

Original Research

Occupational Stress Factors among Female Educators in IPTA and IPTS in Malaysia: A Comparative Study

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ABSTRACT

Background: Occupational stress is an important concern among higher education educators due to increasing academic, administrative, and student-related demands. This study aimed to examine occupational stress factors and perceived stress levels among female educators and compare findings between educators in public (IPTA) and private (IPTS) higher education institutions in Malaysia. **Methods:** A quantitative, descriptive-comparative cross-sectional study was conducted among 247 female educators, comprising 202 from IPTA and 45 from IPTS. Data were collected using a structured online questionnaire consisting of demographic information, occupational stress factors, and the 10-item Perceived Stress Scale (PSS). Descriptive statistics, chi-square tests, and Mann-Whitney U tests were used to analyse the data, with statistical significance set at $p < 0.05$. **Results:** Most respondents reported moderate to high perceived stress, with high stress being more prevalent among IPTA educators (55.4%) than IPTS educators (40.0%). Student discipline was the most prominent occupational stressor in both IPTA (73.3%) and IPTS (77.8%). Among IPTA educators, significant associations with perceived stress were found for job overload ($p = 0.001$), job satisfaction and job security ($p = 0.001$), job burnout ($p = 0.015$ – 0.016), job demand ($p = 0.001$ – 0.011), job resources ($p = 0.006$), financial problems ($p = 0.001$), and student discipline ($p = 0.001$ – 0.002). Among IPTS educators, only financial problems were significantly associated with perceived stress ($p = 0.016$ – 0.041). Significant differences between IPTA and IPTS were observed for job overload ($p = 0.013$), job burnout ($p = 0.001$), job demand ($p = 0.030$), financial problems ($p = 0.001$), and overall perceived stress ($p = 0.040$). **Conclusion:** Occupational stress is prevalent among female educators, with both shared and institution-specific stress patterns. Future research should examine larger and more representative samples across multiple institutions using longitudinal or mixed-methods designs.

Keywords: Occupational stress; female educators; perceived stress scale; higher education; Malaysia

1. INTRODUCTION

Occupational stress has become an important concern in the education sector because of its potential effects on educators' mental well-being, teaching performance, job satisfaction, and the overall quality of education. Occupational stress occurs when job demands exceed an individual's ability to cope effectively.⁽¹⁾ In higher education institutions, academic staff are required to undertake multiple responsibilities, including teaching, research, publication,

administration, student supervision, and community engagement.⁽²⁾ These responsibilities have become increasingly complex as universities place greater emphasis on academic performance, research productivity, institutional reputation, and student outcomes. Recent evidence also indicates that academic staff are exposed to a combination of work-related and personal demands that may adversely affect their psychological well-being.⁽³⁾ Therefore, occupational stress among educators remains an important issue that warrants systematic investigation, particularly among groups that may experience different combinations of workplace and personal demands.

Mental health refers to an individual's emotional, psychological, and social well-being, which influences how people think, feel, manage stress, and perform daily responsibilities.⁽⁴⁾ In the education sector, mental health problems such as stress, anxiety, depression, and burnout can negatively affect educators' motivation, productivity, and teaching effectiveness. Previous studies have shown that academic staff are increasingly exposed to occupational stress because of heavy workloads, administrative responsibilities, research expectations, and institutional performance demands.⁽⁵⁾ In Malaysia, the expansion and diversification of higher education institutions, including public universities (*Institusi Pengajian Tinggi Awam* or IPTA), private universities (*Institusi Pengajian Tinggi Swasta* or IPTS), and international branch campuses, have intensified institutional competition and performance expectations. Consequently, educators are increasingly required to fulfil multiple roles simultaneously, potentially contributing to mental fatigue, emotional exhaustion, and reduced well-being among academic staff.^(5,6) Understanding these challenges is therefore important for maintaining a productive academic environment and sustaining the quality of higher education.

Female educators may represent an important population for investigating occupational stress because professional responsibilities can intersect with family and personal responsibilities. In addition to academic duties, many female educators may be involved in childcare, household responsibilities, and other family-related commitments. Managing multiple roles may increase emotional and psychological strain, particularly when workplace demands are high.^(7,8) Previous research has identified work-family conflict as an important contributor to stress and burnout among female academic staff.⁽⁹⁾ Furthermore, academic work involves

considerable emotional labour through student mentoring, academic advising, teaching, and interpersonal interactions, which may contribute to emotional exhaustion.⁽¹⁰⁾ Female university professors have also been reported to experience higher levels of stress and emotional exhaustion than their male counterparts.⁽¹¹⁾ More recent research similarly suggests that female academics may face complex interactions between work demands, caring responsibilities, and psychological well-being.⁽³⁾ These findings indicate that gender-specific investigations may provide a more nuanced understanding of occupational stress among academic staff.

The institutional context in which educators work may further shape their experience of occupational stress. Public and private higher education institutions differ in terms of organizational structures, employment conditions, funding mechanisms, performance expectations, and institutional priorities. Public universities may provide relatively greater employment stability and more structured academic career pathways, whereas private universities may place stronger emphasis on teaching performance, student satisfaction, institutional reputation, market competitiveness, and financial sustainability. Previous studies have reported that educators in private higher education institutions may experience substantial stress associated with teaching demands, performance monitoring, and institutional competitiveness.^(12,13) Similarly, research on Malaysian private higher education institutions has highlighted the importance of job demands and job resources in shaping academic staff outcomes within a competitive and performance-oriented environment (recent Malaysian evidence). However, these institutional differences do not necessarily imply that educators in one sector consistently experience greater stress than those in another. Rather, they suggest that the sources and intensity of occupational stress may vary according to the organizational context.

Occupational stress in the education sector is increasingly recognized as a major occupational and public health concern.⁽¹⁴⁾ The Job Demands-Resources (JD-R) model provides a useful theoretical framework for understanding this phenomenon by proposing that every work environment comprises job demands and job resources that influence employee well-being and performance.^(15,16) High job demands in the absence of adequate resources may gradually deplete employees' physical and emotional resources, increasing the

likelihood of chronic stress and burnout. Among academic staff, job demands may include excessive workload, administrative responsibilities, research and publication requirements, teaching obligations, and interpersonal demands, whereas job resources may include organizational support, autonomy, recognition, and adequate institutional resources. Recent research involving academics has further demonstrated that work demands, caring responsibilities, and access to job resources are associated with mental health outcomes, supporting the relevance of the JD-R perspective in understanding stress within academic work environments.⁽³⁾

One of the major contributors to occupational stress among educators is job overload. Job overload occurs when the amount of work and professional expectations exceed an individual's available time and capacity.^(17,18) In contemporary higher education institutions, educators spend substantial time managing administrative tasks, documentation, digital communication, institutional compliance, teaching preparation, assessment, and research activities in addition to their core academic responsibilities. Excessive workloads may increase stress and make it more difficult for educators to maintain an appropriate work-life balance.⁽¹⁹⁾ Burnout is another important consequence of prolonged exposure to excessive occupational demands. Burnout is recognized as an occupational phenomenon resulting from chronic workplace stress that has not been successfully managed.⁽²⁰⁾ Emotional exhaustion associated with burnout may reduce educators' motivation, creativity, and engagement in teaching activities,⁽²¹⁾ potentially limiting their willingness to adopt innovative teaching approaches and increasing reliance on routine instructional practices.^(16,22)

Other factors, including financial problems, student discipline, and time management, may also contribute to occupational stress among educators. Financial stress can negatively affect mental well-being, job satisfaction, and professional performance by increasing anxiety and reducing psychological resources for coping with workplace demands.^(23,24) Student discipline problems may similarly create emotional strain, as managing disruptive behaviour requires sustained emotional regulation and professional engagement. Previous studies have identified classroom disruption and student misbehaviour as important contributors to emotional exhaustion and reduced job satisfaction among educators.^(25,26) In addition, time

management is particularly important in higher education because educators are required to balance teaching, research, assessment, administrative responsibilities, and student supervision.⁽²⁷⁾ Educators who experience difficulties in managing competing demands may consequently experience greater work pressure and occupational stress.⁽²⁷⁾

Despite the growing body of literature on occupational stress among educators, several important gaps remain. First, previous studies have frequently examined occupational stress among academic staff as a general population, with comparatively less emphasis on the specific experiences of female educators as a distinct group. This is important because female academics may experience an intersection of occupational demands and family-related responsibilities that can shape their stress experiences differently from those of male academics. Second, although previous research has identified multiple occupational stressors, including workload, work-family conflict, burnout, financial difficulties, student-related problems, and time-management difficulties, these factors are often examined independently or within specific institutional settings. Consequently, there remains limited understanding of how multiple contributing factors collectively relate to perceived stress among female educators. Third, although differences between public and private higher education institutions have been discussed in relation to workload, organizational demands, and institutional expectations, direct comparative evidence focusing specifically on female educators across these two institutional contexts remains insufficient. Recent research on female academics in Malaysian private universities has also highlighted the need for greater empirical attention to the work-life challenges experienced within this specific institutional context.⁽²⁸⁾ Thus, it remains insufficiently understood whether the contributing factors and perceived levels of occupational stress among female educators differ between public and private universities.

Addressing these gaps is important because identifying occupational stressors without considering gender and institutional context may provide only a partial understanding of the problem. A direct comparison between public and private universities can provide evidence on whether differences in organizational structures, workload expectations, performance requirements, and available resources are associated with different stress experiences among

female educators. Such evidence can assist higher education institutions in developing context-specific occupational stress interventions rather than applying a uniform approach across different institutional settings. Therefore, this study aims to compare the contributing factors associated with occupational stress and the perceived stress levels among female educators in public and private universities. By focusing specifically on female educators and comparing two distinct higher education contexts, this study seeks to address an underexplored area in the existing literature and provide empirical evidence to inform targeted strategies for promoting the psychological well-being and work sustainability of female academic staff.

2. METHODS

2.1 Study Design and Location

This study employed a quantitative, descriptive-comparative cross-sectional research design to examine occupational stress factors and perceived stress levels among female educators in Malaysian higher education institutions. The study was conducted at two selected higher education institutions in Malaysia, comprising one public higher education institution (*Institusi Pengajian Tinggi Awam* or IPTA) and one private higher education institution (*Institusi Pengajian Tinggi Swasta* or IPTS). A quantitative approach was adopted because the study involved systematic collection and statistical analysis of numerical data to examine patterns and relationships among the study variables. The cross-sectional design enabled data to be collected from the respondents at a single point within the specified data collection period, while the descriptive-comparative component enabled comparison of occupational stress-related factors and perceived stress levels between female educators from the IPTA and IPTS.

The unit of analysis was the individual female educator. The study focused specifically on female educators because gender was defined as one of the scope criteria of the study. Data were collected using a structured self-administered questionnaire.

2.2 Population, Sample Size, and Sampling Technique

The target population comprised female educators employed at the selected IPTA and IPTS in Malaysia. The total accessible population was 482 female educators, consisting of 432 educators from the selected IPTA and 50 educators from the selected IPTS. The required sample

size was determined based on the recommended sampling table reported by Krejcie and Morgan (1970).⁽²⁹⁾ Accordingly, a minimum sample of 202 respondents was required from the IPTA population, while 45 respondents were required from the IPTS population, resulting in a total target sample of 247 respondents.

Purposive sampling was employed to recruit participants who met the predetermined eligibility criteria. The inclusion criteria were: (i) female educators employed by the selected IPTA or IPTS; (ii) actively involved in teaching during the data collection period; (iii) willing to participate voluntarily in the study; and (iv) able to understand and respond to the questionnaire. Educators who were not actively involved in teaching during the data collection period or who submitted incomplete questionnaires were excluded from the final analysis.

The recruitment process was conducted separately at the two participating institutions. Following institutional permission, the researcher approached eligible female educators through the relevant institutional contact persons or administrative channels. An invitation containing an explanation of the study, eligibility requirements, voluntary nature of participation, and the online questionnaire link was distributed to potential participants. Respondents were not individually selected based on their stress level or occupational characteristics; rather, participants were recruited based on their eligibility and willingness to participate. Recruitment continued until the required sample size was achieved.

A total of 247 valid responses were targeted for the final analysis, comprising 202 respondents from the IPTA and 45 respondents from the IPTS. The institutional allocation of the sample was based on the respective population sizes and the sample size recommendations in the study of Krejcie and Morgan (1970).⁽²⁹⁾

2.3 Variables and Operationalisation of the Study

The study consisted of independent and dependent variables. The independent variables represented the contributing factors associated with occupational stress among female educators. These factors comprised job overload, job satisfaction and job security, job burnout, job demand, job resources, interpersonal relationships, financial problems, student discipline, and time management.

The dependent variable was perceived stress level among female educators. Perceived stress was assessed

using the Perceived Stress Scale (PSS) developed by Cohen et al. (1983).⁽³⁰⁾ The PSS measures the extent to which individuals perceive their lives as stressful during the specified period. The responses were scored according to the scoring procedure of the validated instrument. The resulting scores were used to determine the perceived stress level of the respondents according to the categories specified for the instrument.

For the occupational stress factors, respondents indicated their level of agreement with each statement using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Higher scores indicated a greater level of agreement with the respective occupational stress-related statements. The resulting item scores were aggregated according to their respective constructs before statistical analysis.

2.4 Respondent Recruitment and Data Collection Procedure

Prior to data collection, the researcher obtained the necessary institutional permissions from the participating higher education institutions. An official student confirmation letter and relevant permission documents were submitted to the respective institutions to facilitate access to eligible respondents. Data were collected using a structured online questionnaire administered through Google Forms. Before accessing the questionnaire, potential participants were provided with an information statement explaining the purpose of the study, the expected time required to complete the questionnaire, the voluntary nature of participation, confidentiality procedures, and their right to decline participation. Participants who agreed to participate provided informed consent before proceeding to the questionnaire.

The questionnaire consisted of three sections. Section A collected socio-demographic information, including age, marital status, educational qualification, and teaching experience. Section B measured the identified contributing factors of occupational stress using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Section C measured perceived stress using the Perceived Stress Scale (PSS) developed by Cohen et al. (1983).⁽³⁰⁾ The questionnaire link was distributed electronically through the participating institutions and relevant communication channels available to eligible educators. Respondents completed the questionnaire independently without direct intervention from the researcher. Data collection

was conducted over approximately two and a half months. To improve data quality, responses were screened after the closure of the data collection period. Responses that did not meet the predefined eligibility criteria, contained substantial missing information, or were incomplete were excluded from the final dataset. The dataset was also checked for duplicate submissions before statistical analysis. Only complete and eligible responses were retained for the final analysis.

2.5 Instrument Validity and Reliability

The questionnaire items used in this study were adapted from established instruments and measures reported in previous studies. The adaptation process involved reviewing the original items to ensure their relevance to the context of female educators in Malaysian higher education institutions. Content validity was assessed to determine whether the items adequately represented the constructs being measured and were appropriate for the target population.

Before the main data collection, a pilot study was conducted with respondents who met the study's eligibility criteria but were not included in the final study sample. The pilot study was conducted to assess the clarity, comprehensibility, appropriateness, and reliability of the questionnaire items. Feedback obtained during the pilot study was considered before the questionnaire was administered to the main sample.

Internal consistency reliability was assessed using Cronbach's Alpha. A Cronbach's Alpha coefficient of 0.70 or above was considered indicative of acceptable internal consistency, consistent with the recommendation reported by Bond and Fox (2007).⁽³¹⁾ Cronbach's Alpha values were examined for the overall instrument and, where applicable, for each individual construct.

2.6 Ethical Practices

Ethical considerations were observed throughout the research process to protect the rights, privacy, and confidentiality of the participants. The necessary institutional permission and ethical requirements were fulfilled before the commencement of data collection. Ethical approval was granted by the FONAHS Research Ethics Committee with "Research with Minimal Risk". (Reference No. FONAHS-REC/2025/01/006). Participants were provided with information regarding the purpose and procedures of the study and were required to provide informed consent before completing the questionnaire.

Participation was voluntary, and respondents were informed that they could decline participation or discontinue their participation without any negative consequences. No information that could directly identify individual respondents was reported in the research findings. The collected data were treated as confidential and were used solely for academic and research purposes.

The online questionnaire was administered through Google Forms, and access to the collected dataset was restricted to the researcher/research team. The data were stored securely and were not disclosed to unauthorised individuals. In presenting the results, data were reported in aggregate form to ensure that individual respondents and their responses could not be identified.

2.7 Data Processing and Statistical Analysis

The completed questionnaires were exported from Google Forms and subsequently screened, coded, and analysed using the Statistical Package for the Social Sciences (SPSS), Version 26. Prior to analysis, the dataset was checked for completeness, eligibility, duplicate responses, and data entry errors. Each questionnaire item was assigned a numerical code, and negatively worded items in the PSS were reverse-coded according to the scoring procedure of the original instrument.

Descriptive and inferential statistical analyses were conducted according to the study objectives. Descriptive statistics, including frequencies and percentages, were used to summarise the socio-demographic characteristics of the respondents. Means and standard deviations were calculated to describe the distribution of scores for the occupational stress factors and perceived stress measures.

For the comparison between educators from the IPTA and IPTS, descriptive results were presented separately for each institutional group. Where the variables were analysed as categorical variables, the Chi-Square test of independence was used to determine whether a statistically significant association existed between institutional group and the relevant occupational stress or perceived stress categories. The Chi-Square test was interpreted based on the Pearson Chi-Square statistic and its corresponding p-value.

For the analysis of the relationship between occupational stress factors and perceived stress, the appropriate inferential test was selected based on the level and distribution of the variables. Where the variables were treated as ordinal or non-normally distributed scores, Spearman's rank-order correlation

was used to determine the direction and strength of the relationship between each occupational stress factor and perceived stress. Statistical significance was evaluated at the 0.05 significance level using two-tailed tests.

For categorical stress-level analyses, the perceived stress score was classified according to the established scoring criteria of the PSS instrument. The frequencies and percentages of respondents in each stress category were then calculated. Mean score interpretation was also used to describe the level of the occupational stress factors based on the predefined interpretation criteria.

The statistical analysis plan was therefore structured to address three main analytical purposes: (i) describing the characteristics and stress-related measures of the respondents; (ii) comparing stress-related outcomes between educators from the IPTA and IPTS; and (iii) examining the association or relationship between occupational stress factors and perceived stress levels. All statistical tests were interpreted using a significance level of $p < 0.05$.

3. RESULTS

3.1 Demographic Characteristics of Respondents

A total of 202 female educators participated in this study (Table 1). The largest age group was respondents aged 40–49 years (43.6%), followed by those aged 30–39 years (34.7%). Respondents aged 50 years and above accounted for 11.9%, while the youngest age group of 20–29 years represented 9.9% of the sample. In terms of marital status, the majority of respondents were married (75.2%), whereas 24.8% were single. Regarding educational attainment, most respondents possessed a PhD qualification (72.3%), followed by a Master's degree (24.2%), while only 3.5% held a Bachelor's degree. For teaching experience, the largest proportion of respondents had 11–15 years of teaching experience (44.6%). This was followed by educators with 16–20 years of experience (16.3%), 6–10 years of experience (15.8%), less than 5 years of experience (14.9%), and more than 21 years of experience (8.4%). Overall, the findings indicate that the respondents were predominantly experienced, married female educators with doctoral-level qualifications.

3.2 Contributing Factors of Occupational Stress Among Female Educators

Nine occupational factors were examined to identify their contribution to stress among female

educators in IPTA and IPTS. These factors included job overload, job satisfaction and job security, job burnout, job demand, job resources, interpersonal relationships, financial problems, student discipline, and time management. The findings revealed that student discipline was the most prominent contributor to occupational stress in both institutions. A high level of stress related to student discipline was reported by 73.3% of respondents in IPTA and 77.8% of respondents in IPTS Malaysia (Table 2). Female educators reported experiencing stress when dealing with students who submitted assignments late, engaged in academic dishonesty, displayed rude behaviour, or were inattentive during classes.

Table 1. Demographic characteristics of respondents

Variables	Frequency, n (%)
Age	
20-29 years old	20 (9.9)
30-39 years old	70 (34.7)
40-49 years old	88 (43.6)
50 years old and above	24 (11.9)
Marital status	
Single	50 (24.8)
Married	152 (75.2)
Highest education level	
Bachelor degree	7 (3.5)
Master	49 (24.2)
PhD	146 (72.3)
Working / teaching experiences	
< 5 years	30 (14.9)
6 - 10 years	32 (15.8)
11 - 15 years	90 (44.6)
16 - 20 years	33 (16.3)
> 21 years	17 (8.4)

Similarly, job demand emerged as another major stressor. High stress levels were reported by 68.3% of IPTA respondents and 75.6% of IPTS respondents. Many educators indicated that lesson preparation outside working hours, excessive administrative responsibilities, and limited time for rest contributed substantially to their work-related stress. A considerable proportion of respondents also experienced stress associated with job resources, particularly regarding participation in decision-making processes, influence on departmental matters, adequacy of salary, and access to important workplace information. High stress related to job resources was reported by 65.8% of respondents from

IPTA and 57.8% from IPTS Malaysia. Financial concerns were another important contributor to stress. High stress due to financial problems was reported by 42.6% of respondents in IPTA and 72.1% in IPTS Malaysia. Respondents expressed concerns about financial stability, delayed payments, and the ability to cope with unexpected expenses, particularly during illness or emergencies.

Table 2. Summary of major occupational stress factors

Occupational stress factor	IPTA, high stress (%)	IPTS, high stress (%)
Student discipline	73.3	77.8
Job demand	68.3	75.6
Job resources	65.8	57.8
Job overload	60.9	40.0
Financial problems	42.6	72.1
Job satisfaction & security	43.6	75.6
Job burnout	34.7	77.8
Interpersonal relationship	38.1	48.9
Time management	37.6	37.8

IPTA: *Institusi Pengajian Tinggi Awam* or Public Higher Education Institution;

IPTS: *Institusi Pengajian Tinggi Swasta* or Private Higher Education Institution

Furthermore, job burnout and job satisfaction/job security were found to contribute substantially to occupational stress, particularly among respondents from IPTS. High stress associated with job burnout was reported by 77.8% of IPTS respondents compared with 34.7% in IPTA. Likewise, stress related to job satisfaction and job security affected 75.6% of IPTS respondents and 43.6% of IPTA respondents. In contrast, time management was the least influential stress factor in both institutions. Most respondents reported moderate levels of stress related to balancing work responsibilities and personal activities, with 60.9% of IPTA respondents and 62.2% of IPTS respondents falling within the moderate stress category.

Overall, the findings suggest that occupational stress among female educators is primarily influenced by student-related issues, increasing job demands, inadequate organizational resources, financial concerns, and burnout. These findings highlight the need for universities to strengthen institutional support systems, improve workload management, and provide adequate resources to promote the psychological well-being of female educators.

3.3 Perceived Stress Level Among Female Educators

The perceived stress level of female educators was assessed using the 10-item Perceived Stress Scale (PSS). The findings indicated that most respondents experienced either moderate or high levels of perceived stress (Table 3). Female educators from IPTA reported a higher prevalence of high perceived stress (55.4%), followed by moderate perceived stress (42.6%), while only 2.0% were categorized as having low perceived stress. In contrast, most respondents from IPTS Malaysia experienced moderate perceived stress (57.8%), followed by high perceived stress (40.0%), whereas only 2.2% reported low perceived stress. Analysis of individual stress indicators showed that many respondents frequently felt nervous and stressed, experienced difficulties controlling important aspects of their lives, and felt overwhelmed by problems and responsibilities. A substantial proportion of educators also reported feeling frustrated by situations beyond their control and struggled with increasing work-related demands. Overall, the findings suggest that occupational stress is a significant concern among female educators in both IPTA and IPTS. Although moderate stress was more common among respondents from the IPTS, female educators from the IPTA demonstrated a greater tendency towards high perceived stress. These findings highlight the importance of implementing effective stress management strategies and strengthening institutional support systems to promote the psychological well-being of educators.

Table 3. Perceived stress level among female educators

Stress level	IPTA, n (%)	IPTS, n (%)
Low stress	4 (2.0)	1 (2.2)
Moderate stress	86 (42.6)	26 (57.8)
High stress	112 (55.4)	18 (40.0)

High perceived stress was more prevalent among female educators in IPTA (55.4%), whereas moderate perceived stress was the dominant category among female educators in IPTS Malaysia (57.8%).

3.4 Relationship Between Occupational Stress Factors and Perceived Stress Level

The relationship between occupational stress factors and perceived stress levels among female educators was analysed using the Chi-square test (Table 4). The findings showed that several occupational stress factors were significantly associated with perceived stress levels among respondents from IPTA. Significant associations were found for job overload ($p = 0.001$), job satisfaction and job security ($p = 0.001$), job burnout ($p = 0.015-0.016$), job demand ($p = 0.001-0.011$), job resources ($p = 0.006$), financial problems ($p = 0.001$), and student discipline ($p = 0.001-0.002$). These findings indicate that female educators experiencing higher levels of stress in these domains were more likely to report higher perceived stress levels.

Table 4. Relationship between occupational stress factors and perceived stress level among female educators

Occupational stress factor	IPTA, p -value	IPTS, p -value
Job overload	0.001	0.144–0.424
Job satisfaction & job security	0.001	0.329–0.761
Job burnout	0.015–0.016	0.051–0.780
Job demand	0.001–0.011	0.329–0.761
Job resources	0.006	0.682–0.812
Interpersonal relationship	0.125–0.384	0.583–0.771
Financial problems	0.001	0.016–0.041
Student discipline	0.001–0.002	0.150–0.501
Time management	0.447–0.787	0.138–0.318

* p -value (<0.05 : significant)

In contrast, interpersonal relationship ($p = 0.125-0.384$) and time management ($p = 0.447-0.787$) were not significantly associated with perceived stress levels among IPTA respondents. This suggests that these factors had a relatively smaller influence on overall stress compared with workload, organizational, and financial-

related factors. Among female educators from IPTS Malaysia, financial problems emerged as the only factor significantly associated with perceived stress levels, with significance values ranging from $p = 0.016$ to $p = 0.041$. Educators who reported greater financial concerns were more likely to experience higher levels of perceived

stress. However, job overload, job satisfaction and job security, job burnout, job demand, job resources, interpersonal relationships, student discipline, and time management did not demonstrate significant associations with perceived stress levels ($p > 0.05$).

To determine whether occupational stress factors differed between IPTA and IPTS, the Mann–Whitney U test was conducted (Table 5). The analysis revealed significant differences in job overload ($p = 0.013$), job burnout ($p = 0.001$), job demand ($p = 0.030$), and financial problems ($p = 0.001$) between female educators from IPTA and IPTS Malaysia. no significant differences were observed for job satisfaction and job security ($p = 0.372$), job resources ($p = 0.306$), interpersonal relationship ($p = 0.225$), student discipline ($p = 0.343$), and time management ($p = 0.894$).

Table 5. Comparison of occupational stress factors between IPTA and IPTS in Malaysia

Occupational stress factor	z-value	p-value
Job overload	-2.483	0.013
Job satisfaction & job security	-0.892	0.372
Job burnout	-3.308	0.001
Job demand	-2.166	0.030
Job resources	-1.023	0.306
Interpersonal relationship	-1.212	0.225
Financial problems	-3.774	0.001
Student discipline	-0.948	0.343
Time management	-0.133	0.894

*p-value (<0.05: significant)

Furthermore, the overall perceived stress level differed significantly between the two institutions ($Z = -2.052$, $p = 0.040$), indicating that female educators from IPTA and IPTS experienced different levels of occupational stress (Table 6). Overall, the findings suggest that occupational stress among female educators is mainly influenced by workload-related factors, job burnout, job demands, financial concerns, and student-related challenges. Financial problems were identified as the most consistent factor associated with perceived stress levels across both institutions, highlighting the importance of financial well-being in maintaining educators' psychological health and work performance.

Table 6. Comparison of overall perceived stress level between IPTA and IPTS in Malaysia

Occupational stress factor	z-value	p-value
Overall perceived stress level	-2.052	0.040

Occupational stress among female educators was significantly associated with job overload, job satisfaction and job security, job burnout, job demand, job resources, financial problems, and student discipline among respondents from IPTA. In IPTS Malaysia, only financial problems demonstrated a significant relationship with perceived stress levels. Additionally, significant differences between the two institutions were observed for job overload, job burnout, job demand, financial problems, and overall perceived stress level.

4. DISCUSSION

This study examined the contributing factors of occupational stress and perceived stress levels among female educators in one Public Higher Education Institution (*Institusi Pengajian Tinggi Awam* or IPTA) and one Private Higher Education Institution (*Institusi Pengajian Tinggi Swasta* or IPTS) in Malaysia. Overall, the findings indicate that occupational stress remains an important concern among female educators, with most respondents reporting moderate to high levels of perceived stress. Although many respondents were experienced educators aged between 40 and 49 years and possessed doctoral qualifications, these characteristics did not appear to protect them from occupational stress. This finding suggests that professional experience and higher educational attainment do not necessarily eliminate exposure to occupational demands. Instead, experienced educators may assume additional responsibilities related to teaching, research, supervision, administration, and institutional activities, thereby increasing their overall workload.⁽³²⁾ This interpretation is consistent with the Job Demands-Resources (JD-R) theory, which proposes that employee well-being is influenced by the balance between job demands and job resources. Excessive job demands may contribute to strain and burnout, particularly when adequate resources are not available to support employees in managing those demands.⁽³³⁾ Recent research among university teachers similarly indicates that academic work is shaped by multiple demands, resources, and institutional factors that influence workplace stress and well-being.⁽³⁴⁾

Student discipline emerged as the highest-rated contributor to occupational stress among female educators in both institutions. Respondents reported stress associated with student behaviour, including late assignment submission, lack of attention during classes, and academic dishonesty.⁽³⁵⁾ Rather than being viewed

solely as classroom-management problems, these findings suggest that student-related issues represent an additional psychological and emotional demand placed on educators. Managing problematic behaviour requires educators to devote additional time and emotional effort to monitoring students, providing repeated guidance, resolving conflicts, and maintaining classroom engagement.

This finding is consistent with previous research indicating that student-related responsibilities and interpersonal demands constitute important sources of stress among university teachers.⁽³⁶⁾ Recent research based on the JD-R framework also identified teaching-related responsibilities, interpersonal relationships, institutional management, and organisational conditions as important workplace demands and resources among academic staff.⁽³⁴⁾ From the JD-R perspective, student discipline can therefore be conceptualised as a job demand because repeated exposure to challenging student behaviour requires sustained psychological and emotional effort. When such demands are not adequately supported by institutional resources, they may contribute to psychological strain and emotional exhaustion.⁽³³⁾

The prominence of student discipline in the present study also extends the interpretation of occupational stress beyond workload alone. Although workload is an important occupational demand, educators may simultaneously experience interpersonal and emotional demands associated with student management. Consequently, interventions aimed at reducing occupational stress should not focus exclusively on reducing workload but should also strengthen institutional mechanisms for managing student behaviour, academic misconduct, and classroom-related challenges.

Job demand was also identified as an important contributor to occupational stress among the respondents. Educators reported stress associated with excessive workload, lesson preparation outside normal working hours, administrative responsibilities, and limited opportunities for rest.⁽³⁷⁾ These findings are consistent with previous research indicating that academic staff are required to manage multiple academic and non-academic responsibilities, which may increase job-related stress.⁽³⁸⁾ The accumulation of teaching, research, publication, supervision, administrative, and student-related responsibilities may create competing demands that require educators to continuously allocate time and psychological resources across different roles.

This finding strongly supports the JD-R framework. According to Bakker and Demerouti (2017),⁽³³⁾ job demands refer to aspects of work that require sustained physical or psychological effort and may lead to strain when they are excessive or prolonged. In the context of higher education, workload, time pressure, research expectations, teaching responsibilities, and administrative duties can therefore function as job demands. Recent evidence among university teachers similarly demonstrates that academic work involves a combination of workplace demands, organizational pressures, and available resources that influence educators' well-being.⁽³⁴⁾

Importantly, however, student discipline was ranked higher than job demand in the present study. This suggests that occupational stress among female educators is multidimensional. Workload creates pressure through the quantity and intensity of tasks, whereas student-related problems may generate additional emotional and interpersonal demands. The combination of these demands may therefore be more important in explaining perceived stress than workload alone.

Financial problems were significantly associated with perceived stress among female educators in both institutional settings. This finding suggests that occupational stress cannot be understood exclusively in terms of workplace conditions because financial concerns may interact with professional demands to influence overall psychological well-being. Financial pressures may include household expenses, financial commitments, living costs, debt, and concerns regarding financial security.

The finding is consistent with previous research showing that financial strain can contribute to psychological distress and emotional exhaustion among employees.⁽³⁹⁾ For female educators, financial concerns may be particularly relevant when professional responsibilities coexist with family responsibilities. Research involving women employees in Malaysian higher education institutions has shown that work-family conflict is an important issue and that family-related support can influence the experience of conflict among women employees.⁽⁴⁰⁾ Thus, financial stress may represent an additional demand that competes for an individual's psychological resources.

The significant relationship observed in both IPTA and IPTS groups is also noteworthy because it was the only occupational factor that demonstrated a significant relationship with perceived stress among IPTS

respondents. This consistency across institutional contexts suggests that financial concerns may represent a broader source of stress that is less dependent on institutional differences. Nevertheless, the cross-sectional nature of the study prevents causal conclusions regarding whether financial problems directly increase perceived stress.

An important finding of this study was that female educators from the IPTS reported higher levels of stress related to job burnout, job satisfaction, and job security than respondents from the IPTA. This difference may reflect variations in institutional expectations, organisational structures, employment arrangements, performance indicators, and organisational culture. Previous research has suggested that institutional environment and organisational culture play important roles in influencing stress and burnout among university educators.⁽⁴¹⁾ In addition, previous research has highlighted the importance of institutional conditions and available resources in shaping the experiences of academic staff.⁽³⁴⁾

The higher level of job insecurity among IPTS educators may be particularly important. From a JD-R perspective, job security can be understood as an important employment-related resource. When employees perceive uncertainty regarding employment continuity or institutional expectations, this may reduce their sense of security and increase psychological strain. Therefore, the combination of job demands and insufficient resources may help explain the higher levels of burnout and job-related concerns observed among IPTS respondents.

However, the findings should not be interpreted as indicating that employment in IPTS is inherently more stressful than employment in IPTA. Differences may also be influenced by factors that were not measured in the present study, such as employment status, academic discipline, workload allocation, salary, institutional policies, organisational support, and individual coping strategies. Therefore, the institutional comparison should be interpreted as evidence of different stress profiles rather than evidence of a causal effect of institutional type.

The Chi-square analysis provided further evidence that occupational stress factors were not uniformly associated with perceived stress across the two institutional contexts. Among IPTA respondents, job overload, job demand, job burnout, job resources, financial problems, and student discipline were

significantly associated with perceived stress levels. In contrast, among IPTS respondents, only financial problems demonstrated a statistically significant relationship with perceived stress.

The significant findings among IPTA respondents suggest that perceived stress may be influenced by a combination of different occupational demands and resources. In particular, the significant relationship involving job resources is consistent with the JD-R theory, which emphasises that resources such as social support, autonomy, supervisory support, and adequate organisational resources can help employees cope with demanding work conditions.⁽³³⁾ Thus, the presence or absence of job resources may influence how educators respond to occupational demands.

In contrast, the non-significant findings among IPTS respondents require cautious interpretation. The absence of statistical significance does not necessarily indicate that job overload, job demand, job burnout, job resources, or student discipline are unimportant. Rather, the analysis did not detect a statistically significant association between these factors and perceived stress within the sampled IPTS group. One possible explanation is the substantially smaller IPTS sample compared with the IPTA sample, which may have reduced the statistical power to detect small or moderate associations. Differences in organisational structure, variability of responses, and other unmeasured contextual factors may also have contributed to this pattern.

This distinction is important because non-significant findings can provide useful information about the contextual nature of occupational stress. The fact that several factors were significant in the IPTA group but not in the IPTS group suggests that the relationship between occupational demands and perceived stress may vary according to institutional conditions. This interpretation is consistent with the JD-R framework, which emphasises that the effects of job demands depend partly on the availability of job resources and the specific work context.⁽³³⁾

The Mann-Whitney U test further demonstrated significant differences between IPTA and IPTS respondents in job overload, job burnout, job demand, financial problems, and overall perceived stress level. These findings indicate that female educators in the two institutional settings did not experience occupational stress in exactly the same way. Rather than suggesting that one institutional type is universally more stressful, the results indicate that the intensity and pattern of

occupational stress may differ according to institutional conditions.

The JD-R framework provides a useful explanation for these differences because job demands and resources are context-dependent.⁽³³⁾ Recent research among university teachers similarly found that workplace stress is influenced by institutional factors, organisational management, interpersonal relationships, teaching responsibilities, and available resources.⁽³⁴⁾ Therefore, stress-management strategies should be adapted to the specific organisational context rather than applying a single intervention across all higher education institutions.

The findings have several practical implications for higher education institutions. First, universities should review workload distribution by examining teaching loads, administrative responsibilities, supervision requirements, research expectations, and other institutional duties. Second, student discipline should be addressed through clearer institutional procedures, early intervention mechanisms, academic integrity policies, and stronger collaboration between educators, academic management, and student affairs units. Third, institutions should strengthen job resources through supervisory support, collegial support, professional development opportunities, adequate teaching resources, and appropriate autonomy.

Mental health support, counselling, and stress-management programmes may also benefit educators; however, these interventions should not be used as substitutes for organisational-level changes. Consistent with the JD-R framework, reducing excessive job demands while strengthening available job resources is likely to provide a more comprehensive approach to improving employee well-being.⁽³³⁾ For female educators in particular, institutional policies that recognise work-family responsibilities may also be important. Research involving women employees in Malaysian higher education institutions found that work-family conflict is relevant to the experiences of women employees and highlighted the importance of support mechanisms in addressing such challenges.⁽⁴⁰⁾ Similarly, research among female university teachers found that work-family conflict and burnout were negatively associated with job satisfaction, while perceived organisational support was beneficial.⁽⁴²⁾

This study has several strengths. First, it specifically focused on female educators, allowing the study to examine occupational stress within a population

that may experience overlapping professional and personal responsibilities. Second, the inclusion of both an IPTA and an IPTS enabled a comparative examination of occupational stress across two different higher education contexts. Third, the study considered multiple occupational stress factors rather than focusing on a single predictor, providing a broader understanding of the potential sources of perceived stress. Fourth, the study employed the Perceived Stress Scale (PSS), an established instrument for assessing perceived stress, together with descriptive and inferential statistical analyses to examine differences and associations between the study variables.

Despite these strengths, several limitations should be acknowledged. First, the cross-sectional design limits the ability to establish causal relationships between occupational stress factors and perceived stress. The significant associations identified should therefore not be interpreted as evidence that a particular occupational factor directly causes higher stress. Second, purposive sampling and the inclusion of only two higher education institutions limit the generalisability of the findings to all female educators in Malaysian higher education institutions. Third, the IPTS sample was substantially smaller than the IPTA sample, which may have reduced the statistical power to detect significant associations and may partly explain the greater number of non-significant findings in the IPTS group. Fourth, the study relied on self-reported questionnaire responses, which may be affected by recall bias, social desirability, or individual differences in the perception and reporting of stress. Finally, other potentially relevant variables, such as family responsibilities, employment status, academic discipline, salary, organisational support, and work-family conflict, were not examined comprehensively.

Future studies should therefore consider larger and more representative samples involving multiple IPTAs and IPTSs, longitudinal research designs, and additional organisational and individual variables. Future research could also examine whether job resources such as organizational support, supervisor support, autonomy, and work-family support moderate the relationship between job demands and perceived stress among female educators. Such research would provide a more comprehensive test of the JD-R framework in the Malaysian higher education context.

5. CONCLUSION

This study concludes that occupational stress is a significant concern among female educators in both public and private higher education institutions in Malaysia, with most respondents reporting moderate to high levels of perceived stress. Overall, the findings support the study hypothesis that occupational stress factors are associated with perceived stress among female educators, although the strength and pattern of these associations varied according to institutional context. Student discipline, job demand, job overload, financial problems, and job burnout emerged as important occupational stress factors, while financial problems represented the most consistent factor significantly associated with perceived stress across both IPTA and IPTS. The comparative findings further demonstrated significant differences between IPTA and IPTS in job overload, job burnout, job demand, financial problems, and overall perceived stress levels. However, the findings also revealed important similarities, particularly the significant role of financial problems and the generally moderate to high levels of perceived stress reported by educators in both institutional settings. Female educators in IPTA reported higher overall perceived stress, whereas IPTS educators reported greater stress related to burnout and job security, suggesting that occupational stress may be shaped by differences in institutional demands and organisational conditions. These findings highlight the need for higher education institutions to strengthen organisational support, manage excessive workload, address student-related challenges, and provide appropriate psychological and work-life support for female educators. Future research should employ larger and more representative samples involving multiple public and private higher education institutions, preferably using longitudinal or mixed-methods designs, to further examine the factors underlying institutional differences in occupational stress and to evaluate the effectiveness of targeted interventions.

Ethical Approval

Ethical approval was granted by the FONAHHS Research Ethics Committee with "Research with Minimal Risk". (Reference No. FONAHHS-REC/2025/01/006).

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Competing Interests

All the authors declare that there are no conflicts of interest.

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Underlying Data

Derived data supporting the findings of this study are available from the corresponding author on request.

REFERENCES

1. Quick J, Henderson D. Occupational Stress: Preventing Suffering, Enhancing Wellbeing. *International Journal of Environmental Research and Public Health*. 2016;13(5):459. <http://dx.doi.org/10.3390/ijerph13050459>
2. du Plessis M. Model of coping with occupational stress of academics in a South African higher education institution. *SA Journal of Industrial Psychology*. 2020;46:a1714. <http://dx.doi.org/10.4102/sajip.v46i0.1714>
3. Ueno A, Yu C, Curtis L, Dennis C. Job demands-resources theory extended: Stress, loneliness, and care responsibilities impacting UK doctoral students' and academics' mental health. *Studies in Higher Education*. 2025;50(4):808–823. <https://doi.org/10.1080/03075079.2024.2357148>
4. World Health Organization. Mental health: Strengthening our response. Geneva: World Health Organization; 2022. Available from: <https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response> (Accessed on 20 May 2026)
5. Shen P, Slater P. Occupational stress, coping strategies, health, and well-being among university academic staff—An integrative review. *International Education Studies*. 2021;14(12):99–123. <https://doi.org/10.5539/ies.v14n12p99>
6. Zakaria S, Omar N, Asmawi A. Work responsibilities stress among academicians in IPTS in Malaysia. *Journal of Education and Vocational Research*. 2015;6(2):42–47.
7. Narti Z, Afdal A, Hariko R. Work-family conflict pada perempuan dalam perspektif Islam. *Indonesian Journal of Counseling and Development*. 2023;5(2):102–107. <https://doi.org/10.32939/ijcd.v5i2.2864>
8. Uros NT, Ibrahim A, Rami AAM. Workload, work family conflict, and emotional well-being among female teachers in West Malaysia. *FMDB Transactions on Sustainable Social Sciences Letters*. 2025;3(2):44–54. <https://doi.org/10.69888/FTSSSL.2025.000489>
9. Polo F, Abid K. A look at occupational stress in higher education through a transactional lens: Insights from female academics in Qatar. *Journal of Higher Education Policy and Management*. 2025;47(6):669–693. <https://doi.org/10.1080/1360080X.2025.2487925>
10. Mendonca V. The Psychological and Emotional Impact of Teaching on Women. *International Journal of Scientific Research in Engineering and Management*. 2025;9(2):1–9.

- <http://dx.doi.org/10.55041/ijrsrem41641>
11. Redondo-Flórez L, Tornero-Aguilera JF, Ramos-Campo DJ, Clemente-Suárez VJ. Gender Differences in Stress- and Burnout-Related Factors of University Professors. *BioMed Research International*. 2020;2020:6687358. <http://dx.doi.org/10.1155/2020/6687358>
12. Maqsood A, Gul S, Noureen N, Yaswi A. Dynamics of Perceived Stress, Stress Appraisal, and Coping Strategies in an Evolving Educational Landscape. *Behavioral Sciences*. 2024;14(7):532. <http://dx.doi.org/10.3390/bs14070532>
13. Turukmane P, Tirkey D. A comparative study on occupational stress among physical education teachers and coaches across government and private institutions. *International Journal of Physical Education, Sports and Health*. 2025;12(4):77-79. <https://doi.org/10.22271/kheljournal.2025.v12.i4b.3872>
14. Dhungana P, Joshi A, Chalise A, Paudel S. Psychological wellbeing and occupational stress among public secondary school teachers in Beni Municipality, Nepal: a cross-sectional study. *BMC Public Health*. 2025;25(1):3372. <http://dx.doi.org/10.1186/s12889-025-24677-x>
15. Oliveira S, Roberto MS, Veiga-Simão AM, Marques-Pinto A. Addressing Teacher Occupational Health in Challenging Times: The Role of a Positive Organizational Climate in Buffering Teachers' Burnout. *International Journal of Environmental Research and Public Health*. 2025;23(1):42. <http://dx.doi.org/10.3390/ijerph23010042>
16. Demerouti E, Bakker AB. Revitalising burnout research. *Work & Stress*. 2025;39(2):153-161. <http://dx.doi.org/10.1080/02678373.2025.2473385>
17. Lauron RP. The role of social support and job satisfaction in sustaining teacher retention in a private higher education institution. *European Journal of Education Studies*. 2026;13(5):44-61. <http://dx.doi.org/10.46827/ejes.v13i5.6633>
18. Liu G, Mohamad AA, Lo M-C. Role Stressors and Job Insecurity as Predictors of Job Stress: Evidence from a Higher Education Setting. *International Journal of Research and Innovation in Social Science*. 2026;9(12):1716-1728. <http://dx.doi.org/10.47772/ijriss.2025.91200128>
19. Morris C, Agbo B, Osman M, Basketts J, Kyriacou T. The components and implications of teacher workload: a review. *Educational Research*. 2026;68(2):173-194. <http://dx.doi.org/10.1080/00131881.2026.262928>
20. World Health Organization. WHO releases 2025 update to the International Classification of Diseases (ICD-11). Geneva: World Health Organization; 2025. Available from: [https://www.who.int/news/item/14-02-2025-who-releases-2025-update-to-the-international-classification-of-diseases-\(icd-11\)](https://www.who.int/news/item/14-02-2025-who-releases-2025-update-to-the-international-classification-of-diseases-(icd-11)) (Accessed on 20 May 2026)
21. Gorain S, Ghosh S. Assessing Teacher Burnout, Qualifications and Experience on Teacher Effectiveness in Secondary Schools. *Journal of Education Method and Learning Strategy*. 2025;3(3):477-490. <http://dx.doi.org/10.59653/jemls.v3i03.1846>
22. Ilham, MI, Huay X. Structural determinants of educator morale and classroom efficacy. *Journal of Educational Development*. 2019;34(2):112-125.
23. PricewaterhouseCoopers. PwC's 2026 Employee Financial Wellness Survey: Financial anxiety is weakening productivity and retirement security. London: PwC Research Report; 2026. Available from: <https://www.pwc.com/us/en/services/consulting/human-resources/library/employee-financial-wellness-survey.html> (Accessed on 20 May 2026)
24. Castillo VH. Teacher well-being and work-life balance. *International Journal of Research Studies in Education*. 2026;15(5):115-124. <http://dx.doi.org/10.5861/ijrse.2026.26095>
25. Akshara International School. Teacher Stress & Student Behavior Issues: A Growing Challenge in Today's Classrooms. Hyderabad, India: Akshara Research & Insights; 2025. Available from: <https://akshara.edu.in/teacher-stress-student-behavior-issues-solutions-2025/> (Accessed on 20 May 2026)
26. Jaime E. What's the problem: Teacher stress and student behavior. [Master's Thesis]. San Rafael, California; Dominican University of California; 2024. <https://doi.org/10.33015/dominican.edu/2024.EDU.06>
27. Adams RV, Blair E. Impact of Time Management Behaviors on Undergraduate Engineering Students' Performance. *Sage Open*. 2019;9(1):215824401882450. <http://dx.doi.org/10.1177/2158244018824506>
28. Ahangar BF, Ramachandaran SD, Lavanya L, Iddagoda A. Navigating Work-Life Balance: Experiences of Female Academics at Malaysian Private Universities. *International Journal of Learning, Teaching and Educational Research*. 2026;25(3):1170-1195. <http://dx.doi.org/10.26803/ijlter.25.3.52>
29. Krejcie RV, Morgan DW. Determining sample size for research activities. *Educational and Psychological Measurement*. 1970;30(3):607-610. <https://doi.org/10.1177/001316447003000308>
30. Cohen S, Kamarck T, Mermelstein R. A global measure of perceived stress. *Journal of Health and Social Behavior*. 1983;24(4):385-396.
31. Bond TG, Fox CM. Applying the Rasch model: Fundamental measurement in the human sciences (2nd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers; 2007.
32. Turner K, Garvis S. Teacher educator wellbeing, stress and burnout: A scoping review. *Education Sciences*. 2023;13(4):351. <https://doi.org/10.3390/educsci13040351>
33. Bakker AB, Demerouti E. Job demands-resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*. 2017;22(3):273-285. <https://doi.org/10.1037/ocp0000056>
34. Kovács K, Dobay B, Halasi S, Pinczés T, Tódor I. Demands, resources and institutional factors in the work of academic staff in Central and Eastern Europe: Results of a qualitative research among university teachers in five countries. *Frontiers in Education*. 2024;8:1326515. <https://doi.org/10.3389/feduc.2023.1326515>
35. McDaniel SC, Mahatmya D, Bruhn AL. Educator burnout in the age of COVID-19: A mediation analysis of perceived stressors, work sense of coherence, and sociodemographic

- characteristics. Teaching and Teacher Education. 2024;137:104384.
<http://dx.doi.org/10.1016/j.tate.2023.104384>
36. Merwe Y, Klinck K. Assessing Stress Levels Amongst Teachers: Factors, Impacts, Coping Strategies and Teacher Well Being. Education Journal. 2025;14(3):134–145.
<http://dx.doi.org/10.11648/j.edu.20251403.16>
 37. Mourtada TI, Daouk A, Bou Zakhem N, Tahan SA, Kalakesh G, Elia J. Predicting Educator Burnout and Motivation in Educational Settings: Workload as a Job Demand, Organizational Justice as a Resource, and the Moderating Role of Intrinsic Motivation. Education Sciences. 2026;16(3):435.
<http://dx.doi.org/10.3390/educsci16030435>
 38. Markovič D, Fričová J, Kohútová K. Burnout syndrome in Slovak teachers in relation to selected variables of the job demand resources model. In Society Integration Education: Proceedings of the International Scientific Conference. 2024;1:736–744.
<http://dx.doi.org/10.17770/sie2024vol1.7870>
 39. Yang L. Nexus Between Financial Events and Emotional Exhaustion: Mediating Roles of Deliberate Thinking and Negative Interpersonal Events. Frontiers in Psychology. 2022;13:840701.
<http://dx.doi.org/10.3389/fpsyg.2022.840701>
 40. Noor T, Mohamad M, Dahri S, . Relationship between Social Support and Work-Family Conflict: A Case Study of Women Employees in a Malaysian Higher Education Institution. Journal of Technical Education and Training. 2019;11(2):88–95.
<http://dx.doi.org/10.30880/jtet.2019.11.02.009>
 41. Joshi R. Impact Of Organizational Culture On Job Stress And Well-Being Among Higher Education Faculty. Educational Administration: Theory and Practice. 2024;30(5):13975–13985.
<http://dx.doi.org/10.53555/kuey.v30i5.6170>
 42. Su Q, Jiang M. “Ideal employees” and “good wives and mothers”: Influence mechanism of bi-directional work–family conflict on job satisfaction of female university teachers in China. Frontiers in Psychology. 2023;14:1166509. <http://dx.doi.org/10.3389/fpsyg.2023.1166509>