

# THE IMPACT OF REWARDS AND RECOGNITION ON IN-ROLE AND EXTRA-ROLE PERFORMANCE: THE MEDIATING ROLE OF EMPLOYEE ENGAGEMENT IN VIETNAMESE HIGHER EDUCATION INSTITUTIONS

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## ABSTRACT

This study investigates how rewards and recognition affect in-role and extra-role performance through employee engagement among Vietnamese university lecturers. Data were collected from 232 respondents via structured questionnaires, and a quantitative approach was employed. Using SEM analysis, the study confirms that employee engagement fully mediates this relationship. Moreover, psychological safety and organizational justice moderate the link between rewards and engagement. The findings provide theoretical insights and managerial implications for performance management in higher education.

**Keywords:** Rewards and recognition; Employee engagement; In-role performance; Extra-role performance; Psychological safety; Organizational justice.

## TÓM TẮT

Nghiên cứu này xem xét cách thức khen thưởng và sự công nhận ảnh hưởng đến hiệu quả công việc chính và công việc bổ sung thông qua sự gắn kết của giảng viên các trường đại học tại Việt Nam. Dữ liệu được thu thập từ 232 người tham gia thông qua bảng câu hỏi có cấu trúc, và phương pháp định lượng được áp dụng. Thông qua phân tích mô hình cấu trúc tuyến tính (SEM), nghiên cứu xác nhận rằng sự gắn kết nhân viên đóng vai trò trung gian hoàn toàn trong mối quan hệ này. Hơn nữa, cảm giác an toàn tâm lý và công bằng tổ chức có vai trò điều tiết mối liên kết giữa khen thưởng và sự gắn kết. Các kết quả nghiên cứu mang lại đóng góp lý thuyết cũng như hàm ý quản trị trong công tác quản lý hiệu suất tại các cơ sở giáo dục đại học.

**Từ khóa:** Phần thưởng và sự công nhận; Sự gắn kết của nhân viên; Công việc chính; Công việc bổ sung ngoài vai trò; Sự an toàn về mặt tâm lý; Công bằng tổ chức.

## 1. Introduction

In an increasingly competitive and knowledge-driven economy, higher education institutions (HEIs) play a crucial role in

producing human capital and driving national development, making the performance of academic and administrative staff essential for achieving institutional goals and maintaining

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educational quality (Tran and Ly, 2020). Vietnam's HEIs have undergone significant reforms in governance, curriculum development, and international collaboration, requiring a motivated workforce capable of delivering both in-role performance (core job duties) and extra-role performance (voluntary contributions) (Organ, 2014).

A key factor influencing employee performance is the implementation of effective rewards and recognition programs, in which rewards include tangible financial incentives such as salary increases and bonuses, while recognition involves symbolic forms of appreciation like verbal praise and awards (Danish and Usman, 2010). Research has shown that these initiatives enhance employee commitment and performance (Güngör, 2011), but their effectiveness depends heavily on employee engagement, a psychological state characterized by vigor, dedication, and absorption in work (Schaufeli et al., 2002). This is particularly relevant in HEIs, where intrinsic motivation and passion for teaching and research are crucial (Bakker and Demerouti, 2008). However, in Vietnam, research on the link between rewards, recognition, employee engagement, and performance remains limited, often focusing on job satisfaction or work motivation without distinguishing between in-role and extra-role performance. Given this gap, understanding how rewards and recognition foster performance through employee engagement, moderated by psychological safety and organizational justice, is critical for developing evidence-based HR strategies. Thus, this study aims to provide empirical insights into these relationships, helping institutional leaders design more effective performance management systems in Vietnam's evolving higher education landscape.

## **2. Theoretical Background and Hypotheses Development**

### **2.1. Theoretical backgrounds**

This study adopts the Job Demands-Resources (JD-R) model (Bakker and Demerouti, 2007) and Social Exchange Theory (SET) (Blau, 1964) as theoretical foundations. In the JD-R model, rewards and recognition are considered job resources that promote work engagement, thereby enhancing performance. SET supports this by explaining the concept of the "norm of reciprocity," suggesting that individuals who receive economic or socio-emotional benefits from their organization often develop a sense of obligation and respond with positive attitudes and behaviors (Maden, 2015). From the perspective of SET, it can be argued that when employees receive valuable resources from their organization, they are more likely to reciprocate by investing greater energy, time, and effort into their work. Meanwhile, organizational justice and psychological safety are introduced as moderators based on the premise that a fair, psychologically safe climate enhances the effectiveness of rewards in fostering engagement. This integrated theoretical lens strengthens the causal logic underlying the proposed research model.

### **2.2. Literature review**

#### **2.2.1. Rewards and recognition**

Rewards are defined as the outcomes of the employment association that an employee deems to possess value (Chen and Hsieh, 2006) and represent what a corporation extends to its employees (Hulkko-Nyman et al., 2012). Besides, the practice of recognition consists of assuring employees that the company genuinely appreciates their contributions (Sartain and Finney, 2003). Recognition is not only a reflective journey of an employee's job performance but also their

level of engagement (Brun and Dugas, 2008). Rewards and recognition can both take the form of monetary or non-monetary compensation, either through formal organizational initiatives or informally conveyed by an employee's supervisor (Chadwick, 2008).

Rewards and recognition, as facets of a business's psychological climate, play a key role in fostering job satisfaction (Biswas, 2010). Compensation, performance-based rewards, and additional benefits exhibit a positive nexus with normative commitment (Valaei and Rezaei, 2016). The implementation of reward systems directly impacts workforce agility and elicits a heightened sense of organizational support among staff (Madden et al., 2015).

### 2.2.2. *Employee engagement*

Although there have been numerous interpretations of engagement by scholars and professionals, the present study has meticulously examined the existing literature to exclusively focus on operational definitions that can help understand the role of engagement in determining individual outcomes rather than organizational results. In line with Schaufeli (2013), who conceptualizes engagement as a psychological state, Rai et al. (2018) identified definitions that connect engagement with employee performance regarding their behavioral manifestations. The initial conceptual definition of engagement by Kahn (1990) as an individual's expression of their "preferred self" through task behaviors that enhance active and comprehensive role performances holds particular significance in this context.

### 2.2.3. *In-role and extra-role performances*

Numerous researchers (MacKenzie et al., 1998; Deckop et al., 1999) have examined

separate measures of IRP and ERP in relation to job performance. Initially proposed by Katz and Kahn (2015), IRP encompasses essential task behaviors that are directly or indirectly dedicated to individual and organizational outcomes. Organ (1988, 1990) explained, "In-role behaviors are defined as activities explicitly stated in job descriptions and expected from sales associates." MacKenzie et al. (1998) conducted a study involving 672 salespersons and found that IRP is a precursor to organizational commitment and job satisfaction.

A study by Katz (1964) introduced the concept of extra-role performance that goes beyond the explicit requirements of a job and is considered to be synonymous with organizational citizenship behavior (OCB) as proposed by Smith et al. (1983) and Organ (1988). According to Organ (1988, 1990), extra-role behaviors are discretionary actions that exceed the formal expectations outlined in job descriptions. Besides, MacKenzie et al. (1998) have substantiated that organizational commitment and job satisfaction are significant factors influencing ERP, which, in turn, have a direct negative impact on turnover.

### 2.2.4. *Evidence of rewards and recognition as an antecedent of employee engagement*

Following Meyer (2013), a connection between employee reward programs, incentive compensation, and engagement has been established through the application of social and psychological theories, such as generational theory, motivation theory, and incentive compensation theory. According to the cognitive evaluation theory (Deci and Ryan, 2013), a change in perceived competence can influence intrinsic motivation. In other words, if an individual's perception of competence rises due to an environmental event, their intrinsic motivation will also increase (Arnold, 1976).

According to the social exchange theory (SET), rewards and recognition from an organization create a sense of obligation in employees, which in turn leads to higher levels of engagement (Saks, 2006). In other words, when employees feel appreciated for their work, they feel obliged to reciprocate (Wayne et al., 2002). Similarly, Schaufeli (2013) found that the resources provided by an enterprise, such as a fair income, recognition, and development opportunities, foster a sense of obligation in employees, leading them to engage more with the organization.

Among the diverse theories proposed to elucidate the psychological mechanisms underlying employee engagement, the job demands-resources (JD-R) model introduced by Bakker and Demerouti (2007) has gained paramount empirical support (Schaufeli, 2013). Rewards and recognition are prominent components of job resources, thus supporting the positive relationship between rewards, recognition, and work engagement in the JD-R model.

***H1: Rewards and recognition have a positive impact on employee engagement.***

#### *2.2.5. Literature support for the impact of employee engagement on performance*

Broadly speaking, it has been claimed that employees' level of work engagement significantly impacts their job performance (Halbesleben and Wheeler, 2008). Saks (2006) asserted, based on the Social Exchange Theory (SET), that employees' attitudes, intentions, and behaviors are influenced by engagement. Empirical evidence supports the notion that engagement is positively correlated with employee performance. Bakker et al. (2004) demonstrated that colleagues of engaged employees consistently rate them higher in terms of both in-role and extra-role

performance. Furthermore, engagement is associated with proactive behaviors (Sonnetag, 2003) and innovative behaviors, which have the potential to boost employee performance. According to a study by Xanthopoulou et al. (2008), work engagement leads to an upward trend in both IRP and ERP among flight attendants employed by a European airline.

***H2a: Employee engagement has a positive impact on in-role performance.***

***H2b: Employee engagement has a positive impact on extra-role performance.***

#### *2.2.6. Role of engagement as a mediator in prior research*

According to the JD-R model, the nexus between personal and job resources and positive outcomes is mediated by work engagement. Numerous scholars (Maslach, 2001; Saks, 2006; Ho et al., 2011) discovered that employee engagement serves as a mediator in the correlation between various work and organizational elements and employee outcomes. Ghosh et al. (2016) documented that engagement acts as a mediator in the connection between rewards and recognition and normative commitment among employees of private banks in India. Although several relevant pieces of evidence exist, the literature review does not adequately address the relationship between rewards and recognition and employee performance through engagement. Furthermore, how rewards and recognition, in conjunction, forecast employee performance (both IRP and ERP) via engagement is not thoroughly expounded upon.

#### *2.2.7. Organizational justice*

Fairness is a fundamental principle highly regarded within organizations (Konovsky, 2000). In the literature, the terms “justice,” “fairness,” and “equity” have been used

interchangeably (Adams, 1963; Leventhal, 1980; Moorman, 1991). Extensive research has examined the various types of transactions among individuals in the workplace (Suliman and Kathairi, 2012), with justice emerging as an inevitable component of these transactions. Within the context of an organization, justice pertains to the rules and social norms that govern the distribution of outcomes (e.g., rewards and punishments), the procedures employed in making distribution decisions, and the interpersonal treatment of individuals (Bies and Tripp, 1996). As per Moorman (1991), organizational justice focuses on how individuals determine whether they have been treated fairly in their jobs and how these determinations affect other work-related indicators. It has a significant impact on employees' attitudes and behaviors, as well as on their performance and the overall success of the organization (Coetsee, 2006).

#### *2.2.8. The moderating role of organizational justice*

The field of literature contains numerous examples that illustrate the connection between rewards and justice. For instance, Tremblay et al. (2013) have provided evidence of the positive correlation between contingent financial and social rewards and fairness and satisfaction. In a similar vein, Sweeney (1990) has elucidated the relationship between distributive justice and pay satisfaction using the equity theory. As per Roberts et al. (1999), the perception of equity in compensation is viewed as a significant factor in the nexus between pay and job attitudes, such as the intention to stay. De Waal and Jansen (2013) conceptualized a reward system as a hygiene element and argued that it should be viewed as equitable and fair. Ramlall (2003) has emphasized the

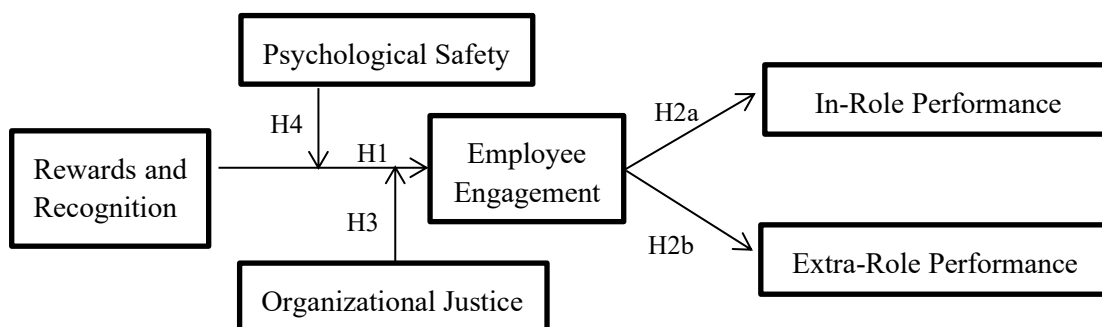
shortage of internal and external equity, as well as being paid a lower level than the market rate, as commonly cited reasons for leaving an organization. Similarly, Ghosh et al. (2013) proposed that offering a compensation package at the market rate is a crucial consideration for employees who are contemplating leaving their businesses.

***H3: The positive nexus between rewards and recognition and employee engagement is moderated by organizational justice.***

#### *2.2.9. Psychological safety*

Psychological safety can refer to individuals' perceptions of the potential consequences of taking interpersonal risks within a specific context, such as the workplace (Edmondson, 1999). Simultaneously, it can be illustrated as the sense of security employees experience when expressing themselves without the fear of facing adverse repercussions to their status, self-image, or career trajectory (Kahn, 1990). Psychological safety also plays a crucial role in fostering employee engagement (May et al., 2004) and facilitating greater creativity as well as innovation (Agarwal and Farndale, 2017). Sherf et al. (2021) differentiate between voice and silence, highlighting that psychological safety exhibits a stronger correlation with silence than with voice. Additionally, silence is significantly related to burnout, while voice is negatively linked to burnout. In a work environment that is considered psychologically safe, individuals possess a sense of confidence that they will not encounter embarrassment, rejection, or punishment from others when expressing their thoughts (Edmondson, 1999).

***H4: The positive nexus between rewards and recognition and employee engagement is moderated by psychological safety.***



**Figure 1.** Conceptual model

### 3. Methodology

#### 3.1. Theoretical backgrounds

This research examines how reward and recognition impact employee performance in Vietnamese higher education, with employee engagement as a mediator and psychological safety and organizational justice as moderators. Using a quantitative approach, data will be analyzed via SPSS 20 for statistical tests and AMOS for confirmatory factor analysis (CFA) and structural equation modeling (SEM).

Data collection will involve online surveys distributed through Google Forms, and QR codes will facilitate access for lecturers at institutions. A total of 261 respondents were collected, with 29 deemed invalid, resulting in an 89% valid response rate. This high rate is attributed to strong professional connections within academia.

Regarding sampling, purposive sampling was used to target academic staff in Vietnamese HEIs who met the inclusion criteria. The sample of 232 valid responses represents a broad demographic, with representation from both public and private institutions, and from diverse geographic locations around Vietnam. While not random, this method ensured access to participants with relevant experience and knowledge. In later stages, snowball sampling was also used to reach additional respondents through professional networks, enhancing the diversity

and relevance of the sample.

#### 3.2. Scale development

All the constructs examined in this study were assessed using measurement scales adopted from the literature. Each of these scales follows a five-point Likert format, except the rewards and recognition scale. In the Likert scale, a score of 1 indicates strong disagreement, while a score of 5 indicates strong agreement.

The rewards and recognition construct was measured using the ten-item Rewards and Recognition Scale developed by Saks (2006). This scale required participants to indicate the extent to which they experienced outcomes related to performing their job well. Participants responded using a five-point Likert-type scale, ranging from (1) to a small extent to (5) to a large extent. The scale items included indicators such as “Job security”, “A promotion”, “Respect from the people you work with”, and “More freedom and opportunities”.

Work engagement was measured using nine items from the Utrecht Work Engagement Scale (Schaufeli et al., 2006), capturing dimensions such as inspiration and enjoyment at work, such as “My job inspires me”.

In-role performance (IRP) was assessed using the seven-item Task Performance Scale by Williams and Anderson (1991), focusing on task fulfillment and job responsibility, for example, “I adequately complete assigned duties.

Extra-role performance (ERP) was measured using their 14-item ERP scale, which assesses discretionary behaviors beyond job requirements. Examples of these items include “I help others who have been absent.”

Psychological safety was evaluated using three items adapted from May et al. (2004), that address openness and perceived risk in expressing oneself at work, such as “I am not afraid to be myself at work”.

Organizational justice was measured using six items from Niehoff and Moorman (1993), assessing distributive, procedural, and interactional justice, for instance, “I consider my workload to be fair” and “My general manager treats me with respect and dignity”.

## 4. Results

### 4.1. Demographic characteristics

The demographic profile reveals a workforce with a strong academic background: over 60% of respondents hold postgraduate qualifications and have 6-10 years of teaching experience. Notably, the gender distribution (55.2% female) from Generation Y indicates a mid-career group of lecturers. Also, most participants reside in Ho Chi Minh City (34.5%) and Hanoi (39.7%), indicating an uneven distribution, with the majority concentrated in the two key economic hubs of the country and home to many of its most prestigious universities. The income diversity and range of experience levels further suggest heterogeneity in reward expectations and engagement responses, reinforcing the need for nuanced HR strategies, with many earning over 25 million VND per month, while 8.2% earn less than 5 million VND, mostly from Generation Z.

**Table 1.** Sample characteristics

Group	Classification	Frequency	Percentage
<b>Age group</b>	Gen X	64	27.6%
	Gen Y	111	47.8%
	Gen Z	57	24.6%
<b>Gender</b>	Female	128	55.2%
	Male	102	44.0%
	Prefer not to say	2	0.9%
<b>Place of residence</b>	Ho Chi Minh	80	34.5%
	Ha Noi	92	39.7%
	Da Nang	41	17.7%
	Others	19	8.1%
<b>Income per month</b>	Under 5 million VND	19	8.2%
	From 5 to under 15 million VND	68	29.3%
	From 15 to under 25 million VND	72	31.0%
	Above 25 million VND	73	31.5%
<b>Highest level of education</b>	Bachelor's degree	89	38.4%
	Master's degree	94	40.5%
	PhD degree	49	21.1%
<b>Working experiences</b>	Under 1 year	44	19.0%
	1 - 5 years	59	25.4%
	6 - 10 years	75	32.3%
	Above 10 years	54	23.3%

## 4.2. Measurement model

### 4.2.1. Cronbach's alpha analysis

The reliability of independent variables, along with the compatibility between the provided components and the observed, can be determined by using Cronbach's Alpha analysis methods. Based on the results of Cronbach's alpha analysis, all six research variables demonstrate a high level of reliability ( $\alpha > 0.7$ ), with Corrected Item-Total Correlation values exceeding 0.3. This confirms that the measurement scales of the research model ensure reliability (Hair et al., 2012).

### 4.2.2. Exploratory factor analysis

The Kaiser-Meyer-Olkin (KMO) coefficient is a statistic used to assess the suitability of factor analysis. A KMO value of 0.5 or higher ( $0.5 \leq \text{KMO} \leq 1$ ) is considered sufficient for conducting factor analysis. If the KMO value is less than 0.5, it suggests that factor analysis may not be appropriate for the given dataset in the research study (Hair et al., 2012). According to the analysis, the KMO value is 0.903, which is higher than 0.5 and lower than 1, indicating the suitability of component investigation. Also, Bartlett's test of sphericity is used to determine whether the observed variables in a factor are correlated. A statistically significant Bartlett's test (sig Bartlett's Test  $< 0.05$ ) indicates that the observed variables are correlated with each other within the factor (Hair et al., 2012). For this research, the significance of Bartlett's Test is 0.000, which is less than 0.05, indicating that the observed variables are associated with each other within the factor.

The Eigenvalue criterion is a commonly used measure to determine the number of factors in EFA (Exploratory Factor Analysis). According to this criterion, only factors with Eigenvalues greater than 1 are retained in the

factor analysis model (Hair et al., 2012). A Total Variance Explained value of  $\geq 50\%$  indicates that the EFA model is appropriate. Assuming the total variance is 100%, this value represents the percentage of variance captured and retained by the extracted factors, as well as the percentage of variance lost from the observed variables (Hair et al., 2012). Based on these criteria and the results investigated, a total of six factors were extracted using criterion of eigenvalues greater than 1, resulting in a cumulative variance of 64.424%.

**Table 2.** Mediator analysis

Completely standardized indirect effect(s) of X on Y				
	Effect	BootSE	BootLLCI	BootULCI
M	0.2216	0.0433	0.1380	0.3074

With a 95% confidence level, the lower bound of the BootLLCI (Lower-Level Confidence Interval) is 0.1380, and the upper bound of the BootULCI (Upper-Level Confidence Interval) is 0.3074. Since the confidence interval [0.1380; 0.3074] does not include 0, there is an indirect effect of X on Y through M, with an effect size of 0.2216. Therefore, the variable M serves as a mediator in the relationship between X and Y.

### 4.3. Confirmatory factor analysis

Confirmatory Factor Analysis (CFA) is conducted to validate the alignment of the input research data with the proposed research model. One of the most critical aspects of CFA is assessing the model's goodness-of-fit, which is evaluated through indicators presented in Table 3. All indicators fall within the acceptable range, confirming that the data is compatible with the proposed model.

In terms of regression weights, the p-value is used to assess whether the observed variables reflect the characteristics of the underlying variables. If the p-value  $< 0.05$  (at a significance level of 5%), the observed

variable is considered significant in the model. Based on the results transpired, all observed variables have p-values of 0.000, which are

less than 0.05. Therefore, all observed variables are considered significant in the model.

**Table 3.** Model fit

Index	Recommended range (Hu and Bentler, 1999; Baumgartner and Homburg, 1996; Doll et al., 1994)	Result	Evaluation
CMIN/df	≤ 3.00	1.84	Good
CFI	≥ 0.90	0.88	Accepted
GFI	≥ 0.70	0.80	Accepted
TLI	≥ 0.90	0.87	Accepted
RMSEA	≤ 0.08	0.06	Good
PCLOSE	≥ 0.05	0.01	Accepted

Observed variables with a minimum standardized regression weight of 0.5 or higher should be retained, ideally aiming for 0.7 or higher. Variables with standardized regression weights below 0.5 need to be eliminated. When an observed variable is removed, we will return to the CFA diagram, remove the corresponding observed variable from the model, reanalyze the CFA, and reassess the quality of the removed observed variable.

The standardized regression weight is also used to evaluate the contribution of an observed variable to the underlying variable. The observed variables with higher standardized regression weights contribute more to the latent variable. As the findings show, all observed variables have standardized regression weights greater than 0.5 and even some exceed 0.7. Therefore, all observed variables are highly appropriate in terms of their contributions.

**4.4. Structural equation modeling**

When determining regression weight, the p-value is taken into account. The correlation between variables is significant if the p-value is less than 0.05; otherwise, it is not significant.

Using a 95% confidence level, Rewards and Recognition have a positive impact on Employee Engagement. Additionally, for the two moderators, both Psychological Safety

and Organizational Justice positively moderate the correlation between Rewards and Recognition and Employee Engagement. Additionally, it is evident that Employee Engagement positively influences In-Role and Extra-Role Performance, as shown in Table 4.

**Table 4.** Regression weight

	Estimate	S.E.	C.R.	P
EE ← RR	0.553	0.074	7.472	***
EE ← RR_PS	0.045	0.011	3.999	***
EE ← RR_OJ	0.066	0.011	6.030	***
ERP ← EE	0.476	0.062	7.670	***
IRP ← EE	0.542	0.060	9.066	***

**Table 5.** Standardized regression weight

	Estimate
EE ← RR	0.436
EE ← RR_PS	0.207
EE ← RR_OJ	0.318
ERP ← EE	0.510
IRP ← EE	0.721

It is asserted that among two moderators, the order of influencing moderators is increasing respectively: Organizational Justice (0.318) and Psychological Safety (0.207). Additionally, Employee Engagement is found to have a more significant impact on In-Role Performance (0.721) than on Extra-Role Performance (0.51), as illustrated in Table 5.

**Table 6.** Hypothesis testing results

Hypothesis	Content	p-value	Result
H1	Rewards and recognition have a positive impact on employee engagement.	***	Accepted
H2a	Employee engagement has a positive impact on in-role performance.	***	Accepted
H2b	Employee engagement has a positive impact on extra-role performance.	***	Accepted
H3	The positive nexus between rewards and recognition and employee engagement is moderated by organizational justice.	***	Accepted
H4	The positive nexus between rewards and recognition and employee engagement is moderated by psychological safety.	***	Accepted

## 5. Discussion

The findings of this investigation indicate that rewards and recognition have a positive impact on employee engagement, particularly lecturers at higher institutions. Moreover, engagement has a subsequent effect on in-role and extra-role performance. In general, rewards and recognition not only enable employees to fulfill their official job responsibilities but also motivate them to undertake tasks beyond the prescribed obligations of their positions, thereby fostering active involvement in their work.

At a theoretical level, this investigation emphasizes the differentiation between IRP and ERP and expands current knowledge on engagement by establishing a connection between rewards and recognition and IRP and ERP. The findings of this study are consistent with the JD-R model's propositions. This discovery regarding the impact of rewards and recognition on engagement aligns with the existing literature (Hulkko-Nyman et al., 2012). Also, the effect of engagement on both IRP and ERP as an outcome is in accordance with earlier investigations (Bakker et al., 2004; Schaufeli et al., 2006). Sripirabaa and Krishnaveni (2009) have also contended that financial support in the form of incentives, salary increases, and bonuses played a positive

role in performance management. The discovery pertaining to engagement's role as a mediator in the relationship between rewards and recognition and ERP is reminiscent of the renowned study by Saks (2006), in which engagement serves as a mediator between antecedent factors (comprising rewards and recognition) and outcome indicators such as OCB.

Based on the analysis of the results regarding the two moderators, the interrelations between involvement with OJ and rewards and recognition (Ghosh et al., 2016) have already been established. The current study from Rai et al. (2019) was the initial attempt to demonstrate that the correlation between rewards and recognition, and engagement is enhanced by a substantial degree of OJ. Hence, total rewards, in conjunction with perceived equality, impartiality, and clarity in organizational practices, would have a more potent impact on engagement compared to the sole value of rewards and recognition. Additionally, psychological safety positively moderates the association between rewards and recognition and employee engagement. In the current era, when psychological factors in the workplace are highly emphasized, the majority of employees express the view that ensuring psychological safety is crucial in their work

environment. Failure to meet this requirement can result in diminished employee performance, as optimistic psychological states play a significant role in decision-making and ultimately impact the outcomes of employees. Furthermore, in the educational sector specifically, heightened psychological pressure can lead to problematic struggles. Therefore, it is believed that psychological safety significantly moderates the relationship between rewards and recognition and employee engagement. Based on findings, lecturers from Vietnamese universities feel comfortable voicing concerns, sharing feedback, and taking initiative. Here, rewards and recognition strengthen engagement because employees trust the system and feel valued.

## 6. Implications of the study

The findings of this study offer several managerial implications for administrators and policymakers in Vietnam's higher education institutions (HEIs) aiming to enhance both in-role and extra-role performance through rewards and recognition mechanisms. To maximize impact, institutions should implement structured programs that incorporate both financial and intrinsic rewards, such as career development and professional recognition, and should also emphasize autonomy in teaching and research (Deci and Ryan, 2000).

Given the mediating role of employee engagement, HEIs should foster an inclusive work environment, encourage participation in decision-making, and publicly recognize contributions to boost engagement and performance (Kahn, 1990; Saks, 2006). Customizing rewards based on faculty needs—such as research grants and conference funding—ensures relevance and effectiveness (Eisenberger and Stinglhamber, 2011). This approach can help institutions retain highly

skilled faculty and staff, thereby strengthening their academic reputation and student outcomes (Bakker and Demerouti, 2008).

Psychological safety and organizational justice play a crucial role in strengthening the impact of rewards on engagement. HEIs should cultivate a culture of trust and fairness by ensuring transparency in reward distribution and providing equal growth opportunities (Edmondson, 1999; Colquitt, 2001). Employees who perceive fairness and feel psychologically safe are more likely to be engaged and motivated to perform beyond their formal job roles.

## 7. Limitations and recommendations for future research

This report analyzes the impact of rewards and recognition on lecturers' in-role and extra-role performance in Vietnam, but has some limitations. The small sample size (232 participants) is concentrated in two major cities, limiting generalizability. A larger, more diverse sample could provide more accurate insights for the paper. Additionally, the study focuses only on psychological safety and organizational justice as moderators, though other factors may also influence the relationship between rewards, recognition, and lecturer engagement. Lastly, the measurement scales used were not tailored to the education sector, which may affect accuracy. Hence, developing industry-specific scales and examining rewards and recognition initiatives in other sectors could yield more comprehensive findings.

Due to the mentioned limitations, subsequent research on this topic should encompass a wider array of components that have a significant impact on the correlation between rewards and recognition and employees' in-role and extra-role performance, although this may introduce practical difficulties to the study. Nonetheless,

there is merit in placing greater emphasis on motivations beyond those explored in the present study.

Additionally, the second suggestion concerns expanding the sample size and demographic information. Besides, the combination of quantitative and qualitative methodologies within the research instrument has the potential to yield a more exhaustive

comprehension of academic research. To thoroughly and clearly elucidate and outline the respondents' stance on the matter, the researcher recommends incorporating open-ended questions or conducting direct interviews. The inclusion of these qualitative elements will facilitate a more intricate examination of lecturers' in-role and extra-role performance within the education sector.

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## APPENDICES

## Appendix 1: Questionnaire design

Construct	Items	References
<b>Rewards and recognition</b>	RR1: A pay raise. RR2: Job security. RR3: A promotion. RR4: More freedom and opportunities. RR5: Respect from the people you work with. RR6: Praise from your supervisor. RR7: Training and development opportunities. RR8: More challenging work assignments. RR9: Some form of public recognition (e.g., employee of the month). RR10: A reward or token of appreciation (e.g., lunch).	Developed by Saks (2006)
<b>Employee engagement</b>	EE1: At my work, I feel bursting with energy. EE2: At my job, I feel strong and vigorous. EE3: I am enthusiastic about my job. EE4: My job inspires me. EE5: When I get up in the morning, I feel like going to work. EE6: I feel happy when I am working intensely. EE7: I am proud of the work that I do. EE8: I am immersed in my work. EE9: I get carried away when I am working.	Developed by Schaufeli et al. (2006)
<b>In-role performance</b>	IRP 1: I adequately complete assigned duties. IRP2: I fulfill responsibilities specified in job description. IRP3: I perform tasks that are expected. IRP4: I meet formal performance requirements of the job. IRP5: I engage in activities that will directly affect my performance evaluation. IRP6: I neglect aspects of the job I am obligated to perform. IRP7: I fail to perform essential duties.	Developed by Williams and Anderson (1991)
<b>Extra-role performance</b>	ERP1: I help others who have been absent. ERP2: I help others who have heavy work loads. ERP3: I assist supervisors with his/her work (when not asked). ERP4: I take time to listen to co-workers' problems and worries. ERP5: I go out of my way to help new employees. ERP6: I take a personal interest in other employees. ERP7: I pass along information to co-workers.	Developed by Williams and Anderson (1991)

	<p>ERP8: My attendance at work is above the norm.</p> <p>ERP9: I give advance notice when unable to come to work.</p> <p>ERP10: I take undeserved work breaks.</p> <p>ERP11: I spend a great deal of time with personal phone calls.</p> <p>ERP12: I complain about insignificant things at work.</p> <p>ERP13: I conserve and protect organizational property.</p> <p>ERP14: I adhere to informal rules devised to maintain order.</p>	
<b>Psychological safety</b>	<p>PS1: I am not afraid to be myself at work.</p> <p>PS2: I am afraid to express my opinions at work.</p> <p>PS3: There is a threatening environment at work.</p>	Adapted by May et al. (2004)
<b>Organizational justice</b>	<p>OJ1: I consider my workload to be fair.</p> <p>OJ2: I feel that my job responsibilities are fair.</p> <p>OJ3: Job decisions are made by the general manager in an unbiased manner.</p> <p>OJ4: My general manager clarifies decisions and provides additional information when requested by employees. justice</p> <p>OJ5: When decisions are made about my job, the general manager treats me with respect and dignity.</p> <p>OJ6: When decisions are made about my job, the general manager deals with me in a truthful manner.</p>	Developed by Niehoff and Moorman (1993)