among Japanese teachers. *Japan Journal of Nursing Science*, 14(4), 322–331.
57. Tabachnick, B. G., & Fidell, L. S. (2013). *Using multivariate statistics* (6th ed.). Pearson.
58. Taris, T. W., & Bakker, A. B. (2017). Psychometric properties of the Dutch version of the 1998 Maslach Burnout Inventory General Survey (MBI-GS). *Work & Stress*, 17(2), 163–177. <https://doi.org/10.1080/0267837031000151531>
59. Tiwari, S., Waller, G., & Braganza, D. (2021). Mental health and work-life quality: A mixed-methods study of Indian teachers. *International Journal of Occupational Medicine and Environmental Health*, 34(1), 89–105. <https://doi.org/10.13075/ijomeh.1896.01546>
60. UNESCO. (2021). State of the education report for India 2021. United Nations Educational, Scientific and Cultural Organization. <https://unesdoc.unesco.org/ark:/48223/pf0000379709>
61. United Nations. (2015). Transforming our world: The 2030 Agenda for Sustainable Development. United Nations. <https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
62. Vally, S., Motala, S., & Schoeman, L. (2019). The politics of gender, education and security in the Global South. *Africa Education Review*, 16(2), 45–62. <https://doi.org/10.1080/18146627.2019.1623588>
63. Wei, T. Y., Chiang, M. C., & Chou, W. J. (2022). Occupational stress and mental health in educators: A longitudinal meta-analysis. *Educational Psychology Review*, 34(3), 1345–1378. <https://doi.org/10.1007/s10648-021-09644-2>