Jurnal Psikologi | E-ISSN: 2302-1098
2025, Vol. 24, No. 2, 165-183
https://doi.org/10.14710/jp.24.2.165-183

Uncovering the emotional exhaustion of PTN-BH lecturers: The impact of workload, interpersonal relationships, and change-related communication

Noor I'anah,[1] Dian Ratna Sawitri,[2] Debora Eflina Purba,[1] and Corina D. Riantoputra[1*]
[1] Faculty of Psychology, University of Indonesia, Depok, Indonesia
[2] Faculty of Psychology, Diponegoro University, Semarang, Indonesia

ABSTRACT
Background: Emotional fatigue is a growing concern among academics, with over 50% of lecturers in Indonesia experiencing emotional exhaustion. *Perguruan Tinggi Negeri Berbadan Hukum* (PTN-BH) face high autonomy along with heavy tridarma responsibilities and performance pressures, often without adequate financial or emotional support. Research focusing specifically on PTN-BH lecturers remains limited.
Purpose: To examine work-related stressors—workload, interpersonal relationships, and change-related communication—that contribute to emotional exhaustion among PTN-BH lecturers, using the Job Demands–Resources theory (55.9% female; M_{age} = 42.54; SD_{age} = 10.6).
Method: A cross-sectional survey was conducted involving 306 PTN-BH lecturers in Indonesia (55.9% female; M_{age} = 42.54; SD_{age} = 10.6). Data were analyzed using moderated multiple regression in IBM SPSS version 25.
Findings: Workload and change-related communication showed significant effects on emotional exhaustion. In contrast, interpersonal relationships and the moderating role of self-leadership were not statistically significant.
Implication: Addressing excessive workload and improving communication during organizational changes are essential to reduce emotional exhaustion and promote well-being among PTN-BH lecturers.

KEYWORDS
Emotional exhaustion, workload, lecturer, PTN-BH, change.

ARTICLE HISTORY
Received 8 May 2025
Revised 21 August 2025
Accepted 22 October 2025

Introduction

An appropriate working environment is fundamental for supporting workers' mental health (World Health Organization [WHO], 2024). Survey data from 28 countries show that problems related to working environment conditions increased over the 10 years prior to the survey (Eurofound, 2019). In recent decades, significant changes in the higher education sector have led to an increase in work stressors affecting academics' mental health (Kinman & Johnson, 2019). Reports indicate that 55% of lecturers in the UK experience chronic emotional exhaustion (Dougal et al., 2021). The figure is even higher in the United States at 63% (Vyletel et al., 2023). A study of a small sample of lecturers in Indonesia showed that 56.3% of lecturers experienced high levels of emotional exhaustion (Wayanti, 2016).

Emotional exhaustion is defined as "*feelings of being emotionally overextended and exhausted by one's work. "It is manifested by both physical fatigue and a sense of feeling psychologically and emotionally 'drained*'" (Wright & Cropanzano, 1998, p. 486). Early detection of emotional exhaustion is crucial for preventing the development of more serious mental health problems. Emotional

CONTACT Corina D. Riantoputra corina.r@ui.ac.id Jl. Lkr. Kampus Raya, Depok, West Java, Indonesia, 16424

exhaustion is the most common form of psychological fatigue experienced by individuals across various work environments (Turgut et al., 2016). Emotional exhaustion is an early indicator of mental health disorders and presents an opportunity for more effective interventions before its effects become widespread (Dobson & Schnall, 2018; Huang et al., 2025). Work stressors among lecturers are strongly correlated with high levels of emotional exhaustion (Watts & Robertson, 2011).

Emotional exhaustion is influenced by both individual and situational work-related factors. Job situational factors or job stressors include job demands and resources. A review of the literature indicates that academics' job stressors contribute to high levels of emotional exhaustion (Watts & Robertson, 2011). Trend analyses show increasing pressure from work stressors in the UK's higher education sector (Wray & Kinman, 2020). The identified stressors include workload, control, supervisor support, coworker support, workplace relationships, role clarity, and change-related communication. However, the trend analysis has not explicitly linked these stressors to the mental health of lecturers. Work stressors exert a more profound impact on workers' mental health (Niedhammer et al., 2022). Therefore, the impact of work stressors on the mental health of lecturers, specifically emotional exhaustion, needs to be further investigated.

Moreover, UK findings cannot be directly generalized to the Indonesian context. For instance, in the UK, lecturers generally hold a PhD, whereas in Indonesia, a master's degree is sufficient (Gov UK, 2024; LLDIKTI, 2021). In terms of research culture, academics in the UK are accustomed to the pressure of publications and grants, whereas the research culture in Indonesia is still in its developing stage (Sucahyo, 2017). Furthermore, Indonesian lecturers' proficiency in English—a key requirement for international publications—varies significantly (Hamied, 2017). These differences potentially influence lecturers' perceptions of and responses to work stressors, making it inappropriate to directly apply findings from the UK to the Indonesian context. In addition, studies conducted in Indonesia are still limited to one state university, lack a theoretical framework, and have not explicitly discussed emotional exhaustion (Multamasatika et al., 2023).

It is important to focus on the specific context of legal-entity higher education institutions (*Perguruan Tinggi Negeri Berbadan Hukum* [PTN-BH]). PTN-BH refers to a category of public universities granted the highest level of autonomy in academic and non-academic domains, including financial management, human resource administration, and the implementation of the *tridarma* of higher education (Kemdikbud Ristek, 2023a). PTN-BH are also referred to as autonomous public universities (Zuraida & Senen, 2021). Focusing on PTN-BH lecturers is essential because of the unique characteristics of these institutions, whose high autonomy brings increased demands and expectations (Fardela, 2024; Permana, 2024).

Lecturers at PTN-BH universities have greater autonomy and are expected to fulfill the demands of teaching, research, and community service (*tridarma*). Their workload is considerably heavier, with a strong emphasis on research productivity, international visibility, and securing external funding (Fardela, 2024). Furthermore, these institutions stress the importance of lecturer participation in global collaborations (Zuraida & Senen, 2021). In contrast, lecturers at non-PTN-BH universities face fewer administrative burdens, with teaching and local community service as their primary responsibilities. Their job demands are relatively light, resulting in fewer workload and performance expectations stressors (Permana, 2024). Furthermore, PTN-BH universities have more rigorous performance evaluations, focusing on research output, international publications, and

institutional rankings, whereas non-PTN-BH universities place greater emphasis on teaching quality and community engagement (Kemdikbud Ristek, 2023a).

This study employs the JD-R theory to examine the influence of job stressors on emotional exhaustion. The JD-R theory explains how job demands (e.g., workload) and resources (e.g., interpersonal relationships, change-related communication, and self-leadership) affect employee well-being, including the risk of emotional exhaustion and levels of motivation (Demerouti et al., 2001; Bakker et al., 2023). This study adopts the following propositions of JD-R theory: (1) job characteristics can be categorized as demands or resources; (2) increased job demands tend to deplete employees' energy, leading to emotional exhaustion; and (3) job demands' impact on mental health problems can be mitigated by resources (Demerouti & Bakker, 2017; Bakker et al., 2023). Figure 1 illustrates the current research model.

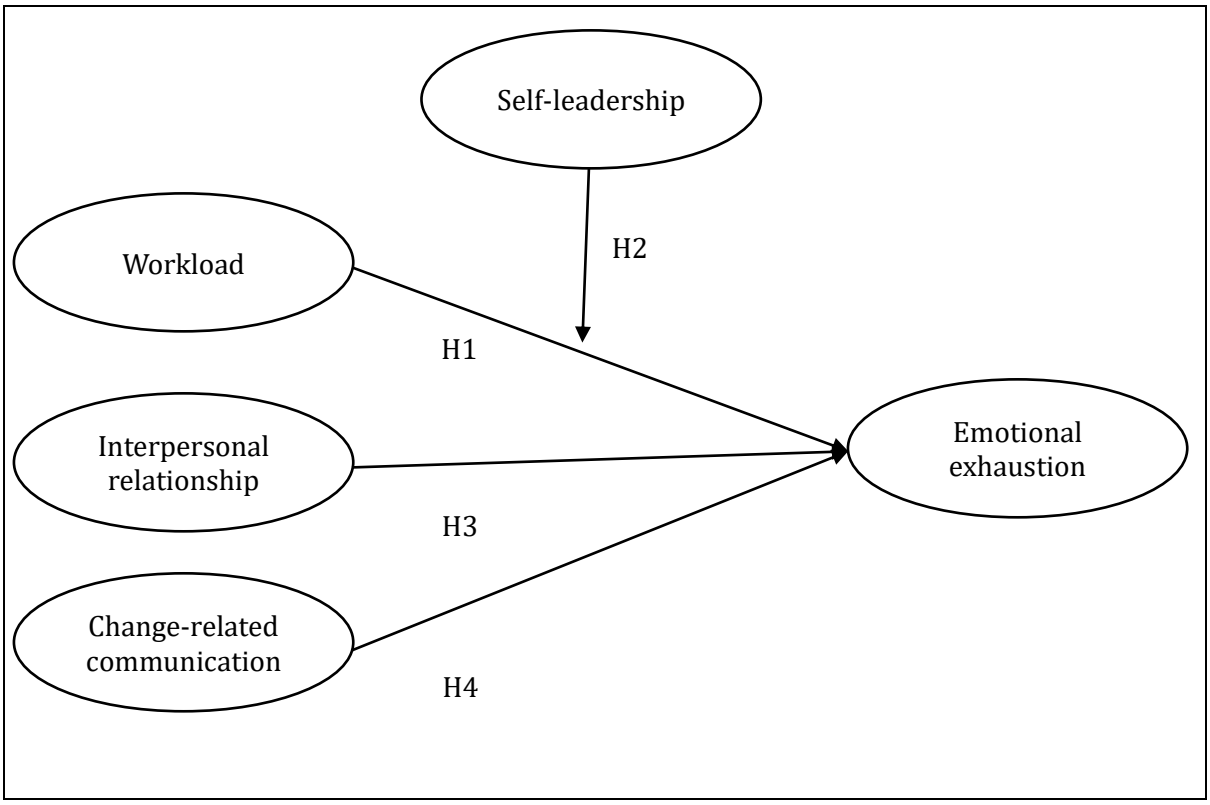

Figure 1. Research Model

Four research gaps warrant further exploration. First, the effect of workload on lecturers' emotional exhaustion remains inconclusive. Workload is defined as *"how much one has to achieve in one's work, the speed at which tasks have to be performed, how much one has to deal with or is confronted with other people's feelings, and how much one has to conceal his or her own feelings at work from other people"* (Burr et al., 2019, p. 481). This definition shows that workload is not limited to the quantity and pace of work but also includes emotional demands, such as managing others' emotions and suppressing one's own feelings in the workplace. (Burr et al., 2019). In line with the JD-R proposition, when workload is excessive and inadequate resources are not available, emotional exhaustion occurs (Bakker et al., 2023). In Indonesia, PTN-BH lecturers face high work complexity, yet empirical studies examining the impact of workload on emotional exhaustion remain scarce.

Therefore, this study seeks to address this gap within the context of PTN-BH, leading to the following hypothesis:

H1: Workload positively affects emotional exhaustion.

Although numerous studies have demonstrated a significant relationship between workload and emotional exhaustion, further investigation is necessary due to inconsistent and context-dependent findings. For example, a study involving 291 professors in Italy found a significant positive relationship between workload and emotional exhaustion (Converso et al., 2019). Similarly, research on 683 lecturers in Nigeria revealed a positive effect of workload on emotional exhaustion (Ugwu et al., 2023). However, a study of 274 health science lecturers in Japan found no significant association between workload and emotional exhaustion (Shimohata et al., 2021). These discrepancies indicate that specific contextual factors may influence the relationship between the two variables.

The inconclusive findings from previous research underscore the need to explore factors that moderate the relationship between workload and emotional exhaustion. According to the JD-R theory's buffer hypothesis, resources can reduce workload's adverse impact on emotional exhaustion (Bakker et al., 2023). It has been proven that resources play a role in weakening the pressure from job demands, which consists of individual and organizational aspects. Organizational aspects can be in the form of organizational support, task variety, feedback, and reward and recognition (De Jonge & Huter, 2021). The individual aspects include personality, emotional intelligence, intrinsic motivation, and self-leadership (Bianchi & Andrews, 2018; Junça Silva et al., 2024; Sabagh et al., 2018). Recent studies have highlighted self-leadership as a personal, modifiable resource that can help individuals cope with high workloads (Furtner et al., 2012; Junça Silva et al., 2024). In the Indonesian academic context, self-leadership has been shown to enhance work effectiveness and mitigate the negative consequences of overwork (Napitupulu, 2024).

Self-leadership functions as a personal resource within the JD-R framework. Manz's (1986; p. 589) early definition of self-leadership— "*a comprehensive self-influence perspective that concerns leading oneself toward performance of naturally motivating tasks as well as managing oneself to do work that must be done, but is not naturally motivating*." As a personal resource, self-leadership strengthens self-regulation, motivation, and energy for lecturers under high workload (Aziz & Abidin, 2024; Matahela & van Rensburg, 2024). In academia, lecturers demonstrate self-leadership by initiating research, managing teaching duties, and completing administrative tasks that may be less intrinsically motivating but are nonetheless mandatory. This resource enables them to more effectively regulate workload pressures (Matahela & van Rensburg, 2024), thereby weakening the relationship between workload and emotional exhaustion.

Self-leadership enables individuals to manage their time and emotional energy more effectively, which helps them maintain psychological resources even when facing a heavy workload (Bakker et al., 2014). By fostering self-regulation and proactive coping, self-leadership reduces strain in high-pressure environments and prevents the depletion of energy that often leads to emotional exhaustion (Çakmak & Uğurluoğlu, 2022; Yildirim-Hamurcu & Terzioglu, 2021). Research on teleworkers, including educators, found that self-leadership significantly mitigates the workload effect on emotional exhaustion, especially in high-autonomy roles (Junça-Silva et al., 2024). These findings motivated the present study to investigate self-leadership as a moderator in the PTN-BH context. This study examines the moderating role of self-leadership in the relationship between workload and emotional exhaustion within the context of PTN-BH lecturers. We hypothesize:

H2: Self-leadership moderates the association between workload and emotional exhaustion, such that the association weakens when self-leadership is higher (vs. lower).

The third research gap concerns the limited number of quantitative studies examining interpersonal relationship-based work stressors despite dynamic changes in the social relations of lecturers. Collegial relationships that once characterized academic work are increasingly replaced by competitive relationships in higher education due to target culture, performativity, and managerialism (Wray & Kinman, 2022). In the context of work stressors, interpersonal relationships are defined as "*relationships* [that deal] *with the employees' impression of the possibility to obtain support from colleagues if one should need it* [and] *whether there is a feeling of being part of the group of employees at the workplace*" (Burr et al., 2019, p. 497). Thus, interpersonal relationships reflect the quality of social interactions at work, including emotional support, assistance when needed, positive reinforcement from colleagues, and the sense of being valued and included in a workplace community (Burr et al., 2019). A trend analysis from 2008 to 2014 found that interpersonal relationships remained in the "red" (urgent action) category for academics in the UK (Wray & Kinman, 2020). A qualitative study involving 41 respondents from Central and Eastern Europe also concluded that collegial support is a critical resource for lecturers (Kovács et al., 2024). However, no quantitative study has specifically examined the impact of interpersonal relationships as a work stressor on lecturers' emotional exhaustion. Positive interpersonal relationships at work have long been considered protective against job stress and emotional exhaustion (Cooper, 1981).

From the JD-R theory perspective, interpersonal relationships are job resources. This study examines the motivational process of the JD-R theory by investigating the direct role of interpersonal relationships on emotional exhaustion (Schaufeli & Bakker, 2004). We propose that better interpersonal relationships are associated with a lower risk of emotional exhaustion among lecturers. The work culture in higher education has undergone significant changes—from collegiality to a more competitive, target-driven environment (Kekäle & Pinheiro, 2025). This shift resonates with the characteristics of Indonesia's PTN-BH institutions, which emphasize institutional autonomy while imposing increasingly demanding expectations for global competitiveness (Fardela, 2024; Permana, 2024). Hence, focusing on the PTN-BH context contributes to the theoretical expansion of JD-R theory in non-Western academic settings that feature complex, competitive, and collectivistic work structures. This study contributes by quantitatively analyzing the relationship between these variables in the PTN-BH lecturer context. We hypothesize:

H3: Interpersonal relationships negatively affect emotional exhaustion.

The third research gap is related to the significant and dynamic transformations in the higher education sector over the past 2 decades. These changes highlight the importance of addressing work stressors arising from change-related communication, which in the context of job stressors is defined as "*how organizational change (large or small) is managed and communicated in the organization*" (Cousin et al., 2004, p. 122). Thus, change-related communication encompasses how information is shared, how it is managed, and how employees' communication process is participatory. This variable reflects staff involvement in discussions, access to ask questions, advance notice of important decisions, and understanding of how changes affect their work tasks (Cousin et al., 2004). Poorly managed and poorly communicated organizational change can create uncertainty among employees (MacKay et al., 2004; Wray & Kinman, 2020). In turn, such feelings of uncertainty and lack of information risk draining workers of their energy resources.

The JD-R theory interprets change-related communication as a job resource that serves as a negative predictor of emotional exhaustion (Schaufeli & Bakker, 2004). In other words, better change-related communication is associated with lower emotional exhaustion. This argument aligns with the third proposition of the JD-R theory, which states that resources buffer the negative impact of job stressors on employee well-being (Bakker et al., 2023). Research in various organizational settings demonstrates that poorly handled change-related communication significantly increases emotional exhaustion (Raza et al., 2023). In higher education, stressors arising from change-related communication have attracted attention in the United Kingdom (Wray & Kinman, 2020) and across the European Union (Kinman & Johnson, 2019). However, to date, no study has investigated the role of change-related communication in the context of PTN-BH lecturers. Thus, in our context, we hypothesize:

H4: Change-related communication negatively affects emotional exhaustion.

Method

Setting

This study was conducted in the context of the autonomous public universities in Indonesia (*Perguruan Tinggi Negeri Berbadan Hukum*—PTN-BH). Universities worldwide have transformed their governance and strategies to meet demands for global competitiveness, innovation, and international visibility (Kinman & Johnson, 2019). This is reflected in the establishment of PTN-BH institutions with greater autonomy than other HEIs in Indonesia (Kemdikbud Ristek, 2023a). The Indonesian government's high expectations of PTN-BH institutions require lecturers to not only fulfill their teaching responsibilities but also actively engage in internationally recognized research, conduct relevant community service, and participate in the increasingly complex management of their institutions (Fardela, 2024; Permana, 2024). As of October 2024, there were 24 PTN-BH institutions in Indonesia (Kemdikbud Ristek, 2023b).

Procedure and Participants

This study employed a quantitative method with an online-based cross-sectional survey. The study involved five variables: one criterion variable (emotional exhaustion), three predictor variables (workload, interpersonal relationships, and change-related communication), and one moderator variable (self-leadership). The study procedure included instrument development, ethical review, pilot testing, data collection, and analysis. The Ethics Committee of the Faculty of Psychology, Universitas Indonesia, approved this study under approval number 127/FPsi.Ethics Committee/PDP.04.00/2024.

The target population comprised lecturers with at least two years of service at PTN-BH institutions. Data were collected using a SurveyMonkey link, which was distributed via an official letter sent through the human resources departments (or equivalent units) of PTN-BH institutions across Indonesia. Additional recruitment was conducted through academic mailing lists of PTN-BH lecturers and social media platforms (e.g., the lecturers' WhatsApp and Instagram communities). The data collection period lasted from October 2 to December 2, 2024. A total of 522 responses were recorded, and 306 valid responses were retained for analysis. The data were cleaned by excluding those with incomplete responses (162 participants), those who failed the attention check item (23 participants), and those who did not meet the eligibility criteria (29 participants). Of the 24 PTN-BH

institutions, ≥ 13 participants were recruited from each of the 13 institutions, with the remaining participants coming from 11 other PTN-BH institutions.

Instruments

All instruments were adapted from a previous study and translated into Indonesian Bahasa. A pilot test of the measurement instruments was conducted to assess the readability, context appropriateness, and reliability of the translated versions. Reliability was evaluated with Cronbach's alpha, showing satisfactory internal consistency for all scales ($\alpha > .70$; Table 2). Content validity was ensured through a review by four experts (2 professors, 2 lecturers in industrial and organizational psychology), confirming item relevance to the constructs. Construct validity was supported by CFA, which showed a good model fit for each variable (CFI > 0.90, SRMR < 0.09) (Hu & Bentler 1999). Each instrument used a 6-point Likert scale with one of two response ranges: (1) "almost never" to (6) "almost always" or (1) "strongly disagree" to (6) "strongly agree." The average score of all items was calculated for scoring.

Emotional exhaustion was measured using the eight-item exhaustion subscale of the Burnout Assessment Tool (Schaufeli et al., 2020). An example item is "*I feel mentally exhausted at my workplace*. (*Saya merasa kelelahan secara mental di tempat kerja saya*)". (Cronbach's alpha = .80).

Workload was measured using eight items from the COPSOQ III developed by Burr et al. (2019). Item wording was adapted to the context of workload of lecturers in higher education by emphasizing "*tridarma*." The term "*tridarma*" refers to Indonesia's three core lecturers' responsibilities: teaching, research, and community service. An example item is "The workload related to my tridarma is uneven, so it accumulates. (*Beban kerja terkait tridarma saya tidak merata sehingga menumpuk*)". (Cronbach's alpha = .90).

Interpersonal relationships were measured using the COPSOQ III subscales of support from colleagues and sense of community (Burr et al., 2019) and the Management Stress Indicator Tool (MSIT: Cousins et al., 2004). Seven items were used. An example item is "There is an atmosphere of mutual respect between me and my coworkers. (*Ada suasana yang saling menghormati antara saya dan rekan kerja saya*)". (Cronbach's alpha = .80).

Change-related communication was measured using the COPSOQ III predictability subscale (Burr et al., 2019) and the MSIT change subscale (Cousins et al., 2004). Five items were used. For example, "I am notified in advance of important decisions, changes, or plans at my workplace. (*Saya diberitahu sebelumnya tentang keputusan penting, perubahan, atau rencana di tempat kerja saya*)". (Cronbach's alpha = .79).

Finally, self-leadership was operationalized using nine-item Abbreviated Self-Leadership Questionnaire (ASLQ) from Houghton et al. (2012). An example item is "I set specific goals for personal performance. (*Saya menetapkan tujuan yang spesifik untuk kinerja pribadi*)". (Cronbach's alpha = .80).

Data Analysis

We conducted a regular moderated multiple regression analysis (MRA) using IBM SPSS Statistics version 25 for Windows to test the study's hypotheses. A bivariate correlation analysis was performed to identify potential control variables before conducting the regression, drawing on prior research. Variables that exhibited significant correlations were subsequently included as controls in

the regression model. We first applied mean-centering to both the predictor (workload) and the moderator (self-leadership) to examine the moderating effect and minimize the multicollinearity between the main effects and the interaction term (Iacobucci et al., 2017). The interaction term was then calculated by multiplying the mean-centered workload and self-leadership scores. Finally, a bootstrapping procedure with 5,000 resamples and a 95% confidence interval was employed to obtain more robust and precise parameter estimates (Hayes, 2013).

Results and Discussion

Descriptive Analysis

The final sample included 306 valid participants, all of whom were lecturers from PTN-BH institutions in Indonesia. The gender distribution was relatively balanced, with a slightly higher proportion of female lecturers (171 participants; 55.9%). The participants' ages ranged from 25 to 75 years, with the largest age group being 35-44 years (116 participants; 37.91%). Majority of the participants were married (261 participants; 85.3%). Tenure varied widely although most participants (134; 43.79%) had 2–10 years of service. The distribution of academic rank was fairly even, with lecturers being the largest group (119 participants; 38.9%). Lastly, most participants (n = 215; 70.3%) did not hold any structural (managerial or administrative) positions. Table 1 summarizes the demographic data of the study.

Table 1.
Demographic Data of the Participants (N = 306)

Characteristics	Total	Percentage
Gender		
Male	135	44.1%
Female	171	55.9%
Age		
25-34 years	77	25.16%
35-44 years	116	37.91%
45-54 years	71	23.20%
55-64 years	37	12.09%
65 years and above	5	1.63%
Marriage Status		
Unmarried	32	10.5%
Married	261	85.3%
Previously Married	13	4.2%
Tenure		
2-10 years	134	43.79%
11-19 years	76	24.84%
20-29 years	58	18.95%
30-39 years	32	10.46%
≥40 years	6	1.96%
Academic Position		
Teaching Staff	15	4.9%

Characteristics	Total	Percentage
Assistant Lecturer	84	27.5%
Lecturer	119	38.9%
Associate Professor	56	18.3%
Professor	29	9.5%
Structural Position		
No	215	70.3%
Yes	91	29.7%

Bivariate Correlations

Table 2 presents the results of the bivariate correlation analysis, which revealed that three demographic factors had significant relationships with emotional exhaustion: age (r (306) = –.21, p < .001), tenure (r (306) = –.22, p < .001), and academic position (r (306) = –.15, p = .07). Age, tenure, and academic position were included as control variables in the moderated multiple regression analysis. These findings are consistent with prior research on the influence of age, tenure (Fontinha et al., 2018), and academic position (Parveen & Adeinat, 2019) on emotional exhaustion.

The correlation analysis also showed significant associations between the independent variables and emotional exhaustion: workload (r (306) = .79, p < .001), interpersonal relationships (r (306) = –.36, p < .001), and change-related communication (r (306) = –.52, p < .001). The strong correlation between workload and emotional exhaustion prompted a multicollinearity test to ensure no redundancy among variables. The test results indicated acceptable values, with tolerance scores above .25 and Variance Inflation Factor (VIF) values below 4, suggesting no multicollinearity concerns (Field, 2018). Therefore, hypothesis testing proceeded using moderated multiple regression analysis, controlling for the three demographic variables.

Table 2.
Means, SDs, and Bivariate Correlations

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Gender	-	-	1										
2. Age	42.54	10.06	-0.10	1									
3. Marital tatus	-	-	0.08	0.32**	1								
4. Tenure	14.15	10.27	-0.11	0.93**	0.25**	1							
5. Academic Position	2.97	1.06	-0.11	0.74**	0.24**	0.75**	1						
6. Structural Position	-	-	0.00	0.22**	0.07	0.23**	0.33**	1					
7. Workload	3.56	0.76	-0.07	-0.20**	-0.01	-0.21**	-0.14*	0.06	(.90)				
8. Interpersonal Relationships	2.62	0.81	0.07	0.14*	0.02	0.13*	0.12*	0.17**	-0.31**	(.80)			
9. Change-related Communication	4.20	0.64	0.02	0.17**	-0.01	0.18**	0.18**	0.27**	-0.46**	0.51**	(.79)		
10. Self-Leadership	4.53	1.09	0.02	-0.03	0.00	-0.00	0.06	0.12*	0.03	0.12*	0.22**	(.80)	

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
11. Emotional Exhaustion	3.34	0.83	0.02	-0.21**	0.01	-0.22**	-0.15**	-0.06	0.79**	-0.36**	-0.52**	-0.05	(.80)

Notes: N = 306; *p < .05; **p < .01. **Numbers in parentheses** = *Cronbach's alpha* value of each measuring instrument; **Gender** (0 = male, 1 = female); **Marital Status** (1 = unmarried, 2 = married, 3 = previously married); **Academic Position** (1 = teaching staff, 2 = assistant lecturer, 3 = lecturer, 4 = associate professor, 5 = professor); **Structural Position** (0 = no, 1 = yes).

Hypothesis Testing

The results of the moderated multiple regression analysis showed that the research model significantly explained the variance in emotional exhaustion, F (8, 297) = 69.66, p < .001, R^2 = .65. This indicates that the model accounts for 65% of the variance in emotional exhaustion (see Table 3). Supporting Hypothesis 1, workload exerted a significant positive effect on emotional exhaustion (b = .82, p < .001). In other words, higher workload levels among PTN-BH lecturers are associated with higher levels of emotional exhaustion.

Table 3.
Moderated multiple regression analysis results (N = 306)

Dependent variable: Emotional exhaustion			
Variables	**Model**		
	1	**2**	**3**
Age	-0.02**	-0.01	-0.01
Tenure	-0.00	-0.00	-0.00
Academic Position	0.00	0.01	0.01
Workload		0.82***	0.82***
Interpersonal Relationship		-0.08	-0.08
Change-related Communication		-0.20***	-0.20***
Self-Leadership		-0.04	-0.04
WL*SL			-0.01
R^2	.05	.65	.65
ΔR^2	.05	.61	.00
F	4.94	79.85	69.65
df_1, df_2	3.302	7.298	8.297

Notes: *** p < .001; WL*SL = workload interaction with self-leadership.

The moderating role of self-leadership in the relationship between workload and emotional exhaustion revealed no significant effect (b = 0.04, p = .791). In other words, the level of self-leadership perceived by lecturers was not sufficient to buffer the workload's impact on emotional exhaustion. The model showed no increase in the variance explained. This result reinforces the conclusion that Hypothesis 2 is not supported.

Furthermore, interpersonal relationships did not significantly affect emotional exhaustion (b = 0.08, p = .138). This indicates that the quality of interpersonal relationships, whether high or low, does not significantly affect the level of emotional exhaustion experienced by PTN-BH lecturers. Thus, Hypothesis 3 is not supported. Conversely, change-related communication significantly negatively affected emotional exhaustion (b = 0.20, p < .001). This implies that more effective

communication related to organizational change within PTN-BH institutions is associated with lower levels of emotional exhaustion among lecturers. Therefore, Hypothesis 4 is supported.

Discussion

This study was conducted to understand the impact of job stressors on the emotional exhaustion of lecturers at autonomous public universities in Indonesia (*Perguruan Tinggi Negeri Berbadan Hukum*—PTN-BH). It stemmed from the need for a more contextualized understanding of the mental health of PTN-BH lecturers amid global changes and increasing performance demands. Specifically, the study examined three main stressors—workload, interpersonal relationships, and change-related communication—and tested the moderating role of self-leadership in the relationship between workload and emotional exhaustion. The results show that workload and change-related communication significantly influenced emotional exhaustion. However, interpersonal relationships did not show a significant effect, indicating that social relationships at work may not be a sufficient protective factor in PTN-BH lecturers' emotional exhaustion. Another notable finding was that self-leadership did not significantly moderate the relationship between workload and emotional exhaustion. In other words, self-leadership did not function as a buffer against the negative workload effects on emotional exhaustion in this study sample.

The results show that workload significantly influenced emotional exhaustion. This finding aligns with prior research conducted on lecturers in the UK (Wray & Kinman, 2020), Italy (Converso et al., 2019), and Nigeria (Ugwu et al., 2023), which similarly found that increased workload is a significant predictor of strain among lecturers. Increased workload and time pressure simultaneously cause lecturers to experience threats of losing physical and psychological resources (Schaufeli & Bakker, 2004). The findings support this framework within the PTN-BH context, showing that workload pressures contribute to emotional exhaustion. Increased workload and time pressure are strong predictors of emotional exhaustion because they trigger prolonged psychological distress and fatigue (Sabagh et al., 2018).

The PTN-BH context illustrates the potential downside of job autonomy. Specifically, high autonomy can lead to persistent, subtle mental demands (Beermann et al., 2018), causing workload to maintain a dominant influence on emotional exhaustion as part of the health impairment process (Bakker et al., 2023). Among PTN-BH lecturers, heavy administrative and *tridarma* responsibilities—including the tendency to exceed BKD targets—may create overwhelming work conditions despite considerable autonomy (Kemdikbud Ristek, 2023a). In support of this reasoning, 85.5% of the study participants reported workloads exceeding 12 credits.

Another notable result was that self-leadership did not significantly moderate the relationship between workload and emotional exhaustion. In other words, self-leadership did not function as a buffer against the negative workload effects on emotional exhaustion in this study sample. Although self-leadership is considered an adaptive personal strategy, its role in mitigating workload effects in PTN-BH environments appears insufficient. Previous research involving general professional samples found that self-leadership did not alleviate the impact of quantitative workload on emotional exhaustion (Mander & Antoni, 2022). However, while those studies included lecturers, they did not specifically address the context of higher education. In contrast, the current study specifies the context by examining the role of self-leadership among PTN-BH lecturers in Indonesia who face the *tridarma* of the specific workload of higher education. Self-leadership may enhance research

productivity (Napitupulu, 2024; Ndiago, 2025) and job performance (Çakmak & Uğurluoğlu, 2022). However, self-management is less effective when the stressors are structural and largely beyond individual control. Self-management may not be sufficient to offset workload-related stress in high-structure, high-pressure work environments, thereby diminishing the buffering effect of self-leadership (Mander & Antoni, 2022). This reinforces the JD-R theory proposition that the effectiveness of personal resources heavily depends on their fit with the nature of the associated demands (Bakker & Demerouti, 2007).

In this study, the self-leadership variable showed a skewed distribution toward high values, indicating low variance among participants. Most respondents reported high levels of self-leadership, with a few reporting low levels. This imbalance may weaken the moderation analysis, which requires adequate variance in the moderator variable to effectively detect interaction effects (Hayes, 2013). Thus, a restricted range may result in weak or insignificant moderation (Shieh, 2018). However, this imbalance indicates that most PTN-BH lecturers may have developed strong self-leadership to meet the demands of autonomous and competitive jobs. Therefore, the lack of a buffering effect may not stem from irrelevance but rather from minimal variability in self-leadership scores, making meaningful comparison difficult.

The current study found that interpersonal relationships did not significantly predict emotional exhaustion. This finding may be explained by two factors. First, it is likely that the emotional exhaustion of PTN-BH lecturers is more influenced by work stressors originating from the work aspect than from the social aspect. Previous research reveals that high workload and job demands are the most dominant predictors of emotional exhaustion among university lecturers (Castro et al., 2023; Kinman & Wray, 2021). Although good interpersonal relationships and social support can help relieve stress, the level of social support did not directly increase or decrease emotional exhaustion. This impact is smaller than the direct influence of high job demands and lack of control over work (Charoensukmongkol & Phungsoonthorn, 2021). Research in the broader context also suggests that while social support from coworkers and supervisors can help reduce stress, it is not a key determinant in preventing emotional exhaustion (Charoensukmongkol & Phungsoonthorn, 2021; Prado-Gascó et al., 2020). Thus, interpersonal relationships may only play a secondary role that is not strong enough to neutralize the primary stress of high workload demands.

From the methodological perspective, the non-significant results may be due to the second factor—shared variance between interpersonal relationships and other variables in the model. Interpersonal relationships were correlated with emotional exhaustion ($r = -.36$). However, interpersonal relationships were also correlated with workload ($r = -.31$) and change-related communication ($r = .51$). When these joint contributions were considered, the unique influence of interpersonal relationships on emotional exhaustion was not strong enough to reach statistical significance. In other words, other more dominant variables in the regression model likely overtook the previously obvious protective effect of interpersonal relationships.

In academia, the current study results may be due to the nature of work that emphasizes individual responsibility. This reduced the influence of interpersonal dynamics on emotional exhaustion (Asfahani, 2022). For example, studies have shown that role conflict and workload contribute more to emotional exhaustion than interpersonal relationship factors (Asfahani, 2022). These results are also in line with the findings of the current study that workload predicts emotional exhaustion by 62%. Emotional exhaustion in higher education settings is likely influenced by a

combination of factors, including workload, autonomy level, and personal achievement (Wang et al., 2024). Thus, the complexity of interactions between factors may weaken the direct influence of interpersonal relationships on emotional exhaustion (Kotlyarova & Dmitrienko, 2018).

Finally, change-related communication significantly predicted emotional exhaustion. Good change-related communication reflects information accessibility and opinion involvement (Cousin et al., 2004). Research in the business sector have shown that change-related communication is associated with emotional exhaustion (Raza et al., 2023; Turgut et al., 2016). However, it has not been widely studied in higher education settings. This study shows similar results while also highlighting the importance of change-related communication as a relevant job resource in a specific context. The findings also confirm that communication effectiveness impacts perceptions of organizational change and plays an important role in maintaining lecturers' psychological well-being (Wray & Kinman, 2020).

The current study extends the scope of JD-R theory by showing that change-related communication is not only relevant in the industrial or business sector (i.e., Turgut et al., 2016) but also crucial in the academic context. Through the lens of the JD-R theory, change-related communication presents information (resources) and negatively impacts emotional exhaustion (Schaufeli & Bakker, 2004). Therefore, this study contributes theoretically by reinforcing the role of change-related communication as a context-specific job resource. Moreover, the protective role of this resource against emotional exhaustion becomes even more evident in complex institutional change, such as in higher education.

This study makes four principal contributions. First, this study is the first to specifically analyze workload as a determinant of emotional exhaustion among PTN-BH lecturers. Prior studies in Indonesia tended to be general or limited to single institutions, which constrained their generalizability (Multamasatika et al., 2023). This study enriches existing evidence by including multiple universities and focusing on the PTN-BH context (Wray & Kinman, 2020; Converso et al., 2019; Ugwu et al., 2023) while emphasizing the unique demands of "*tridarma*" and global competitiveness in Indonesia. In doing so, this study extends the JD-R theory by contextualizing workload complexity as a central academic stressor in developing countries.

Second, the study contributes to the JD-R theory by clarifying the personal resource boundary conditions. Although self-leadership is widely considered an adaptive strategy (Çakmak & Uğurluoğlu, 2022; Napitupulu, 2024), the present findings show that its buffering role is limited in high-structure, high-pressure contexts such as PTN-BH universities. This finding indicate that personal strategies are less effective when stressors are structural and systemic, supporting the JD-R proposition that resource effectiveness depends on demand–resource fit (Bakker & Demerouti, 2007).

Third, the study highlights that although interpersonal relationships are generally considered a form of social support, they did not significantly mitigate emotional exhaustion. This finding nuances the JD-R framework by showing that structural demands may overshadow relational resources (Junca-Silva et al., 2024; Mander & Antoni, 2022). Such demands include workload and autonomy pressures in academic environments, where individual responsibility dominates. Fourth, this study introduces change-related communication as a critical job resource in higher education. While previous studies have mostly discussed it in the business sector (Turgut et al., 2016), the current findings demonstrate its relevance for lecturers facing institutional change. Effective

communication facilitates adaptation and reduces emotional exhaustion, thereby extending the JD-R framework to organizational change processes in academia.

Institutional policy recommendations

This study recommends several institutional policy improvements to mitigate emotional exhaustion among PTN-BH university lecturers. First, strengthening communication protocols through timely, transparent, and participatory processes can reduce uncertainty and stress. Second, workload balancing mechanisms that account for the needs and career stages of lecturers can prevent overload and enhance time management. Third, promoting self-leadership through targeted workshops and mentorship can help lecturers manage stress and maintain a work–life balance. Finally, by reinforcing collegial relationships and peer support networks, fostering a collaborative environment can reduce isolation and build emotional resilience. Collectively, these measures address systemic work stressors and support a healthier, more sustainable academic environment.

Limitations

This study has several limitations. First, self-reports were used to collect data at a single time point, introducing the risk of common method bias (Podsakoff et al., 2024). However, the procedural controls and Harman's single-factor test indicated acceptable thresholds. Nonetheless, future studies should consider more robust data collection designs, such as longitudinal or time-lagged approaches, to better capture the dynamics of mental health over time.

Second, the workload measure used in this study was general and did not differentiate workload types based on the *tridarma* elements. Studies in other contexts (e.g., Xu & Wang, 2023) have separated workload into teaching, research, and administrative categories. Since workload accounted for a substantial portion of variance in emotional exhaustion, future research should dissect these components and consider additional demands such as administrative duties. Objective sources, such as BKD scores, can enhance measurement accuracy in the Indonesian context.

Conclusion

Among PTN-BH lecturers, workload significantly affects emotional exhaustion, whereas interpersonal relationships are not meaningful predictors. Change-related communication emerges as a protective factor, whereas self-leadership does not effectively moderate the workload–exhaustion relationship. These findings provide critical insights into work stressor dynamics within the PTN-BH. Future research should explore more complex data collection techniques and examine additional buffering variables, such as intrinsic motivation or perceived time control, to deepen our understanding of protective mechanisms against emotional exhaustion.

Credit/Acknowledgment

This study was supported by the PMDSU research scheme of the Ministry of Education, Culture, Research, and Technology of the Republic of Indonesia (grant no. 051/E5/PG.02.00.PL/2024).

References

Asfahani, A. M. (2022). The impact of role conflict on turnover intention among faculty members: A moderated mediation model of emotional exhaustion and workplace relational conflict. *Frontiers in Psychology*, 13, 1087947. https://doi.org/10.3389/fpsyg.2022.1087947

Aziz, S. A. A., & Abiddin, N. Z. (2024). Fostering academic excellence: The synergy of self-leadership, knowledge exchange, and innovative practices in higher education. Edelweiss *Applied Science and Technology,* 8(5), 1101–1111. https://doi.org/10.55214/25768484.v8i5.1810

Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management: Published in Cooperation with the School of Business Administration, The University of Michigan and in alliance with the Society of Human Resources Management*, *43*(1), 83-104. https://doi.org/10.1002/hrm.20004

Bakker, A. B., Demerouti, E., & Sanz-Vergel, A. (2023). Job demands–resources theory: Ten years later. *Annual Review of Organizational Psychology and Organizational Behavior*, *10*(1), 25-53. https://doi.org/10.1146/annurev-orgpsych-120920-053933

Beermann, B., Amlinger-Chatterjee, M., Brenscheidt, F., Gerstenberg, S., Niehaus, M., & Wöhrmann, A. M. (2018). Orts- und zeitflexibles arbeiten: Gesundheitliche chancen und risiken [Location- and time-flexible working: Health opportunities and risks]. *Health Opportunities and Risks*, 59, 59–69. https://doi.org/ https://doi.org/10.21934/baua:bericht20170905

Bianchi, C., & Andrews, L. (2018). Consumer engagement with retail firms through social media: An empirical study in Chile. *International Journal of Retail & Distribution Management*, *46*(4), 364-385. https://doi.org/10.1108/IJRDM-02-2017-0035

Burr, H., Berthelsen, H., Moncada, S., Nübling, M., Dupret, E., Demiral, Y., ... & Pohrt, A. (2019). The third version of the Copenhagen psychosocial questionnaire. *Safety and Health at Work*, *10*(4), 482-503. https://doi.org/10.1016/j.shaw.2019.10.002

Çakmak, C., & Uğurluoğlu, Ö. (2022). The relationship between self-leadership, job satisfaction, and job stress among healthcare professionals. *Arch Health Sci Res*, 9(2), 123-129. https://doi.org/10.54614/ArcHealthSciRes.2022.21115

Castro, L., Serrão, C., Rodrigues AR, Marina S, Dos Santos JPM, Amorim-Lopes TS, ... & Duarte, I. (2023). Burnout, resilience, and subjective well-being among Portuguese lecturers' during the COVID-19 pandemic. *Frontiers in Psychology*, *14*, 1271004. https://doi.org/10.3389/fpsyg.2023.1271004

Charoensukmongkol, P., & Phungsoonthorn, T. (2021). The effectiveness of supervisor support in lessening perceived uncertainties and emotional exhaustion of university employees during the COVID-19 crisis: The constraining role of organizational intransigence. *The Journal of General Psychology*, *148*(4), 431-450. https://doi.org/10.1080/00221309.2020.1795613

Converso, D., Sottimano, I., Molinengo, G., & Loera, B. (2019). The unbearable lightness of the academic work: The positive and negative sides of heavy work investment in a sample of Italian university professors and researchers. *Sustainability*, *11*(8), 2439. https://doi.org/10.3390/su11082439

Cooper, C. L. (1981). *Executive Families Under Stress.* Prentice Hall.

Cousins, R., Mackay, C. J., Clarke, S. D., Kelly, C., Kelly, P. J., & McCaig, R. H. (2004). 'Management standards' work-related stress in the UK: Practical development. *Work and Stress*, *18*(2), 113-136. https://doi.org/10.1080/02678370410001734322

De Jonge, J., & Huter, F. F. (2021). Does match really matter? The moderating role of resources in the relation between demands, vigor and fatigue in academic life. *The Journal of Psychology*, *155*(6), 548-570. https://doi.org/10.1080/00223980.2021.1924603

Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*(3), 499. http://dx.doi.org/10.1037/0021-9010.86.3.499

Dobson, M., & Schnall, P. L. (2018). *From stress to distress: The impact of work on mental health*. Unhealthy Work (pp. 113-132). Routledge.

Eurofound. (2019). *Working conditions and workers' health* [Research report]. Publications Office of the European Union. https://doi.org/10.2806/909840

Fardela, R. (May 26, 2024). *Suka duka menjadi dosen di Perguruan Tinggi Negeri Badan Hukum (PTN-BH) [Joys and challenges of being a lecturer at a State University with Legal Entity (PTN-BH) status]*. Kumparan.com. https://kumparan.com/ramacosfardela/suka-duka-menjadi-dosen-di-perguruan-tinggi-negeri-badan-hukum-ptnbh-22oYMhWp0OR

Field, A. (2018). *Discovering statistics using IBM SPSS Statistics* (5th ed.). Sage Publications, Ltd.

Fontinha, R., Van Laar, D. & Easton, S. (2018). Quality of working life of academics and researchers in the UK: the roles of contract type, tenure and university ranking. *Studies in Higher Education*, *43*(4), 786-806. https://doi.org/10.1080/03075079.2016.1203890

Gov UK. (February 12, 2024). *Higher education lecturer*. National Careers Service. https://nationalcareers.service.gov.uk/job-profiles/higher-education-lecturer#:~:text=You'll%20usually%20need%20a,or%20be%20working%20towards%20one

Hamied, F. A. (August 18, 2017). *Policies in higher education: What they mean to TEFL in Indonesia.* UPI The Education University. https://sejarah.upi.edu/artikel/dosen/policies-in-higher-education-what-they-mean-to-tefl-in-indonesia/

Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press

Houghton, J. D., Dawley, D., & DiLiello, T. C. (2012). The abbreviated self-leadership questionnaire (ASLQ): A more concise measure of self-leadership. *International Journal of Leadership Studies*, *7*(2), 216-232. https://regent.edu/acad/global/publications/ijls/new/vol7iss2/IJLS_Vol7Iss2.pdf#page=93

Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: A multidisciplinary journal*, *6*(1), 1-55. https://doi.org/10.1080/10705519909540118

Huang, C. H., Chao, Y. N., Lee, Y. C., & Wu, H. H. (2025). A longitudinal study on nurses' emotional exhaustion assessment in Taiwan. *IAENG International Journal of Applied Mathematics*, 55(3).

Iacobucci, D., Schneider, M. J., Popovich, D. L., & Bakamitsos, G. A. (2017). Mean centering, multicollinearity, and moderators in multiple regression: The reconciliation redux. *Behavior research methods, 49*(1), 403-404. https://doi.org/10.3758/s13428-016-0827-9

Junça Silva, A., Almeida, A., & Rebelo, C. (2024). The effect of telework on emotional exhaustion and task performance via work overload: The moderating role of self-leadership. *International Journal of Manpower*, *45*(2), 398-421. https://doi.org/10.1108/IJM-08-2022-0352

Kekäle, J., & Pinheiro, R. (2025). *Individual leadership in higher education: Partial solutions, unintended consequences, and the search for an alternative*. Worldviews and Values in Higher Education (pp. 127-149). Emerald Publishing Limited.

Kemdikbud Ristek. (2023a). *Analitik PTN-BH* [PTN-BH analytics]. Direktorat Kelembagaan, Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. https://sinta.kemdikbud.go.id/ptnbhanalytics/v2

Kemdikbud Ristek. (2023b). *Mengenal lebih lanjut status perguruan tinggi negeri: PTN-BH, PTN-BLU, dan PTN-Satker [Understanding the status of public universities: PTN-BH, PTN-BLU, and PTN-Satker].* https://itjen.kemdikbud.go.id/web/mengenal-lebih-lanjut-status-perguruan-tinggi-negeri-ptn-bh-ptn-blu-dan-ptn-satker/

Kinman, G., & Johnson, S. (2019). Special section on well-being in academic employees. *International Journal of Stress Management*, *26*(2), 159. https://doi.org/10.1037/str0000131

Kotlyarova, V. V. & Dmitrienko, N. A. (2018). Emotional burnout of university teachers as a socio-pedagogical and psychological issue. *Astra Salvensis*. https://www.ceeol.com/search/article-detail?id=686507

Kovács, K., Dobay, B., Halasi, S., Pinczés, T., & Tódor, I. (2024). 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,* (8). https://doi.org/10.3389/feduc.2023.1326515

Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. (2021, Januari 18). *Keputusan direktur jenderal pendidikan tinggi nomor 12/E/KPT/2021 tentang pedoman operasional beban kerja dosen tahun 2021*. Direktorat Jenderal Pendidikan Tinggi. https://lldikti6.kemdikbud.go.id/wp-content/uploads/2021/02/SalinanKepdirjendikti-tentang-PO-BKD-compressed.pdf

MacKay, C. J., Cousins, R., Kelly, P. J., Lee, S., & McCaig, R. H. (2004). 'Management Standards' and work-related stress in the UK: Policy background and science. *Work and Stress*, *18*(2), 91-112. https://doi.org/10.1080/02678370410001734322

Mander, R., & Antoni, C. H. (2023). Work overload and self-endangering work behavior: The amplifying and buffering role of work autonomy and self-leadership. *Zeitschrift Für Arbeits- Und Organisationspsychologie A&O,* 67(3), 135–148. https://doi.org/10.1026/0932-4089/a000405

Manz, C. C. (1986). Self-leadership: Toward an expanded theory of self-influence processes in organizations. *The Academy of Management Review*, *11*(3), 585. https://doi.org/10.2307/258312

Matahela, V. E., & van Rensburg, G. H. (2024). Enhancing nurse faculty resilience through self-leadership: Guidelines for resource mobilization in dynamic academic environments. *Frontiers in Psychology,* 15, 1280561. https://doi.org/10.3389/fpsyg.2024.1280561

Multamasatika, D. F., Akbar, K. A., Hartanti, R. I., & Kallawicha, K. (2023). Work factors affect work stress among lecturers: Study in Indonesia. *Неврология, нейропсихиатрия, психосоматика*, *15*(4), 12-16. http://dx.doi.org/10.14412/2074-2711-2023-4-12-16

Napitupulu, H. (2024). *Pengaruh extrinsic motivation, intrinsic motivation, dan research self-efficacy terhadap perceived academic research performance dengan mediasi perceived self-leadership dan moderasi academic human capital (studi pada dosen di Indonesia)* [Doctoral dissertation, University of Pelita Harapan].

Niedhammer, I., Sultan-Taïeb, H., Parent-Thirion, A., & Chastang, J. F. (2022). Update of the fractions of cardiovascular diseases and mental disorders attributable to psychosocial work factors in Europe. *International Archives of Occupational and Environmental Health, 95*, 233–247. https://doi.org/10.1007/s00420-021-01737-4

Parveen, M., & Adeinat, I. (2019). Transformational leadership: Does it really decrease work-related stress? *Leadership & Organization Development Journal*, *40*(8), 860 876. https://doi.org/10.1108/LODJ-01-2019-0023

Permana, M., W. (2024, May 02). *Privatisasi perguruan tinggi: Dari kesejahteraan dosen hingga kualitas pendidikan [Privatization of higher education: From lecturer welfare to educational quality].* Puskapol UI. https://puskapol.fisip.ui.ac.id/privatisasi-perguruan-tinggi-dari-kesejahteraan-dosen-hingga-kualitas-pendidikan/

Podsakoff, P. M., Podsakoff, N. P., Williams, L. J., Huang, C., & Yang, J. (2024). Common method bias: It's bad, it's complex, it's widespread, and it's not easy to fix. *Annual Review of Organizational Psychology and Organizational Behavior,* 11(1), 17-61. https://doi.org/10.1146/annurev-orgpsych-110721-040030

Prado-Gascó, V., Gómez-Domínguez, M. T., Soto-Rubio, A., Díaz-Rodríguez, L., & Navarro-Mateu, D. (2020). Stay at home and teach: A comparative study of psychosocial risks between Spain and

Mexico during the pandemic. *Frontiers in Psychology*, *11*, 566900. https://doi.org/10.3389/fpsyg.2020.566900

Raza, M. A., Imran, M., Rosak-Szyrocka, J., Vasa, L., & Hadi, N. U. (2023). Organizational change and workplace incivility: Mediated by stress, moderated by emotional exhaustion. *International Journal of Environmental Research and Public Health*, *20*(3), 2008. https://doi.org/10.3390/ijerph20032008

Sabagh, Z., Hall, N. C., & Saroyan, A. (2018). Antecedents, correlates and consequences of faculty burnout. *Educational Research*, *60*(2), 131-156. https://doi.org/10.1080/00131881.2018.1461573

Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior: The International Journal of Industrial, Occupational and Organizational Psychology and Behavior*, *25*(3), 293-315. https://doi.org/10.1002/job.248

Schaufeli, W. B., Desart, S., & De Witte, H. (2020). Burnout Assessment Tool (BAT)—development, validity, and reliability. *International Journal of Environmental Research and Public Health, 17*(24), 9495. https://doi.org/10.3390/ijerph17249495

Shimohata, T., Kubo, M., Aiba, I., Hattori, N., Yoshida, H., Umino, Y., ... & Takeda, A. (2021). Current status and measures of burnout among neurologists: Part 1. *Clinical Neurology* , *61* (2), 89-102. https://doi.org/10.5692/clinicalneurol.cn-001533

Shieh, G. (2018). Sample size determination for examining interaction effects in factorial designs under variance heterogeneity. *Psychological methods*, *23*(1), 113. https://www.proquest.com/scholarly-journals/longitudinal-study-on-nurses-emotional-exhaustion/docview/3185291765/se-2

Sucahyo, N. (2018, November 8). *Akademisi Indonesia terbebani aturan administrasi* [*Indonesian academics burdened by administrative regulations*]. VOA Indonesia. https://www.voaindonesia.com/a/akademisi-indonesia-terbebani-aturan-administrasi/4649983.html

Turgut, S., Michel, A., Rothenhöfer, L. M., & Sonntag, K. (2016). Dispositional resistance to change and emotional exhaustion: Moderating effects at the work-unit level. *European Journal of Work and Organizational Psychology*, *25*(5), 735-750. https://doi.org/10.1080/1359432X.2016.1157583

Ugwu, F. O., Ugwu, L. E., Nwali, A. C., Onyishi, I. E., & Okafor, C. O. (2023). Cost of high workload on work–life balance: A moderated mediation model. *Technology Analysis & Strategic Management,* 1-15. https://doi.org/10.1080/09537325.2023.2209202

Vyletel, B., Voichoski, E., Lipson, S., & Heinze, J. (2023). *Exploring faculty burnout through the 2022–23 HMS faculty/staff survey*. *Psychology Teacher Network.* https://www.apa.org/ed/precollege/psychology-teacher-network/introductory-psychology/faculty-burnout-survey

Wang, X., Yang, L., Chen, K., & Zheng, Y. (2024). Understanding teacher emotional exhaustion: exploring the role of teaching motivation, perceived autonomy, and teacher–student relationships. *Frontiers in Psychology*, *14*, 1342598. https://doi.org/10.3389/fpsyg.2023.1342598

Watts, J., & Robertson, N. (2011). Burnout in university teaching staff: A systematic literature review. *Educational Research*, *53*(1), 33-50. https://doi.org/10.1080/00131881.2011.552235

Wayanti, S. (2016). Kelelahan kerja (burnout syndrom) pada dosen berdasarkan karakteristik demografi, harapan, penghargaan dan kontrol [Work fatigue (burnout syndrome) among lecturers based on demographic characteristics, expectations, rewards, and control]. *Jurnal Penelitian Kesehatan "SUARA FORIKES" (Journal of Health Research" Forikes Voice")*, *7*(1), 39-45. http://dx.doi.org/10.33846/sf.v7i1.11

World Health Organization. (2024, September 2). *Mental health at work* [Fact sheet]. https://www.who.int/news-room/fact-sheets/detail/mental-health-at-work

Wray, S., & Kinman, G. (2020). The psychosocial hazards of academic work: An analysis of trends. *Studies in Higher Education*, 1–12. https://doi.org/10.1080/03075079.2020.1793934

Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of Applied Psychology*, *83*(3), 486. https://psycnet.apa.org/doi/10.1037/0021-9010.83.3.486

Xu, Y., & Wang, Y. (2023). Job stress and university faculty members' life satisfaction: The mediating role of emotional burnout. *Frontiers in Psychology*, *14*, 1111434. https://doi.org/10.3389/fpsyg.2023.1111434

Yildirim-Hamurcu, S., & Terzioglu, F. (2022). Nursing students' perceived stress: Interaction with emotional intelligence and self-leadership. *Perspectives in psychiatric care*, *58*(4), 1381-1387. https://doi.org/10.1111/ppc.12940

Zuraida, U., & Senen, S. H. (2020). *The role of human capital management in improving the performance of autonomous public university/Perguruan Tinggi Negeri Berbadan Hukum (PTN-BH).* Advances in Business, Management and Entrepreneurship (pp. 592-595). CRC Press.