Jurnal Maksipreneur:
Manajemen, Koperasi, dan Entrepreneurship Vol. 15 No. 2 June 2026 p. 502 – 515

Aspects Supporting Lecturers' Scientific Publications as Educational Development in Universities

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Abstract. Social Exchange Theory examines how people interact within a group or company. It focuses on how workers think and make decisions based on fair treatment and trust in their leaders. When workers feel their relationships are built on fairness and mutual respect, they are more likely to put in their best effort. The study shows the importance of examining how managers lead, how much work lecturers have, and how they are rewarded in higher education to help them publish more scientific work. The findings suggest that transformational leadership and rewards are significantly associated with lecturers' performance in scientific publications, indicating that higher levels of these factors correlate with improved performance. The workload variable shows a negative link between workload and lecturers' scientific publication performance. This means that as the workload increases, the quality or amount of scientific publications decreases because the workload is too heavy for their abilities. If rewards can support such a large workload under social exchange theory, lecturers' scientific publication performance will also increase.

Keywords: Transformational leadership; Workload; Reward; Publication performance.

Abstrak. *Teori Pertukaran Sosial mengamati bagaimana orang berinteraksi dalam suatu kelompok atau perusahaan. Teori ini berfokus pada bagaimana pekerja berpikir logis dan membuat keputusan berdasarkan perlakuan yang adil dan kepercayaan kepada pemimpin mereka. Ketika pekerja merasa bahwa hubungan mereka dibangun atas dasar keadilan dan saling menghormati, mereka cenderung memberikan upaya terbaik mereka sebagai balasannya. Studi ini menunjukkan bahwa penting untuk fokus pada bagaimana manajer memimpin, seberapa banyak beban kerja dosen, dan bagaimana mereka di-hargai di pendidikan tinggi, untuk membantu mereka menerbitkan lebih banyak karya ilmiah. Temuan menunjukkan bahwa kepemimpinan transformasional dan penghargaan secara signifikan terkait dengan kinerja dosen dalam publikasi ilmiah, yang menyiratkan bahwa tingkat kepemimpinan transformasional dan penghargaan yang lebih tinggi berkorelasi dengan peningkatan kinerja. Variabel beban kerja menunjukkan bahwa ada hubungan negatif antara beban kerja dan seberapa baik dosen berkinerja dalam publi-kasi ilmiah mereka. Ini berarti bahwa ketika beban kerja meningkat, kualitas atau jumlah*

publikasi ilmiah mereka menurun, karena beban kerja terlalu berat untuk kemampuan mereka. Jika penghargaan dapat mendukung keberadaan beban kerja yang besar tersebut berdasarkan teori pertukaran sosial, kinerja publikasi ilmiah dosen juga akan meningkat.

***Kata kunci**: Kepemimpinan transformasional; Beban kerja; Penghargaan; Kinerja publikasi.*

Article Info:
Received: February 5, 2026 Accepted: May 27, 2026 Available online: June 20, 2026
DOI: http://dx.doi.org/10.30588/jmp.v15i2.2614

BACKGROUND

A lecturer is a scientist who helps by answering questions, creating and sharing art, science, and technology through teaching, doing research, and serving the community. Lecturers are responsible for giving education. Teachers and lecturers are recognized as professional educators who have an essential role in the education system (Law No. 14 of 2005, Art. 3(1)). Lecturers not only lack sufficient answers to teach and conduct research, but also do not have enough answers to share information and provide encouraging updates. Tasks this in line with the college's function as an educational institution. The world of Indonesian education, particularly higher education, is controlled by a government decree called SK DIKTI No. 152/E/T/2012. This document sets the rules for how scientific publications should be handled. Law number 14 from the year 2005 says that power workers and scientists, including lecturers, are required to follow the Tri Dharma of education. This means they must do three things: teaching, research, and community service. Therefore, a lecturer's performance can be measured by observing how the three dharmas are carried out.

According to the Tri Dharma of Higher Education, a lecturer has three main responsibilities: to provide education, to carry out research, and to contribute to society. Of the three parts talked about, the hardest one is doing the research and writing the paper. This is because, as soon as a lecturer gets SK, the level of encouragement for writing stays low. This is because no support facilitates quality research. How a lecturer's performance affects the quality of education, the reputation of the college, and the growth of their own academic career. To become a functional lecturer and get the allowance certification, you need to regularly and properly do three Dharma College tasks as per the standard. According to background research and interviews with several lecturers in the district of Cilacap, Indonesia, more focus is on teaching, so there is no regular publication of studies; as a result, the workload demands do not align with the reciprocal relationship with performance outcomes for lecturers. However, only a small number of lecturers who regularly do research and publish their findings look into them. This is a show-level low research and publication with a three-year syntax productivity period.

Research and learning play a crucial role in higher education, as shown by Mugimu and Sekiziyivu (2016). A research lecturer can succeed with adequate funding, a manageable workload, and high-quality work. The results match what Mugimu and Sekiziyivu (2016) found in their study, which showed that not having enough money, having too much work, and not being motivated are big problems that stop lecturers from

doing well in their studies. However, according to Rohmah et al. (2016), there are five methods that can help lecturers enhance their scientific writing abilities. The fifth component involves the allocation of funds for research, the allocation of funds for the devotion society, efforts to increase the publication of journals with ISBNs, and incentives for outstanding lecturers to produce scientific work and participate in scientific forums, based on laws and research to enhance research productivity, requiring a supportive environment. An environment like that needs leaders who support everyone, clear goals to follow, a clear understanding of how much work is expected, and recognition or rewards for lecturers who create scientific research.

THEORETICAL REVIEW

A leader possesses power and can influence others (Robbins et al., 2017). Leading a group towards a common goal is called leadership. In a company, functional management can't work well without a good leader. Improving performance can be achieved at the individual, group, and organizational levels; individuals, groups, and organizations rely significantly on effective leadership. Studies indicate that how well someone performs in their job is a key factor for lecturers who are employed. When lecturers get good leadership and feel motivated and confident in their skills, their teaching performance tends to improve (Razak et al., 2016).

Bass (1990a) talks about two kinds of leadership: Transformational and Transactional. The behavior, values, and morals of leaders determine the characteristics of leaders, as stated by the second leadership. Leadership that is transactional is about exchanges or deals between leaders and their employees. In a transformational leadership setting, the relationship between leaders and their team members is more about mutual give and take and is based on trust. Leaders either promise things and give rewards to their team members, or they warn them and punish them when they don't do a good job. According to the Social Exchange Theory, the way people organize themselves in society involves workers who act reasonably and believe in fairness, giving back, and trusting their leaders (Cropanzano & Mitchell, 2005). Ohemeng et al. (2020) found that when leaders show behavior, values, and morals based on fairness, giving back, and trust, it helps workers perform better and stay loyal. Therefore, this research will utilize the transformational leadership variable to enhance the quality of scientific publications by scientific lecturers.

A lecturer is a scientist who answers questions, creates and shares knowledge, technology, and art by teaching, doing research, and helping the community. Responsible for authoring books and conducting scientific research, as well as disseminating ideas to enlighten society. So, the main job of the lecturer is to do three things at the Dharma College. The task involves a workload of at least 12 credits and up to 16 credits each semester, depending on the student's academic ability. In addition, the burden-related administrative tasks, along with the reporting task, are three dharma.

H1: Transformational influence on the performance of the lecturer's study publication work in science.

Many workers tend to become less efficient when they have too much work, which can lead to poorer performance. The workload is tiring for the body, mind, and feelings

because of being in a tough situation for a long time. The difference between how hard someone works and what they get from that work also plays a role in this. Psychologically, workload has three aspects: feeling tired, having strong emotions, feeling disconnected from others, and seeing a drop in how well someone does their job (Pines, 2000). Runtuwene et al. (2016) stated that workload leaves someone without a sense of purpose and incapable of fulfilling work-related needs. Pramudyo's study (2010) found that there is a connection between how well lecturers perform and the amount of work they have. Lecturers who have a lot of work to do don't have much time to put together material for studying and publishing. Trisnaningsih (2011) says that workload is one of the things that influences how well lecturers perform. From what was explained earlier, it's clear that workload is a mental issue that leads to tiredness and problems, which can harm a person's body, mind, and feelings, and ultimately lower their ability to perform well.

H2: Workload influences lecturers' performance in their research, publications, and scientific work.

Studies have shown that source power finance helps the components have the ability to create scientific work. Without adequate funding, the goal cannot be achieved. Supporting factors include things like awards that offer training, research money, help, and community service; having access to facilities and journals; and rewards for writing scientific papers. A reward is given to a lecturer for their good work, commitment, or the help they provide. In line with Hunger and Wheelen (2003), it is emphasized that three key aspects should be considered at this stage: implementation factors, support, and strategy. In line with Hunger & Wheelen (2003), it is emphasized that three key aspects should be considered at this stage: implementation factors, support, and strategy. Write a program, plan a budget, and get the Standard Operating Procedure (SOP) up and running. The budget in question records the source of funds for finance and the allocation of necessary funds to run the program aimed at improving performance in lecturer matters, publication work, and scientific work.

Reward is a way to make someone feel accepted and appreciated right away. It includes things like pay and how well people get along with each other at work. According to Nawawi (2017), managers look at how well each person is doing their job both in official meetings and in everyday situations. A reward serves as an incentive aimed at encouraging workers to boost productivity (Tohardi, 2002). A reward is something given to encourage people to achieve certain goals, which helps them perform better and win in competition by making workers more productive (Simamora, 2004). Awards, sometimes called recognition, are rewards that a company gives to its workers for the work they do. These awards are meant to boost productivity and keep the best workers motivated. Mahsun (2006) says there are two kinds of gifts: social gifts and psychological gifts. Awards, social recognition, and praise are forms of acknowledgment received both internally and externally. These are awards given by outside groups, like material finance and charter awards. Awards psychic comes from inside a person, similar to things like praise, flattery, greetings, and congratulations. The psychological roots of awards come from self-esteem (related to price self), self-satisfaction (related to satisfaction self), and pride in the results achieved. Awards are psychological aspects of self-confession and bring satisfaction to oneself.

H3: Rewards affect the performance of lecturers, study publication, and scientific work.

Mangkunegara (2018) says that both internal and external factors are playing a role. Achievements, being acknowledged, taking responsibility in work, and moving forward are all important parts of life. This covers the relationships between bosses and employees, methods used, how work is monitored, managing rules and policies, and the personal aspects of work and daily life. Based on the information given, it is clear that awards, or an award, can be one way to help improve the performance of lecturers in scientific publishing. Awards can also help drive leadership transformation and workload, and boost performance, lecturer publications, and scientific work. So, because of this situation and the reasons behind it, we can start an investigation and keep going with discussions and studies about how transformation, workload, rewards, and performance publications are connected in a way that affects each other.

H4: Transformational, influential to performance, lecturer study publication work, and scientific moderated reward.

H5: Workload influences lecturers' performance, study, publications, work, and scientific moderated rewards.

Based on the theoretical review described, the research model is shown in Figure 1.

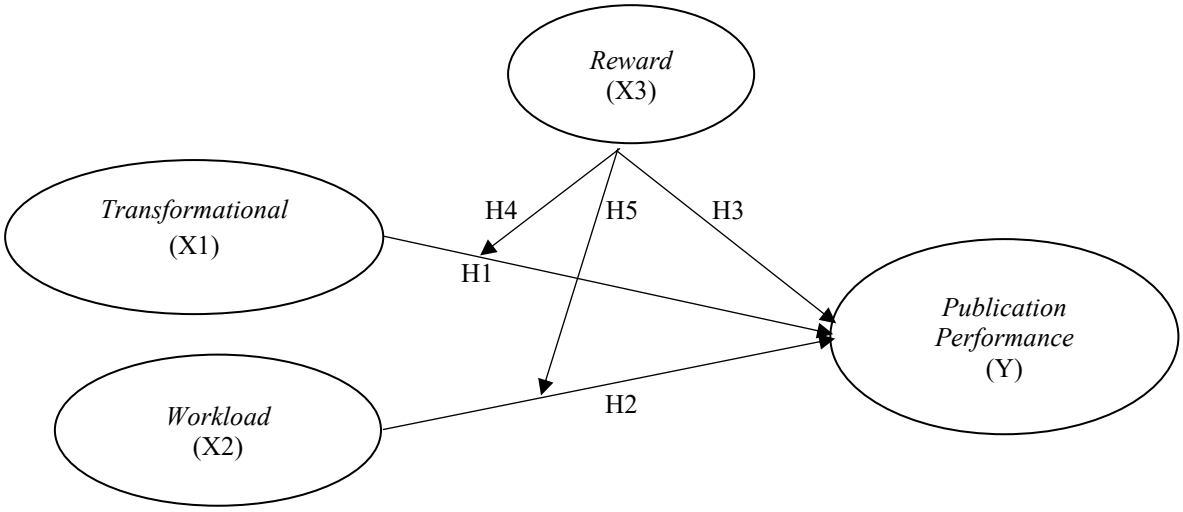


Figure 1. Research Model

RESEARCH METHODS

A quantitative methodology is adopted in this research, and the relationships among variables are examined using the Partial Least Squares Structural Equation Modeling approach. Several statistical tests are performed in this research, including validity testing, reliability testing, hypothesis testing, and the analysis of the effects between variables. The research is conducted at nine higher education institutions located in Cilacap Regency, Indonesia. In particular, this study investigates how lecturers distribute and manage their working time within these universities situated in the urban area of Cilacap.

The population of the research consists of all lecturers working at the selected universities. To determine the respondents, the study employs a non-probability sampling technique, specifically convenience sampling. Sekaran and Bougie (2019) explain that

convenience sampling refers to a sampling approach in which data are collected from individuals who are easily accessible and willing to participate in providing information. In other words, respondents are selected based on their availability and readiness to contribute the data required for the research.

Therefore, information obtained from respondents can be used as research data as long as it is relevant to the identified data sources and collected naturally without deliberate intervention from researchers. This includes any information provided by respondents, regardless of whether it reflects positive or negative conditions (Sekaran & Bougie, 2019). The data collection process in this study involves several techniques, namely interviews, questionnaires, and documentation. According to Sugiyono and Setiyawami (2022), questionnaires are a data collection instrument consisting of a set of written questions that must be answered by respondents. In this research, the questionnaire uses a Likert scale to measure the level of influence of each indicator on the studied variables. Each item is evaluated using a scale ranging from 1 to 5.

For data analysis, this study integrates Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) approach. SEM enables researchers to conduct multiple analyses simultaneously. These analyses include evaluating the validity and reliability of measurement instruments, examining the relationships between variables, and developing predictive models through regression or structural modeling techniques (Sugiyono & Setiyawami, 2022).

The PLS-SEM method consists of two main components, namely the measurement model (outer model) and the structural model (inner model) (Duryadi, 2021). The measurement model is used to assess the relationship between indicators and their respective latent variables. Evaluation of the measurement model begins with testing construct validity. Convergent validity is assessed through factor loading values, which should exceed 0.60. Additionally, the Average Variance Extracted (AVE) must have a value greater than 0.50 to indicate that the construct has adequate validity. Discriminant validity is evaluated through cross-loading values, while reliability is examined using Cronbach's Alpha. A Cronbach's Alpha value greater than 0.70 indicates that the construct has acceptable reliability.

Meanwhile, the structural model (inner model) is used to analyze the relationships among latent variables through path coefficients. The evaluation of this model uses several indicators. The R-Square value indicates the explanatory power of the model, where values of 0.75, 0.50, and 0.25 represent strong, moderate, and weak levels of explanation. In addition, the F-Square value is used to determine the magnitude of the influence of exogenous variables on endogenous variables, with values of 0.02, 0.15, and 0.35 indicating small, medium, and large effects.

Hypothesis testing within the PLS framework is conducted by examining the significance of the path coefficients obtained from the model analysis. The coefficient indicates the direction and strength of the relationship between variables. The level of significance is determined through the probability value (p-value) and the t-statistic value. A relationship between variables is considered significant if the p-value is less than or equal to 0.10, 0.05, or 0.01, and the t-statistic value exceeds 1.64 for a one-tailed test or 1.96 for a two-tailed test. Conversely, if the p-value is greater than 0.10, the relationship between variables is considered statistically insignificant (Jogiyanto & Abdillah, 2019).

The measurement instrument for the transformational leadership variable in this study is adapted from Bass (1990b). This instrument consists of twelve items representing four main dimensions, namely idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. The workload variable measurement instrument is adapted from Reid (1997) and includes five measurement items derived from three indicators: time load, mental effort load, and psychological stress load.

Furthermore, the measurement instrument for the reward variable is adapted from Byars and Rue (2010), which evaluates both intrinsic and extrinsic rewards. Intrinsic rewards include aspects such as feelings of accomplishment, goal achievement, job satisfaction, personal development, informal recognition, and work status. Extrinsic rewards include formal recognition, fringe benefits, incentive payments, a supportive work environment, promotion opportunities, and positive social relationships. In total, this variable consists of twelve measurement items.

Finally, the performance variable measurement instrument is adapted from Mitchell (1982). The indicators used to measure performance include quality of work life, accuracy, timeliness, initiative, ability, and communication. These indicators are represented through five measurement items used to evaluate lecturer performance in this study. Meeraha (2011) conducted a study that showed performance studies are a good way to get leaders to focus on education, which is worth spending money on, and also gives power to institutions. Studies by Tuan et al. (2022) show that the top two things affecting how productive study lecturers are are having access to good research tools and having rules and support that help with research work. Factors include ensuring sufficient resources for scientific research, refining policies to enhance scientific performance, creating effective strategies for scientific activities, and boosting awareness of institutional affiliation, as highlighted in the research by Qalati et al. (2022). Leadership that matches the role encourages participation and boosts work performance. Newton (2010) said that the relationship between leaders and workers influences how engaged and productive the workers are, and this happens through actions that are done willingly or through mutual giving and taking.

Rohmah et al. (2016) found that college teachers have their own objectives for using strategies to enhance lecturers' scientific writing skills. The second part of the plan involves training people, setting up scientific meetings and inviting experts to speak, upgrading facilities, sharing research through publications, giving money for research and community service, supporting the society, and offering rewards and recognition. Lastly, there are factors supporting the strategy. Sanmugam and Rajanthran (2014) found that a mentoring program for students who are not productive can help improve their productivity. This research also highlights the need to focus on important factors that support progress in studies, such as financial support, recognition, funding, and systems in place. More research is needed, and there should be more attention given to encouraging lecturers to publish their scientific research. Thinking through the framework using a paradigm study is shown below, based on the review of the bibliography and research that was previously discussed.

RESULTS AND DISCUSSIONS

Outer Model

The measurement model was assessed to determine whether the indicators properly represent their respective constructs. This evaluation involved examining convergent validity, discriminant validity, and reliability. The estimation of the measurement model was carried out using the Partial Least Squares (PLS) algorithm.

1. Validity Convergent

Basically, convergent validity means how well different ways of measuring the same thing actually agree with each other. In PLS analysis, if a measurement item has a loading over 0.70, it's usually good enough. And, the AVE should be more than 0.50. The loading value indicates the strength of the relationship between an indicator and its latent construct, where higher values represent stronger measurement capability. The results of the analysis reveal that the reward construct has an AVE value of 0.727, transformational leadership shows 0.698, workload records 0.865, and publication performance reaches 0.742. Since all indicators demonstrate loading values above the recommended threshold of 0.70 and the AVE values of each construct exceed 0.50, the indicators can be considered capable of explaining their respective constructs effectively. In addition, the examination of cross-loading values indicates that each indicator loads more strongly on its intended construct than on other constructs. All cross-loading values are above 0.70, and the highest loading for every indicator occurs within its own construct. This finding suggests that the indicators successfully represent the constructs they are designed to measure.

2. Validity Discriminant

Discriminant validity is used to verify that each construct in the model is empirically distinct from other constructs. This assessment can be performed by analyzing the cross-loading matrix, which compares the correlation between indicators and different constructs. A construct demonstrates acceptable discriminant validity when an indicator has a stronger association with its own construct than with other constructs in the model. Basically, the study found that all the signs we looked at were pretty strongly linked to their main ideas, all scoring above 0.70. Plus, each sign was most closely tied to the idea it was supposed to represent. This all adds up to show that the different ideas are distinct from each other and that the signs are doing a good job of measuring what they're supposed to.

3. Reliability

We checked how dependable the ideas in the PLS model were by looking at Cronbach's Alpha and Composite Reliability. These two tests help us see if the different parts of each idea are all measuring the same thing consistently. An idea is considered dependable if both Cronbach's Alpha and Composite Reliability are above 0.70. When these numbers are good, it means the parts are all measuring the same basic idea pretty much the same way, and the way we're measuring things is pretty solid.

Table 1. Reliability Test

Variables	Cronbach's Alpha	Composite Reliability
Publication Performance	0.914	0.935
Rewards	0.966	0.970
Transformational	0.961	0.965
Workload	0.961	0.970

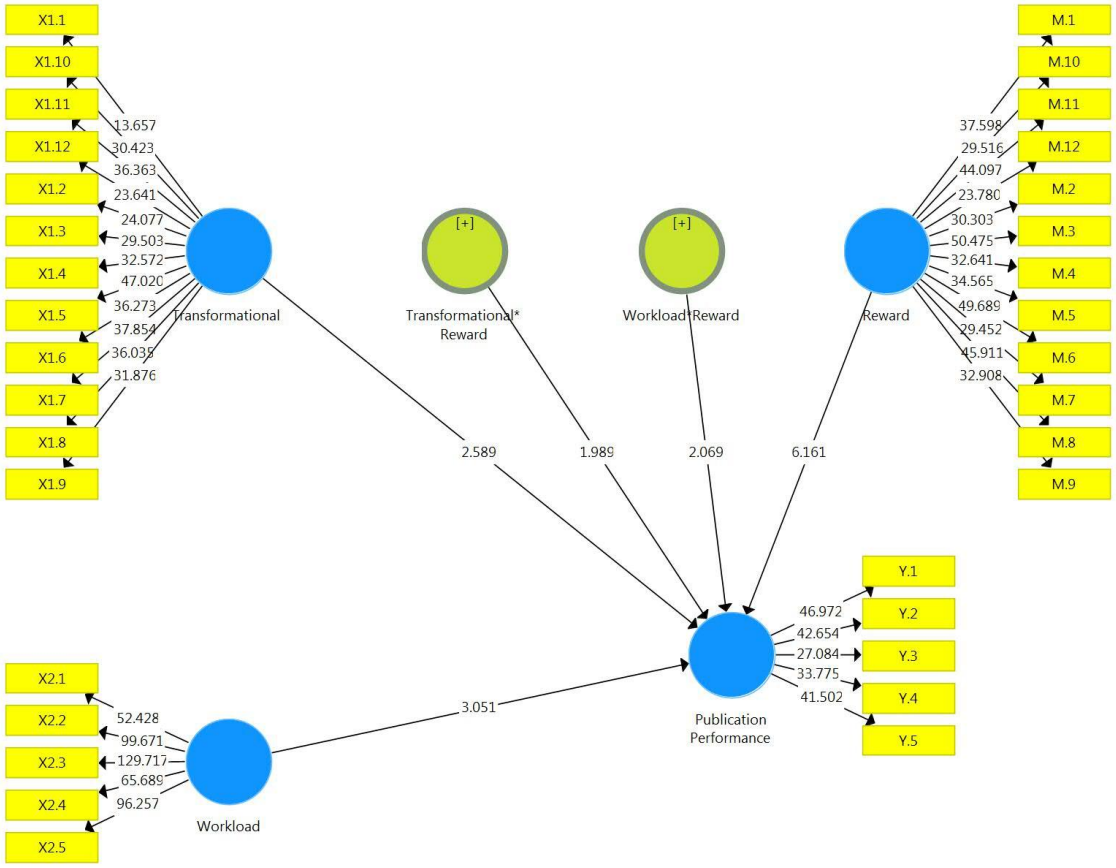
Source: SmartPLS Output Results (v.3.2.9).

So, these findings tell us that all the variables are good to go when it comes to composite reliability and Cronbach's alpha, which basically means they're all reliable. Because of that, we can move on to the next steps, like looking at how well the model fits and checking out the inner model.

Inner Model

Inner-model or structural-model testing is done to look at how different ideas are connected, check the importance of each factor, and see how well the overall model explains the results. The results indicate that the adjusted R-Square value for the Publication Performance variable is 0.432. This value indicates that the independent variables account for 43.2% of the variance in the Publication Performance variable, with the remaining 56.8% attributed to other variables not included in this study.

The factor test looks at how much the hidden variables affect the structure and tells whether the effect is small, medium, or big. Basically, an F value of 0.02 means the effect is pretty minor, 0.15 suggests a moderate effect, and if you see 0.35, that's a pretty big effect. The results indicate that the reward variable has an effect on the publication performance variable, with an F-squared value of 0.290, suggesting a moderate influence (0.15–0.35). The transformational variable has a small effect on the publication performance variable, with the effect size ranging between 0.02 and 0.15.



Source: Results of Stock SmartPLS (v.3.2.9).

Figure 2. Hypotheses Testing

Test Results of Hypotheses

Structural equation modeling helps researchers understand how different variables are connected and relate to each other in a study. We used PLS software to test the structural model. The hypothesis we're testing comes from the image output and the path coefficient numbers. To check if the hypothesis holds up, we follow this guideline: if the p-value is under 0.05 and the t-statistic is over 1.960, it means the outside variable really influences the inside variable. This next part explains all about testing hypotheses.

Table 2. Hypotheses Testing
Total Effects (Means, STDEV, T-Values, P-Values)

Variables	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	t-Statistics (O/STDV)	P Values
Transformational → Publication Performer	0.257	0.268	0.099	2,589	0.010
Workload → Publication Performance	-0.212	-0.209	0.070	3,051	0.002
Reward → Publication Performer	0.467	0.468	0.076	6.161	0.000
Transformational*Reward → Publication Performer	0.226	0.222	0.113	1,989	0.047
Workload*Reward → Publication Performance	0.155	0.154	0.075	2,069	0.039

Source: Results of Stock SmartPLS (v.3.2.9).

Discussions

In PLS, each suggested connection is checked through a simulation. In this case, the method used is bootstrapping on the sample. The following are the results of the PLS bootstrapping analysis:

a. The Effect of Transformational on Publication Performance

The initial hypothesis test suggests that transformational leadership affects how much is published. The numbers back this up: the coefficient is 0.257, the p-value is 0.010, which is lower than the usual 0.05 cutoff, and the t-statistic is 2.589, which is bigger than the threshold of 1.960. These results show that there have been changes that have improved how publications are performing. The hypothesis that transformational leadership has a positive and significant effect on publication performance is accepted. This follows the research done by Meeraha (2011), which showed that giving strong evidence to leaders in higher education about how research performance is a useful tool and should be included in professional growth and accountability is a good use of institutional money and resources.

Other research shows that the two main things that affect how much lecturers can do in their research are the availability of resources and the policies that support research work. Here are some of the things we can do: (1) make sure there are enough resources for professors to do their scientific research; (2) come up with better rules so professors can get more done in their research; (3) figure out some plans for how we'll do scientific research; (4) get the heads of the related departments to understand why scientific research is a big deal (Tuan et al., 2022). As shown in prior research, leadership often helps employees become more engaged in their work (Qalati et al., 2022). Newton (2010)

pointed out that the way leaders and workers relate to each other influences workers' involvement and productivity, especially when their actions are grounded in social exchange theory.

b. The Effect of Workload on Publication Performance

For the second test, we examined whether workload affected how much people published; the results showed a positive association: higher workload was associated with fewer publications. Specifically, the number we got was -0.212. This finding is statistically significant because the p-value was 0.002, well below the usual cutoff of 0.05, and the t-statistic was 3.051, exceeding the typical threshold of 1.960. The results indicate that workload impacts publication performance. The idea that a heavy workload has both harmful and beneficial effects on how much someone publishes is widely accepted. Studies have found that when people do too much work as part of their Tridharma responsibilities, it makes it hard to balance work and personal life. This imbalance can lower how well they perform and stop them from reaching their best possible performance levels (Meilani et al., 2022).

c. The Effect of Reward on Publication Performance

For the third test, we examined the third idea, which concerned how rewards influence how well people publish. We saw a connection of 0.467. This means the chance of this happening by accident is pretty low (less than 0.05), and the result is quite significant (the t-statistic was greater than 1.960). These results suggest that rewards influence publication performance. The idea that rewards have a good and important influence on how well someone publishes is considered correct. This follows from past research, which shows that one important lesson is to use a performance-based reward system to encourage and help university lecturers in Indonesia do better in their jobs. Second, policymakers and educational leaders should continue to focus on providing a more supportive administrative and supervisory system, along with better career opportunities, university identity, financial assistance, and improved working conditions for lecturers. Third, loyal lecturers will be happy to stay in the organization, strongly believe in its values, and work better for it (Sukirno, 2020).

d. The impact of transformational leadership on how well a publication performs is influenced by the type of reward given

For the fourth test, we examined how transformational leadership affects publication output, especially when rewards are a factor. We found a coefficient of 0.226 there. The p-value is 0.047, which is less than 0.05, and the t-value is 1.989, which is higher than 1.960. The findings indicate that transformation impacts publication performance, with rewards moderating this effect. So, the idea that rewards can help reduce the impact of transformational leadership on the quality of someone's published work is supported. This follows earlier studies that show, first, that universities aim to improve lecturers' skills in writing scientific papers through certain strategies. Second, these strategies include training, holding scientific forums for lecturers, enhancing publication support, offering funding for research and community service, and giving rewards or incentives. Third, some factors support these strategies, and others that may prevent them from being effective, as found by Rohmah et al. (2016).

e. The Effect of Workload on Publication Performance Moderated by Rewards

The fifth test finds that how much work someone has does impact their publication output, and this relationship is shaped by the rewards they receive. Specifically, the coefficient is 0.155, the p-value is 0.039 (below the 0.05 threshold), and the t-value is 2.069 (greater than 1.960). These results indicate that the amount of work someone has affects how much they publish, and the rewards they receive can change the strength of this effect. The hypothesis that rewards can moderate the effect of workload on publication performance is accepted. This is supported by past studies showing that there should be a mentoring program for academics who are not very productive. This is because the workload can be managed better to boost research productivity. It also focuses on important factors that help research progress, like research pay, recognition, funding, and systems that support research outcomes. These things are needed to encourage lecturers to publish more scientific work (Shanmugham et al., 2018).

CONCLUSIONS AND RECOMMENDATIONS

According to the study, to help scientific lecturers perform better, university managers should focus more on transformational leadership, managing workload, and offering proper rewards. The findings indicated that transformational leadership, reward, and the performance of scientific lecturers are closely connected in a positive way. The more transformational and rewarding, the more publications scientific performance lecturers will produce. While this is happening, there is a negative link between the workload and how well scientific lecturers perform. So, when the workload increases, the performance of the scientific lecturers tends to decrease. Because the amount of work is too much for the lecturers to handle on their own, but they can keep doing it if they get rewards, as the social exchange theory says. Following this, there will be more lecturers with publications on performance, enabling them to provide information for analysis by other researchers. What is the current situation with the lecturers' award system? When life pressure or workload impact is present, organizational citizenship behavior variables or work behavior power are affected.

ACKNOWLEDGMENT

The completion of this study would not have been possible without the blessings of strength, health, and guidance from Allah SWT, for which the author is deeply grateful. It is hoped that this research will be useful for future studies. I also want to thank the people who gave me the encouragement and advice I needed to complete this article, as well as the people who took the time to fill out the questionnaire. Their responses were essential in collecting the data needed to address the problem.

REFERENCES

Bass, B. M. (1990a). *Bass & Stodgill's Handbook of Leadership: Theory, Research, and Managerial Applications* (3rd ed.). The Free Press.

Bass, B. M. (1990b). From Transactional To Transformational Leadership: Learning To Share The Vision. *Organizational Dynamics*, *18*(3), 19–31. https://doi.org/10.1016/ 0090-2616(90)90061-S

Byars, L. L., & Rue, L. W. (2010). *Human Resource Management*. McGraw-Hill.

Cropanzano, R., & Mitchell, M. S. (2005). Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, *31*(6), 874–900. https://doi.org/10.1177/01492 06305279602

Duryadi, M. (2021). *Research Methods: Empirical Model Path Analysis and Analysis User SmartPLS*. Prima Agus Teknik Foundation.

Hunger, J. D., & Wheelen, T. L. (2003). *Strategic Management*. Prentice Hall.

Jogiyanto, H. M., & Abdillah, W. (2019). *Konsep dan Aplikasi PLS untuk Penelitian Empiris*. BPFE UGM.

Mahsun, M. (2006). *Pengukuran Kinerja Sektor Publik*. BPFE UGM.

Mangkunegara. (2018). *Manajemen Sumber Daya Manusia Perusahaan*. Remaja Rosdakarya.

Meeraha, T. S. M. (2011). Inculcation of Action Research Among University Lecturers. *Procedia - Social and Behavioral Sciences*, *15*(1), 3620–3624. https://doi.org/10.1016/j.sbspro.2011.04.345

Meilani, Y. F. C. P., Bernarto, I., & Nahar, F. H. (2022). The Relationship Between Autonomy, Workload, And Work-Life Balance To Job Performance Of Female Lecturers At Private Universities During the COVID-19. *Jurnal Aplikasi Manajemen*, *20*(3), 477–487. https://doi.org/10.21776/ub.jam.2022.020.03.02

Mitchell, T. R. (1982). Motivation: New directions for theory, research, and practice. *Academy of Management Review*, *7*(1), 80–88. https://doi.org/10.5465/amr.1982.4285467

Mugimu, C. B., & Sekiziyivu, S. (2016). Authentic Instructional Materials and the Communicative Language Teaching Approach of German as a Foreign Language in Uganda. *International Journal of Learning, Teaching and Educational Research*, *15*(5), 61–74. Retrieved from https://www.academia.edu/48815535

Nawawi, H. (2017). *Manajemen Sumberdaya Manusia: Untuk Bisnis yang Kompetitif*. UGM Press.

Newton, C. (2010). *The Role Of Individual Differences and Leader-Member Exchange In The Stressor-Emotion Model Of Counterproductive Workplace Behavior*. University of Lethbridge.

Ohemeng, F. L. K., Obuobisa Darko, T., & Amoako-Asiedu, E. (2020). Bureaucratic Leadership, Trust Building, And Employee Engagement In The Public Sector In Ghana. *International Journal of Public Leadership*, *16*(1), 17–40. https://doi.org/10.1108/IJPL-05-2019-0018

Pemerintah RI. (2005). *Undang-Undang Republik Indonesia No. 14 Tahun 2005 tentang Guru dan Dosen*. Pemerintah RI.

Pines, A. M. (2000). Treating Career Burnout: A Psychodynamic Existential Perspective. *Journal of Clinical Psychology*, *56*(5), 633–642. https://doi.org/10.1002/(SICI) 1097-4679(200005)56:5<633::AID-JCLP5>3.0.CO;2-%23

Pramudyo, A. (2010). *Analisis Faktor-Faktor Yang Mempengaruhi Kinerja Dosen Negeri Pada Kopertis Wilayah V Yogyakarta*. Universitas Muhammadiyah Yogyakarta.

Qalati, S. A., Zafar, Z., Fan, M., Sánchez Limón, M. L., & Khaskheli, M. B. (2022). Employee Performance Under Transformational Leadership And Organizational Citizenship Behavior: A Mediated Model. *Heliyon*, *8*(11), e11374. https://doi.org/10.1016/j.heliyon.2022.e11374

Razak, Y., Syah, D., & Aziz, A. (2016). Kepemimpinan, Kinerja Dosen dalam Peningkatan Mutu Pendidikan Perguruan Tinggi. *Tanzhim*, *1*(2), 30–44.

Reid, G. B. (1997). Applications Using Formal Measurement Theory. *International Journal of Cognitive Ergonomics*, *1*(4), 303–313. Retrieved from https://www.researchgate.net/profile/Herbert-Colle/publication/318835033

Robbins, S. P., Judge, T. A., & Campbell, T. T. (2017). *Organizational Behaviour*. Pearson Education.

Rohmah, N., Huda, M., & Kusmintardjo, K. (2016). *Strategi Peningkatan Kemampuan Dosen dalam Penulisan Karya Ilmiah (Studi Multi Kasus pada Unisda dan Staidra di Kabupaten Lamongan)*. Universitas Negeri Malang.

Runtuwene, P., Tewal, B., & Mintardjo, C. (2016). Effect of Job Placement, Mutation, and Workload on Employee Performance on PT Bank Sulutgo Manado. *Jurnal Berkala Ilmiah Efisiensi*, *16*(1), 269–279.

Sanmugam, S. T., & Rajanthran, N. (2014). Exploring Malaysian Polytechnic Lecturers' Perceptions Towards Research: An Institutional Case Study. *Procedia-Social and Behavioral Sciences*, *123*(1), 398–405. https://doi.org/10.1016/j.sbspro.2014.01.1 438

Sekaran, U., & Bougie, R. (2019). *Research Methods For Business: A Skill-Building Approach*. John Wiley & Sons.

Shanmugham, M., Strawderman, L., Babski-Reeves, K., & Bian, L. (2018). Alarm-Related Workload In Default And Modified Alarm Settings And The Relationship Between Alarm Workload, Alarm Response Rate, And Care Provider Experience: Quantification And Comparison Study. *JMIR Human Factors*, *5*(4), e11704.

Simamora, H. (2004). *Manajemen Sumber Daya Manusia* (3rd ed.). BP STIE YKPN.

Sugiyono, S., & Setiyawami, S. (2022). *Metode Penelitian Sumber Daya Manusia*. Alfabeta.

Sukirno, S. (2020). Dataset of Lecturer Performance Appraisal. *Data in Brief*, *32*, 106161. https://doi.org/10.1016/j.dib.2020.106161

Tohardi, A. (2002). *Pemahaman Praktis Manajemen Sumber Daya Manusia*. Universitas Tanjung Pura.

Trisnaningsih, S. (2011). Faktor-Faktor Yang Mempengaruhi Kinerja Dosen Akuntansi. *Jurnal Akuntansi dan Auditing*, *8*(1), 83–94. https://doi.org/10.14710/jaa.8.1.83-94

Tuan, N. A., Hue, T. T., Lien, L. T., Van, L. H., Nhung, H. T. T., & Dat, L. Q. (2022). Management Factors Influencing Lecturers' Research Productivity In Vietnam National University, Hanoi, Vietnam: A Structural Equation Modeling Analysis. *Heliyon*, *8*(9), 1–14.