ACADEMIA
ISSN, 2241-1402
http://hepnet.upatras.gr

Number 44-45, 2026

Academia A publication of the Higher Education Policy Network

Lecturers' emotional exhaustion and innovative work behavior in the era of volatility, uncertainty, complexity, and ambiguity in Higher Education

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Abstract

The digital revolution has changed many aspects of higher education since the era of Society 5.0. The changes have led to a paradigm shift in higher education, including curriculum changes, contemporary learning methods, and demands for achieving key performance indicators. The rapid changes without rapid competencies enhancement and preparation may lead lecturers to be emotionally exhausted. The purpose of this study was to examine several factors influencing emotional exhaustion, including job and competency compatibility, lecturers' development supports, workplace friendship, and their relations to innovative work behaviors [IWB]. This study used online questionnaires to 202 university lecturers in Indonesia. The data were analyzed by SEM-Amos software. The results showed that job-competency compatibility and leaders' development support had an insignificant negative effect on lecturers' emotional exhaustion. Also, workplace friendship had a positive but insignificant effect on lecturers' emotional exhaustion while emotional exhaustion had a positive insignificant effect on IWBs. Moreover, by using emotional exhaustion as mediator, the influence of job-competency compatibility, leaders' development support, and workplace friendship on IWBs were significant. This study also provides readers with recommendations for future research related to the variables.

Keywords
Emotional exhaustion, innovative work behavior, job-competencies compatibility, leaders' support, workplace friendship.

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Introduction

The advanced changes in the world since the globalization era, the 4.0 revolution era and the society 5.0 era have upgraded the digital revolution. All human activities use technology, including education, health, and economic transactions. This phenomenon makes everything seem to be more practical, nonetheless technological advances can replace many human jobs with robotics and artificial intelligence. Technology advancement can also affect the sustainability of an organization. Bennis and Nanus (1985), business and leadership experts from America, call the world condition that we are now facing a world of volatility, uncertainty, complexity, and ambiguity known by the acronym VUCA. Inevitably, the situation will affect human lifestyle and decision-making, including any organizations nowadays. Many organizations have changed work methods, processes, and evaluations to adapt to the VUCA era. The changes create high work demands that urge target achievements, workload increases, and limited resources, which can make policies ineffective (Amin & Raudhoh, 2021; Supriadi & Mukminin, 2024), leading to emotional exhaustion.

Previous studies have documented that emotional exhaustion influences employee attitudes towards their work, including less engagement in the organization (Chen et al., 2020; Lebron et al., 2018), job satisfaction (Han et al., 2020), affective commitment organizational, intention to quit, quality of service performance (Grobelna, 2021) and employee performance (Ali et al., 2022; Amin et al., 2024; Listyaningsih et al., 2024). Considering the negative impacts of emotional exhaustion, investigating the causes of emotional exhaustion is essential. According to the Job Demand-Resource Model (JDR) theory pioneered by Bakker and Demerouti (2017), most studies linked work overload as the leading cause of emotional exhaustion. Employees considering a lots of workload must be done by high responsibility could easily get emotional exhaustion(Ali et al., 2022; Habibi et al., 2024; Muazza et al., 2023).

European scholars have also acknowledged that emotional exhaustion can stem not only from workload but from broader institutional and interpersonal dynamics. For instance, Oppenauer and Voorde (2016) emphasize that emotional exhaustion can be exacerbated by the role ambiguity, autonomy issues, and a lack of psychological safety—highlighting the importance of cultural and organizational context in how exhaustion manifests. Their study, and others in the European context (e.g., Bakker & Demerouti,

2017), suggest a more complex and sometimes reciprocal relationship between exhaustion and work behaviors, including innovation.

One of the jobs that has many workload demands is lecturer. Today's lecturers are not only required to implement teaching, researching, and doing community services, also known as *Tri Dharma Perguruan Tinggi* in Indonesia. Lecturers are also required to achieve various key performance indicators. The focus of provision for students in this era involves 4Cs: Creativity, Critical Thinking, Communication, and Collaboration (Risdianto, 2019). Lecturers must promote and encourage students to have the 4Cs through learning methods and curriculum changes, which are implemented in the *Merdeka Belajar Kampus Merdeka* curriculum policy in Indonesia. As a result, lecturers have additional duties and responsibilities that could cause them prolonged emotional exhaustion.

Job Demand-Resource Model (JD-R) theory and the Conservation of Resources (COR) theory define an overview of emotional exhaustion mechanisms. COR theory says that people will experience stress when losing their resources from their personal and surroundings. In this context, "personal resources" refer to internal characteristics, skills, and psychological capacities that individuals bring to their work, which help them manage job demands and remain resilient under pressure (Hobfoll et al., 2018). For a lecturer, the resources from their personal include job-competencies compatibility, such as subject-matter expertise, teaching skills, time management, adaptability to new technology, and confidence in fulfilling academic duties. These internal assets enable lecturers to perform tasks effectively and meet professional expectations. When lecturers feel that their personal abilities match the demands of their job, they are less likely to experience stress or burnout. However, when there is a mismatch—such as needing to adopt new digital tools or publish more frequently without adequate preparation—emotional exhaustion may occur.

Meanwhile, the resources from the surroundings can be leaders' support to develop their competencies and workplace friendship. These external (environmental) resources refer to social and organizational support systems that help employees cope with stressors, such as encouragement from supervisors, professional development opportunities, collaboration among colleagues, and a supportive work culture. When both personal and environmental resources are lacking or threatened, emotional exhaustion becomes more likely.

The three resources allegedly can influence the rise of emotional exhaustion in the work environment. With leaders' support for competency development and workplace friendship, emotional exhaustion will be decreased, but lecturers' IWB will increase. Innovative work behavior (IWB) is defined as the intentional creation, introduction, and application of new ideas, processes, or products within a work role, group, or organization to improve performance (Janssen, 2000). A stable mood will impact the emergence of creativity, which is implemented in IWB.

However, it is essential to note that the relationship between emotional exhaustion and IWB is not always deterministic or one-directional. European researchers such as Messmann and Mulder(2011) have emphasized that IWB is influenced by both job-related stressors and enabling factors such as autonomy, support, and learning opportunities. Therefore, emotional exhaustion can both hinder and—paradoxically, in some contexts—stimulate creativity, depending on individual coping mechanisms and institutional support. This suggests the relationship is better understood through complex models involving mediation and moderation effects, rather than as a linear causality. A description of the mechanism for forming IWB through reducing emotional exhaustion that combines these resources has yet to be widely investigated. While emotional exhaustion has been extensively studied as a negative outcome of work pressure, its indirect impact on proactive behaviors like innovation—especially in academic environments—remains under-explored in the Indonesian context. This study attempted to bridge this gap by investigating how emotional exhaustion mediated the relationship between personal and environmental resources and IWB among university lecturers.

Thus, this research was guided by the following questions, grounded in both theoretical and contextual gaps in the literature:

1. How do job-competency compatibility, leaders' development support, and workplace friendship influence lecturers' emotional exhaustion?
2. How does lecturers' emotional exhaustion mediate the relationship between those resources and their innovative work behavior?

The current research contributes to the literature on innovative work behavior by examining factors that cause lecturers' emotional exhaustion, which in turn will affect IWB. It also adds to the theoretical discourse by examining a mediation model grounded in both the JD-R and COR theories, and by situating Indonesian academic labor within broader international debates on workplace innovation and well-being. This mechanism

model can provide input for leaders in minimizing emotional exhaustion to improve the lecturers' innovativeness in achieving high performance.

1. Literature Review

1.1 Emotional Exhaustion on Lecturers

Emotional exhaustion is a condition of an individual when he or she is drained of personal resources and becomes emotionally exhausted and fatigued (Fardous & Afzal, 2022). The condition mostly begins with uneasy and displeased feelings; thus, the feeling can grow into weariness, irritability, lack of motivation, lack of self-confidence, lack of concentration, lack of energy, and lack of joy or interest (Maslach, 2003). Hence, people with emotional exhaustion will be unable to work responsibly and constructively, which later can influence their work performance (Fardous & Afzal, 2022). Moreover, someone who experiences a higher intensity of emotional exhaustion can experience burnout (Grayson & Alvarez, 2008).

Lecturers potentially experience emotional exhaustion because lecturers nowadays have extra work demands and the rapid growth of technology and information advances (Donker et al., 2020; Werang et al., 2021). In Indonesia, lecturers' workloads while implementing *Kurikulum Merdeka Merdeka Belajar* or Independent Curriculum and Independent Learning is not only undertaking the education and teaching and researching but also doing community services). The curriculum requires Indonesian lecturers to teach with the dominant use of technology and student-centered methods. They must also make national and international publications to recognize their research. In addition, they must do community services that provide accurate, practical, and useful output for community development. Moreover, the paradigm shift in higher education in the VUCA era requires universities to prepare qualified graduates who are competitive and employable and qualified teaching staff who can accomplish their workload with full responsibility.

The upgrade of the job demands is separate from lecturers' readiness and preparations because the curriculum changes in the short term. The gap between job demands and lecturers' competency readiness can make lecturers feel emotionally exhausted. Emotional exhaustion will ultimately become prolonged stress and impact physical and mental health (Kovalkova & Malkova, 2021). Even before the pandemic, faculty members reported high levels of stress and emotional exhaustion (Kovalkova &

Malkova, 2021). It means that lecturers' regular job activities as professionals have already drained their emotional state, and they can now get more stress with the extra workloads. On the other hand, lecturers have an important role in bringing the nation's youth to success since they are the agents of change in education (Wea et al., 2020). A lecturer's performance can be disrupted by so many work demands that can trigger emotional exhaustion (Werang et al., 2021).

Moreover, European scholars have conceptualized emotional exhaustion as part of broader burnout and engagement constructs, deeply embedded in social and institutional frameworks. For example, Schaufeli, Leiter, and Maslach (2009) suggest that emotional exhaustion should not only be viewed as an outcome of workload, but also of insufficient autonomy, unclear roles, and lack of recognition, factors often present in academic settings.

Research on emotional exhaustion has proliferated these years because of the essential awareness of mentality among educators. However, most studies focus on emotional exhaustion among teachers (Becker et al., 2014; Cubukcu, 2013; Hogekamp et al., 2016; Klusmann et al., 2023; Werang et al., 2021). Research about emotional exhaustion on lecturers, specifically among Indonesian lecturers who adhere to the Kurikulum Merdeka Merdeka Belajar, has yet to be much investigated. Therefore, this study focused on emotional exhaustion among Indonesian lecturers who adhere to the recent curriculums and demands.

1.2 Factors Influencing Emotional Exhaustion

Emotional exhaustion has been discussed predominantly during the era of technological advances, which generate rapid changes in work rhythms. It is because the changes in work rhythm affect changes in workload and work environment, which could later generate an imbalance between work demands and the available resources and result in emotional exhaustion.

According to the Job Demand-Resource Model (JD-R) theory (Bakker & Demerouti, 2017), two independent forces are psychologically processed when people work: the work demands and job resources. The work demands involve physical, psychological, social, or organizational demands of work that employees view as workloads that must be done at a particular time and place. These work demands can influence employees' health if the workload is too excessive. Meanwhile, job resources are motivational processes that are inherent in the job itself, including task autonomy,

task variety, feedback, training and development, participation in decision-making, co-worker support, and leadership support. The Conservation of Resources (COR) theory also emphasizes that losing one of the resources will cause stress; thus, people will always defend the resources they have. The collaboration of these two theories concludes that an imbalance between work demands, and a person's resources will cause stress. Stress will result in various negative behaviors, including emotional exhaustion, job dissatisfaction, decreased work motivation, deviant behavior, and decreased work performance.

The issues of emotional exhaustion have indeed attracted many researchers (Ali et al., 2022; Oppenauer & Voorde, 2016). However, the mechanism for clarifying the factors influencing emotional exhaustion has yet to be completely revealed. Several studies found factors that potentially can be a good or bad influence on emotional exhaustion. Chen et al. (2020) concluded that work engagement, which has long been recognized as having a positive impact on employee work behavior, can also create emotional exhaustion through feelings of not being competent enough for the job or not having compatible competencies and workload, known as the feeling of 'never enough' or 'worrying about not giving the best.' The higher the feeling of incompetence on a person's job, the more he or she would feel emotionally exhausted. Chen et al. (2020) discoursed that emotional exhaustion occurs in multi-factorial ways and is more complex than the JD-R theory explains (Bakker & Demerouti, 2017).

Moreover, Lebron et al. (2018) reveal that the relationship between leaders and employees can positively impact employee engagement but negatively impact emotional exhaustion. Lebron et al. (2018) also concluded that employee engagement, mediated by workplace friendship, can negatively impact emotional exhaustion. Also, Grobelna (2021) explains that emotional exhaustion is caused by excessive workload and lack of support from colleagues in listening to problems, discussing, and helping with difficulties at work.

In Europe, similar theoretical advances have contributed to understanding how emotional exhaustion occurs in education, Oppenauer and Voorde (2016), for example, argue that emotional exhaustion arises not just from job demands but also from a lack of developmental resources—mirroring concerns in Indonesia. Their research also supports the idea that contextual factors such as perceived fairness, support, and professional growth opportunities are significant moderators.

Previous studies showed that many factors cause emotional exhaustion, and the mechanism of the occurrence is not always direct. It can happen through mediating

variables that are strengthened or weakened by moderator variables. It is concluded that the factors that influence emotional exhaustion come from the individual himself/herself and the surrounding environment, such as job-competence compatibility, workplace friendship, and leadership support for development as antecedents of emotional exhaustion, affecting work quality and performance. Based on the theoretical framework and previous studies, the research hypotheses are as follows:

H1: Job and competencies compatibility has a significant negative effect on emotional exhaustion.

H2: Leaders' Support has a significant negative effect on emotional exhaustion.

H3: Workplace friendship has a significant negative effect on emotional exhaustion.

1.3 Emotional Exhaustion on Innovative Work Behavior

Innovative work behavior (IWB) is known to be one of the factors that can improve organizational performance. It is commonly defined as the intentional creation, promotion, and realization of new ideas within a role, group, or organization (Janssen, 2000). Jong and Hartog (2010) further categorize IWB into three behavioral phases: idea generation, idea promotion, and idea realization. These phases require both personal initiative and supportive organizational climates. In academic settings, IWB may manifest through the development of new teaching methods, novel research questions, or interdisciplinary collaboration. Scholars in Europe have emphasized that IWB is not merely about individual creativity but also depends on the contextual enablers such as autonomy, leadership support, trust, and learning culture (Messmann & Mulder, 2011). For example, lecturers are more likely to act innovatively when they feel supported in their growth and when they operate in psychologically safe environments. Conversely, if resources are lacking, emotional exhaustion can reduce the cognitive and emotional energy needed to innovate.

The rapid changes demand institutions to create innovations to sustain the institutions' performances (Amin et al., 2022). For that reason, employees are required to have IWBs which is known to be one of the factors that can improve organizational performance. It is defined as a behavior to produce innovativeness by introducing and implementing new ideas, products, or processes that benefit the organization (Saputra & Rozyanti, 2023). In other words, IWB is deemed essential to determine the prosperity of an institution.

However, a working environment that demands innovation may raise employees' emotional exhaustion (Koch & Alder, 2018), or in this study, are lecturers. Rai and Kim (2021) found a significant effect of employees' emotional exhaustion with inadequate resources to comply with the work demands on IWB. Apparently, employees who feel emotionally exhausted will negatively affect their innovative behavior (Lee et al., 2021). Saputra and Rozyanti (2023) also found a significant influence between emotional exhaustion and IWB. Moreover, Xie et al. (2023) stated that emotional exhaustion was the main mediator between IWB and hindrance stress. They suggested that employees should be wise with different work demands and that leaders should give employees rest time to keep them in a positive state (Xie et al., 2023). Furthermore, Koch and Alder (2018) found that employees' high work demands that require innovation can devastate their psychological well-being. In other words, emotional exhaustion could influence IWB and vice versa.

Many factors cause emotional exhaustion, and the mechanism of the occurrence is not always direct: it can be through mediating variables or strengthened or weakened by moderator variables. By modifying the existing research model, the researchers added new variables from individuals, co-workers, and leaders: job-competence compatibility, workplace friendship, and leaders' development support. The variables influencing emotional exhaustion would influence lecturers' IWB. Thus, the novelty of this model lies in the mechanism for the emergence of emotional exhaustion, which comes from the three different resources, which will influence lecturers' innovative behavior in teaching, doing research, and doing community services. The previous studies have arranged the research hypotheses as follows:

H4: Emotional exhaustion mediates Job-competency Compatibility and Innovative Work Behaviour.

H5: Emotional exhaustion mediates Leaders' Support and Innovative Work Behaviour.

H6: Emotional exhaustion mediates Workplace Friendship and Innovative Work Behaviour.

1.4 Institutional Context in Indonesian Universities

In Indonesian higher education institutions, leadership style and workplace dynamics play a crucial role in shaping academic performance, motivation, and emotional well-being. Leadership in universities is commonly top-down, where rectors, deans, and heads of

study programs act as key decision-makers (Crumpton, 2015). However, transformational and supportive leadership styles are increasingly recognized as more effective in fostering motivation and engagement among academic staff (Pifianti et al., 2022; Zheng et al., 2019). Leaders who provide opportunities for professional development, encourage autonomy, and offer emotional support tend to reduce stress levels among lecturers and enhance innovative behavior (Anindita & Tanuwijaya, 2023).

Workplace friendship, on the other hand, reflects the collectivist cultural values of Indonesian society, which emphasize harmony, mutual help, and social bonding in the workplace (Artina et al., 2020; Lee & Ok, 2011) In university settings, informal relationships among colleagues are not only a source of emotional support but also foster collaboration and shared problem-solving—especially important given the high expectations for research output, community service, and administrative responsibilities. According to a study by Utaminingtyas et al.(2023), strong peer support and collegial relationships helped lecturers cope with academic stress and were positively correlated with job satisfaction and institutional loyalty.

Despite these positive dynamics, challenges remain. Rigid bureaucratic systems, unclear performance appraisals, and limited mentoring in some institutions can limit the potential benefits of leadership and workplace friendship. This study responded to these mixed realities by examining how leadership support and workplace friendship, as perceived by lecturers, contribute to emotional exhaustion and IWB in an evolving academic environment.

2. Research methods

This study was a quantitative research using a survey research method. The data were collected directly from respondents. The respondents were 202 lecturers in Indonesia from public and private universities. The data were collected by distributing online questionnaires to lecturers with civil servant and non-civil servant status who had been working as a lecturer for at least five years. The questionnaire was divided into two parts. The first part includes the characteristics of respondents, such as gender, age, education level, and others. The second part contains respondents' perceptions of emotional exhaustion, job competence compatibility, leaders' development support, workplace friendship and IWB. The data were analyzed by using the Structural Equation Model (SEM) with Amos software.

The questionnaire consists of a total of 45 items using a 10-point Likert scale ranging from 1 (strongly disagree) to 10 (strongly agree). The items are grouped into five main categories:

- Job-competency compatibility (8 items)
- Leaders' developmental support (9 items)
- Workplace friendship (8 items)
- Emotional exhaustion (10 items)
- Innovative work behavior (10 items)

Each set of items was adapted from validated instruments in previous international studies, adjusted to the context of Indonesian higher education. The content validity was reviewed by two expert panels in educational psychology and HRM.

2.1 Operational Variables

To provide clear boundaries for the variables, operational definitions are as follows: 1) Job-competency compatibility (X1) is a self-assessment regarding the compatibility of one's own competence with the job as a lecturer who must implement the *Tri Dharma* of Higher Education; 2) Leaders' developmental supports (X2) is the perception of leadership behavior that supports lecturers to improve their competency by providing opportunities and financial support fairly and openly; 3) Workplace friendship (X3) is a work atmosphere supported by friendly and collaborative colleagues; 4) Emotional exhaustion (M) is a feeling of emotional exhaustion due to a mismatch between personal competence and the workload; and 5) IWB (Y) is measured by lecturers' IWBin teaching, researching, and doing community service.

Each variable is measured based on respondents' perceptions with dimensions that have been tested based on the support of theoretical studies and empirical evidence from previous studies in reputable journals. Alternative answers are provided with each score referring to a Likert scale from strongly disagree (1) to strongly agree (10).

2.2 Ethical Considerations

This study was conducted in accordance with ethical research standards. Informed consent was obtained electronically before respondents accessed the questionnaire. The purpose of the study, data usage, and voluntary nature of participation were clearly explained. Participants were assured of confidentiality and anonymity: no identifying

information (e.g., names, emails, or institutions) was collected. All responses were stored securely and only used for academic purposes.

3. Results

The respondents of this study were 202 lecturers in Indonesia who were willing to answer the online questionnaires. The following table shows the respondents' profile.

Table 1: *Respondents' Profile*

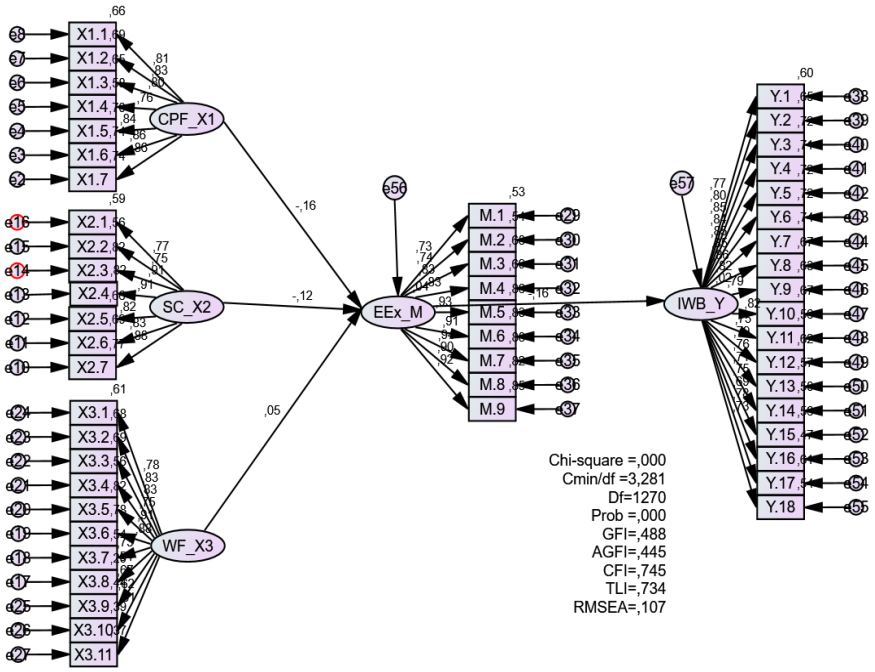
	Characteristics	**Frequency**	**Percentage (%)**
Gender		202	100
	Male	94	46.54
	Female	108	53.46
Age		202	100
	23-32	48	23.76
	33-42	77	38.12
	43-52	43	21.29
	>52	34	16.83
Education Level		202	100
	Bachelor Degree	1	0.49
	Master Degree	124	61.39
	Doctorate	77	38.12
Working Period		202	100
	1-10	116	57.42
	11-20	51	25.25
	>20	35	17.33
Lecturer Job Status		202	100
	Government employee	115	56.93
	Contract	57	28.22
	Fixed Agreement	25	12.38
	Private/Foundation	5	2.47
Position		202	100
	Expert Assistant	85	42.08
	Lector	88	43.56
	Associate Professor	21	10.40
	Professor	8	3.96
Working Unit		202	100
	Public University	153	75,74
	Private University	49	24,26
University Location		202	100
	Sumatera	180	89,11
	Jawa	14	6,93
	Others	8	3,96
		202	100
Additional Job Tasks	Structural	30	14.85
	Non-Structural	172	85.15

Source: The results of questionnaire data processing, 2023.

Table 1 shows that the respondents were dominated by female lecturers aged between 33-42 years, with the functional position of Lector, coming from public universities in Sumatra with no additional duties.

Inferential analysis and structural equation modeling (SEM) were used to test the hypotheses formulated in this research. The results of the first data processing showed that the measurement model did not fit the data: $\chi 2 = 874.64^{**}$, df = 624, $\chi 2/Df = 1270$ p > 0.05; GFI = 0.488, CFI = 0.745, TLI = 0.734, RMSEA = 0.107. AGFI=0445. The complete results can be seen in the following figure:

Figure 1: *Structure of Model Fit (before Elimination)*

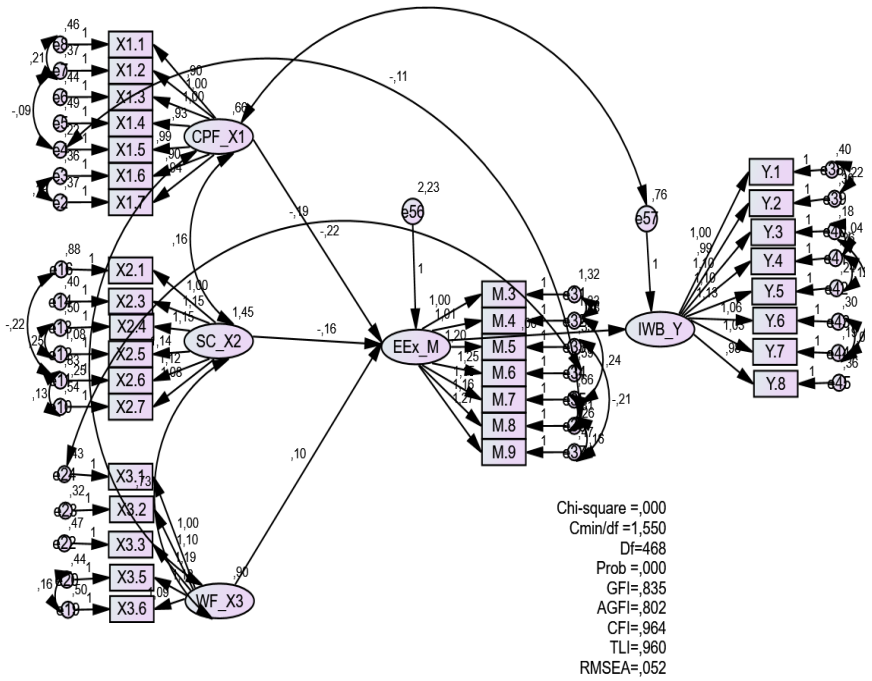


3.1 Measurement Model

In the first model, the loading factors less than 0.50 are Y.16, Y.14, Y15, Y.11, Y13, Y17, Y18, Y9, Y10. Y12, M.1, M.2, X3.11, X3.4, X310, X3.9. As an alternative, Whittaker (2012) proposed an approach using Bayesian Lasso for covariance, which avoids sequential modification processes based on MIS and positive estimates. With this approach, significant residual covariance will be detected simultaneously. It can be used to improve model fit efficiently or as a diagnostic tool to evaluate other modifications that may be needed in the model. In this case, the researchers covariated several items by

examining possible changes in the residual covariance one by one and deciding whether such changes were necessary to improve the fit model.

Figure 2: *Structure of Model Fit (after Elimination)*



Several fit indices indicated the model's fit to the data at hand. The chi-square value of the model was 0.000 > 0.000, which was very good; the degrees of freedom were 283, and the p-value was .000, illustrating the significance of the model. CMIN/df showed a value of 1.550 and represented a reasonable model fit; the index value was less than 5 (Hair et al., 2019). The root Mean Square of Error Approximation (RMSEA) was 0.052, and following Browne and Cudeck (1992), a value of anything less than 0.08 was considered acceptable. The Comparative Fit Index (CFI) value was 0.964, which meets the threshold value; the Goodness of Fit Index (GFI) is 0.835 above the threshold value of 0.80; the Adjusted Goodness of Fit Index (AGFI) was 0.802 above the threshold value of 0.80, Tucker-Lewis Index (TLI) was 0.960, and Normed Fit Index (NFI) is 0.906. The results of the analysis showed that the proposed model had a good fit with the observed data. The p-value threshold of the Chi-square test is greater than 0.05, indicating statistical significance in the model. Fit scores such as CMIN/DF, TLI, CFI, GFI, and AGFI were all within the expected range (0.90 - 1.00 or 2 - 3), indicating a high degree of fit between the model and the data. In addition, RMSEA values lower than the threshold of 0.05 indicated that the model fit the data very well.

3.2 Reliability and Convergent Validity

Table 2: *Loading Composite Reliability (CR), AVE and Convergen Validity*

Variable	Item	Loading	CR Value	AVE
Innovative Work Behavior (IWB) (Y)	Y.8	0,669	0,912	0,566
	Y.7	0,807		
	Y.6	0,742		
	Y.5	0,801		
	Y.4	0,779		
	Y.3	0,834		
	Y.2	0,709		
	Y.1	0,656		
Emotional Exhaustion (EEx) (M)	M.9	0,888	0,951	0,790
	M.8	0,79		
	M.7	0,82		
	M.6	0,857		
	M.5	0,903		
	M.4	0,637		
	M.3	0,634		
Workplace Friendship (WF) (X3)	X3.1	0,674	0,844	0,519
	X3.2	0,771		
	X3.3	0,728		
	X3.5	0,742		
	X3.6	0,684		
Leaders' Support (LS) (X2)	X2.1	0,621	0,867	0,524
	X2.3	0,828		
	X2.4	0,792		
	X2.5	0,635		
	X2.6	0,685		
	X2.7	0,758		
Job-Competence Compatibility (JCC) (X1)	X1.1	0,533	0,877	0,509
	X1.2	0,64		
	X1.3	0,598		
	X1.4	0,534		
	X1.5	0,743		
	X1.6	0,597		
	X1.7	0,611		

The data regarding the variables and related factors showed the results of measuring convergent reliability and validity. The Innovative Work Behavior (IWB) variable had a loading factor that varies from 0.656 to 0.834, with a Composite Reliability

(CR) value of 0.912, exceeding the minimum threshold of 0.70. Average Variance Extracted (AVE) of 0.566, meeting the minimum threshold of 0.50. The Emotional Exhaustion (E Ex) variable had a loading factor from 0.634 to 0.888, with a CR value of 0.951 and AVE 0.790, both of which met the threshold for reliability and convergent validity. Likewise, the variables Workplace Friendship (WF), Leaders' Support (LS), and Job-Competence Compatibility (JCC) also had adequate loading factors, with CR values above 0.70 and AVE above 0.50. These results indicated that this measurement tool was reliable and valid in the context of this research. Further evaluation also showed that the latent construct was measured well, with Composite Reliability (CR) and Average Variance Extracted (AVE) values that met the established criteria. Therefore, the model fit the observed data well, provided with reliable results, and could be used for the hypothesis test.

3.3 Structural Model

Figure 3: Standardized Path Analysis Estimation

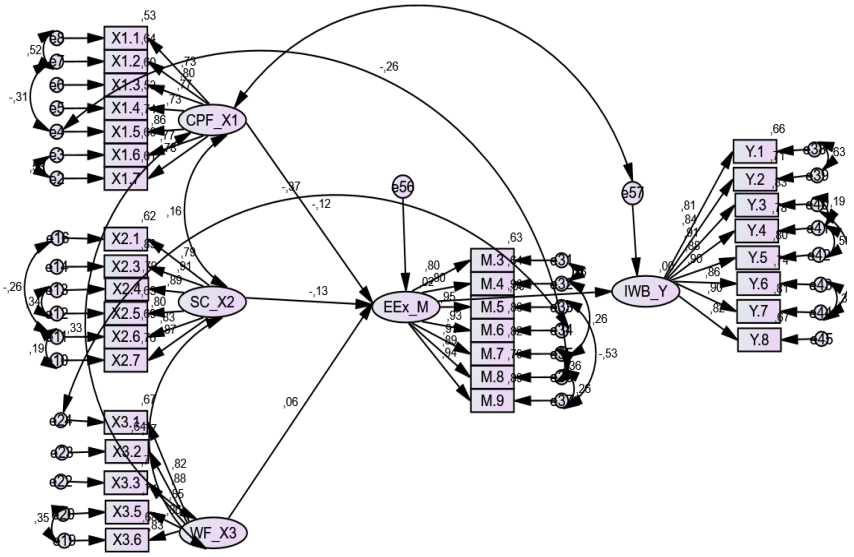


Table 3: *Path Analysis and P-Value*

Variable			**H**	**Unstandardized Estimates**	**Standardized Estimates**	**S.E.**	**C.R.**	**P Value**	**Category**
Emotional Exhaustion (E Ex) (M)	<---	Job-Competence Compatibility (CPF) (X1)	H1	-0,219	-0,117	0,148	-1,477	0,14	Not supported
Emotional Exhaustion (E Ex) (M)	<---	Leaders' Support (LS) (X2)	H2	-0,165	-0,131	0,126	-1,31	0,19	Not supported
Emotional Exhaustion (E Ex) (M)	<---	Workplace Friendship (WF) (X3)	H3	0,099	0,062	0,169	0,586	0,558	Not supported
Innovative Work Behaviour (IWB) (Y)	<---	Emotional Exhaustion (E Ex) (M)	H4	0,002	0,003	0,028	0,069	0,945	Not supported
Innovative Work Behaviour (IWB) (Y) <-- Emotional Exhaustion (E Ex) (M) <-- Job-Competence Compatibility (JCC) (X1)			H5					0.000	Supported
Innovative Work Behavior (IWB) (Y) <-- Emotional Exhaustion (E Ex) (M) <-- Leaders' Support (SC) (X2			H6					0.000	Supported
Innovative Work Behavior (IWB) (Y) <-- Emotional Exhaustion (E Ex) (M) <-- Workplace Friendship (WF) (X3)			H7					0.000	Supported

The results of the analysis showed that hypothesis H1 which linked Emotional Exhaustion (M) with Job-Competence Compatibility (X1) did not receive strong support because the standard path coefficient (-0.117) was negative and not statistically significant (p = 0 .14). Likewise, the hypothesis H2 which related between Emotional Exhausting (E Ex) (M) and Support Competency (SC) (X2) did not receive support, because the standard path coefficient (-0.131) was also negative and not significant (p = 0.19). Furthermore, hypothesis H3, which tried to link Emotional Exhaustion (M) with Workplace Friendship (X3), was also not proven to be significant, with a positive path coefficient (0.062) but not statistical (p = 0.558).

Finally, hypothesis H4, which predicts that Innovative Work Behavior (Y) is influenced by Emotional Exhaustion (M), also does not receive strong support because the path coefficient (0.003) is very small and not significant (p = 0.945). Thus, the analysis results showed no strong support for all the hypotheses proposed in this study, indicating that the Emotional Exhaustion (M) variable did not significantly influence other variables in the model.

The analysis results support hypotheses H5, H6, and H7. In the context of this research, hypothesis H5, which links Innovative Work Behavior with Emotional Exhaustion through Job-Competence Compatibility, is proven to be significant, as well as hypothesis H6, which links Innovative Work Behaviour with Emotional Exhaustion through Leaders' Support, and H7 which connects WBI with Emotional Exhaustion through Workplace Friendship. All these hypotheses show significant path coefficients ($p = 0.000$), indicating that JCC, LS, and WF have a significant influence on IWB through the mediator E Ex. These findings indicate that factors such as professional competence compatibility, leaders' support to development, and workplace friendship play an important role in influencing innovative work behavior, especially through mediating emotional exhaustion. The results provide new insights into the dynamics influencing innovative behavior in the work environment.

4. Discussion

Emotional exhaustion has been highlighted by many researchers since the awareness of mental health issues increased. Most studies on emotional exhaustion focus on employees who need to deal with their workload. Indeed, it is also crucial to take a deep look at emotional exhaustion among lecturers, specifically today's lecturers, who are not only responsible for teaching. Hence, this study examined some factors that can influence emotional exhaustion among Indonesian lecturers, such as job-competency compatibility, leaders' support, and workplace friendship.

The results of the study showed that the influence of job-competence compatibility on emotional exhaustion was not significant and has a negative effect. The result indicated that a lecturer's emotional exhaustion could not be reduced by the compatible job and competence of the lecturer. The result is in line with Konkel and Heffernan's (2021) study that mentioned emotional exhaustion is not related to job security, including feeling secure about the job and competence compatibility. However, Schoeps et al. (2019) found that teachers who got training for their competencies are less likely to experience stress, including emotional exhaustion. It means that the teachers' training program can reduce their emotional exhaustion. The contradictory results of those studies indicated that the compatibility of lecturers' jobs and their competencies cannot directly influence the lecturers' emotional exhaustion. It is because not all lecturers have the same way to overcome their emotional state. A lecturer might find that their emotional state can be

fine if their job and their competencies are compatible, but other lecturers might not. Individual needs a quite long process to heal their emotional state and needs more than only their personal factor (Schoeps et al., 2019). From the lens of the Conservation of Resources (COR) theory (Hobfoll et al., 2018), a compatible job-competence match may not always prevent resource depletion, especially when external demands still exceed perceived support or capacity. This helps explain why compatibility alone may not significantly reduce emotional exhaustion.

This study also found that leaders' support of development has a negative and insignificant effect on emotional exhaustion. This result is in contrast with Liu et al.'s (2021) study that found leaders' support can significantly reduce the emotional exhaustion of university teachers. On the other hand, Lee et al. (2021) found a similar result to this study that mentioned that a leadership style was negatively related to employees' emotional exhaustion. The contradictive results of those studies indicated that it is necessary to understand what specific action and support the lecturers need from their leaders to reduce their emotional exhaustion. This study defined leaders support as providing opportunities and financial support for lecturers to develop. Meanwhile, the leaders' support that Liu et al. (2021) promoted was the leaders' care and mindfulness. It means that as a human being, a lecturer who is emotionally exhausted needs more psychological support than development support. It might be the reason why the result of this study shows negative and insignificant influence from the leaders' support. This is consistent with emotional exhaustion theory, which posits that without psychological safety and emotional resources, instrumental support alone may not be sufficient to alleviate burnout (Maslach et al., 2001).

Moreover, the results of this study illustrated that the effect of workplace friendship on emotional exhaustion is positive but not significant. Of the three factors, only workplace friendship has a positive effect on emotional exhaustion. This result is contradicted with the Durrah's (2023) study that found that workplace friendship could improve employees' mental health. Han et al. (2023) also found that workplace friendship minimized employees emotional exhaustion. While this finding had positive effects but not significant, it showed that the impact of workplace friendship might vary from person to person. Although it is essential an individual's social life is for their mental and emotional state and the emotional exhaustion could mostly be minimized by surrounding resources, as the Job Demand-Resource Model (JD-R) theory proposed (Bakker &

Demerouti, 2017), the impact might vary based on individual personalities, the nature of the work, and the overall organizational culture.

From the perspective of JD-R theory, workplace friendship may act as a resource that buffers job demands, but when these relationships involve emotional labor or social obligations, they can paradoxically become sources of stress themselves. This dual role might explain the non-significant and even slightly positive relationship found in this study.

In Indonesia, lecturers also have to do administrative work personally to complete activity data and performance appraisals in addition to carrying out education, research and community service so that time has been consumed to pursue performance targets and deadlines for completing tasks rather than being spent hanging out with friends.

Emotional exhaustion act as mediator on the relationship between job-competency compatibility and innovative work behavior. Job-competency incompatibility can lead to excessive emotional energy expenditure. Individuals who have challenges and tasks that exceed their competence capacity, will cause emotional exhaustion. This emotional exhaustion has an impact on the ability to think creatively, thus reducing IWB. According to innovation theory, particularly Amabile's Componential Theory of Creativity (1996), intrinsic motivation and cognitive flexibility are essential to innovation. Emotional exhaustion reduces these psychological components, which helps explain the mediating role found in this study.

Emotional exhaustion can also act as a mediator between leaders' support and IWB. Leaders' support for developing competence makes employees feel supported in skill development and competence improvement. However, if the support is too intensive or exceeds the individual's capacity, it can provide additional emotional burden. This emotional exhaustion arises in response to high levels of support or pressure to continuously improve competence. While support for competence development can improve individual skills, emotional exhaustion can limit the ability to think creatively and engage in innovative work behaviors. This aligns with the emotional exhaustion framework in organizational psychology, which warns that even well-intended support mechanisms can backfire when they are not matched with emotional resilience strategies.

Emotional exhaustion may also act as a mediator between workplace friendship and IWB. Workplace friendships often involve intensive social interactions. While these relationships can provide emotional support, they also require the expenditure of emotional energy. If the level of social interaction and engagement is high, emotional

exhaustion may arise as a result of excessive energy expenditure. Maintaining and managing workplace friendships that require intensive interaction outside of working hours, can create an additional burden that can lead to emotional exhaustion. Emotional exhaustion can interfere with an individual's focus and creativity. If an individual feels emotionally exhausted as a result of intensive interactions in workplace friendships, this may limit their ability to perform innovative work behaviors. The results of this study are in line with several studies regarding emotional exhaustion and IWB. Saputra and Rozyanti (2023) found that emotional exhaustion significantly affects IWB and can play a mediating role. However, the variables used are hybrid work characteristics and multitasking. Moreover, this study's results did not align with Xie et al. (2023), who found emotional exhaustion as the main mediator between innovative work behavior and stress avoidance. The different variables of the recent studies could be the cause of the different results. Taken together, these findings underscore the complexity of emotional exhaustion as a construct—one that can both directly and indirectly influence innovation-related outcomes depending on the context, demands, and available resources in the academic workplace.

5. Limitations and Future Directions

Despite its contributions, this study has several limitations. First, the data were collected using self-reported questionnaires, which might be subject to bias such as social desirability or limited introspective accuracy. Second, the study involved 202 lecturers, and although this sample size is statistically sufficient for SEM, it may not fully represent the diversity of higher education institutions across Indonesia, especially given the overrepresentation of lecturers from Sumatra. Third, the cross-sectional design restricts the ability to infer causality between variables, particularly in the mediation model.

Future research could benefit from adopting a longitudinal design to examine how emotional exhaustion and its effects on IWB evolve over time. Comparative studies across different regions or types of institutions (e.g., vocational, religious-based, or international universities) would also provide more generalizable insights. Moreover, intervention-based research that explores specific support programs—such as emotional resilience training, mentoring schemes, or structural workload redistribution—could help validate practical strategies to reduce emotional exhaustion and foster innovation in academic settings.

Conclusion

Lecturers with extra workloads, especially in this rapidly changing era, have the potential to experience emotional exhaustion. As an educator who is also an agent of the youth's national change, it is essential for lecturers to have a stable emotional state in order to maintain the credibility of their work. For that reason, this study examined how job-competence compatibility as the internal factor and leaders' support and workplace friendship as the external factors influence emotional exhaustion among lecturers to generate innovative work behavior. The results showed that two of the three factors, job-competency compatibility and leaders' support, negatively and insignificantly affected emotional exhaustion. Meanwhile, workplace friendship had a positive but insignificant effected on lecturers' emotional exhaustion.

Emotional exhaustion act as mediator on the relationship between job-competency compatibility and innovative work behaviour, between leaders' support for developing competence and innovative work behaviour, also between workplace friendship and IWB. It is important to note that the impact of emotional exhaustion on innovative work behavior may vary depending on the individual, work context, and other factors. A model of increasing IWB can occur through decreasing emotional exhaustion as mediator. This study recommends that future researchers examine other factors that can influence the reduction of lecturers' emotional exhaustion directly or indirectly. Furthermore, future researchers can use qualitative methods by conducting in-depth interviews to investigate lecturers' emotional exhaustion from psychological and personal perspectives.

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Appendix

Sample Questionnaire Items Grouped by Construct

Construct	Item Code	Sample Item (translated from Bahasa Indonesia)	Notes
Emotional Exhaustion (EEx)	M.3, M.4, M.5, M.6, M.7, M.8, M.9	"I feel emotionally drained by my job as a lecturer." "I feel fatigued when I wake up and have to face another day on the job."	Adapted from the Maslach Burnout Inventory (MBI); 7-point Likert scale.
Innovative Work Behavior (IWB)	Y.1–Y.8	"I generate original solutions for problems at work." "I seek out new technologies or methods that could be useful."	Adapted from De Jong & Den Hartog (2010); 7-point Likert scale.
Job-Competence Compatibility (JCC)	X1.1–X1.7	"My current job allows me to fully use my skills and knowledge."	Developed based on perceived person-job fit; 7-point Likert scale.
Leaders' Support (LS)	X2.1–X2.7	"My institution provides funding or time for me to develop my professional competence."	Focus on development-based support rather than emotional support.
Workplace Friendship (WF)	X3.1–X3.6	"I have close friendships with some of my coworkers." "I can share personal thoughts and feelings with colleagues."	Based on workplace friendship scale by Nielsen et al. (2000).