

The Role of Transformational Leadership and Entrepreneurial Orientation on Lecturer Performance

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Abstract. The quality of higher education in Indonesia is still not optimal. This is evidenced by the fact that higher education in Indonesia is still lower compared to other countries. In order to improve the quality of higher education, the role of lecturers is crucial. This study is a quantitative research that aims to analyze the influence of transformational leadership and entrepreneurial orientation in the performance of lecturers in Indonesia. In order to achieve the research objectives, data collection was conducted by distributing questionnaires to 150 IT lecturers. The data analysis was performed using Structural Equation Modeling. The results of the study show that there is an influence of transformational leadership on the performance of lecturers. There is an influence of transformational leadership on entrepreneurial orientation. Additionally, the study also reveals that there is an influence of entrepreneurial orientation on the performance of lecturers. Lastly, there is also an influence of transformational leadership on the performance of lecturers mediated by entrepreneurial orientation. This indicates that transformational leadership plays a role in enhancing the performance of lecturers through entrepreneurial orientation. Furthermore, these findings provide important insights on how to improve the performance of lecturers by enhancing transformational leadership and entrepreneurial orientation.

Keywords: Entrepreneurial Orientation, Lecturer Performance, Transformational Leadership

1 Introduction

Indonesia's human development index still shows a lower level compared to many other countries. Based on the [1] published by the United Nations Development Program 2021, Indonesia is ranked 114 out of 191 countries. For the ASEAN environment itself, Indonesia is still under Malaysia and Thailand. This shows that there are still challenges to be faced in bettering the quality of human life in Indonesia. One important effort to improve human quality is through education.

However, education in Indonesia is also still facing challenges in terms of development, especially in the field of Information Technology. The Information and Communication Technology Development Index (IP-TIK) in Indonesia in 2021 is still recorded at 5.76 from a scale of 0 to 10 or experiencing a growth of 3% compared to 2020 [2]. This shows that the role of education in Information Technology in Indonesia has not yet reached its maximum potential.

To increase the role of Information Technology education, this is very important to improve the quality of lecturers in this field. One of indicator of the quality of Information Technology lecturers is performance in education and teaching activities, research, community service, and other support service. However, the results of a pre-survey of private university lecturers show that the performance of Information Technology lecturers only reaches 69% of the total standard of 100%, so it still needs to be improved.

In an effort to improve the quality of Information Technology education, it is necessary to take steps to improve lecturer performance. This involves providing training and development, support in research and community service, and increasing collaboration between educational institutions, industry and the government to ensure that Information Technology education in Indonesia reaches a higher standard.

One of the ways to improve lecturer performance is by increasing transformational leadership and entrepreneurial orientation. Some of the results from previous research indicate that transformational leadership affecting work performance [3], [4], but there are also other studies showing different results, where performance not affected by transformational leadership [5], [6]. This shows that there is an inconsistency in the correlation amongst transformational leadership and work performance, so it is necessary to conduct research on a similar topic. The effect of entrepreneurial orientation on work performance have shown in several previous studies [7], [8]. However, other studies have shown different results, where entrepreneurial orientation does not affect work performance [9], [10]. This also shows that there is an inconsistency in the correlation amongst entrepreneurial orientation and work performance, so conducting research on similar topic is necessary.

Based on the explanation above, this study aims to examine the role of transformational leadership and entrepreneurial orientation on lecturer performance. This research is expected to contribute to improving the performance of information technology lecturers, especially through increasing transformational leadership and entrepreneurial orientation.

2 Literature Review

2.1 Transformational Leadership

Transformational leadership refers to leaders who can inspire their followers to reach the desired goals and challenge them to achieve these goals in new ways [11]. Transformational leadership has four dimensions based on [12], including inspirational motivation (how leaders inspire their followers to achieve the desired goals), idealized influence (conditions where followers believe in leaders, that will drive them to achieve common goals rather than individual goals), intellectual stimulation (conditions where leaders challenge status conditions quo and encouraging followers to think about new different ways), and individual consideration (a condition where leaders are present as mentors to provide emotional support to their followers).

According to the explanation above, transformational leadership can be defined as leadership model that can inspire followers to achieve common goals by fostering self-confidence and providing emotional support to them.

2.2 Entrepreneurial Orientation

Entrepreneurial orientation (EO) is a strategy-making process literature art as one of the leading theoretically and empirically examined constructs in the domain of entrepreneurship, and it still continues to be a vibrant research area [13]. According to Miller in [14], an entrepreneurial firm with an entrepreneurial orientation (EO) is characterized by engaging in product-market innovation, pursuing ventures with a certain degree of risk, and taking proactive initiatives to introduce innovations that outpace competitors. Furthermore, according to Ireland, Covin, and Kuratko in [15], firms choose to pursue EO because it is recognized as a strategic behavior that is suitable when the environmental upheavals trigger the need for change and adaptation.

According to the explanation above, entrepreneurial orientation can be defined as a person's attitude which includes the courage to take risks, be innovative, and be proactive, as well as the ability to build strategies that can be used to lead organizations in competition. By having some of these attitudes, a person can improve his performance in the organization.

2.3 Performance

Performance is defined as an achievement obtained by someone who works both in quantity and quality carried out by an employee in carrying out their duties based on responsibilities they carry [16]. Furthermore, in accordance with Pawirosumarto et al. in [17], all dimensions need to be considered in the study of the phenomenon as performance is limited by the reduction of one of these components, which is the product of a worker's capacity multiplied by support and effort. In relation to lecturer performance, it consists of several tasks including education and teaching, research, community service and support [18].

According to the explanation above, performance can be defined as evidence of task completion based on certain job descriptions that can be seen in terms of quality and quantity as the product of a worker's capacity.

2.4 Hypothesis Development.

2.4.1 Transformational Leadership and Performance

Transformational leadership have a role in improving performance have been proven in several preceding studies. Research conducted by [3] on 210 respondents at Indonesian private universities shows that transformational leadership influences performance in the context of innovation. In addition, research conducted by [4] 330 employees in state-owned companies showed that performance is not affected by transformational leadership. Transformational leaders will be able to encourage their followers to do the best on their work.

Based on the explanation above, the hypothesis is formulated:

H1: Transformational leadership influences performance

2.4.2 Transformational Leadership and Entrepreneurial Orientation

The effect caused by transformational leadership on entrepreneurial orientation has been proven by several previous studies. Research conducted by [11] on 330 employees of Jordanian commercial banks shows that transformational leadership have some influence on entrepreneurial orientation. In addition, research conducted by [19] on 158 respondents in Africa, shows that there is also an effect of transformational leadership on entrepreneurial orientation.

Based on the explanation above, the hypothesis is formulated:

H2: Transformational leadership influences entrepreneurial orientation

2.4.3 Entrepreneurial Orientation and Performance

Entrepreneurial orientation has a role in improving performance has been proven by several previous studies. Research conducted by [7] shows that performance can be improved by entrepreneurial orientation. The results of another study conducted by [8] on 346 frontline employees in banks show that entrepreneurial orientation possessed by employees can boost the performance of these employees. Individuals who have an innovative, proactive, competitive attitude will have productive behavior and have an impact on the resulting high work performance.

Based on the explanation above, the hypothesis is formulated:

H3: Entrepreneurial orientation influences performance

2.4.4 Transformational Leadership, Performance and Entrepreneurial Orientation

Transformational leadership can increase entrepreneurial orientation and ultimately improve performance. Transformational leaders can encourage their followers to grow and develop into individuals who are proactive, dare to take risks, and innovative so that they always try to produce the best performance [20]. Based on this, there is a path relationship between the three variables. So it can be said that there is an assumption that transformational leadership influences performance mediated by entrepreneurial orientation.

Based on the explanation above, the hypothesis is formulated:

H4: Transformational leadership influences performance mediated by entrepreneurial orientation

3 Research Method

3.1 Sample and Procedure

This study used a quantitative approach, using questionnaires to obtain research data from 150 permanent lecturers of information technology at private universities in Bandung. Respondent profiles were categorized based on gender, age and years of service.

Table 1. Respondent Profile

Demographic	Frequencies	Percentage
Gender		
Male	119	79.3
Female	31	20.7
Age		
≤ 25 years old	0	0
26-30 years old	5	3.3
31-35 years old	31	20.7
36-40 years old	37	24.7
>40 years old	77	51.3
Working Period		
≤ 5 years	8	5.3
6-10 years	28	18.7
11-15 years	28	18.7
16-20 years	35	23.3
>20 years	51	34.0

3.2 Measures

Transformational leadership is measured using a measurement scale developed by [21], [22]. Example of a question in this variable: "The study program leader speaks enthusiastically about what must be achieved". Entrepreneurial orientation is measured using a measurement scale developed by [23]. Examples of questions in this variable: "I often try new methods, techniques or instruments on my work". Lecturer performance is measured using a measurement scale developed by [24]. Examples of questions in this variable: "I produce scientific paper based on my field of science".

Table 2. Loading Factors

	EO	PERF	TL
EO1	0,725		
EO2	0,735		
EO3	0,744		
EO4	0,748		
EO5	0,778		
EO6	0,840		
EO7	0,775		
EO8	0,833		
EO9	0,820		
P1		0,723	
P2		0,850	
P3		0,775	
P4		0,809	
P5		0,796	
P6		0,786	
TL1			0,723
TL2			0,761
TL3			0,781
TL4			0,751
TL5			0,779
TL6			0,726

To test whether each of the research variables tested differs from one another, we conduct validity tests. Table 2 shows the results of the loading factor values of each variable research item. The loading factor value must be equal to or greater than 0.7 [25]. Some of these indicators show a loading factor value of more than 0.7. This means that the indicator can be said to be valid.

Table 3. Reliability Check

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
EO	0,919	0,933	0,606
PERF	0,883	0,909	0,625
TL	0,850	0,888	0,568

To test the internal consistency of the research instrument used, the reliability test of the research instrument was carried out. Composite reliability and Cronbach alpha must be equal to or greater than 0.7 [26], while the AVE value must be greater than 0.5 [27]. Based on Table 3, the Composite reliability and Cronbach alpha values show a value of more than 0.7, and the AVE value shows a value of more than 0.5. This shows that this research instrument can be said to have fulfilled the reliability test.

4 Result and Discussion

4.1 Result

The goodness of fit model, r square and hypothesis tests can be shown in Tables 4 and 5.

Table 4. Goodness of fit model

	Saturated Model	Estimated Model
SRMR	0,084	0,084
d_ULS	1,621	1,621
d_G	0,737	0,737
Chi-Square	595,484	595,484
NFI	0,717	0,717

If the SRMR value is lower than 0.1 or 0.08 means that the research model is good fit [28]. Based on Table 4, the SRMR value is 0.084, this means that the research model can be said to be fit. In addition to the SRMR value, an NFI value of more than 0.9 indicates a fit model [29]. However,

the NFI value that is closer to 1 can be said to be moderate fit because the NFI value is between 0 and 1. Based on Table 4, the NFI value is close to 1, so it can be said to be a moderate fit.

Table 5. R-square

Dependent Variable	R Square
EO	0,207
PERF	0,226

Table 6. Hypothesis Testing

Hypothesis	Coef.	Prob.	Conclusion
TL -> PERF	0,171	0,022	Hypothesis accepted
TL-> EO	0,455	0,000	Hypothesis accepted
EO -> PERF	0,373	0,000	Hypothesis accepted
TL -> EO -> PERF	0,170	0,001	Hypothesis accepted

Based on Table 6, the direct relationship between transformational leadership and lecturer performance ($\beta = 0.171$; $p < 0.05$) is significant; therefore these results support the hypothesis. The results also show that there is a direct correlation between entrepreneurial orientation and transformational leadership ($\beta = 0.455$; $p < 0.05$) which is significant; therefore these results support the hypothesis. In relation between entrepreneurial orientation and lecturer performance ($\beta = 0.373$; $p < 0.05$); these results also support the hypothesis. In the relationship between lecturer performance and transformational leadership, it shows that there is a mediating role of entrepreneurial orientation ($\beta = 0.170$; $p < 0.05$); these results also support the research hypothesis.

4.2 Discussion

This study examines the relationship between entrepreneurial orientation, transformational leadership and lecturer performance. The first hypothesis states that transformational leadership has an influence on lecturer performance. This means that transformational leadership has a role in improving lecturer performance. The results of this study support the results of previous studies which show that there is a reaction between transformational leadership on lecturer performance [3], [30], [31].

The second hypothesis states that there is an influence of transformational leadership on entrepreneurial orientation. In this case, it means that an employee's entrepreneurial orientation can be improved by increasing transformational leadership. A leader who is strong in carrying out transformational leadership, will be able to inspire his followers to achieve certain goals, challenge

them to be able to achieve that certain goal, motivate them to think and solve problems they face in new different ways. The results of this study support the results of preceding studies which show that there is an influence from transformational leadership on entrepreneurial orientation [19], [32].

The third hypothesis states that there is an influence of entrepreneurial orientation on lecturer performance, and the research results prove this statement. This means that the lecturer's performance can be improved by increasing the lecturer's entrepreneurial orientation. Lecturers who have an entrepreneurial orientation such as an innovative attitude, dare to take risks, are willing to compete, and are proactive will be more motivated to be productive and this will be shown by high performance. The results of this study support the results of previous studies which show that there is an influence of entrepreneurial orientation on lecturer performance [7], [8].

The fourth hypothesis states that lecturer performance is influenced by transformational leadership through entrepreneurial orientation. The research results prove this statement, this means that lecturer performance can be improved by transformational leadership through entrepreneurial orientation. Leaders who can inspire and motivate their followers to achieve certain goals while being able to solve problems in new ways will be able to increase innovative, proactive, risk-taking behavior, so that this behavior will ultimately improve the performance of their employees. The results of this study support the transformational leadership theory and the entrepreneurial orientation theory.

5 Conclusion

This study aims to examine the correlation between lecturer performance, entrepreneurial orientation and transformational leadership. The outcome of the study show that lecturer performance can be boosted by increasing transformational leadership and entrepreneurial orientation. This of course can be input in improving lecturer performance, namely by increasing transformational leadership and increasing behavior related to entrepreneurship. Increasing transformational leadership can be done by increasing inspiration, motivation, individual attention, and problem solving in new ways. With such a leadership model, it will be able to encourage individuals to have an innovative, proactive attitude, and willing to compete to achieve maximum performance.

Acknowledgments

The authors are grateful to Maranatha Christian University, Bandung, Indonesia, for funding the study and the publication of manuscript. Furthermore, the authors are grateful to the respondents that were willing to spend their valuable time filling out the questionnaire wholeheartedly.

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