Lecturer engagement mediates the effect of transformational leadership and training on lecturer performance and compensation moderates the effect of lecturer engagement on lecturer performance

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\textbf{ABSTRACT}

This study chose Contingency Theory as a theoretical perspective to empirically investigate the role of transformational leadership, training, lecturer engagement, and compensation in improving lecturer performance. The research respondents were 166 lecturers at the College of Economics in Riau Province. The data was processed using PLS Structural Equation Modeling (SEM). This study proposes lecturer engagement and compensation as a strategy to improve lecturer performance. From the results, it was clear that transformational leadership and education and training affected lecturer performance, lecturer engagement played a role in mediating the effect of leadership and training on lecturer performance, and compensation moderated the effect of lecturer engagement on lecturer performance. These results reinforce the Contingency Theory which states that individual and organizational performance depends on the motivational system and the extent to which the leader has control and influence in certain situations.

1. Introduction

Previous Studies have shown that transformational leadership influences employee performance (Abdelwahed, 2022; Ahmed et al., 2021; Alheet et al., 2021; Balasuriya & Perera, 2021; Budur & Demir, 2022; Chang & Jeong, 2021; Ferozi & Chang, 2021; Magasi, 2021; Mathende & Karim, 2021; Yucel 2021). However, several studies stated that transformational leadership has no effect on employee performance (Katou et al., 2022; Tosun et al., 2022; Ambad et al., 2021). Some previous studies which focused on education and training and employee performance, showed that education and training affects employee performance (Garavan et al., 2020; Hernaus et al., 2021; Israr et al., 2021; Kuruppu et al., 2021; Lee et al., 2020; Luo et al., 2021; Maguire et al., 2022; Mehale et al., 2021; Nawarathna et al., 2021; Saleem et al., 2021). Yet, other previous studies which focused on education and training and employee performance, showed that education and training does not affect employee performance (Aragon & Valle, 2020; Garaika, 2020; Kartika & Widhiandono, 2022). A number of studies regarding lecturers’ engagement on their performances showed that lecturers’ engagement affects lecturer performance (Arwab et al., 2022; Bhardawaj & Kalia 2021; Godbless, 2021; Jabeen & Rahim2021; Nguyen & Nguyen 2022; Park et al., 2021). On the other hand, several studies have stated that lecturer engagement did not affect lecturer performance (Jindal et al., 2022; Baharsyah & Nugrohoseno, 2021; Park & Kim, 2022). Several studies which examined compensation and lecturer performance showed that compensation affected lecturer performance (Khan et al., 2021; Martin et al., 2021; Meyer et al., 2022; Orakwe

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et al., 2021; Tarurhor, 2021; Wang et al., 2021; Zoghlami, 2020). In contrast to earlier studies, other studies found that compensation did not affect lecturer performance (Chen & Hasan, 2022; Miles & Angelis, 2021; Fortune & Hidayat, 2021; Ferry et al., 2021). Based on the previous studies mentioned above, it can be concluded that there are still inconsistencies in the results regarding the influence of transformational leadership and education and training on lecturer performance. As a solution to this problem previously mentioned, a mediation concept with variables including lecturer engagement and moderation with compensation is proposed. Transformational leaders and lecturers who have been given training, along with lecturer engagement and strengthened by good compensation, will potentially improve lecturer performance. This present study is expected to strengthen the Contingency theory related to the variables of transformational leadership, training, lecturer engagement, compensation, and lecturer performance.

2. Literature Review

2.1 The Influence of Transformational Leadership on Lecturer Performance

Yukl and Gardner (2018) define leadership as the process of influencing others to understand and agree about what needs to be done and how to do it, as well as the process of facilitating individual and collective efforts to accomplish shared objectives. The Transformational Leadership Approach was originally initiated by Burns (2010). Burns distinguishes two types of leadership, namely Transactional Leadership and Transformational Leadership. Transformational leaders are those who lead through social exchange. For example, politicians lead by “trade one thing for another: jobs for votes, or subsidies for campaign contributions”. Transactional business leaders offer financial rewards for productivity or do not give reward on the lack of productivity. Research on performance has identified leadership as an antecedent of performance (Yukl & Gardner, 2018). Among the factors that influence employee behavior and performance, leadership has been identified by many researchers as one of the most important factors (Yukl and Gardner, 2018). Northouse (2016), stated that there are 7 factors indicating leadership, namely idealized influence, inspirational motivation, intellectual stimulation, adapted considerations, contingent reward, management-by-exception and laissez-faire. In this study the first hypothesis to be tested is as follows:

H1: It is suspected that Transformational leadership has a positive and significant effect on lecturer performance.

2.2 The Effect of Education and Training on Lecturer Performance

Education and training are form of educational activities for employees or prospective employees to increase knowledge, skills, and attitudes in order to achieve effective and efficient organizational goals and meet the requirements of certain functional positions. Training provides employees with specific and identifiable knowledge and skills to be applied in their current jobs (Mathis et al., 2017). Standards in the education and training process include the Analyze-Design-Develop-Implement-Evaluate (ADDIE) model process (Mathis et al., 2017) as follows: Assessment; Design; Development; Implementation; Evaluation. Simamora, (2010) states the benefits derived from the holding of education and training, namely: 1) Increasing the quality and quantity of productivity, 2) Reducing the learning time required for employees to achieve specified performance standards, 3) Creating a more profitable attitude, loyalty and cooperation, 4) Fulfilling human resource planning requirements, 5) Reducing the number and cost of work accidents, and 6) Helping employees in their personal improvement and development. Noe, (2020) states that indicators for measuring education and training performances are through: 1) Knowledge, 2) skills 3) abilities 4) behavior, 5) Rae, (2000) states that training indicators consist of: 1) training content, 2) training methods, 3) instructor attitudes and skills, 4) training time, and 5) training facilities. Thus, in this study the hypothesis to be tested is as follows:

H2: It is expected that education and training have a positive and significant effect on lecturer performance.

2.3 The Role of Lecturer Engagement in Mediating the Influence of Transformational Leadership on Lecturer Performance

Lecturer engagement is defined as employee engagement that is characterized by positive emotional attachment to organizational objectives who are able to employ and express themselves physically, cognitively and emotionally (Macey and Schneider 2015). Wellins and Concelman (2005) argued that employee engagement is the illusive force that motivates employees to increase performance at a higher level. This energy is in the form of commitment to the organization, a sense of belonging to work and pride, more effort (time and energy), enthusiasm and interest, commitment to carrying out work. Employee engagement is therefore described as an employee's appreciation of organizational goals, which is implemented in the form of initiative, effort, and persistence in achieving organizational goals. According to Marciano (2010), an engaged employee will be committed to the goal, use all his abilities to complete the task, maintain his behavior at work, ensure that he has completed the task properly in accordance with the objectives and is willing to take corrective or evaluation steps if necessary. Smith and Marwik, (2009) stated that employee engagement is influenced by several factors, namely: 1) organizational culture, 2) leadership, 3) quality of communication within the organization, 4) applied management style, 5) level of trust and respect for the work environment, 6) Reputation of the organization itself. According to Schaufeli and Baker (2004), there are three characteristics in employee engagement, namely; Vigor, Dedication and Absorption. Logically, transformational leadership accompanied by lecturer engagement will potentially improve lecturer performance, therefore the following hypothesis is proposed:

H3: It is expected that education and training have a positive and significant effect on lecturer performance.
H3: It is expected that lecturer engagement mediates the effect of transformational leadership on lecturer performance.

2.4 The Role of Lecturer Engagement in Mediating the Effect of Education and Training on Lecturer Performance

Employee engagement is described as a form of involvement, satisfaction, and individual enthusiasm for their work (Robbins and Judge, 2017). According to Marciano (2010), an engaged employee will be committed to the goal, use all his abilities to complete the task, maintain his behavior at work, ensure that he has completed the task properly in accordance with the objectives and is willing to take corrective or evaluation steps if necessary. Schiemann (2011) also defined employees as those who have engagement exceed employees who are satisfied or simply committed to an organization or a person. According to Robinson (2012) there are three groups of engagement based on the level of lecturer engagement, namely: engaged, not engaged, and actively disengaged. Employee engagement can be influenced by factors that can be grouped into 2 forms, namely internal factors or originating from within employees and external factors that come from outside the employee (Lockwood, 2007). A sense of employees’ attachment and will foster an attitude of loyalty and responsibility towards the organization (Park and Gursoy, 2012). Conversely, a low level of engagement will not only affect on employee performance but also on the level of his desire to leave the job, reduce customer service satisfaction, and reduce the level of contribution (Cataldo, 2011). Hewitt (2015) stated that there are three indicators to measure lecturer engagement, namely: say, stay and strive. Logically, if lecturer engagement is high, it can improve lecturer performance, therefore the following hypothesis is proposed:

H4: It is expected that lecturer engagement mediates the effect of education and training on lecturer performance.

2.5 The Role of Compensation in Moderating the Effect of Lecturer Engagement on Lecturer Performance

Compensation according to Dessler (2017) is any form of payment or reward given to employees and arising from the employee's work. Compensation refers to all forms of financial returns and tangible services and benefits that employees receive as part of a work relationship (Bhattacharya and Sengupta, 2012). Compensation as a style of social control has been found in many cultures. The compensating style is usually initiated by a person to fulfill an obligation. Compensation will be considered in the context of some broader modes of social control (Black, 2014). Larger organizations may have higher compensation levels than smaller organizations due to higher levels of productivity and economies scale. The compensation mix is also affected by firm size, in which larger organizations spend more on indirect compensation than smaller firms (Mathis et al., 2017).

Employees do not always receive the same amount of compensation in each period. There are many factors behind it, both internal and external factors which are interrelated with one another. According to Hartatik (2014), there are several factors that influence the provision of compensation, namely: 1) government factors, 2) agreements between companies and employees, 3) cost of living standard for employees, 4) wage comparison size, 5) demand and availability of labor, 6) company's ability to pay. Bangun (2012) stated that compensation can be measured by determining: 1) salary, 2) incentives, 3) bonuses, 4) wages, 5) premiums, 6) treatment and 7) insurance. Mathis et al., (2017) explained that the compensation dimension consists of three components, namely: 1) Tangible direct rewards, such as, salaries, bonuses, incentives; 2) Intangible direct, such as, insurance, vacations, retirement rewards and 3) Intangible rewards, such as, a supportive work environment, challenging work. Logically, if the influence of lecturer involvement on lecturer performance is strengthened by compensation, it has the potential to increase lecturer performance, therefore the following hypothesis is proposed.

H5: It is expected that compensation moderates the influence of lecturer engagement on lecturer performance.

In the following, the researchers present the conceptual framework for this study:

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**Fig. 1.** Conceptual Framework

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3. Method

To test the model, researchers chose lecturers from the College of Economics in Riau Province as a sample. Our study recognizes the role of transformational leadership, training, lecturer engagement, and compensation in improving lecturer performance according to contingency theory. The reason researchers tested this model on lecturers was because it was assumed that lecturers had to have behavioral characteristics (skills and competences to carry out tasks) to educate future leaders. The researchers chose a sample of 166 lecturers at the College of Economics in Riau Province. Data collection was carried out through a survey questionnaire instrument. To analyze the data, Structural Equation Modeling (SEM) using SMARTPLS 3.0 was applied to test the proposed hypothesis.

In this study, to measure the lecturers’ performance, the indicators used were taken from the decision of the Directorate General of Higher Education number 12/E/KPT/2021 which consisted of carrying out education and teaching, carrying out research, carrying out community service and carrying out support. For transformational leadership, the indicators were taken from Riggio, (2006) and Northouse, (2019), namely: charisma, inspirational motivation, intellectual stimulus, and individual attention. The training indicators were adapted from Rae, (2000) including: training content, training methods, attitude and skills of instructors, length of time of training, training facilities. The lecturer engagement indicators were adapted from Hewitt, (2015), namely say, stay and strive. Last, for compensation, the indicators the researchers adapted Milkovich et al., (2014) and Mathis et al., (2017) studies, namely: salary, incentives and insurance.

4. Results and discussion

Of 166 lecturers at the College of Economics in Riau Province as participants, 91% of them had a postgraduate education background and were married. The majority of them had been working more than 10-15 years within the ages of 30-40 years. Participants responded to lecturer performance variables that were perceived to get the highest score and the lowest score. The result showed that the highest scores was the implementation of tridharma supports indicator. While, the lowest perceived indicator was the implementation of community service. Further, on transformational leadership variables, the indicator which was perceived to get the highest score was inspirational motivation indicator. While the lowest perceived indicator was individual attention. Third, on the training variable, the indicator that was perceived to get the highest score was the length of training time, while the lowest perceived indicator was the training content and training methods. Last, on lecturer engagement variables, the indicator which was perceived to get the highest score was the stay indicator. Whereas, the lowest perceived indicator was strive indicator. The following is the research model path:

Fig. 2. Research Model Path

4.1 Measurement Model Analysis (Outer Model)

Convergent Validity Test

The results of the convergent validity test of the data in this study are presented in the following Table 1.
Table 1
Factor Loading

<table>
<thead>
<tr>
<th>Variable</th>
<th>Indicator</th>
<th>Factor Loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinerja Dosen/KD (Lecturer Performance)</td>
<td>KD1- Implement Teaching Education</td>
<td>0.752</td>
</tr>
<tr>
<td></td>
<td>KD2- Conduct Research</td>
<td>0.899</td>
</tr>
<tr>
<td></td>
<td>KD3- Carry out Community Service</td>
<td>0.910</td>
</tr>
<tr>
<td></td>
<td>KD4- Carry out Support</td>
<td>0.894</td>
</tr>
<tr>
<td>Kepemimpinan Transformasional/KT (Leadership transformational)</td>
<td>KT1- Charisma</td>
<td>0.997</td>
</tr>
<tr>
<td></td>
<td>KT2- Inspirational Motivation</td>
<td>0.996</td>
</tr>
<tr>
<td></td>
<td>KT3- Intellectual Stimulation</td>
<td>0.995</td>
</tr>
<tr>
<td></td>
<td>KT4- Individual Attention</td>
<td>0.999</td>
</tr>
<tr>
<td>Diklat/DK (Education and Training)</td>
<td>DK1- Training Contents</td>
<td>0.865</td>
</tr>
<tr>
<td></td>
<td>DK2- Education and Training Methods</td>
<td>0.896</td>
</tr>
<tr>
<td></td>
<td>DK3- Instructor attitudes and skills</td>
<td>0.921</td>
</tr>
<tr>
<td></td>
<td>DK4- Length of Training Time</td>
<td>0.849</td>
</tr>
<tr>
<td></td>
<td>DK5- Training Facility</td>
<td>0.923</td>
</tr>
<tr>
<td>Keterikatan dosen/EE (Lecturer engagement)</td>
<td>EE1- Say</td>
<td>0.908</td>
</tr>
<tr>
<td></td>
<td>EE2- Stay</td>
<td>0.956</td>
</tr>
<tr>
<td></td>
<td>EE3- Strive</td>
<td>0.933</td>
</tr>
<tr>
<td>Kompensasi/KM (Compensation)</td>
<td>KM1- Salary</td>
<td>0.897</td>
</tr>
<tr>
<td></td>
<td>KM2- Incentive</td>
<td>0.935</td>
</tr>
<tr>
<td></td>
<td>KM3- Insurance</td>
<td>0.857</td>
</tr>
</tbody>
</table>

Based on the results of the convergent validity test in table 1, if the factor loading value is <0.5, the items must be removed from the model and the factor loading value must be re-estimated. By removing several factor loadings <0.5, all indicators are used to continue the analysis in the next stage. Convergent validity can be achieved if all loading factors are >0.5. Because all loading factors in this study are > 0.5, it means that all indicators are valid to form variable constructs.

Discriminant Validity Test

The results of the discriminant validity test of the data in this study are presented in the following Table 2.

Table 2
Cross Loading Value

<table>
<thead>
<tr>
<th>Indicator</th>
<th>DK</th>
<th>EE</th>
<th>KT</th>
<th>KD</th>
<th>KM</th>
<th>MD</th>
</tr>
</thead>
<tbody>
<tr>
<td>DK1- Training Contents</td>
<td>865</td>
<td>0.746</td>
<td>0.688</td>
<td>0.889</td>
<td>0.663</td>
<td>0.458</td>
</tr>
<tr>
<td>DK2- Education and Training Methods</td>
<td>896</td>
<td>0.811</td>
<td>0.572</td>
<td>0.902</td>
<td>0.741</td>
<td>0.515</td>
</tr>
<tr>
<td>DK3- Instructor attitudes and skills</td>
<td>921</td>
<td>0.874</td>
<td>0.579</td>
<td>0.898</td>
<td>0.819</td>
<td>0.604</td>
</tr>
<tr>
<td>DK4- Length of Training Time</td>
<td>49</td>
<td>0.839</td>
<td>0.712</td>
<td>0.769</td>
<td>0.831</td>
<td>0.573</td>
</tr>
<tr>
<td>DK5- Training Facility</td>
<td>923</td>
<td>0.877</td>
<td>0.645</td>
<td>0.827</td>
<td>0.838</td>
<td>0.591</td>
</tr>
<tr>
<td>EE1- Say</td>
<td>854</td>
<td>0.908</td>
<td>0.523</td>
<td>0.798</td>
<td>0.713</td>
<td>0.514</td>
</tr>
<tr>
<td>EE2- Stay</td>
<td>879</td>
<td>0.956</td>
<td>0.642</td>
<td>0.793</td>
<td>0.759</td>
<td>0.557</td>
</tr>
<tr>
<td>EE3- Strive</td>
<td>873</td>
<td>0.933</td>
<td>0.671</td>
<td>0.825</td>
<td>0.807</td>
<td>0.535</td>
</tr>
<tr>
<td>Lecturer engagement * Compensation</td>
<td>616</td>
<td>0.574</td>
<td>0.312</td>
<td>0.557</td>
<td>0.655</td>
<td>1.000</td>
</tr>
<tr>
<td>KD1- Implement Teaching Education</td>
<td>640</td>
<td>0.548</td>
<td>0.922</td>
<td>0.752</td>
<td>0.580</td>
<td>0.279</td>
</tr>
<tr>
<td>KD2- Conduct Research</td>
<td>876</td>
<td>0.783</td>
<td>0.701</td>
<td>0.899</td>
<td>0.702</td>
<td>0.505</td>
</tr>
<tr>
<td>KD3- Carry out Community Service</td>
<td>880</td>
<td>0.770</td>
<td>0.559</td>
<td>0.910</td>
<td>0.735</td>
<td>0.516</td>
</tr>
<tr>
<td>KD4- Carry out Support</td>
<td>914</td>
<td>0.863</td>
<td>0.559</td>
<td>0.894</td>
<td>0.797</td>
<td>0.601</td>
</tr>
<tr>
<td>KM1- Salary</td>
<td>765</td>
<td>0.720</td>
<td>0.614</td>
<td>0.719</td>
<td>0.897</td>
<td>0.584</td>
</tr>
<tr>
<td>KM2- Incentive</td>
<td>874</td>
<td>0.791</td>
<td>0.569</td>
<td>0.808</td>
<td>0.935</td>
<td>0.660</td>
</tr>
<tr>
<td>KM3- Insurance</td>
<td>699</td>
<td>0.675</td>
<td>0.514</td>
<td>0.658</td>
<td>0.857</td>
<td>0.507</td>
</tr>
<tr>
<td>KT1- Charisma</td>
<td>713</td>
<td>0.654</td>
<td>0.997</td>
<td>0.775</td>
<td>0.652</td>
<td>0.313</td>
</tr>
<tr>
<td>KT2- Inspirational Motivation</td>
<td>0.709</td>
<td>0.654</td>
<td>0.996</td>
<td>0.772</td>
<td>0.630</td>
<td>0.312</td>
</tr>
<tr>
<td>KT3- Intellectual Stimulation</td>
<td>710</td>
<td>0.644</td>
<td>0.995</td>
<td>0.775</td>
<td>0.626</td>
<td>0.313</td>
</tr>
<tr>
<td>KT4- Individual Attention</td>
<td>717</td>
<td>0.666</td>
<td>0.999</td>
<td>0.774</td>
<td>0.627</td>
<td>0.309</td>
</tr>
</tbody>
</table>

The model has good discriminant validity if each loading indicator value of a latent variable is greater than other correlated variables. As shown on Table 2 above, the cross-loading value in this study for each indicator is greater than the other latent variables. This indicates that each variable has good discriminant validity.

Construct Reliability Test

As shown on Table 3, Average Variance Extracted (AVE) has a value of > 0.5 and Composite Reliability (CR) has a value of > 0.7, meaning that the constructed construct is good or reliable (Hair et al., 2019). The following is the Construct Reliability table:
### Table 3
Construct Reliability

<table>
<thead>
<tr>
<th>Variable</th>
<th>Average Variance Extracted (AVE)</th>
<th>Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>0.750</td>
<td>0.951</td>
</tr>
<tr>
<td>Lecturer Engagement</td>
<td>0.993</td>
<td>0.953</td>
</tr>
<tr>
<td>Leadership Transformational</td>
<td>0.794</td>
<td>0.998</td>
</tr>
<tr>
<td>Lecturer Performance</td>
<td>0.870</td>
<td>0.923</td>
</tr>
<tr>
<td>Compensation</td>
<td>0.805</td>
<td>0.925</td>
</tr>
<tr>
<td>Moderating Effect 1</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

**Structural Model Analysis (Inner Model)**

**Coefficient of Determination (R2)**

The R-Square values in this study are presented in the following Table 4.

### Table 4
R-Square

<table>
<thead>
<tr>
<th>Variable</th>
<th>R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>-</td>
</tr>
<tr>
<td>Lecturer Engagement</td>
<td>0.867</td>
</tr>
<tr>
<td>Leadership Transformational</td>
<td>-</td>
</tr>
<tr>
<td>Lecturer Performance</td>
<td>0.953</td>
</tr>
<tr>
<td>Compensation</td>
<td>-</td>
</tr>
</tbody>
</table>

The R² results are 0.67; 0.33; and 0.19 indicate that the model is "good", "moderate", and "weak" (Hair et al., 2019). Based on Table 4, the adjusted R-Square value for the lecturer performance variable is 0.953, meaning that the percentage of the effect on transformational leadership, training, lecturer engagement, and compensation variables is 95.30% and the model is categorized as good.

**Predictive Relevance (Q²)**

The Q² value has the same meaning as the coefficient of determination (R-Square). A Q Square (Q²) value of 0 indicates the model has predictive relevance; conversely if the Q² value is less than 0, it indicates that the model has less predictive relevance; or in other words, where all the Q² values are higher, the model can be considered more fit to the data (Hair et al., 2019). The value of Q² in research can be seen as follows:

\[
Q^2 = 1-(1-R_{12})(1-R_{22})...(1-R_{n2}) = 1-(1-0.953) = 0.953.
\]

The calculation results show a Q² value of 0.953 meaning that the variables studied can be explained by this model and the remaining 0.047 are influenced by variables not examined.

### Table 5
Hypothesis Test Results

<table>
<thead>
<tr>
<th>Original Sample (O)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transformational Leadership → Lecturer Performance</td>
<td>0.178</td>
<td>7.830</td>
<td>0.000</td>
</tr>
<tr>
<td>Education and Training → Lecturer Performance</td>
<td>0.484</td>
<td>7.515</td>
<td>0.000</td>
</tr>
<tr>
<td>Transformational Leadership → Lecturer Engagement → Lecturer Performance</td>
<td>0.304</td>
<td>6.348</td>
<td>0.000</td>
</tr>
<tr>
<td>Education and Training → Lecturer Engagement → Lecturer Performance</td>
<td>0.221</td>
<td>4.170</td>
<td>0.000</td>
</tr>
<tr>
<td>Moderating Effect 1 → Lecturer Performance</td>
<td>0.981</td>
<td>25.384</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Hypothesis 1**

The first hypothesis which assumes that transformational leadership affects lecturer performance is accepted because p-values <0.05 and t-statistic values > 1.96. It means that transformational leadership affects the improvement of lecturer performance. This result strengthens the contingency theory in which effective leadership can motivate lecturers to improve their performance. Effective leadership includes the process of setting goals and motivating subordinates which contingent upon the situation at hand. The results of this study are in line with researches conducted by (Budur and Demir, 2022; Chang and Jeong, 2021; Ferozi and Chang, 2021; Magasi, 2021; Mathende and Karim, 2021; Yucel, 2021) which stated that transformational leadership had a positive and significant effect on lecturer performance.
**Hypothesis 2**

The second hypothesis which assumes that education and training has a positive and significant effect on lecturer performance is accepted because p-values <0.05 and t-statistic values > 1.96 means that education and training has an effect on improving lecturer performance. This result reinforces the contingency theory in which good leader can motivate lecturers to improve their performance. Good leader can set goals and motivate subordinates which contingent upon the situation at hand. The results of this study are in accordance with previous researches (Kuruppu et al., 2021; Lee et al., 2020; Luo et al., 2021; Maguire et al., 2022; Mehale et al., 2021; Nawarathna et al., 2021; Saleem et al., 2021) which stated that training had an effect on lecturer performance.

**Hypothesis 3**

The third hypothesis which states that lecturer engagement mediates the effect of transformational leadership on lecturer performance is accepted because p-values <0.05 and t-statistic values > 1.96. It means that lecturer engagement influences transformational leadership on lecturer performance. This result reinforces the contingency theory in which good leader can motivate lecturers to improve their performance. Good leader can set goals and motivate subordinates which contingent upon the situation at hand. Because both transformational leadership and in mediation directly influence the lecturers’ performance, the lecturer's involvement is considered as partial mediation. Several previous studies have found that training has an effect on lecturer performance, including (Jabeen and Rahim 2021; Nguyen and Nguyen 2022; Park et al., 2021) researches.

**Hypothesis 4**

The fourth hypothesis which stated that lecturer engagement mediates the effect of education and training on lecturer performance is accepted because p-values <0.05 and t-statistic values > 1.96. It means that lecturer engagement influences transformational leadership on lecturer performance. This result reinforces the contingency theory in which good leader can motivate lecturers to improve their performance. Good leader can set goals and motivate subordinates which contingent upon the situation at hand. Because both education and training and in mediation directly influence the lecturers’ performance, the lecturer's involvement is considered as partial mediation. Several previous studies have found that training has an effect on lecturer performance, including (Jabeen and Rahim 2021; Nguyen and Nguyen 2022; Park et al., 2021) researches.

**Hypothesis 5**

The fifth hypothesis which assumed compensation moderates the effect of lecturer engagement on lecturer performance is accepted because p-values <0.05 and t-statistic values > 1.96. It indicates that compensation strengthens the effect of lecturer engagement on lecturer performance. The result of this study also strengthens contingency theory in which good leader can motivate lecturers to improve their performance. Good leader can set goals and motivate subordinates which contingent upon the situation at hand. Because compensation directly affects lecturer performance and in moderation, compensation strengthens the influence of lecturer engagement on lecturer performance, compensation is included on quasi-moderation.

**5. Conclusions**

This study aims to develop contingency theory through a conceptual model of transformational leadership, training, lecturer engagement, and teacher performance variables. The results showed that all of the five hypotheses proposed were accepted. The most effective path in improving lecturer performance was the path of mediating lecturer engagement to the effect of education and training on lecturer performance because it gave the greatest total effect or total influence compared to other relationship pathways in this study. Thus, it can be concluded that this model can strengthen the contingency theory. Managerially, one of the strategies in improving the lecturers’ performance is to strengthen the role of compensation. For this reason, the management of the economics high school in Riau Province needs to increase direct or indirect compensation for the lecturers. Future research is suggested to focus on the role of mediating lecturer engagement in the influence of education and training on lecturer performance because it has the greatest total effect.

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**References**


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