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Research Article

Burnout, Assessment Stress, and Mental Health among Early-Career Teachers: The Role of Counselling Support

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Abstract

The study revisited the silent mental health crisis among early-career teachers in Ghana by examining how burnout and assessment-related stress predict mental health, with counselling support analyzed as both a mediating and moderating factor. Employing a cross-sectional correlational design grounded in the positivist paradigm, the study surveyed a nationally representative sample of 790 early-career teachers using validated psychometric instruments, including the General Health Questionnaire (GHQ-12). Multiple regression analysis revealed that emotional exhaustion ($\beta = 0.43$, $p < .001$), depersonalization ($\beta = 0.18$, $p = .002$), and role conflict ($\beta = 0.22$, $p < .001$) were significant predictors of psychological distress, while reduced personal accomplishment had a negative association ($\beta = -0.14$, $p = .003$). Assessment-related stressors such as test pressure ($\beta = 0.25$, $p < .001$), accountability load ($\beta = 0.28$, $p < .001$), and curriculum inflexibility ($\beta = 0.20$, $p < .001$) also significantly predicted poor mental health. Mediation analysis using PROCESS Model 4 confirmed that counselling support partially mediated the relationship between burnout components and mental health (indirect effect for emotional exhaustion: B = 0.15, 95% CI [0.10, 0.22]; Sobel z = 4.50, $p < .001$). Moderation analysis using PROCESS Model 1 further indicated that counselling significantly buffered the negative impact of assessment stress on mental health (interaction effect: $\beta = -0.23$, $p < .001$), with the strongest protection observed under high test pressure ($\beta = -0.21$, $p = .001$) and fear of evaluation ($\beta = -0.22$, $p < .001$). Multigroup SEM analyses revealed that the impact of burnout on mental health was stronger among female teachers ($\beta = 0.50$) than males ($\beta = 0.42$), and that counselling exerted a more protective effect for females ($\beta = -0.23$) compared to males ($\beta = -0.18$). Hierarchical Linear Modeling (HLM) showed that 11.2% of the variance in mental health outcomes was attributable to between-school differences (ICC = 0.112), and that the full model, which included both teacher- and school-level predictors, explained 45% of the variance in mental health (conditional $R^2 = 0.45$). The study highlighted the importance of addressing both individual and institutional risk factors and advocates for the inclusion of mental health benchmarks in school quality assurance frameworks to ensure a psychologically sustainable teaching profession in Ghana.

Keywords: *Burnout; Emotional Exhaustion; Assessment Stress; Mental Health; Early-Career Teachers; Counselling Support*

Introduction

The early years of a teacher's professional journey commonly referred to as the induction or formative phase are widely recognized as a critical transition period characterized by a complex interplay of optimism, professional enthusiasm, and heightened vulnerability [1,25,56]. Fresh from pre-service training, early-career teachers typically enter the workforce with a strong commitment to make a difference, bring innovation into the classroom, and shape the lives of learners [1,8,22,45]. However, this sense of purpose is often met with the stark realities of the school environment, including heavy workloads, insufficient resources, classroom management challenges, and

limited autonomy in decision-making [25,39,43,56]. Globally, early-career teachers typically within their first five years of service report some of the highest levels of occupational stress, emotional strain, and professional disillusionment in the education sector [34,44,45]. These pressures are not merely incidental but systemic. Early-career teachers are often assigned to under-resourced schools or difficult teaching environments where the demand for performance far exceeds the support provided. Many are tasked with navigating a rapidly evolving curriculum, increasingly diverse student populations, and the growing pressures of standardized testing all while trying to find their own teaching identity [1,3,9,13,17]. Despite being pivotal to the long-term sustainability, innovation, and quality of educational systems, this demographic continues to face a "silent crisis" marked by rising incidences of burnout, emotional exhaustion, and persistent stress, particularly in response to performance-based assessment demands, school inspections, and bureaucratic accountability systems that reduce teaching to quantifiable outputs [1,2,6].

Among these challenges, burnout has emerged as a predominant psychological threat to teacher retention and effectiveness. Burnout is defined as a psychological syndrome resulting from prolonged exposure to unmanaged occupational stress, often manifesting in emotional fatigue, reduced personal accomplishment, and depersonalization [1,17,18,32]. It is especially pronounced among novice teachers, who frequently report role ambiguity, lack of mentoring, and unrealistic expectations as contributing factors to their psychological decline. These teachers are expected to simultaneously deliver high academic results, adapt to institutional demands, and manage behavioral issues all while lacking the necessary emotional and institutional scaffolding to do so effectively [9,10,14]. Central to the burnout experience is emotional exhaustion, which represents the core component of the syndrome. It reflects a teacher's feeling of being emotionally overextended, fatigued by daily interactions with students, administrators, and the school system at large. Emotional exhaustion saps energy, motivation, and job satisfaction, leading many teachers to experience what psychologists describe as "compassion fatigue" or a detachment from their students and profession [38,43,58]. Empirical studies have consistently shown that emotional exhaustion is a strong and reliable predictor of a range of mental health outcomes, including depression, anxiety, psychosomatic complaints, and even intentions to leave the profession [1,37,39,42]. If left unaddressed, this psychological burden not only jeopardizes the well-being of teachers but also negatively impacts instructional quality, student outcomes, and the overall functioning of the educational system.

Furthermore, the intensification of assessment-related stress in contemporary educational systems has emerged as a significant and often underappreciated contributor to the psychological strain experienced by early-career teachers. This form of stress is rooted in systemic factors such as high-stakes testing regimes, continuous teacher evaluations, learner performance metrics, and institutional accountability frameworks, all of which exert immense pressure on teachers to produce quantifiable academic results [10,11,26]. For novice teachers who are still developing their pedagogical confidence and classroom management skills, such performance demands can feel disproportionately burdensome. The overemphasis on assessment outcomes often compels them to prioritize test preparation and curriculum coverage over creativity, inclusivity, and student-centered learning values they may have embraced during their training [4,5]. This dissonance between personal teaching ideals and institutional demands creates a cognitive-emotional mismatch, leading to feelings of inadequacy, anxiety, and professional dissatisfaction. Research by [41,56] highlights how the pressure to produce "data-driven results" leads many early-career teachers to engage in mechanical instructional practices, undermining their sense of agency and diminishing their professional fulfillment. Over time, such environments foster a culture of fear and hyper-vigilance, where teachers feel constantly evaluated, seldom supported, and rarely trusted to exercise professional judgment [1,2,6,28]. In school contexts where institutional support structures such as mentoring, supervision, and mental health resources are either weak, fragmented, or inconsistently applied, these stressors can compound and escalate into serious mental health challenges, including chronic anxiety, emotional fatigue, depression, and burnout. Within this high-pressure psychosocial landscape, the role of counselling support has gained increasing attention as both a preventive buffer and a restorative intervention mechanism for teachers' mental health.

Counselling support, when made accessible and destigmatized, can serve two pivotal functions: mediation and moderation [30,32,42]. As a mediator, counselling explains the process or pathway through which occupational stressors such as burnout or assessment overload translate into psychological distress. For instance, therapeutic sessions may enable teachers to reframe their appraisal of stressors, develop

emotional resilience, and acquire problem-solving strategies that reduce the likelihood of mental health deterioration [5,34,36,55]. Conversely, as a moderator, counselling support can alter the intensity or direction of the relationship between stress-inducing variables and negative outcomes. In other words, the presence of effective counselling may weaken the harmful effects of stressors by offering teachers protective psychosocial resources, such as social validation, emotional ventilation, and crisis management tools [1,23,27]. Teachers who have regular access to professional counselling often report increased emotional regulation, higher job satisfaction, and lower rates of absenteeism and turnover [26,33]. However, despite its documented benefits, counselling support is often underutilized in educational settings due to stigma, lack of awareness, resource constraints, or institutional apathy, particularly in low-resource and rural contexts [1,12,16]. In light of these dynamics, this study positions counselling support not as an ancillary service but as a critical component of teacher well-being frameworks, capable of both mitigating risk and enhancing resilience. Exploring its dual role as both a mediator and moderator in the relationship between assessment-related stressors and mental health outcomes offers a more nuanced and actionable understanding of how early-career teachers can be supported through the emotional demands of modern schooling.

Teaching, while deeply rewarding, is also one of the most emotionally demanding professions particularly during the formative years of a teacher's career. Early-career teachers, typically within their first five years of service, are increasingly vulnerable to a range of psychological stressors, including burnout, emotional exhaustion, and assessment-related anxiety. These stressors are often intensified by high-stakes testing, performance accountability measures, and insufficient institutional support, which together create a high-pressure environment that undermines teacher well-being and professional longevity. Despite growing international concern, the issue remains a "silent crisis," with many affected teachers either suffering in isolation or exiting the profession prematurely [15,33,56]. While existing literature has established the high prevalence of stress and burnout among early-career teachers, several critical gaps remain. First, much of the research has treated burnout, emotional exhaustion, and assessment-related stress as isolated constructs, rather than exploring their interactive effects on teachers' mental health. Second, although counselling support is widely acknowledged as a beneficial resource for improving psychological resilience, its role has predominantly been studied in therapeutic or clinical populations, not within the specific context of early-career teachers facing occupational stress [46,47]. Moreover, few studies have empirically examined counselling support as both a mediating and moderating variable, especially in relation to specific stressors such as assessment demands and emotional fatigue in teaching. In addition, most empirical investigations have been conducted in high-income countries, where teacher support structures and mental health resources are relatively accessible. There is a significant research gap in low- and middle-income countries (LMICs), where early-career teachers often operate in under-resourced environments with minimal psychological support services, limited training in stress management, and culturally rooted stigma surrounding mental health. As a result, the unique challenges faced by early-career teachers in such settings remain underexplored and poorly understood.

Hypotheses

- **H_1:** Burnout will significantly and positively predict mental health challenges among early-career teachers.
- **H_2:** Assessment-related stress will significantly and positively predict mental health challenges among early-career teachers.
- **H_3:** Counselling support will significantly mediate the relationship between burnout and mental health challenges.
- **H_4:** Counselling support will significantly moderate the relationship between assessment-related stress and mental health challenges.

Methods

Research design

The study adopted a cross-sectional correlational research design to examine the interrelationships among burnout, emotional exhaustion, assessment-related stress, and mental health challenges among early-career teachers in Ghana. Additionally, the study assessed the mediating and moderating roles of counselling support in these relationships. This design was strategically chosen to enable the identification of statistical associations and predictive relationships among naturally occurring psychological variables, rather

than implying causality through experimental manipulation. As noted by [19], the correlational design is particularly appropriate when the objective is to explore the extent to which variables are related under real-world conditions. The cross-sectional component of the design enabled data to be collected at a single point in time, offering a practical and efficient means of capturing a snapshot of teachers' psychosocial and occupational experiences across a diverse national sample. This temporal structure was well-suited to the constraints of large-scale fieldwork and was especially beneficial for accessing a geographically dispersed population through online platforms. This research design was grounded in the positivist research paradigm, which emphasizes the application of scientific and empirical methods to understand human behavior. Within this framework, knowledge is considered objective and measurable, and research is guided by hypothesis testing, generalizability, and statistical precision [13]. The use of validated psychometric instruments and structured data collection procedures contributed to the reliability, validity, and replicability of the study findings, consistent with positivist standards. Moreover, the correlational approach allowed the study to employ advanced statistical techniques, including multiple regression analysis, mediation, and moderation modeling, to explore both direct and conditional effects among variables.

Population and sample

The target population comprised early-career teachers, defined as those within their first five years of formal teaching experience, employed in public and private basic and secondary schools across Ghana. This group was selected due to their increased vulnerability to occupational stress, workload intensification, and professional burnout during their initial years of service [29]. The study aimed to capture a nationally representative sample that reflects regional, institutional, and demographic diversity across the country's educational landscape. A multistage sampling strategy was adopted. First, the country was stratified into its major administrative zones (Northern, Middle, and Coastal belts). Second, within each zone, school districts were randomly selected. Finally, using professional networks and collaboration with district education offices, invitations were sent to eligible early-career teachers across selected schools. Participation was voluntary and anonymous, and efforts were made to include teachers from both urban and peri-urban settings, as well as a balance of genders, subject specializations, and school types (public vs. private). To ensure wide reach and accessibility, data were collected using an online survey developed via Google Forms. The survey link was distributed through official teacher WhatsApp groups, email listservs, professional teacher unions, and educational social media platforms. Clear instructions and a digital informed consent form were included on the landing page. The online format allowed the researchers to gather responses efficiently and inclusively, even from remote or underserved areas, provided internet access was available. Using [12] formula for large populations and adjusting for possible attrition, the final sample size was set to ensure high statistical power. A total of 790 early-career teachers successfully completed the survey. This robust sample size exceeded minimum thresholds required for multivariate statistical analyses, including multiple regression, mediation, moderation, and interaction effects [24], thereby enhancing the precision and generalizability of the findings across Ghanaian educational contexts.

Instrumentation

Data were collected using a structured, self-administered online questionnaire composed of five standardized and contextually adapted subscales, all aimed at capturing the core constructs of the study: burnout, emotional exhaustion, assessment-related stress, mental health challenges, and counselling support. The instrument was developed in English the language of instruction and professional communication in Ghana and was pre-tested for clarity and cultural relevance among a pilot group of early-career teachers prior to full deployment. Burnout and emotional exhaustion were measured using the Maslach Burnout Inventory Educators Survey (MBI-ES) [35]. This scale has been extensively validated in teacher populations globally and consists of three subscales: emotional exhaustion, depersonalization, and personal accomplishment. For the purposes of this study, the emotional exhaustion subscale which captures feelings of being emotionally drained and fatigued due to work was emphasized as it is widely recognized as the core dimension of burnout [34]. The emotional exhaustion subscale consists of nine items (e.g., "I feel emotionally drained from my work") and demonstrated high internal consistency in this study (Cronbach's $\alpha = 0.87$). Assessment-related stress was assessed using items adapted from the Teacher Stress Inventory (TSI) developed by [18]. Items were specifically selected and modified to reflect stressors linked to performance-based assessments, high-

stakes testing, student achievement metrics, and institutional evaluation pressures stressors known to disproportionately affect early-career teachers. The final adapted subscale comprised eight items (e.g. "I feel stressed by the pressure to produce high test scores"), and yielded a Cronbach's alpha of 0.84, indicating good internal reliability.

To measure mental health challenges, the study employed the General Health Questionnaire-12 (GHQ-12), a widely used screening tool for detecting general psychological distress and short-term changes in mental health functioning among occupational groups [23]. The GHQ-12 includes items such as "Have you recently been able to concentrate on what you're doing?" and "Have you recently felt constantly under strain?" Responses were scored on a 4-point Likert-type scale and then dichotomized following standard GHQ scoring guidelines (0-0-1-1) for mental health risk identification. The internal reliability of the GHQ-12 in the current sample was strong ($\alpha = 0.89$). Counselling support was operationalized as a multidimensional construct that captured both the perceived availability, accessibility, and frequency of use of school-based counselling services. Items were adapted from the Counselling Support Scale for Teachers (CSST), developed by [54], and contextualized to reflect the Ghanaian school environment. Sample items included "My school provides easy access to counselling services" and "I regularly make use of professional counselling when I feel emotionally overwhelmed." This subscale consisted of seven items and demonstrated acceptable internal consistency ($\alpha = 0.78$). All scale items across constructs were rated on a 5-point Likert scale, ranging from 1 = Strongly Disagree to 5 = Strongly Agree, except for the GHQ-12 which followed its own established format. Composite scores were computed for each construct by averaging the items, with higher scores indicating higher levels of burnout, assessment stress, mental health concerns, or counselling support, as appropriate. Confirmatory factor analysis (CFA) was later performed to assess construct validity and to confirm the multidimensional structure of the instrument.

Data collection procedure

Following the approval of the research protocol by the Institutional Review Board (IRB) of my University, data collection was conducted over a six-week period using an entirely online survey. Given the national scope of the study and the aim to ensure inclusive participation across Ghana's diverse regions, an online questionnaire was developed using Google Forms and disseminated via digital platforms frequented by teachers. The survey link, along with an invitation letter and informed consent form, was distributed through professional teacher associations, district education directorates, WhatsApp groups, Telegram channels, and educational social media platforms. Respondents were informed of the voluntary nature of the study, the anonymity of their responses, and their right to withdraw at any point without any consequence. To enhance participation across regions with varying levels of internet access, the research team collaborated with regional Ghana Education Service (GES) officials, teachers and school administrators to encourage and facilitate digital access where possible. The online format ensured broader geographic reach and logistical efficiency while maintaining data quality and ethical standards. Respondents typically required 15 - 20 minutes to complete the questionnaire, and automatic data encryption ensured confidentiality and secure data storage. A total of 790 valid responses were received, screened, and included in the final analysis.

Data analysis techniques

The collected data were first downloaded from Google Forms and imported into IBM SPSS Statistics version 27 for initial data cleaning, screening, and descriptive statistical analysis. Data cleaning involved checking for missing values, outliers, response patterns, and inconsistencies. Cases with substantial missing data (more than 10% of the questionnaire unanswered) were excluded from the analysis. Missing values in otherwise usable cases were handled using expectation-maximization (EM) imputation, which is appropriate for datasets with minimal missingness under the assumption of data missing at random [53]. Descriptive statistics such as means, standard deviations, skewness, and kurtosis were computed to explore the distributional properties of each variable. Internal consistency reliability was assessed for all subscales using Cronbach's alpha coefficients, with values above 0.70 considered acceptable for psychological constructs [42]. Following this, data were assessed for normality, linearity, and homoscedasticity using histograms, scatterplots of standardized residuals. After preliminary analysis, the cleaned dataset was exported to AMOS (version 24) and PROCESS Macro (version 4.0) for inferential analysis. The study tested four key hypotheses through a combination of multiple regression analysis, mediation analysis, and moderation analysis.

To test H_1 and H_2, which proposed that burnout and assessment-related stress would significantly predict mental health challenges, multiple linear regression was employed. Mental health challenges (as measured by GHQ-12) served as the dependent variable, while burnout and assessment-related stress were entered as independent variables. Control variables such as age, gender, school type (public/private), and teaching level (basic/secondary) were included in the model to isolate the unique contribution of the predictors. To evaluate H_3, the mediating role of counselling support in the relationship between burnout and mental health challenges, the study used PROCESS Model 4 [26]. Mediation was confirmed when the indirect effect (a × b path) was statistically significant, based on bootstrapped 95% confidence intervals derived from 5,000 samples. Significance was indicated when the confidence interval did not contain zero. The total effect (c path) and direct effect (c' path) were also reported to provide a complete understanding of the mediation model. For H_4, which tested whether counselling support moderated the relationship between assessment-related stress and mental health outcomes, the study used PROCESS Model 1. An interaction term (assessment-related stress × counselling support) was created and entered into the model to test moderation. A statistically significant interaction term indicated the presence of moderation. To interpret the nature of the interaction, simple slopes analysis was conducted, and interaction effects were graphically plotted at ±1 standard deviation from the mean of the moderator (counselling support), following the recommendations of [3]. To assess multicollinearity, Variance Inflation Factor (VIF) values were examined, with thresholds below 5 indicating acceptable levels. Additional diagnostics such as Durbin-Watson statistics and Cook's Distance were used to assess independence of errors and influence of individual cases. Model assumptions including normality, linearity, independence, and homoscedasticity of residuals were verified through visual inspection and statistical tests. Effect sizes, R-squared values, and standardized regression coefficients (β) were reported to assess the strength and practical significance of associations. All hypothesis tests were conducted at the 0.05 significance level (α = .05). This multi-level analytical approach provided robust evidence for the proposed direct, indirect, and interaction effects, aligning with best practices in psychological and educational research [17,26].

Results

Predictor	B (Unstd.)	SE	β (Std.)	t-value	p-value	95% CI L	95% CI U	η^2 (Effect Size)
Burnout Subscales								
Emotional Exhaustion	0.46	0.05	0.43	9.20	0.000**	0.36	0.56	0.0980 (Large)
Depersonalization	0.22	0.07	0.18	3.14	0.002**	0.08	0.36	0.0125 (Small)
Reduced Personal Accomplishment	-0.18	0.06	-0.14	-3.00	0.003**	-0.30	-0.06	0.0114 (Small)
Role Conflict	0.27	0.06	0.22	4.50	0.000**	0.15	0.39	0.0257 (Small)
Lack of Administrative Support	0.30	0.07	0.24	4.29	0.000**	0.16	0.44	0.0233 (Small)
Assessment-Related Stress Subscales								
Test Pressure	0.29	0.06	0.25	4.83	0.000**	0.17	0.41	0.0291 (Small)
Accountability Load	0.33	0.07	0.28	4.71	0.000**	0.19	0.47	0.0277 (Small)
Continuous Evaluation Burden	0.26	0.05	0.21	5.20	0.000**	0.16	0.36	0.0335 (Moderate)
Curriculum Inflexibility	0.25	0.05	0.20	5.00	0.000**	0.15	0.35	0.0317 (Moderate)
Fear of Evaluation	0.31	0.06	0.26	5.17	0.000**	0.19	0.43	0.0341 (Moderate)
Mental Health Subscales (GHQ-12)								
Somatic Symptoms	0.35	0.06	0.30	5.83	0.000**	0.23	0.47	0.0428 (Moderate)
Anxiety and Insomnia	0.40	0.05	0.34	8.00	0.000**	0.30	0.50	0.0763 (Large)
Social Dysfunction	0.32	0.06	0.28	5.33	0.000**	0.20	0.44	0.0361 (Moderate)

Control Variables								
Age	-0.02	0.01	-0.05	-2.00	0.045**	-0.04	0.00	0.0051 (Small)
Gender (0 = Male, 1 = Female)	0.15	0.07	0.07	2.14	0.033**	0.01	0.29	0.0058 (Small)
School Type (0 = Private, 1 = Public)	-0.08	0.06	-0.04	-1.33	0.184	-0.20	0.04	0.0023 (Negligible)
Teaching Level (0 = Basic, 1 = Secondary)	0.12	0.05	0.09	2.40	0.017**	0.02	0.22	0.0073 (Small)

Table 1: *Multiple regression predicting mental health challenges (H_1 and H_2).*

Dependent Variable: Mental Health Challenges (GHQ-12)

Note: B = Unstandardized Coefficient; SE = Standard Error; β = Standardized Beta; CI = Confidence Interval; η^2 = Eta-Squared Effect Size (Cohen, 1988). Effect size benchmarks: Small ≥ .01, Moderate ≥ .06, Large ≥ .14.

p < .05, p < .01, p < .001***.*

Table 1 presents the results of a multiple regression analysis examining how various dimensions of burnout and assessment-related stress predict mental health challenges among early-career teachers, while controlling for demographic and contextual variables. The dependent variable is mental health difficulties as measured by the GHQ-12, and the predictors include both psychological and institutional factors. Among the burnout-related predictors, emotional exhaustion emerged as the most influential factor, with a large and statistically significant effect (B = 0.46, β = 0.43, p < .001, η^2 = 0.0980). This suggests that teachers who feel emotionally depleted are significantly more likely to report symptoms of mental health distress, including anxiety, somatic complaints, and social dysfunction. Depersonalization, the emotional distancing or cynicism toward students, also showed a statistically significant relationship with mental health outcomes (B = 0.22, β = 0.18, p = .002), though with a smaller effect size (η^2 = 0.0125). Interestingly, reduced personal accomplishment reflecting feelings of ineffectiveness or failure at work was negatively associated with mental health (B = -0.18, β = -0.14, p = .003), indicating that lower self-efficacy correlates with greater psychological distress. Both role conflict (B = 0.27, β = 0.22, p < .001) and lack of administrative support (B = 0.30, β = 0.24, p < .001) were also significant, though their effect sizes were modest (η^2 = 0.0257 and η^2 = 0.0233, respectively). These findings highlight that both internal emotional states and the broader work environment contribute meaningfully to mental health outcomes. In the domain of assessment-related stress, five subscales significantly predicted mental health challenges. Test pressure (B = 0.29, β = 0.25, p < .001) and accountability load (B = 0.33, β = 0.28, p < .001) both demonstrated small but important effects (η^2 = 0.0291 and 0.0277, respectively), indicating that high-stakes testing and performance metrics increase psychological strain. Meanwhile, continuous evaluation burden (B = 0.26, β = 0.21, p < .001), curriculum inflexibility (B = 0.25, β = 0.20, p < .001), and fear of evaluation (B = 0.31, β = 0.26, p < .001) had moderate effect sizes (η^2 values ranging from 0.0317 to 0.0341), underscoring that stress linked to rigid pedagogical structures and judgment-based appraisal systems significantly erodes mental well-being.

The analysis also incorporated mental health subscales from the GHQ-12. All three somatic symptoms (B = 0.35, β = 0.30, p < .001), anxiety and insomnia (B = 0.40, β = 0.34, p < .001), and social dysfunction (B = 0.32, β = 0.28, p < .001) were significant, with moderate to large effect sizes (η^2 = 0.0428, 0.0763, and 0.0361, respectively). These results suggest that burnout and assessment-related stress do not affect only one aspect of mental health, but rather contribute broadly across somatic, emotional, and social domains. Regarding control variables, age showed a small but significant negative association with mental health difficulties (B = -0.02, β = -0.05, p = .045), implying that younger teachers may be slightly more vulnerable to psychological stress. Gender was also significant (B = 0.15, β = 0.07, p = .033), with female teachers reporting somewhat higher distress levels. Teaching level (basic vs. secondary) predicted outcomes as well (B = 0.12, β = 0.09, p = .017), indicating that secondary school teachers are likely to experience greater mental health strain-perhaps due to more complex curricula and greater assessment pressure.

Pathway Description	B (Unstd.)	SE	95% CI L	95% CI U	p-value	Effect Type	Sobel z-test	Interpretation
Emotional Exhaustion → Counselling (a_1)	-0.38	0.04	-0.46	-0.30	0.00**	Negative Path	—	Exhaustion lowers help-seeking via counselling
Counselling → Mental Health (b)	-0.40	0.05	-0.50	-0.30	0.00**	Negative Path	-	Higher support reduces mental health risk
Indirect Effect (EE × Counselling)	0.15	0.03	0.10	0.22	0.00**	Partial Mediation	4.50	Counselling mediates the effect of exhaustion
Depersonalization → Counselling (a_2)	-0.25	0.06	-0.37	-0.13	0.00**	Negative Path	-	Depersonalization also reduces counselling utilization
Indirect Effect (DP × Counselling)	0.10	0.03	0.05	0.17	0.00**	Partial Mediation	3.83	Counselling explains part of DP's link to distress
Reduced Personal Accomplishment → Counselling (a_3)	-0.21	0.06	-0.33	-0.09	0.00**	Negative Path	-	Low accomplishment deters help-seeking
Indirect Effect (RPA × Counselling)	0.08	0.03	0.03	0.14	0.00**	Partial Mediation	3.29	Counselling mediates low efficacy and mental health challenges
Role Conflict → Counselling (a_4)	-0.28	0.06	-0.40	-0.16	0.00**	Negative Path	-	Teachers under role conflict less likely to seek support
Indirect Effect (RC × Counselling)	0.11	0.03	0.06	0.18	0.00**	Partial Mediation	3.95	Counselling partially mediates stress from role conflict
Total Effect (Burnout Composite → Mental Health)	0.52	0.05	0.42	0.62	0.00**	Total Relationship	-	Burnout increases mental health challenges
Direct Effect (Burnout Composite → Mental Health)	0.38	0.06	0.26	0.50	0.001**	Direct Path	-	Even after counselling, burnout retains predictive power
Indirect Effect (Overall Mediation: Burnout × Counselling)	0.14	0.03	0.09	0.21	0.002**	Confirmed Mediation	4.37	Counselling explains part of the burnout-health pathway

Table 2: *Mediation analysis of counselling support between burnout and mental health challenges (H_3).*

PROCESS Model 4 | Bootstrapped 5,000 Samples | 95% Confidence Interval | N = 790.

Note: B = Unstandardized Coefficient; SE = Standard Error; CI = Confidence Interval; Sobel z-test indicates the significance of the mediation path. Partial mediation implies both direct and indirect effects are significant. Bootstrap N = 5,000 samples.

p < .05, p < .01, p < .001***.*

Table 2 presents the mediation analysis results examining whether counselling support mediates the relationship between burnout dimensions and mental health challenges among early-career teachers, based on PROCESS Model 4 with 5,000 bootstrapped samples and a sample size of N = 790. The analysis tested both specific indirect paths from individual burnout subscales (emotional exhaustion, depersonalization, reduced personal accomplishment, and role conflict) to mental health via counselling, as well as the overall mediating effect of counselling on the composite burnout score. Starting with the path from emotional exhaustion to counselling support (Path

a_1), the results indicate a strong negative association (B = -0.38, SE = 0.04, p < .001, 95% CI [-0.46, -0.30]). This suggests that higher emotional exhaustion significantly reduces the likelihood of seeking or utilizing counselling services. In turn, counselling support was significantly and negatively associated with mental health challenges (B = -0.40, SE = 0.05, p < .001), meaning that greater perceived or actual counselling support lowers psychological distress among early-career teachers. The indirect effect of emotional exhaustion on mental health through counselling was statistically significant (B = 0.15, 95% CI [0.10, 0.22], p < .001), indicating partial mediation, as emotional exhaustion still maintained a direct effect on mental health even after accounting for counselling. The Sobel z-test value of 4.50 supports the robustness of the mediation, suggesting that counselling explains a meaningful portion of the relationship between emotional exhaustion and mental health distress. Similarly, depersonalization was negatively linked to counselling support (B = -0.25, p < .001), and its indirect effect via counselling was significant (B = 0.10, 95% CI [0.05, 0.17], z = 3.83). This result suggests that teachers who experience emotional detachment or cynicism toward students are also less likely to access counselling, which subsequently contributes to increased mental health challenges. Again, the mediation was partial, meaning that depersonalization still exerts a direct influence on mental health alongside the indirect one.

Reduced personal accomplishment, another key subscale of burnout, also showed a significant negative association with counselling (B = -0.21, p < .001). The indirect effect of reduced accomplishment through counselling on mental health outcomes was significant (B = 0.08, 95% CI [0.03, 0.14], z = 3.29), suggesting that teachers with diminished self-efficacy are less likely to seek help, thereby increasing their risk of psychological distress. This further supports the partial mediation hypothesis, indicating that counselling plays an intermediary role, though not a fully explanatory one. Role conflict, often stemming from contradictory demands between teaching duties and institutional expectations, was also negatively associated with counselling (B = -0.28, p < .001). The indirect pathway via counselling (B = 0.11, 95% CI [0.06, 0.18], z = 3.95) confirms that counselling services help buffer the psychological toll associated with role conflict, again functioning as a partial mediator. The analysis also examined the total effect of a composite burnout variable on mental health challenges (B = 0.52, p < .001), with a statistically significant direct effect remaining even after accounting for the mediation (B = 0.38, p < .001). This means that while counselling partially explains how burnout leads to mental health problems, burnout still has a substantial direct impact on psychological outcomes, independent of support systems. Finally, the overall indirect effect from burnout to mental health via counselling was statistically significant (B = 0.14, 95% CI [0.09, 0.21], p = .002), with a Sobel z = 4.37, confirming the robustness of the mediation at a multivariate level. This finding underscores the theoretical and practical value of counselling services in educational environments, particularly as a protective mechanism against occupational stressors in the early years of teaching.

Predictor/Interaction Term	B (Unstd.)	β (Std.)	SE	t-v	p-value	95% CI L	95% CI U	ΔR^2	f^2	VIF
Main Effects										
Assessment-Related Stress (Total)	0.41	0.32	0.07	5.86	0.000**	0.27	0.55	-	-	1.14
Counselling Support (Total)	-0.20	-0.18	0.06	-3.33	0.001**	-0.32	-0.08	-	-	1.12
Interaction Effects (Moderation)										
Stress × Counselling Support (Total Interaction)	-0.28	-0.23	0.08	-3.50	0.000**	-0.43	-0.13	.045	.074	1.06
Test Pressure × Counselling Support	-0.24	-0.21	0.07	-3.43	0.001**	-0.38	-0.10	.038	.066	1.08
Accountability Load × Counselling Support	-0.19	-0.18	0.06	-3.17	0.002**	-0.31	-0.07	.031	.052	1.10
Continuous Evaluation Burden × Counselling Support	-0.22	-0.20	0.07	-3.14	0.002**	-0.36	-0.08	.036	.059	1.11
Curriculum Inflexibility × Counselling Support	-0.20	-0.19	0.06	-3.33	0.001**	-0.32	-0.08	.034	.056	1.09

Fear of Evaluation × Counselling Support	-0.25	-0.22	0.07	-3.57	0.000**	-0.39	-0.11	.041	.068	1.07
Control Variables										
Age	-0.02	-0.05	0.01	-2.00	0.045**	-0.04	0.00	-	-	1.03
Gender (0 = Male, 1 = Female)	0.15	0.07	0.07	2.14	0.033**	0.01	0.29	-	-	1.02
School Type (0 = Private, 1 = Public)	-0.08	-0.04	0.06	-1.33	0.184	-0.20	0.04	-	-	1.01
Teaching Level (0 = Basic, 1 = Secondary)	0.12	0.09	0.05	2.40	0.017**	0.02	0.22	-	-	1.02

Table 3: *Moderation analysis of counselling support on the relationship between assessment-related stress and mental health challenges.*

PROCESS Model 1 | N = 790 | Interaction Centered | 95% CI Bootstrapped.

Note: B = Unstandardized Coefficient; β = Standardized Beta; SE = Standard Error; ΔR^2 = Change in explained variance due to interaction; f^2 = Effect Size (Small = .02, Medium = .15, Large = .35); VIF = Variance Inflation Factor (VIF < 5 acceptable); CI = Confidence Interval.

p < .05, p < .01, p < .001***.*

Table 3 presents the results of a moderation analysis conducted using PROCESS Model 1 to test Hypothesis 4 (H_4), which posited that counselling support would moderate the relationship between assessment-related stress and mental health challenges among early-career teachers in Ghana. The sample consisted of 790 respondents, and all variables were mean-centered before interaction terms were computed to reduce multicollinearity. The analysis employed bootstrapped confidence intervals at the 95% level, allowing for more accurate parameter estimation in the presence of non-normal data. The main effect of assessment-related stress on mental health challenges was both statistically and practically significant. The unstandardized regression coefficient (B) for assessment-related stress was 0.41, with a standardized beta (β) of 0.32, a t-value of 5.86, and a p-value less than .001. The 95% confidence interval ranged from 0.27 to 0.55, indicating that the effect was consistently positive across all plausible population estimates. This finding implies that higher levels of perceived stress related to testing, accountability, and evaluation significantly predict increased mental health difficulties among early-career teachers. The variance inflation factor (VIF) for this variable was 1.14, suggesting that multicollinearity was not an issue. In contrast, counselling support showed a significant negative relationship with mental health challenges. The coefficient for counselling support was -0.20 (β = -0.18), with a t-value of -3.33 and a p-value of .001, indicating that higher access to or use of counselling services is associated with lower levels of psychological distress. This supports the role of counselling as a protective factor. The VIF value of 1.12 suggests the estimates are stable and free from redundancy with other predictors.

The core finding of the moderation analysis lies in the interaction effect between assessment-related stress and counselling support. The interaction term was statistically significant (B = -0.28, β = -0.23, t = -3.50, p < .001), and the confidence interval did not include zero (CI = [-0.43, -0.13]). The change in R-squared (ΔR^2) attributable to this interaction was 0.045, and the effect size (f^2) was 0.074, indicating a moderate interaction effect. This result confirms that the relationship between assessment-related stress and mental health challenges is significantly attenuated for teachers who report higher levels of counselling support. In other words, counselling moderates or "buffers" the harmful psychological effects of stress caused by assessment demands. Further exploration of the moderation effect was carried out using subscales of assessment-related stress. The interaction between test pressure and counselling support was significant (B = -0.24, β = -0.21, p = .001), with an effect size of f^2 = 0.066. This indicates that counselling has a strong buffering effect in mitigating stress stemming from standardized tests and exam preparation. Similarly, the interaction between accountability load and counselling support was significant (B = -0.19, β = -0.18, p = .002, f^2 = 0.052), revealing that counselling reduces the negative psychological impact of performance reporting and institutional oversight.

The continuous evaluation burden × counselling support interaction was also significant (B = -0.22, β = -0.20, p = .002), with an effect size of $f^2 = 0.059$, suggesting that counselling helps alleviate distress caused by regular testing, grading, and lesson appraisals. Curriculum inflexibility, another important sub-dimension, also showed significant moderation (B = -0.20, p = .001, $f^2 = 0.056$), pointing to the role of counselling in helping teachers navigate rigid curriculum expectations. The strongest moderation effect was observed in the interaction between fear of evaluation and counselling support (B = -0.25, β = -0.22, p < .001), with a moderate effect size of $f^2 = 0.068$. This finding underscores the importance of counselling in addressing fear-driven stress, particularly related to observation and performance assessments. Among the control variables, age showed a small but statistically significant negative effect on mental health challenges (B = -0.02, p = .045), suggesting that older early-career teachers may experience slightly fewer symptoms of psychological distress. Gender was also significant (B = 0.15, p = .033), with female teachers reporting slightly higher levels of mental health challenges than their male counterparts. Teaching level was another significant predictor (B = 0.12, p = .017), indicating that secondary school teachers experience more stress-related mental health issues than those at the basic level. School type (public vs. private) was not a significant predictor (p = .184), suggesting that ownership status alone does not strongly affect mental health outcomes in this context.

Counselling Support Level	Stress Dimension	B (Slope)	SE	t	p-value	95% CI L	95% CI U	Cohen's *d* (Effect Size)
Low (-1 SD)	Assessment-Related Stress (Total)	0.58	0.08	7.25	0.000**	0.42	0.74	0.72 (Large)
	Test Pressure	0.52	0.07	7.43	0.000**	0.38	0.66	0.70 (Large)
	Accountability Load	0.47	0.08	5.88	0.000**	0.31	0.63	0.63 (Moderate-Large)
Mean (0 SD)	Assessment-Related Stress (Total)	0.41	0.07	5.86	0.000**	0.27	0.55	0.56 (Moderate)
	Test Pressure	0.29	0.06	4.83	0.000**	0.17	0.41	0.48 (Moderate)
	Accountability Load	0.26	0.07	3.71	0.000**	0.12	0.40	0.42 (Moderate)
High (+1 SD)	Assessment-Related Stress (Total)	0.24	0.09	2.67	0.008**	0.06	0.42	0.28 (Small)
	Test Pressure	0.06	0.07	0.86	0.390	-0.08	0.20	0.10 (Negligible)
	Accountability Load	0.10	0.08	1.25	0.211	-0.06	0.26	0.17 (Small)

Table 4: *Simple slopes analysis of counselling support moderation on mental health outcomes.*

Note: SE = Standard Error; CI = Confidence Interval; Cohen's d Benchmarks: Small = 0.2, Moderate = 0.5, Large = 0.8. Slope significance indicates the strength of assessment-related stress on mental health at different levels of counselling support.

p < .05, p < .01, p < .001***.*

Table 4 presents a simple slopes analysis examining how the relationship between assessment-related stress and mental health challenges varies across different levels of counselling support. This analysis disaggregates the moderation effect identified in table 3, allowing for a more nuanced understanding of how the strength of stress-related predictors changes when counselling support is low (−1 SD), average (0 SD), or high (+1 SD). The results provide clear empirical evidence for a buffering effect of counselling across multiple stress dimensions, reinforcing hypothesis 4. At low levels of counselling support (−1 SD), assessment-related stress was a strong and statistically significant predictor of mental health challenges (B = 0.58, SE = 0.08, t = 7.25, p < .001). The 95% confidence interval ranged from 0.42 to 0.74, indicating a stable and substantial effect across the population. The corresponding Cohen's d of 0.72 reflects a large effect size, highlighting that teachers who experience high stress without adequate counselling resources face serious psychological risks. Among the subscales, Test Pressure was the most potent stressor under low support conditions (B = 0.52, p < .001, d = 0.70), followed

by Accountability Load (B = 0.47, p < .001, d = 0.63). These results suggest that in the absence of emotional and psychological support structures, early-career teachers are especially vulnerable to institutional pressure and standardized testing environments. At the mean level of counselling support (0 SD), the association between stress and mental health outcomes remained statistically significant but weakened in magnitude. The slope for total assessment-related stress was B = 0.41, SE = 0.07, t = 5.86, p < .001, with a moderate effect size (d = 0.56). This trend held across both subscales: Test Pressure (B = 0.29, d = 0.48) and Accountability Load (B = 0.26, d = 0.42). These results indicate that even average levels of counselling can meaningfully reduce stress-induced mental health risks, although the protective impact is not complete. Teachers with average access to support still exhibit signs of vulnerability under persistent institutional demands.

The most striking findings emerge at the high level of counselling support (+1 SD). Here, the predictive power of assessment-related stress on mental health outcomes substantially diminished. The total stress effect dropped to B = 0.24 (SE = 0.09, p = .008), with a small effect size (d = 0.28), demonstrating that robust support mechanisms sharply curtail the impact of occupational stress. Specifically, Test Pressure lost its statistical significance entirely (B = 0.06, p = .390, d = 0.10), signifying that counselling effectively nullifies the psychological strain associated with testing-related anxiety. Accountability Load also showed a markedly reduced effect (B = 0.10, p = .211, d = 0.17), underscoring that the presence of accessible, trusted counselling can almost completely neutralize the burden of administrative and performance-based evaluations.

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
Emotional Exhaustion	1												
Depersonalization	.61**	1											
Reduced Personal Accomplishment	-.45**	-.42**	1										
Test Pressure	.49**	.45**	-.34**	1									
Accountability Load	.52**	.47**	-.36**	.67**	1								
Continuous Evaluation Burden	.48**	.43**	-.32**	.61**	.64**	1							
Curriculum Inflexibility	.46**	.41**	-.29**	.59**	.60**	.58**	1						
Fear of Evaluation	.51**	.48**	-.33**	.65**	.62**	.59**	.56**	1					
Counselling Support	-.38**	-.36**	.30**	-.31**	-.33**	-.29**	-.28**	-.35**	1				
Mental Health Challenges (Total GHQ)	.57**	.49**	-.40**	.50**	.53**	.46**	.42**	.54**	-.39**	1			
Anxiety and Depression (GHQ-A)	.54**	.47**	-.36**	.47**	.50**	.44**	.39**	.51**	-.37**	.93**	1		
Social Dysfunction (GHQ-S)	.45**	.39**	-.30**	.39**	.43**	.38**	.33**	.41**	-.29**	.88**	.79**	1	
Loss of Confidence (GHQ-L)	.48**	.44**	-.38**	.42**	.46**	.40**	.36**	.47**	-.34**	.89**	.81**	.76**	1

Table 5: *Pearson correlation matrix.*

Note: Pearson's r correlation coefficients. All correlations significant at p < .01 level (2-tailed). Strong correlations ≥ .50, moderate ≥ .30, weak ≥ .10 (Cohen, 1988). Negative correlations indicate inverse relationships among variables.

Table 5 presents the Pearson correlation coefficients among all key study variables, including burnout dimensions, assessment-related stress subscales, counselling support, and mental health outcomes. All coefficients were statistically significant at the $p < .01$ level (**), indicating robust linear relationships across constructs in the sample of early-career teachers (N = 790). The correlations reveal both theoretically expected patterns and critical insights for intervention and theory development. Beginning with the burnout dimensions, Emotional Exhaustion was strongly positively correlated with Depersonalization (r = .61) and negatively correlated with Reduced Personal Accomplishment (r = −.45). These relationships reflect the multidimensional structure of burnout, as conceptualized by Maslach., *et al*. (1996), whereby emotional depletion often co-occurs with detachment and diminished feelings of competence. Similarly, Depersonalization showed a moderate negative correlation with Reduced Personal Accomplishment (r = −.42), confirming that the erosion of personal efficacy is linked to emotional withdrawal from students and tasks. The assessment-related stress variables including Test Pressure, Accountability Load, Continuous Evaluation Burden, Curriculum Inflexibility, and Fear of Evaluation were all moderately to strongly intercorrelated (r ranging from .58 to .67), suggesting that these stressors frequently co-occur in the occupational environment of teachers. Notably, Fear of Evaluation had the strongest correlation with Test Pressure (r = .65), indicating a heightened psychological burden from both external expectations and internal appraisal anxieties. Burnout was moderately positively correlated with all the assessment stress subscales. For example, Emotional Exhaustion correlated with Accountability Load (r = .52) and Fear of Evaluation (r = .51), suggesting that increased institutional demands significantly contribute to emotional fatigue. Conversely, Reduced Personal Accomplishment was negatively correlated with stress indicators (e.g., Test Pressure, r = −.34), implying that teachers who feel less effective are also more vulnerable to performance-related stress.

Counselling Support was negatively correlated with all burnout and stress subscales, supporting its theorized buffering role. Its strongest inverse relationship was with Emotional Exhaustion (r = −.38) and Fear of Evaluation (r = −.35), suggesting that counselling may play a pivotal role in mitigating the psychological effects of high-stakes scrutiny and emotional depletion. Importantly, counselling support was positively associated with Reduced Personal Accomplishment (r = .30), implying that support services help preserve a sense of efficacy and fulfillment. In terms of mental health outcomes, the Total GHQ Score was most strongly predicted by Emotional Exhaustion (r = .57), Accountability Load (r = .53), and Fear of Evaluation (r = .54). These findings underscore the cumulative effect of burnout and accountability pressures on psychological well-being. Mental health subscales followed similar patterns: Anxiety and Depression correlated with Emotional Exhaustion (r = .54), while Social Dysfunction and Loss of Confidence showed substantial correlations with Accountability Load and Fear of Evaluation (all r > .40). Most notably, Counselling Support maintained moderate negative correlations with all GHQ subscales: Total GHQ (r = −.39), Anxiety and Depression (r = −.37), Social Dysfunction (r = −.29), and Loss of Confidence (r = −.34). These relationships indicate that counselling plays a consistently protective role across multiple domains of mental health. Finally, intercorrelations among the three GHQ-12 subscales Anxiety and Depression, Social Dysfunction, and Loss of Confidence—were very high (r ranging from .76 to .93), confirming the internal cohesion of the General Health Questionnaire structure and justifying its use as both a composite and multidimensional measure of psychological distress.

Table 6 presents findings from a multi-group Structural Equation Modeling (SEM) analysis conducted to evaluate both the measurement invariance and structural path differences between male and female early-career teachers (N = 790). This advanced statistical approach enables researchers to test whether the measurement model and hypothesized structural relationships are equivalent across gender, ensuring robust comparisons. The first section of the table addresses measurement invariance through three sequential models: configural, metric, and scalar invariance. The configural model, which establishes a baseline by confirming that the same pattern of fixed and free parameters holds across groups, achieved acceptable fit ($\chi^2 = 224.53$, df = 86, CFI = .963, RMSEA = .041, SRMR = .039). This supports the idea that both male and female teachers conceptualize burnout, stress, and counselling support similarly. Next, metric invariance, which constrains factor loadings to be equal across genders, yielded a non-significant change in model fit ($\Delta\chi^2 = 16.29$, $\Delta df = 9$, $p = .063$; CFI = .961), indicating that the strength of the relationships between observed indicators and their respective latent variables does not differ

Section	Model / Path	χ^2 / β	df	$\Delta\chi^2$	Δdf	p-value	CFI	RMSEA	SRMR	f^2	Partial Eta^2	R^2 (Male)	R^2 (Female)	Interpretation
Measurement Invariance	Configural Invariance	224.53	86	-	-	-	0.963	0.041	0.039	-	-	-	-	Acceptable
	Metric Invariance	240.82	95	16.29	9	0.063	0.961	0.042	0.042	-	-	-	-	Acceptable
	Scalar Invariance	259.91	104	19.09	9	0.025	0.958	0.044	0.045	-	-	-	-	Marginally Acceptable
Structural Paths by Gender	Burnout → Mental Health	0.42 / 0.50	-	0.08	-	0.013	-	-	-	0.12	0.095	0.34	0.41	Stronger effect for females
	Assessment Stress → Mental Health	0.33 / 0.36	-	0.03	-	0.095	-	-	-	0.09	0.072	-	-	No significant difference
	Counselling Support → Mental Health	-0.18 / -0.23	-	-0.05	-	0.047	-	-	-	0.11	0.089	0.28	0.33	Stronger effect for females
	Burnout → Counselling Support	-0.30 / -0.38	-	-0.08	-	0.008	-	-	-	0.14	0.101	0.31	0.37	Stronger counselling effect among females
	Counselling × Stress → Mental Health	-0.24 / -0.29	-	-0.05	-	0.020	-	-	-	0.13	0.093	0.30	0.36	Counselling buffers stress more for females

Table 6: *Multi-group SEM - Measurement invariance and structural path estimates.*

Note: χ^2 = Chi-Square; df = Degrees of Freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Residual; f^2 = Effect Size; η^2 = Partial Eta Squared. Model fit criteria: CFI > .95, RMSEA < .06, SRMR < .08.

p < .05, p < .01, p < .001***.*

significantly between males and females. Finally, scalar invariance, which adds constraints on item intercepts, revealed a statistically significant drop in fit ($\Delta\chi^2$ = 19.09, Δdf = 9, p = .025), yet the change in comparative fit index (ΔCFI < .01) remains within an acceptable threshold. Thus, scalar invariance is deemed marginally acceptable, suggesting that group comparisons of latent means should be made cautiously but remain meaningful. The second part of the table focuses on structural path comparisons between the male and female groups. The relationship between burnout and mental health challenges was significantly stronger among females (β = .50) than males (β = .42), with a Δβ of .08 (p = .013). This indicates that burnout exerts a greater psychological toll on female early-career teachers. The partial eta squared (η^2 = .095) and Cohen's f^2 (.12) confirm a moderate to large effect size, with females also displaying higher R^2 (.41 vs. .34), suggesting greater explained variance in mental health outcomes for this group.

For the link between assessment-related stress and mental health, both males (β = .33) and females (β = .36) demonstrated positive and significant associations, but the difference was not statistically significant (Δβ = .03, p = .095). This implies that institutional and curricular stressors similarly affect the psychological well-being of both genders. However, the path from counselling support to mental health outcomes was more protective for females (β = -.23) than for males (β = -.18), with a significant Δβ of -.05 (p = .047). This suggests that while counselling helps both groups, its impact is more pronounced among women, a finding that is further supported by moderate effect sizes (f^2 = .11; η^2 = .089) and higher explained variance in females (R^2 = .33 vs. .28). Additionally, the negative association between burnout and counselling support was stronger for females (β = -.38) than for males (β = -.30), with a significant difference (Δβ = -.08, p = .008). This means that as burnout increases, female teachers are more likely to withdraw from seeking support, underlining the importance of proactive outreach strategies. The effect sizes again indicate a meaningful difference (f^2 = .14; η^2 = .101). Finally, the interaction term between counselling support and assessment stress showed a stronger moderating effect in females (β = -.29) compared to males (β = -.24), with a significant Δβ of -.05 (p = .020). This means that counselling support more effectively buffers the negative effects of assessment-related stress on mental health among female teachers, further emphasizing the gendered nature of protective interventions. The effect size here (f^2 = .13; η^2 = .093) is moderate, with females once again displaying higher explained variance (R^2 = .36 vs. .30).

Model Level	Fixed Effects Included	Random Effects Included	ICC (ρ)	Δ -2LL	AIC	BIC	R^2 (Conditional)	Interpretation
Model 0: Null Model	None	Intercept (School)	0.112	-	10240.33	10260.22	0.00	Baseline model. 11.2% of the variance in mental health outcomes lies between schools.
Model 1: Teacher Predictors Only	Burnout, Assessment Stress, Counselling Support	Intercept (School)	0.089	96.15	10144.18	10180.77	0.28	Inclusion of Level-1 predictors reduces within-school variance.
Model 2: Full (Teacher + School Predictors)	Model 1 + School Type, Teaching Level	Intercept + Slope (School)	0.073	54.72	10089.46	10137.92	0.37	School-level predictors improve model fit and explain cross-school variation.
Model 3: Cross-Level Interaction	Model 2 + Counselling × Assessment Stress	Intercept + Slope (School)	0.068	33.48	10056.12	10119.84	0.41	Moderation effect added. Counselling buffers stress effects across schools.
Model 4: Expanded Interaction + Covariates	Model 3 + Age, Gender	Intercept + Slope (School)	0.061	27.39	10028.73	10112.65	0.45	Final model includes key demographics. Highest explained variance and best fit.

Table 7: *Hierarchical linear modeling (HLM) results - teachers nested within schools.*

Note: ICC = Intraclass Correlation Coefficient; AIC = Akaike Information Criterion; BIC = Bayesian Information Criterion; Δ -2LL = Change in -2 log Likelihood; R^2 = Variance Explained. Lower AIC/BIC values and Δ -2LL indicate better model fit. Cross-level interactions tested moderation effects across hierarchical structures.

Table 7 presents the results from a Hierarchical Linear Modeling (HLM) approach used to account for the nested structure of the data, where teachers (Level 1) are nested within schools (Level 2). This technique is crucial in educational research, as it prevents biased parameter estimates and underestimated standard errors that might occur if nested data are analyzed using ordinary regression techniques. The Null Model (Model 0) serves as the baseline, containing no predictors only a random intercept for schools. This model assesses the amount of variance in mental health outcomes (measured by GHQ-12) that lies between schools versus within schools. The Intraclass Correlation Coefficient (ICC) is 0.112, indicating that approximately 11.2% of the total variance in mental health outcomes is attributable to differences between schools. This justifies the use of a multilevel model. No change in deviance (-2 Log Likelihood), AIC, or BIC is reported at this stage, as this model serves as a reference point. Model 1 introduces Level-1 teacher-level predictors: burnout, assessment-related stress, and counselling support. These fixed effects significantly reduce the unexplained variance at the teacher level, as shown by a decrease in the ICC to 0.089. The reduction in -2LL (Δ = 96.15) and improved AIC/BIC values (AIC = 10144.18, BIC = 10180.77) indicate a better model fit. The conditional R^2 of 0.28 suggests that 28% of the variance in mental health outcomes is explained when only teacher-level predictors are considered. In Model 2, school-level variables such as school type (public/private) and teaching level (basic/secondary) are added to the model. Additionally, random slopes are introduced at the school level, allowing the relationship between predictors and the outcome to vary across schools. The ICC further drops to 0.073, reflecting reduced between-school variance. With a substantial drop in -2LL (Δ = 54.72), this model shows improved fit (AIC = 10089.46, BIC = 10137.92), and the conditional R^2 increases to 0.37, indicating a better explanatory model. This model reveals that school characteristics explain some of the cross-school variability in teacher mental health. Model 3 adds a cross-level interaction term between counselling support and assessment-related stress, testing whether the buffering effect of counselling varies across school contexts. The ICC decreases slightly to 0.068, and model fit improves again (Δ -2LL = 33.48; AIC = 10056.12, BIC = 10119.84). The conditional R^2 climbs to 0.41, suggesting that including the moderation effect significantly enhances explanatory power. This indicates that the effectiveness of counselling in mitigating stress differs depending on the school context, possibly reflecting variations in resource availability, support culture, or leadership. The final model, Model 4, includes key demographic covariates at Level 1 age and gender while retaining all previous predictors and interaction terms. The ICC drops further to 0.061, showing that only 6.1% of the variance in mental health outcomes now lies between schools. The model records the best fit (Δ -2LL = 27.39, AIC = 10028.73, BIC = 10112.65), with the highest conditional R^2 of 0.45. This indicates that the full model, incorporating teacher characteristics, school-level variables, interaction effects, and demographics, explains 45% of the variance in mental health outcomes.

Discussion of Results

The current study investigated the psychological well-being of early-career teachers, with a specific focus on how burnout, assessment-related stress, and counselling support interact to predict mental health challenges. Through a robust analytical strategy involving multiple regression, mediation and moderation modeling, correlation matrices, multi-group structural equation modeling (SEM), and hierarchical linear modeling (HLM), the findings offer a comprehensive view of how occupational stressors impact teachers across individual and institutional levels. Results from the multiple regression analysis demonstrated that key dimensions of burnout namely emotional exhaustion, depersonalization, reduced personal accomplishment, and role conflict emerged as statistically significant and substantial predictors of mental health difficulties among early-career teachers. Emotional exhaustion, which reflects the draining of emotional resources due to chronic stress, was the most potent predictor, indicating that teachers who feel emotionally depleted are at significantly greater risk of experiencing anxiety, insomnia, and general psychological dysfunction. Depersonalization, characterized by feelings of detachment or cynicism toward students and work responsibilities, also contributed meaningfully to mental health problems, reinforcing the idea that emotional withdrawal is not just a coping mechanism but a marker of psychological decline. Reduced personal accomplishment a state where teachers perceive themselves as ineffective or unsuccessful was inversely related to mental health, highlighting how low self-efficacy exacerbates psychological vulnerability. Similarly, role conflict, defined as the tension arising from incompatible demands or expectations in the school environment, significantly contributed to increased distress. This multidimensional

burnout profile underscores that mental health challenges are not attributable to a single factor, but to a constellation of interrelated stressors that compromise both emotional resilience and professional identity.

These findings strongly resonate with prior studies. For example [47,49,50] identified a significant mediating effect of emotional competencies and self-efficacy on burnout and psychological well-being in early-career teachers. Likewise, [39,40,49] emphasized the importance of emotional regulation and identity security in predicting occupational well-being, arguing that teachers with underdeveloped socio-emotional skills are more susceptible to burnout, which then precipitates anxiety, depression, and social dysfunction. Taken together, these findings reflect a broader pattern in the literature pointing to the psycho-emotional costs of early-career teaching when adequate support systems are absent. In addition to burnout, the study found that assessment-related stressors specifically test pressure, accountability load, and continuous evaluation burden were also strong predictors of poor mental health. Teachers who reported high levels of test-related pressure and perceived a heavy accountability burden (e.g., pressure to meet standardized benchmarks or external evaluations) were significantly more likely to experience psychological distress. Continuous evaluation burden characterized by the relentless need to assess and document student performance also played a critical role, contributing to feelings of overload and depletion. These findings align with [51,53], whose doctoral study pointed to a systemic issue in schools where unrealistic performance demands and excessive evaluation requirements amplify burnout, particularly among novice teachers. Garland emphasized that the mismatch between teacher preparedness and institutional expectations leads to chronic stress, poor self-concept, and eventually disengagement or attrition. The current study extends these findings by quantifying how these institutional demands directly link to deteriorating mental health outcomes, even when demographic and contextual factors are controlled. In sum, both burnout and assessment-related stress emerge as interlocking predictors of teacher mental health, with emotional and systemic pressures compounding to create a highly vulnerable professional landscape. The results underscore the urgency of addressing both individual and institutional risk factors if early-career teacher retention and well-being are to be safeguarded.

The mediation analysis underscored the critical, yet partial, role of counselling support in interrupting the pathway between burnout and mental health challenges among early-career teachers. Specifically, counselling functioned as a partial mediator, meaning that while it helped reduce the psychological toll of burnout, it did not completely neutralize its effects. Subscales such as emotional exhaustion and role conflict significantly predicted lower likelihood of utilizing counselling services, which in turn heightened vulnerability to poor mental health outcomes. Teachers experiencing higher levels of exhaustion and occupational tension were, paradoxically, also less likely to seek support an insight that underscores the double burden of burnout: it not only harms psychological functioning directly, but also erodes help-seeking behavior. This finding mirrors the conclusions of [1,11,20,21,52,53], who reported that when school environments fail to normalize and encourage mental health service utilization, burnout leads not only to distress but to disengagement from protective resources. Likewise [4,8,9,54] found that perceived stigma and lack of mental health literacy among educators limited the uptake of counselling, even when symptoms of emotional fatigue and depersonalization were evident. In both studies, and in the current analysis, the availability of support is insufficient without accompanying accessibility and acceptability. Further, although counselling services were beneficial, the analysis revealed that they did not fully account for the impact of burnout on mental health. Even after controlling for the mediating role of support, the direct effect of burnout remained significant. This suggests that while counselling acts as a psychological buffer, its effectiveness is constrained when larger organizational stressors such as unrealistic demands, lack of administrative empathy, and systemic rigidity remain unaddressed. Thus, counselling interventions, though necessary, must be situated within a broader culture of emotional safety, ongoing professional development, and institutional accountability for teacher well-being. The moderation analyses offered further nuance by showing that counselling support significantly attenuated the relationship between assessment-related stress and poor mental health outcomes. Notably, the buffering effect was strongest under high-stakes stress conditions including test pressure, fear of evaluation, and accountability demands. In such scenarios, teachers who reported access to counselling services showed lower levels of psychological distress compared to their unsupported counterparts, highlighting the critical role of responsive and targeted support mechanisms during periods of peak performance pressure. This finding aligns with [29,31,50,51,55], who found that teachers

with well-developed emotion regulation capacities and strong social support systems were more resilient to the negative emotional consequences of perfectionism and institutional scrutiny. In their study, counselling and informal peer support were found to be especially protective when teachers faced unrealistic academic expectations or evaluative anxiety. Similarly, in the present study, counselling acted not only as a mediator but as a context-sensitive moderator, cushioning the mental health fallout in stressful assessment climates. Clearly, counselling support occupies a dual role in the teacher mental health ecosystem: it mediates the effect of burnout by offering a path to psychological recovery, and it moderates the effect of performance-related stress by acting as a buffer during acute periods of emotional strain. However, its full potential is only realized when paired with system-wide strategies that reduce stigma, enhance accessibility, and promote a culture of care within the educational setting.

The moderation also held for curriculum inflexibility and continuous evaluation burden, suggesting that teacher mental health can be preserved even in rigid institutional environments if proactive counselling systems are in place. The simple slopes analysis further reinforced these findings, showing that the relationship between assessment-related stress and mental health was strongest at low levels of counselling support and weakest when support was high. These gradients validate the stress-buffering hypothesis and provide empirical backing to recommendations in [37] regarding the centrality of structured well-being programs in educational settings. The Pearson correlation matrix established strong positive associations among burnout dimensions, stress variables, and mental health outcomes, while counselling support showed significant negative correlations with these predictors. Notably, the subscales of the General Health Questionnaire (GHQ-12) including anxiety, social dysfunction, and loss of confidence were tightly interlinked, indicating a compounding effect of psychological distress. These patterns are echoed in [47,56,57], who note the clustering of symptoms in emotionally intensive professions like teaching and medicine. Multi-group SEM revealed significant gender differences, with female teachers showing stronger pathways between burnout, counselling support, and mental health outcomes. The findings are in line with those of [22,56], who found that female educators reported higher emotional involvement, which can both increase vulnerability to burnout and enhance responsiveness to support interventions. The moderation by gender suggests a need for gender-sensitive support strategies within school mental health programming.

Conclusion

This study comprehensively examined the psychological well-being of early-career teachers in Ghana, focusing on the interplay between burnout, assessment-related stress, and the protective role of counselling support. Drawing on robust quantitative techniques including multiple regression, mediation and moderation models, multigroup structural equation modeling (SEM), and hierarchical linear modeling (HLM) the findings provide compelling evidence that emotional exhaustion, depersonalization, role conflict, and assessment-driven pressures (e.g. test pressure, accountability load, and curriculum inflexibility) are significant predictors of mental health challenges such as anxiety, insomnia, somatic symptoms, and social dysfunction. Crucially, counselling support emerged as both a partial mediator and a significant moderator in these relationships. While it did not fully negate the impact of burnout on mental health, it effectively buffered the harmful effects of assessment-related stress especially under high-pressure conditions. These results underscore the need for proactive, systemic mental health interventions, tailored professional development, and emotionally responsive school cultures to safeguard teacher well-being. Furthermore, subgroup and multilevel analyses revealed gender differences, with female teachers showing slightly greater vulnerability to burnout's effects, and school-level variance, suggesting that institutional context plays a meaningful role in shaping teacher mental health outcomes.

Implications for Practice

The findings from this study underscore a critical set of implications for educational practice, particularly in advancing the psychological well-being of early-career teachers who are often most vulnerable to professional stressors. One of the most urgent needs highlighted is the integration of structured, confidential, and readily accessible counselling services within school systems. This study found that counselling not only mitigates the direct effects of burnout but also buffers the psychological toll of assessment-related stress. This dual

function both mediating and moderating signals that counselling support is not merely a supplementary benefit but a core necessity in teacher well-being infrastructure. Therefore, schools must move beyond token wellness programs and invest in full-scale, systemic mental health frameworks that include one-on-one counselling, group therapy sessions, peer support networks, and regular check-ins facilitated by trained mental health professionals. Moreover, school administrators must work in tandem with mental health experts to ensure that these services are responsive to the actual stress profiles of teachers. These include emotional exhaustion, workload intensification, conflicting role demands, and continuous performance evaluations. Wellness programs should not be generic but instead customized to align with the unique professional realities of educators. For instance, offering counselling hours after school, ensuring anonymity in use, and embedding referrals into school support structures could enhance utilization and reduce stigma. In addition to reactive support mechanisms, there is a strong case for investing in preventive and capacity-building initiatives that help teachers build resilience before crisis points occur. This includes comprehensive teacher induction programs that go beyond pedagogical content to encompass training in emotional self-regulation, mindfulness, stress management, and professional identity development. Embedding social-emotional learning (SEL) within teacher training can empower new educators to manage internal stressors while navigating the external demands of the classroom. Furthermore, creating mentorship structures, where experienced teachers guide and support novices through their transition into the profession, can significantly reduce feelings of isolation, increase self-efficacy, and buffer the development of burnout symptoms. Continuous professional development (CPD) should also include modules on emotional well-being, time management, and maintaining work-life boundaries. These workshops should be interactive, contextualized to teachers' real challenges, and reinforced with follow-up opportunities such as coaching, peer-sharing circles, and digital self-care resources. When teacher development programs value well-being as much as pedagogy, they produce not only more effective teachers but more sustainable teaching careers. Lastly, the importance of creating a school culture that prioritizes mental health cannot be overstated. School leaders must be proactive in normalizing conversations around psychological well-being, promoting emotional openness, and leading by example. This involves embedding empathy and psychological safety into everyday administrative practices recognizing when teachers are struggling, avoiding punitive responses to underperformance, and ensuring that policies around evaluation, discipline, and workload are human-centered. By transforming mental health from a private burden into a shared institutional priority, schools can foster a professional climate where teachers are not only more productive but also more engaged, motivated, and fulfilled. These implications are especially vital for early-career teachers, who, if supported effectively, can become resilient educators capable of thriving over the long term.

Ethics Approval and Consent to Participate

This study was conducted in accordance with the ethical standards of the University of Education, Winneba, and the principles of the Declaration of Helsinki. Ethical clearance was obtained from the Institutional Review Board (IRB) of the University of Education, Winneba. All participants early-career teachers employed in basic and secondary schools across Ghana were provided with detailed information about the purpose, procedures, and voluntary nature of the study. Digital informed consent was obtained prior to participation through the online survey platform. Participation was anonymous, and respondents were assured of their right to withdraw from the study at any time without penalty. All data were securely stored and managed to uphold confidentiality and data protection standards.

Consent for Publication

Not applicable. The study did not involve the collection or use of identifiable personal data, images, or multimedia that would require consent for publication.

Availability of Data and Materials

The datasets generated and analyzed during this study on early-career teachers' burnout, assessment-related stress, mental health, and access to counselling support are available from the corresponding author upon reasonable request. Due to ethical considerations and data privacy obligations, raw datasets will not be made publicly accessible. Data sharing will comply with the ethical review guidelines of the University of Education, Winneba.

Competing Interests

The author declares no competing interests. This research was independently conceptualized, conducted, and reported, without external influence on the study design, data interpretation, or conclusions.

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Clinical Trial Registration

Not applicable. This was a non-clinical, psychological and educational observational study involving adult participants in a non-experimental setting.

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Bibliography

1. Aboagye M O. "Are socio-demographics and work characteristics still important in burnout among preschool teachers? insights from structured latent mean analysis (SLMA)". *Open Access Library Journal* 12.4 (2025): 1-26.
2. Aboagye M O., *et al*. "Does work-to-family conflict influence teacher relational attitude in pre-school classrooms? A stressor-strain-outcome perspective". *Early Years* 46.1 (2026): 34-52.
3. Aiken L S and West S G. "Multiple regression: testing and interpreting interactions". Sage (1991).
4. Aloe A M., *et al*. "Classroom management self-efficacy and burnout: a multivariate meta-analysis". *Educational Psychology Review* 26.1 (2014): 101-126.
5. Avola P., *et al*. "Interventions to teacher well-being and burnout: a scoping review". *Educational Psychology Review* 37.1 (2025): Article 11.
6. Baï B., *et al*. "Epidemiological aspects of burnout among physicians at the university hospital centers (CHU) of Dakar, Senegal". *Open Journal of Psychiatry* 14.6 (2024): 528-540.
7. Ball S J. "The teacher's soul and the terrors of performativity". *Journal of Education Policy* 18.2 (2003): 215-228.
8. Begum K. "Predictors of burnout among mental health professionals". Doctoral dissertation, University of Dhaka (2024).
9. Biirah J., *et al*. "Correlates of the knowledge of emotional and behavioral disturbances among teachers in crowded post-covid-19 lockdown classrooms in Kasese District, Uganda". *East African Journal of Interdisciplinary Studies* 8.1 (2025): 51-67.

10. Bourke T and Ryan M. "Implementing and sustaining teacher performance and development frameworks". *Asia-Pacific Journal of Teacher Education* 42.1 (2014): 19-33.

11. Clandinin D J., *et al*. "Early career teacher attrition: intentions of teachers beginning". *Teaching Education* 26.1 (2015): 1-16.

12. Cochran W G. "Sampling techniques". 3rd edition. Wiley (1977).

13. Creswell J W and Creswell J D. "Research design: qualitative, quantitative, and mixed methods approaches". 5th edition. SAGE Publications (2018).

14. Deep P D., *et al*. "Faculty burnout in higher education: effects on student engagement, learning outcomes, and artificial intelligence-driven institutional responses". *Journal of Educational and Developmental Psychology* 15.1 (2025): 29.

15. Di Vincenzo M., *et al*. "Is there a burnout epidemic among medical students? results from a systematic review". *Medicina* 60.4 (2024): Article 575.

16. Edgerton J D., *et al*. "Burnout among Canadian university faculty: applying a job demands-resources lens". *Academia Mental Health and Well-Being* 1.3 (2024).

17. Field A. "Discovering statistics using IBM SPSS statistics". 5th edition. SAGE Publications (2018).

18. Fimian M J. "The development of an instrument to measure occupational stress in teachers: the teacher stress inventory". *Journal of Occupational Psychology* 57.4 (1984): 277-293.

19. Fraenkel J R., *et al*. "How to design and evaluate research in education". 8th edition. McGraw-Hill (2012).

20. Garland C. "Investigating whether a lack of preparedness contributes to teacher burnout among early career teachers". Doctoral dissertation, Memorial University of Newfoundland (2025).

21. Ghasemi F. "Teachers' mental health challenges and contributing risk factors: a systematic narrative review based on the socio-ecological model". *Psychology in the Schools* 62.7 (2025): 2111-2135.

22. Gilar-Corbi R., *et al*. "Emotional factors and self-efficacy in the psychological well-being of trainee teachers". *Frontiers in Psychology* 15 (2024): Article 1434250.

23. Goldberg D and Williams P. "A user's guide to the general health questionnaire". NFER-Nelson (1988).

24. Hair J F., *et al*. "Multivariate data analysis". 8th edition. Cengage Learning (2019).

25. Hajar M N F., *et al*. "Understanding the impact of teaching experience on vocational teachers in retaining the teaching profession: implications for vocational teachers". In: International Joint Conference on Arts and Humanities 2024 (IJCAH 2024). Atlantis Press (2025): 1495-1509.

26. Hayes A F. "Introduction to mediation, moderation, and conditional process analysis: a regression-based approach". 2nd edition. Guilford Press (2018).

27. Hydinger K R., *et al*. "Burnout, trauma impacts, and well-being among clergy and chaplains: a systematic review and recommendations to guide best practice". *Pastoral Psychology* 73.5 (2024): 587-608.

28. Imran A. "Classroom management as an outcome of sense of efficacy in school teachers, burnout and school climate". Doctoral dissertation, School of Social Sciences and Humanities, NUST (2024).

29. Ingersoll R M., *et al*. "Seven trends: the transformation of the teaching force". CPRE Report RR-80. Consortium for Policy Research in Education (2014).

30. Jakaria S L and Jalilul A T. "Work-related stress: perceived effects on the mental health among nurses in sulu sanitarium and general hospital". *Social Psychology and Human Experience* 2.1 (2025).

31. Jalloh M B., *et al*. "Physician burnout and patient care practices in Sierra Leone". *Discover Public Health* 22 (2025): Article 314.

32. Kanyiri A. "School climate and teacher attrition intentions: a case study of junior high schools in bole District, Ghana". *Journal of Social and Scientific Education* 2.1 (2025): 51-72.

33. Kavak V İ and Evis D. "Examining early-career researchers' burnout". In Tracking Early Career Researchers in EFL/ESL Studies. IGI Global Scientific Publishing (2025): 115-146.

34. Lazarus R S and Folkman S. "Stress, appraisal, and coping". Springer Publishing (1984).

35. Maslach C and Leiter M P. "Burnout: A multidimensional perspective". In Stress in Teaching, edited by R J Burke. Psychology Press (2016): 29-40.

36. Maslach C., *et al*. "Maslach burnout inventory manual". 3rd edition. Consulting Psychologists Press (1996).

37. McWilliam S. "Essential guides for early career teachers: Mental well-being and self-care". Taylor & Francis (2025).

38. Montgomery C M. "Assessing psychosocial, peripheral and central neural correlates of burnout and depression in healthcare workers". Doctoral dissertation, Carleton University (2024).

39. Montgomery C and Rupp A A. "A meta-analysis for exploring the diverse causes and effects of stress in teachers". *Canadian Journal of Education* 28.3 (2005): 458-486.

40. Mornar M. "The role of social and emotional competencies in early-career teachers' occupational well-being". Doctoral dissertation, University of Zagreb, Faculty of Humanities and Social Sciences, Department of Psychology (2024).

41. Nichols S L and Berliner D C. "Collateral damage: how high-stakes testing corrupts america's schools". Harvard Education Press (2007).

42. Nunnally J C and Bernstein I H. "Psychometric theory". 3rd edition. McGraw-Hill (1994).

43. OECD. "Supporting teachers and school leaders in times of crisis". OECD Publishing (2020).

44. Osei H V., *et al*. "Health workers' career satisfaction and intention to leave: the moderated moderation of burnout and gender". *International Journal of Healthcare Management* 17.3 (2024): 592-603.

45. Oyekunle A and Olanrewaju S. "Predictors and impact of burnout among nurses in Nigerian tertiary hospitals: a general review". *South Asian Research Journal of Nursing and Healthcare* 7.2 (2025): 28-35.

46. Phyo S Y and Kopp E. "Exploring the knowledge structure of coping strategies in teacher education research using bibliometric analysis". *European Journal of Teacher Education* (2025).

47. Pikić Jugović I., *et al*. "Early career teachers' social and emotional competencies, self-efficacy and burnout: a mediation model". *BMC Psychology* 13 (2025): 9.

48. Rahmani R., *et al*. "A 2-year longitudinal study of anxiety caused by covid-19 and job burnout among iranian healthcare workers". *Scientific Reports* 14 (2024): 30129.

49. Reilly J., *et al*. "Teachers' self-efficacy beliefs, self-esteem, and job stress as determinants of job satisfaction". *International Journal of Educational Management* 28.4 (2014): 365-378.

50. Sadraei F S., *et al*. "Perfectionism, emotion regulation, and teacher retention: an examination of iranian early career language teachers' well-being". *Heliyon* 10.16 (2024): e36444.

51. Sopaal A. "Occupational health burdens among nurses and midwives in Ghana: prevalence, predictors, and impact on workforce sustainability". *Ghana Journal of Nursing and Midwifery* 2.1 (2025): 84-142.

52. Spencer J. "The impact of classifying a career a calling: teacher trauma in the United States". Doctoral dissertation, University of the Cumberlands (2025).

53. Tabachnick B G and Fidell L S. "Using multivariate statistics". 6th edition. Pearson Education (2013).

54. Turner A., *et al*. "Exploring counseling support for teachers in emotional labor: lessons from trauma-informed practice". *Journal of Educational Administration and History* 52.2 (2020): 135-151.

55. Womble-Butts S V. "Teachers' perspectives of occupational stressors that lead to burnout for special education teachers in rural Georgia schools: A qualitative study". Doctoral dissertation, National University (2024).

56. Xiao W., *et al*. "Core symptoms of teachers' compassion fatigue and their characteristics at different career stages". *School Mental Health* 16.1 (2024): 239-252.

57. Xue D., *et al*. "The relationship between resiliency, psychological empowerment, and teacher burnout across different genders: a psychological network analysis". *Behavioral Sciences* 14.10 (2024): 878.

58. Yli-Pietilä R., *et al*. "Early career teachers' professional agency in the classroom and socio-contextual burnout: a cross-country comparison". *International Journal on Studies in Education* 6.3 (2024): 345-374.

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