



The Impact of Reward System on Job Satisfaction and In-role Performance among Lecturers in Indonesia

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Abstract

The current study attempts to analyze the effect of the reward system (intrinsic and extrinsic) on job satisfaction and in-role performance. Moreover, the expected effect of job satisfaction and in-role performance was also tested. This research focuses on all permanent lecturers at private universities in Makassar under the Institute for Higher Education Services Region IX (LLDIKTI IX). Self-administered online questionnaires were designed and distributed to respondents who met the judgment sampling criteria. The 220 respondents were determined as primary data and then tested with structural equation modeling (SEM) analysis based on partial least squares (PLS). The founding statistically stated that intrinsic rewards positively and significantly affect lecturer in-role performance and job satisfaction. Extrinsic rewards have a significant effect on in-role performance but are not significant on lecturer job satisfaction. Furthermore, the mutual relationship between in-role performance-job satisfaction was confirmed and supported. These findings provide the latest insights into productive human resource planning strategies in higher education in Indonesia.

Abstrak

Penelitian ini mencoba untuk menyelidiki hubungan antara sistem penghargaan (intrinsik dan ekstrinsik) terhadap kepuasan kerja dan kinerja peran. Selain itu, pengaruh resiprokal antara kepuasan kerja dan kinerja peran juga diuji. Penelitian ini berfokus pada seluruh dosen tetap pada perguruan tinggi swasta di kota Makassar yang berada di bawah payung Lembaga Layanan Pendidikan Tinggi Wilayah 9 (LLDIKTI9). Kuesioner online yang dikelola sendiri dirancang dan didistribusikan kepada responden yang memenuhi kriteria pengambilan sampel penilaian. Sebanyak 220 responden ditentukan sebagai data primer kemudian diuji dengan analisis Structural Equation Modeling (SEM) berbasis Partial Least Squares (PLS). Pendiri secara statistik menyatakan bahwa penghargaan intrinsik berpengaruh positif dan signifikan terhadap kinerja dosen dan kepuasan kerja. Extrinsic rewards berpengaruh signifikan terhadap kinerja, namun tidak signifikan terhadap kepuasan kerja dosen. Selain itu, hubungan timbal balik kinerja-kepuasan kerja dalam peran juga dikonfirmasi dan didukung. Temuan ini memberikan wawasan terkini tentang strategi perencanaan sumber daya manusia yang produktif di perguruan tinggi di Indonesia.

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INTRODUCTION

It is undoubtedly believed that reward management for employees is a crucial aspect of human resource management (HRM) for all types of organizations (Dessler, 2017). Rewards management is the process of coming up with and putting into place ways to reward employees in a way that will attract, motivate, and keep those who are thought to help the company reach its goals (Armstrong, 2007; DeCenzo et al., 2015). Armstrong (2007), one of the pioneers of reward theory, explicate that reward management is founded on a well-articulated philosophia collection of ideas and guiding concepts that are congruent with organizational values and assist in their implementation. The idea acknowledges that, since HRM is about investments in human capital for which reasonable returns are expected, it is appropriate to compensate individuals differentially according to their contribution (i.e., the return on investment they generate).

Historically, human resource (HR) practitioners and reward specialists have nearly solely focused on monetary awards (Allscheid & Cellar, 1996). Typically, the award structure comprises pay policies and practices, salary and payroll administration, total reward, minimum wage, executive salary, and team award (Peluso et al., 2017). Nonetheless, due to a mix of demographic, economic, and societal shifts, many companies are having trouble attracting and nurturing talent (e.g., an aging workforce, budget constraints, wars for talent) (Karayanni & Nelken, 2022). Consequently, reward management acknowledges the significance of giving proper monetary rewards but stresses the necessity of reinforcing these with certain other sources of rewards. Reiss (2012) argues that intrinsic drive is most frequently characterized as “doing something for himself,” such as when a child plays football for no other reason than because it is what he wants to do. In contrast, extrinsic motivation is the pursuit of instrumental goals, such as when a child plays football to win a game or to have fun with friends. This is in line with self-determination theory (SDT) (Deci & Ryan, 2004) which assume that extrinsic incentives can dramatically erode intrinsic motivation.

It is theorized that extrinsic rewards alter the external milieu in which work is performed by individual (Armstrong, 2007). They provide both monetary and non-monetary rewards such as incentive, health insurance, career improvement, organizational support for training and development, a manageable workload, and supervised career progression (De Gieter & Hofmans, 2015). Moreover, organizations must be sufficiently competitive with several sorts of remuneration to be able to hire, pay attention to, and recompense employees for their achievements (Malik et al., 2015). And despite the fact that considerably recent literature has focused on its importance, it continues to be vital for employee satisfaction and in-role performance on different population (Rai et al., 2018; Tarigan et al., 2022; Venketsamy & Lew, 2022). Likewise, this deemed sufficient for an employee's unique requirements are likely to affect his decision to remain with the firm positively (Yang & Hwang, 2014). Particularly, it has been emphasized that compensation is likely the sole external reward that perceive valuable, while others attempt to connect employees' intent to remain with their current job to the co-benefits of sufficient wages and development prospects. Therefore, it is acknowledged that an attractive work environment and demanding and varied task assignments and responsibilities generally contribute to work satisfaction or performance. Moreover, it should enable employees to witness the results of their works and perceive how their work significantly impacts others (Deci & Ryan, 2004).

Regardless of the relevance of the external components of the job, these intrinsic job characteristics are crucial in evaluating an employee's performance. Intrinsic rewards refer to non-monetary incentives such as managers encouragement in finishing work duties, opportunities for autonomy in or input into work activities, the significance of the tasks, and endorsement from office colleagues (Davidson & Bucher, 1978; Reiss, 2012). The primary benefit accruing to the employing organization is the employee's psychological motivation to meet his job responsibilities, as opposed to determination driven solely by the prospect of receiving tangible incentives and additional extrinsic rewards (Armstrong, 2007). Intrinsic rewards, like a feeling of accomplishment, a sense of competition, independence, personal and professional growth, status, recognition, appreciation and self-esteem, emerge from the employment itself and are accompanied by big implications (De Gieter & Hofmans, 2015).

It is taken into account that employees are more likely to stay focused and accomplish excellent results if they are highly motivated, pride themselves in their work, believe their actions are essential to the team's success, and have enjoyable, fulfilling, and exciting occupations. The influential of this absence of intrinsic value have been recorded in an intriguing manner. Several scholars have found that employees who are uncertain about their employer's expectations tend to experience feelings of uncertainty, increased stress, and eventual emotional detachment from the employing organization (Ardi et al., 2021; Yang & Hwang, 2014; Yuen et al., 2018). Moreover, if employees were given such clarity, they may be more inclined to perform greatly (Rai et al., 2018). Other studies have demonstrated the efficacy of intrinsic rewards, such as work-life balance, prizes, hard tasks, and unique projects, in improving employees performance, particularly those with extensive work experience (Manzoor et al., 2021; Sarkar et al., 2021). Lastly, numerous scholarly voices emphasize the need for delivering intrinsic rewards to boost staff's productivity at non-profit organizations (Baroudi et al., 2022; Reiss, 2012).

Locke (1969) had separated his theoretical investigation into two parts: first, the effect of (in-role) performance on job satisfaction; and second, the question of why there is no necessary relationship between subsequent contentment and performance. This term refers to individual feelings that tend to contribute to increased productivity, creativity, and job commitment. Employee satisfaction also includes job satisfaction, which might be tied to the nature of the job itself. Locke argues further that an individual will strive for high performance if he believes that it will "demand or lead to the achievement of significant job values." This proposition is compatible with its emphasis on values rather than emotions (e.g., satisfaction) as action determiners, and it explains why job satisfaction cannot be utilized to predict future performance with consistency (Yang & Hwang, 2014). Furthermore, satisfaction can be associated with the quality of work that is unrelated to effective performance, and conversely, effective performance might occur in the absence of satisfaction (Spector, 2014).

For our objectives, it is essential to recognize that great performance can serve as a means to other ends. According to (Ricketta, 2008) who conducted a meta-analysis of panel studies, job satisfaction was more likely to affects job performance than the other way around. Siengthai & Pila-Ngarm (2016) investigated job satisfaction and motivation in Pakistan's banking sector and found that job features have a favorable and statistically significant impact on employee's in-role performance and growth satisfaction. Moreover, some findings have demonstrated a mutual correlation between job satisfaction and job performance (Yang & Hwang, 2014).

The majority of the aforementioned studies revealed a correlation between job satisfaction and higher employee performance. DeCenzo et al. (2015) claimed that perhaps both sides are right: for some people, being happy at work makes them better at their jobs, and for others, being good at their jobs makes them happier at work. However, empirical evidence for this viewpoint is limited and outdated specially to predict lecturer's behavior in Indonesia. In addition, a reciprocal relationship between in-role performance and job satisfaction was raised among HR top scholars (Davis et al., 1992; Yang & Hwang, 2014). If performance on the job affects happiness on the job, then management should focus on making the workplace more productive. Meticulous opinion should be given to the things that make people happy at work and, if any, can lead to good job performance. Still, the research results of related studies are not all supportive each other. Presumably, there is evidence that core performance has both direct and indirect effects on job satisfaction. Extending earlier research to study the interaction with antecedent variables, such as incentive management, would be highly beneficial (extrinsic and intrinsic) to provide clarity in this current debate.

Several prior studies in a wide range of occurrences have demonstrated that the implementation of transparent and fair compensation is absolutely vital for HR since it symbolizes an organization's goals to maintain and improve employee satisfaction and job performance (De Gieter & Hofmans, 2015). For instance, classical theories on extrinsic and intrinsic rewards (Davidson & Bucher, 1978) and relationship between job satisfaction and performance (Locke, 1970; Nathanson & Becker, 1973). This theoretical position was confirmed on various context, such as modern businesses and employees' behavior, and non-profit organizations (e.g., government, health, education, community) (Digest, 2021; Gurendrawati et al., 2022; Hamid & Ashoer, 2021;

Hareendrakumar et al., 2021; Pradana & Mayasari, 2023; Yang & Wang, 2013). Moreover, inadequate compensation can also have a detrimental impact on employee performance, work motivation, and job satisfaction, as well as induce talented employees to quit their jobs (Alhmoud & Rjoub, 2019). (Xenikou, 2017) argues that reward mechanisms influence how and why people work in a specific organization compared to all the other firms. Despite the abundance inquiries above, very little attention is given to explore in the context of university management. Hence, the relationship between reward system on work behavior is still need to be taken into account for HRM theory enrichment.

The global pandemic presents HR managers in educational institutions with significant and novel challenges as they attempt to best handle abrupt shifts (Baroudi et al., 2022). The enormous COVID-19 epidemic resulted in a paradigm shift from favoring face-to-face teaching to e-learning (Osei et al., 2022). On the other side, universities must contend with intensifying rivalry, such as attracting new incoming students, enhancing the quality and capacity of lecturers' teaching and/or research, and ensuring greater competitiveness (Peng, 2014). Moreover, expanding human resources through the process of fulfilling organizational demands (based on the existing structure) with HR planning and hiring scientists with a variety of abilities and credentials. This skill-based, background-adjusted selection approach for faculty members is crucial for educational preparation and outstanding research.

Thus, it is necessary to improve the organization and management of higher education institutions, particularly in terms of managing human resource assets. McKinsey (2021) has reported that many organizations are dramatically negotiating performance management in the midst of the COVID-19 crisis and must update total compensation to reflect changes in financial and non-financial incentives. As they endeavor to keep talent in a post-COVID-19 flexible work environment, non-financial benefits will acquire greater significance (Ardi et al., 2021). Thus, the combination of a focus on the development of HR and a rise in welfare through a fair incentive system to drive optimal work achievements will likely result in longer-lasting job satisfaction (Armstrong, 2007). Disruption gives companies a rare opportunity to rethink their overall reward philosophy holistically, and this study investigates the logical repercussions of applying compensation systems from the perspective of higher education.

This study identifies empirical gaps in the relationship between reward management systems and individual attitudes or behaviors (in-role performance and job satisfaction) in organizations. In addition, despite the abundance of study findings on these three variables, the public domain, which includes the behavior of education institutions in Indonesia, is largely untapped. This naturally reinforces the arguments of Deci et al. (2001), who advocate for not ignoring sectors with different behavioral foundations than businesses. This study also gives the most recent evidence of post-COVID-19 HR behavior, which has recently emerged as a central HRM concern. This therefore examines and quantitatively tests the interrelationships between the applicability of the rewards system (intrinsic and extrinsic) and the reciprocal relationship between work satisfaction and performance in the Indonesian educational environment. By delving into this context, this article will theoretically enhance our understanding of the connection between job satisfaction and in-role performance, particularly with regard to the influence of reward systems on work behavior theory. Additionally, the results are expected to inspire HR managers in creating and executing a combination of internal and external incentives with the aim of influencing the employee's core performance which can actively contribute to their prosperity.

This article's remainder consists of the following sections: The following section covers the viewpoints of prior researchers who have contributed to the analysis of each variable. The research approach and data collection follow the concise literature review. The empirical findings are followed by a discussion of their implications and future research.

METHOD

This quantitative study looks into the effects of implementing a reward system on employee performance and job satisfaction (reciprocal). Every permanent lecturer with residence in the city of Makassar, Sulawesi Selatan, Indonesia, forms the demographic sample. To screen potential respondents, a judgment sampling technique was utilized with the following criteria (Bryman, 2016): 1) permanent lecturers who have worked for at least two years and have an academic rank; 2) permanent lecturers who have obtained educational certification from the Ministry of Research, Technology, and Higher Education (Menristekdikti) Indonesia. This criterion is essential for obtaining an accurate perspective that is pertinent to the research goal.

Utilizing Google Drive features and functions, a web-based questionnaire containing all four variable statements is created. Then, questionnaire URLs were disseminated randomly to various private universities in Makassar, South Sulawesi via a WhatsApp group. In addition to being informed of the goal of the study, these individuals will be requested to complete a 3 to 5-minute online questionnaire. Participation is entirely voluntary, and all comments will be kept strictly confidential. During one month, 226 responses were entered into the database; however, after being filtered, only 165 (73.1%) were determined to be respondents. This is a respectable rate for social science research, and it also meets the necessary sample size based on the maximum likelihood assumption ($21 \text{ items} \times 5-10 = 105-200$) (Sarstedt et al., 2021).

The online questionnaire is divided into two parts. First, respondents were asked to fill in their demographic data such as age, gender, education level, work experience, academic rank, and faculty. Second, respondents were asked to rate how much they agreed with a number of statements about the main points of the study. Extrinsic reward consists of five items which adopted from prior researches (Alhmod & Rjoub, 2019; Malik et al., 2015); intrinsic reward is measured by a six-items scale which were sourced from previous studies (Alhmod & Rjoub, 2019; Venketsamy & Lew, 2022). Satisfaction and in-role performance employ a five-item scale that has been widely adopted in the past studies (Rai et al., 2018; Spector, 2014). The following step is to evaluate the items' measurement using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). With the assistance of SmartPLS 3.0 software, a structural equation modeling (SEM) analysis based on partial least squares (PLS) was used to assess the study hypothesis (Sarstedt et al., 2021). This analysis used because this study aims to test the theoretical framework from the prediction perspective. Also, the structural model is complex and includes many constructs, indicators and/or model relationships. Finally, research objective is to better understand increasing complexity by exploring theoretical extensions of existing theories (reward system, work-behavior theory).

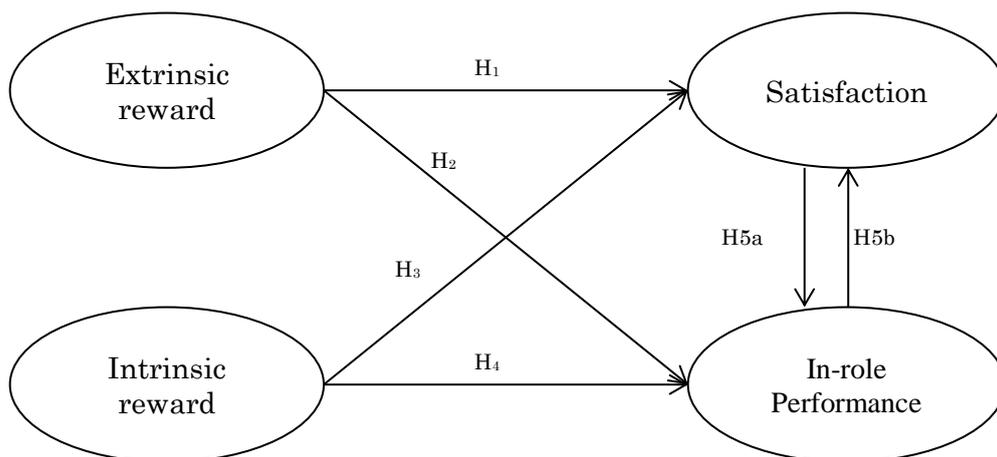


Figure 1. Research model

RESULTS AND DISCUSSION

Measurement model evaluation (outer model)

The first step of outer model evaluation including convergent validity, which can be indicated by the value of the loading factor. It declared to have more than sufficient validity if it has value loading factor > 0.7 (Hair et al., 2017). As shown in Table 1, all items were confirmed to have a loading factor value greater than 0.7. The second step tested the discriminant validity that evaluated based on cross-loading. Hair et al. (2017) stated that if the weight value of an item in an applicable variable exceeds the weight value of the item in another variable, the item is deemed acceptable for measuring the associated variable. From Table 2, all items that measure endogenous and exogenous factors have greater item weights than items measuring other variables. Accordingly, discriminant validity was verified. Moreover, the Fornell-Larcker criteria are the subsequent approach to testing validity. The Fornell-Larcker criterion is a second method for evaluating the discriminant validity of a measure.

Table 1. Measurement model test

| Constructs | Statements (item measurements) | Loadings | CA | rho_A | CR | AVE |
|---------------------------|---|----------|-------|-------|-------|-------|
| Extrinsic rewards (ER) | | | 0.879 | 0.878 | 0.906 | 0.671 |
| ER1 | Fixed income earned can meet daily needs | 0.827 | | | | |
| ER2 | The honor/bonus (variable income) received is commensurate with the demands of university work | 0.843 | | | | |
| ER3 | Universities provide adequate health insurance and/or social security | 0.861 | | | | |
| ER4 | The university provides the widest possible opportunity for lecturers to develop scientific capacity (education and training) | 0.804 | | | | |
| ER5 | The university provides support to lecturers for promotion | 0.790 | | | | |
| Intrinsic rewards (IR) | | | 0.892 | 0.893 | 0.832 | 0.608 |
| IR1 | I feel calm with the certainty of my future career as a lecturer | 0.815 | | | | |
| IR2 | I like getting recognition when I successfully complete a job | 0.736 | | | | |
| IR3 | By becoming a lecturer, my social status increases in the eyes of society and family | 0.794 | | | | |
| IR4 | By becoming a lecturer, I can add friends or campus relations | 0.846 | | | | |
| IR5 | By becoming a lecturer, I can develop insights, views and mindsets | 0.789 | | | | |
| IR6 | All accomplishments or achievements will be adequately rewarded | 0.820 | | | | |
| Satisfaction (SAT) | | | 0.848 | 0.849 | 0.879 | 0.639 |
| SAT1 | I am satisfied because the leadership of the university has given me the opportunity to assume greater responsibility | 0.875 | | | | |
| SAT2 | I feel satisfied because the university leadership provides adequate salary | 0.831 | | | | |
| SAT3 | I feel satisfied because there is transparency in every activity | 0.860 | | | | |
| SAT4 | I am satisfied with a supportive working climate | 0.822 | | | | |
| SAT5 | I feel fast because the university leadership always supports us | 0.799 | | | | |
| In-role performance (PER) | | | 0.820 | 0.824 | 0.844 | 0.654 |
| PER1 | I am able to fulfill the Tridharma PT very well | 0.817 | | | | |
| PER2 | I am able to carry out the supporting elements in Tridharma PT | 0.865 | | | | |

| | | |
|------|---|-------|
| PER3 | I am able to work with other lecturers on various projects | 0.803 |
| PER4 | I am innovative in handling a job | 0.769 |
| PER5 | I can maximize my best potential in carrying out Tridharma PT | 0.822 |

Note: AVE, average variance extracted; CR, composite reliability; CA, Cronbach alpha

The premise underlying the Fornell-Larcker technique is that constructs share greater variance with related indicators than with unrelated constructs. The criterion for evaluating the Fornell-Larcker results is if the AVE exceeds the squared correlation with the other components (Fornell & Larcker, 1981). Table 3 illustrates that all constructs have a greater AVE root than the other constructs and meet the discriminant validity testing criterion. The last step measured the discriminant reliability that consist of three criteria, namely average variance extracted (AVE), Cronbach's alpha, and composite reliability. The construct is considered valid if the discriminant reliability (AVE) is higher than 0.5, the Cronbach alpha is greater than 0.6, and the composite reliability is greater than 0.7 (Hair et al., 2017). The AVE, Cronbach's alpha, and composite reliability values for the four variables are greater than the minimum standards, as shown in Table 1. Thus, it is declared that all constructs satisfy the criteria for discriminant reliability.

Table 2. Cross Loading

| Constructs/ Items | Extrinsic rewards | Intrinsic rewards | Satisfaction | In-role performance |
|-------------------|-------------------|-------------------|--------------|---------------------|
| ER1 | 0.827 | 0.369 | 0.299 | 0.420 |
| ER2 | 0.843 | 0.608 | 0.692 | 0.574 |
| ER3 | 0.861 | 0.482 | 0.405 | 0.378 |
| ER4 | 0.804 | 0.301 | 0.552 | 0.447 |
| ER5 | 0.790 | 0.248 | 0.313 | 0.335 |
| IR1 | 0.554 | 0.815 | 0.552 | 0.493 |
| IR2 | 0.672 | 0.736 | 0.451 | 0.507 |
| IR3 | 0.466 | 0.794 | 0.463 | 0.632 |
| IR4 | 0.670 | 0.846 | 0.678 | 0.520 |
| IR5 | 0.480 | 0.789 | 0.455 | 0.414 |
| IR6 | 0.549 | 0.820 | 0.379 | 0.608 |
| SAT1 | 0.510 | 0.427 | 0.875 | 0.485 |
| SAT2 | 0.433 | 0.657 | 0.831 | 0.551 |
| SAT3 | 0.529 | 0.533 | 0.860 | 0.433 |
| SAT4 | 0.602 | 0.470 | 0.822 | 0.596 |
| SAT5 | 0.551 | 0.536 | 0.799 | 0.338 |
| PER1 | 0.534 | 0.351 | 0.547 | 0.817 |
| PER2 | 0.371 | 0.503 | 0.490 | 0.865 |
| PER3 | 0.504 | 0.573 | 0.565 | 0.803 |
| PER4 | 0.370 | 0.234 | 0.233 | 0.769 |
| PER5 | 0.239 | 0.532 | 0.702 | 0.822 |

Table 3. Mean, standard deviation and discriminant validity (Fornell-Larcker)

| | Mean | SD | 1 | 2 | 3 | 4 |
|------------------|------|------|-------|-------|-------|-------|
| Extrinsic reward | 3.66 | 1.23 | 0.819 | | | |
| Intrinsic reward | 4.29 | 0.93 | 0.522 | 0.779 | | |
| Satisfaction | 4.37 | 1.48 | 0.414 | 0.634 | 0.799 | |
| Performance | 4.06 | 1.62 | 0.597 | 0.555 | 0.541 | 0.808 |

Note. Average variances extracted in the diagonal

Table 4. Hypotheses results

| Direct effects | | Std. β | Std. Error | T-value | P-value | Decision | Confidence Interval (95%) | |
|----------------|----------------------|--------------|------------|---------|---------|---------------|---------------------------|-------|
| | | | | | | | LL | UL |
| H1 | ER \rightarrow PER | 0.352 | 0.099 | 3.555 | 0.000 | Supported | 0.092 | 1.244 |
| H2 | IR \rightarrow PER | 0.267 | 0.108 | 2.468 | 0.015 | Supported | 0.071 | 1.357 |
| H3 | ER \rightarrow SAT | 0.204 | 0.115 | 1.772 | 0.093 | Not Supported | 0.003 | 0.996 |
| H4 | IR \rightarrow SAT | 0.309 | 0.096 | 3.218 | 0.002 | Supported | 0.064 | 1.383 |

| Direct effects | | Std. β | Std. Error | T-value | P-value | Decision | Confidence Interval | |
|----------------|-----------------------|--------------|------------|---------|---------|-----------|---------------------|-------|
| | | | | | | | LL | UL |
| H5a | SAT \rightarrow PER | 0.393 | 0.092 | 4.272 | 0.000 | Supported | 0.128 | 1.501 |
| H5b | PER \rightarrow SAT | 0.387 | 0.091 | 4.252 | 0.000 | Supported | 0.126 | 1.508 |

Note: ER: Extrinsic rewards; IR: Intrinsic rewards; PER: In-role performance; SAT: Satisfaction.
Significance: T-statistic > 1.98; P-value < 0.05 (5%)

Structural model evaluation (inner model)

The first assessment includes the goodness-of-fit model, which employed to determine the capacity of endogenous variables to explain the diversity of exogenous variables or the extent to which exogenous variables contribute to endogenous variables. Q-Square predictive relevance was used to quantify the model's goodness of fit in the PLS analysis (Q^2). Table 4 reveals that the R^2 values for the two dependent variables (performance and job satisfaction) are 0.384 (38.5%) and 0.560 (56%), respectively. In addition, the Q^2 value of the variable measuring job satisfaction is 0.415%, or 41.5%. This indicates that both variables (rewards and in-role performance) may be anticipated as a whole to the extent of 41.5%, with the remaining 58.5% attributable to the influence of variables not considered in this study.

In PLS-SEM analysis, the presence of common method bias (CMB) is identified using a Full Collinearity Assessment method (Kock et al., 2021). To ensure the absence of CMB, it is important that the Variance Inflation Factor (VIF) values remain below the threshold of 3.3 (Kock et al., 2021; Sarstedt et al., 2021). When VIF values exceed 3.3, it suggests that the model is indeed influenced by common method bias. Based on the findings, it appears that the VIF values for all latent variables remain under the 3.3 threshold. This suggests that there is no apparent influence of common method bias on any of the constructs. Consequently, the responses associated with the measurement items in this study seem to demonstrate reliability.

The hypotheses results were presented based on the bootstrapping step from SEM-PLS analysis. From Table 5, it is shown that extrinsic rewards had a substantial influence on performance ($b = 0.352$, t-statistic = 3.555, $p = 0.000$), but found an opposite effect on lecturer job satisfaction ($b = 0.284$, t-statistic = 3.342, $p = 0.001$). Hence, H1 was supported, while H2 was rejected. Next, the test revealed that intrinsic rewards have a statistically significant impact on lecturer job satisfaction ($b = 0.309$, t-statistic = 3.218, $p = 0.002$) and in-role performance ($b = 0.267$, t-statistic = 2.468, $p = 0.015$). Therefore, H3 and H4 was supported. Lastly, regarding the reciprocal relationship, it was found that job satisfaction has a positive and statistically significant effect on in-role performance ($b = 0.387$, t-statistic = 4.252, $p = 0.000$), and in-role performance has a positive and statistically significant effect on lecturer job satisfaction ($b = 0.393$, t-statistic = 4.272, $p = 0.000$). Hence, it can be confirmed that H5a and H5b was supported.

Extrinsic rewards, satisfaction, and in-role performance

Extrinsic rewards had a significant influence on in-role performance, and oppositely found an insignificant effect on job satisfaction among lecturers in Makassar, Indonesia. This findings

corroborate previous studies (Alhmoud & Rjoub, 2019; Karayanni & Nelken, 2022; Tarigan et al., 2022; Venketsamy & Lew, 2022). Justifying the setting of higher education, lecturers may earn an external incentive that enables reporting on their semester or annual performance load. For instance, a member of the teaching staff is encouraged to learn new skills or take on new responsibilities, with all costs covered by the university. This is also appropriate because the professors have received material awards paid directly by the state in the form of certification, and thus they have the responsibility to produce the greatest production possible. However, from the perspective of satisfaction, this gift is inadequate or disproportionate. As is well known, lecturers in Indonesian tertiary institutions are required to fulfill the Tridharma of Higher Education, which consists of teaching, research, and community service.

The participants believe that the incentives they receive each semester are not comparable with the time, effort, and expense required to do this activity. This situation is aggravated by the fact that a number of private institutions cannot afford to pay their professors every month. This may be one of the challenges that continues to cast a shadow over the Indonesian education system, necessitating strategic and practical measures to increase professor work satisfaction. As a result, the institution must establish a transparent and quantifiable incentive plan for the outcome criterion, as it will determine which reward components will be emphasized. In addition, organizations are increasing their investment in skills and competency development as part of their compensation package to recruit and cultivate the people required to execute their future strategies. Variable benchmarks for certain business units or skill sets, long-term incentives over a given level, and different bonus systems for key jobs might be used to determine compensation. Academician will work hard to help students achieve a better future for Indonesia, both financially and otherwise.

Intrinsic rewards, satisfaction, and in-role performance

Intrinsic rewards have a statistically significant impact on lecturer job satisfaction and in-role performance, validating past findings from (Manzoor et al., 2021; Rai et al., 2018; Tarigan et al., 2022). The majority of intrinsic benefits are psychological in nature. In this scenario, lecturers think they have the dedication, perseverance, and capability to carry out all of the prescribed tasks and responsibilities. In addition, they occasionally earn little awards that have a significant impact on their job satisfaction. On a range of formal and unofficial occasions, university administrators may commend or recognize their academics. On a number of occasions, the participants felt valued because they were given unique tasks to work on university-related initiatives, such as national and worldwide research. Other intangible, non-material benefits, such as a friendly and flexible work environment, can also assist an educator in locating a more suitable career path or position. To preserve this optimistic attitude, university leaders might concentrate on rewarding individuals with measurable performance who are more productive, particularly in the publication of scientific publications, without neglecting other human resources who are still in the process. In addition, authorities should separate compensation from developmental feedback and employ intrinsic motivators such as recognition and non-financial prizes so that lecturers can prioritize their career objectives.

Reciprocal effects of satisfaction, and in-role performance

It was significantly confirmed that there were reciprocal effects between job satisfaction and in-role performance. This is reasonable as a well-known tenet from prior research strengthens the reciprocal relationship (Yang & Hwang, 2014). When individuals are able to perform the assigned tasks and obligations, satisfaction should obviously grow as well. In addition, the organizational environment encourages lecturers to be more productive and loyal. Compared to those who are not content, professors who are satisfied tend to be steadier and have more defined orientations or aims. On the other hand, they also enjoy their work, which is an important factor in determining their commitment to the institution's development. This perception may also be influenced by leadership strategies deemed capable of establishing and implementing a more effective reward system.

CONCLUSION AND SUGGESTION

This study aims to investigate the effect of the reward system on job satisfaction and performance; and the reciprocal effect between job satisfaction and individual performance in the context of lecturers in the higher education sector in the city of Makassar, Indonesia. The results of the study confirmed that of the 5 hypotheses proposed, 4 were accepted, while one was rejected. These findings provide a recent contribution to the enrichment of the HRM literature, particularly regarding reward theory and performance behavior. This article contributes to the literature on reciprocal effects between job satisfaction and performance by enriching academic knowledge pertaining the relationship between reward system and work behavior, notably in the context of the higher education in Indonesia. This study also provides recent findings regarding the variety and discrepancies in culture, orientation, employee needs and relations, among other factors. Moreover, this study underlines the need for a more comprehensive knowledge of the impact of HRM practices on the attitudes and actions of individuals in organizations.

This study emphasizes the necessity of collecting evidence regarding the connection between the adoption of reward systems and positive individual outcomes, such as performance and job satisfaction. In the ever-changing environment of human resource management in the education sector, university leaders must become increasingly attuned to their connections. According to the findings, this may necessitate expanding traditional concepts of compensation to incorporate non-monetary characteristics, such as opportunities for training and growth and a friendly work atmosphere. By gradually adopting a reward system, companies acknowledge that “reward” has diverse meanings for different individuals based on a variety of individual and contextual factors. Unlike a “one-size-fits-all” approach, reward systems that integrate transactional and relational benefits enable organizations to mix and match packages for various segments. From this perspective, it is the leader’s responsibility to develop and implement both intrinsic and extrinsic rewards in order to impact the employee’s desire to remain with the firm and contribute to its success.

Despite the contributions offered, several limitations should be acknowledged when evaluating the outcomes of this study. First, the role of benefits in the reward system method has not been investigated in this study. Despite the fact that our research gives intriguing insights into the relationship between rewards and teacher conduct, more emphasis should be made to the broader aspect of rewards. In addition, the research obtained primary data from Makassar, South Sulawesi, Indonesia-based teaching personnel who work at private universities. Future study will almost certainly employ a larger sample size to reinforce predictions. Future study should focus more specifically on the relationships between reward systems and other significant personal and organizational aspects, such as gender, age, race, and job-related traits, to examine how these variables may influence individual attitudes and behavior (rather than limited to in-role performance and job satisfaction).

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