The Influence Of Transformational Leadership, Knowledge Sharing, And Academic Integrity On Lecturer Innovativeness

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Abstract.

The purpose of this study, is to test and analyze the factors that influence both partially and simultaneously on the innovativeness of lecturers at 6 First State Polytechnic Colleges in the Ministry of Research and Technology, using a questionnaire that has been tested for validity and reliability against 200 respondents, in a verification way carried out through the method and analysis of structural equation models (Structural Equation Modeling) using Lisrel V.8.80 software. The results of research and hypothesis testing show that transformational leadership, knowledge sharing, and academic integrity affect both partially and simultaneously on the innovativeness of lecturers with a contribution of 73%. Of the three variables, academic integrity has a more dominant influence compared to other variables.

Keywords: Transformational leadership, knowledge sharing, academic integrity, and lecturer innovativeness.

I. INTRODUCTION

The formal education institution after general secondary education is higher education. In Indonesia, higher education institutions can take the form of academies, polytechnics, high schools, institutes and universities. (Prabowo, 2010). To face competitive and globalized competition, universities must have effective management and the support of capable and competent lecturers in their fields. Lecturers are the main component in the education system in higher education. The high and low quality of a university can be realized if lecturers carry out their duties with creativity through innovative behavior. Innovative behavior is defined as deliberate behavior to generate, improve, and realize new ideas in work, work groups and organizations to provide benefits to the performance of work groups or organizations (West & Farr, 1990). One of the important roles of lecturers is to ensure college innovation. Lecturers' ability to be innovative contributes to a successful learning relationship (Slatten & Mehmetoglu, 2015). Professional lecturers carry out their duties independently. The job of a lecturer demands a high level of interaction and interpersonal skills to handle the needs and desires of heterogeneous stakeholders. Lecturers rely on their individual abilities to determine the development and application of technical teaching. Therefore, innovative behavior is more emphasized for lecturers than other types of service providers. In a university, lecturers are seen as the heart of innovative services (Budiadnyana et al., 2021). Innovative behavior of lecturers in the workplace is the basis of high organizational performance (Turnipseed & Turnipseed, 2013). Innovative behavior will generate innovative ideas as the basis for developing competitiveness, both products and services. (Purwanto et al., 2021).

The quality of lecturers is one of the main factors that determine the quality of higher education. The management of human resources in higher education, especially lecturers, needs to be directed at empowering lecturers in improving the quality of education. The basic capital that lecturers must have is innovativeness. With innovativeness, a lecturer can do varied learning correctly. Thus, efforts to improve the quality of education, especially higher education, can be done by fixing and increasing the innovativeness of the teaching staff. The innovativeness of lecturers can be developed if there is support from universities, the quality of good relationships between leaders and lecturers. Many factors influence the innovativeness of lecturers, such as research conducted by (Kosasih, 2016) who conducted research on the influence of academic culture, task commitment, and academic service quality of academic services affect the innovativeness of lecturers. This means that a conducive academic culture, serious task commitment, and good academic service quality will increase the innovativeness of lecturers. (Chairunnisa & Kosasih, 2019)

examined how the influence of academic culture and task commitment on lecturer innovation. The research was conducted on 215 lecturers at several universities in Jakarta. The results of the study found that academic culture and task commitment have a positive effect on lecturer innovativeness. The leadership style of a leader is also a determining factor in the continuity of success achieved by an institution (Pantouvakis & Vlachos, 2020).

(Zacher & Johnson, 2015) in his article Leadership and Creativity in Higher Education states that higher education transformational leadership involves leaders motivating their followers by acting as positive role models (idealized influence), communicating a compelling vision of the future (inspirational motivation), encouraging independent and creative thinking (intellectual stimulation), and caring and nurturing (individualized attention). The innovativeness of lecturers will grow because transformational leadership is able to influence the surrounding environment positively, can encourage subordinates to be creative and innovative (Widowati, 2020). Innovative lecturers will produce innovative works that are not only beneficial to the lecturers themselves and universities but also to society. To produce innovative works, of course, it must be supported by a leader who is able to motivate, inspire, and stimulate where these traits exist in leaders who have a transformational leadership model. The innovation process relies heavily on knowledge because knowledge represents a field much deeper than conventional data, information and logic. Therefore, the power of knowledge lies in its subjectivity that underlies the values and assumptions that are the foundation for the learning process (Nonaka & Hirotaka Takeuchi, 1995). (Van Den Hooff & Ridder, 2004) states that knowledge sharing is a process by which knowledge owned by individuals and groups can be transferred to the organizational level, so that it can be applied to the development of new products, services, and processes so that it will produce innovations. Knowledge sharing is the transfer of good knowledge from one individual/organization to another individual/organization, whether documented or not. Professional lecturers will take advantage of new and unique experiences gained through interactions with fellow lecturers at work and with fellow lecturers from other universities.

For a lecturer, knowledge sharing will create ideas for making scientific work that is more innovative, so that it will increase the innovativeness of lecturers in making scientific work. The core of morality in a university is academic integrity. Academic integrity shows the integrity of human wholeness as a moral attitude (morals). Cases of plagiarism that occur among academics show the weak academic integrity possessed by these academics. Efforts to realize and uphold academic integrity require continuous innovation and are carried out together (Yasadhana, 2021). To avoid plagiarism, a lecturer must be innovative in creating and developing new ideas in research. This study aims to determine how innovative the lecturers of the first 6 state polytechnics in Indonesia, namely PNJ, POLSRI, POLBAN, POLINES, POLMED, and POLINEMA. As the oldest polytechnic university, it certainly has certain advantages both in terms of human resources and in terms of infrastructure. However, in reality, in the ranking of universities, these 6 Polytechnics are still unable to compete with other universities. This can be due to the lack of innovativeness of lecturers in the implementation of their performance. Research on the innovativeness of lecturers of the first 6 state polytechnics has never been done. This is the urgency of this research. Innovativeness is important for lecturers because innovation is the key to creating progress and positive change in the field of education. Lecturers who are not innovative tend to use teaching methods that are stale and less effective, so that they can reduce the quality of learning and student motivation. Therefore, based on what is stated above, it is necessary to examine how innovative lecturers are in the first 6 state polytechnics in Indonesia.

II. LITERATURE REVIEW

Innovativeness is a key behavior in the diffusion process. Innovativeness refers to the time it takes for individuals/groups/social systems to adopt new ideas from the concept of innovation diffusion compared to others (Rogers, 1995). Innovations take many forms. Innovation can be a new method to improve the quality of an existing product or it can be a new idea or one that already exists but is not yet known by the adopter. Innovation is the process of thinking about and implementing something new that has an impact on the environment (Raditya, 2020). In educational organizations, the innovativeness of lecturers is the behavior or actions of lecturers in creating ideas or updating existing ideas in teaching and learning activities such as

making Persemester Learning Plans (RPS), learning models/methods/research/community service, media/tools used in learning, learning evaluation, etc. where all of that is implemented as a result of learning products and socializing them to all students. According to (Widodo Sunaryo, 2018) Innovativeness is the act of making innovations or finding new things starting at the stage of idea discovery, product/service design, product/service development, production, and use. Its dimensions are: Product innovation, process innovation, and product application innovation. The success or failure of a company is determined by leadership.

The success of a leader is determined by his leadership style. One of the leadership styles is transformational leadership. Transformational leadership is a leader who has equipped himself with stability in spiritual (SQ), emotional (EQ), intellectual (IQ), and physical (PQ) competencies, can transform himself and influence subordinates, other leaders and the surrounding environment to transform in order to meet the needs of institutions and the interests of competition in the global world. Transformational leaders can carry out the role of inspiring subordinates, empowering, building creative power, creating positive psychology, and shaping ethical behavio (Nggili, 2006). According to (Coulcit et al., 2018) Transformational leadership involves inspiring followers to commit to a shared vision that provides meaning to their work while also serving as a role model who helps followers develop their own potential and view problems from new perspectives. Its characteristics are: Idealized influence, Inspirational motivation, Intellectual stimulation, and Individualized consideration. One important component in the knowledge management process is knowledge sharing. According to (Azema & Jafari, 2016) Knowledge sharing has been described as sending and distribution activities of knowledge by a person, a group or an organization to an individual, a group or other organizations. The dimensions are: knowledge donating, knowledge collecting, dan technology. Integrity is the integrity of morality in a person so that the person always holds fast to moral values, is honest, sincere and sincere, consistent between words and actions (Jahja, 2007). (Ronokusumo et al., 2012) stated that academic integrity is a form of high compliance with academic behavior agreements, academic honesty, mutual trust, openness, mutual respect, and a sense of responsibility. The basic values of academic integrity are as follows: honesty, trust, fairness, respect, dan responsibility.

III. METHODS

This research is a quantitative study with the research unit being lecturers at the first 6 polytechnics in Indonesia, namely PNJ, POLSRI, POLBAN, POLINES, POLMED, and POLINEMA. Respondents in this study amounted to 200 civil servant lecturers at the 6 polytechnics. Testing was carried out with SEM using Lisrel 8.80. Data collection in this study was carried out by survey method, namely by distributing questionnaires to respondents. In this case, the unit of observation is the lecturers of the first 6 state polytechnics in the Ministry of Research and Technology where the respondents' answers are primary data obtained using a predetermined questionnaire. Secondary data for this research can be in the form of newspaper articles, magazines/journals, reference books, such as textbooks, handbooks, the results of researchers' interpretations, interpretations of primary data and others. The research model looks like the following figure:

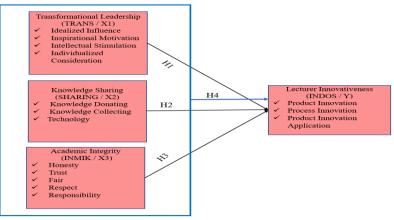


Fig1. Research Model

Based on the research model design, the researchers formulated the following hypotheses:

- 1)H1: Transformational leadership affects the innovativeness of lecturers at the first 6 State Polytechnic Universities within the Ministry of Research and Technology.
- 2) H2: knowledge sharing affects the innovativeness of lecturers of the first 6 State Polytechnic Universities within the Ministry of Research and Technology.
- 3) H3: academic integrity affects the innovativeness of lecturers of the first 6 State Polytechnic Universities within the Ministry of Education and Culture Ministry of Research and Technology.
- 4) H4: transformational leadership, knowledge sharing, and academic integrity simultaneously affect the innovativeness of lecturers of the first 6 State Polytechnic Universities within Ministry of Research and Technology.

IV. DISCUSSION

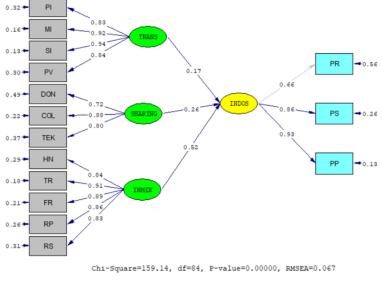


Fig 2. SLF Model Equation

The equation for figure 2 is as follows:

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INDOS = 0.17*TRANS + 0.26*SHARING + 0.52*INMIK, Errorvar = 0.27, R^2 = 0.73
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The results of simultaneous testing of transformational leadership variables, knowledge sharing, and academic integrity on lecturer innovativeness resulted in a coefficient of determination (R2) of 0.73 = 73%. This value is the total contribution of the influence of the three variables with regression coefficients on the innovativeness of lecturers.

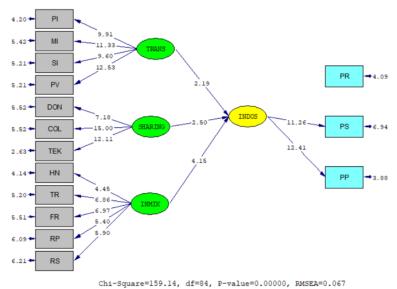


Fig 3. T Value Model Equation

http://ijstm.inarah.co.id

The results of hypothesis testing and analysis proved that transformational leadership affects the innovativeness of lecturers with a regression coefficient of 0.17 or means that this coefficient value contributes a direct influence of 0.0289 with a significance level of tcount 2.19> 1.96 ttable. This provides evidence that if the position holder applies a transformational leadership pattern, it will have a real impact on the innovativeness of lecturers at the first 6 State Polytechnic Universities within the Ministry of Research and Technology. The most powerful dimension forming the transformational leadership variable is intellectual stimulation, meaning that leaders are able to increase the intelligence of their subordinates, create an environment full of creativity, innovation so as to make their subordinates comfortable and learn many things. Leaders tend to be friendly, informal, close and pay attention to subordinates, help and support and encourage self-development of followers, stimulate subordinates to be able to think out of the box and dare to take risks. With all these things, it will increase the innovativeness of lecturers. Hypothesis 1 is accepted. The results of hypothesis testing and analysis prove that knowledge sharing affects the innovativeness of lecturers with a regression coefficient of 0.26 or means that this coefficient value contributes a direct effect of 0.0676 with a significance level of tcount 2.52> 1.96 ttable.

This provides evidence that if lecturers implement knowledge sharing in carrying out the tri dharma of higher education, it will have a real impact on the innovativeness of lecturers at the first 6 State Polytechnic Universities within the Ministry of Research and Technology. The dimension that most strongly shapes the knowledge sharing variable is knowledge collecting. Knowledge collecting means collecting knowledge which refers to consulting with colleagues to share their intellectual capital, meaning that by collecting knowledge lecturers will get more information and knowledge which will certainly support the innovativeness of lecturers in carrying out the tri dharma of higher education. Hypothesis 2 is accepted. The results of hypothesis testing and analysis proved that academic integrity affects the innovativeness of lecturers with a regression coefficient of 0.52 or means that this coefficient value contributes a direct effect of 0.2704 with a significance level of tcount 4.14> 1.96 ttable. This provides evidence that the innovativeness of lecturers will be better if lecturers implement academic integrity in carrying out the tri dharma of higher education. The dimension that most strongly shapes the academic integrity variable is trust. Trust is the second value of academic integrity. Trust grows with time and experience.

Trust gives us the freedom to collaborate, share information, and spread new ideas without fear of our work being stolen, our careers being blocked, or our reputation declining. Hypothesis 3 is accepted.Based on the results of hypothesis testing and data, together (simultaneously) transformational leadership, knowledge sharing, and academic integrity affect the innovativeness of lecturers with a coefficient of determination of R2 = 0.73, which means that the total contribution of the influence of the three exogenous variables on the innovativeness of lecturers is 73% with a significance level of Fcount 4.46> Ftable 0.177. this means that transformational leadership, knowledge sharing, and academic integrity are proven to have an effect on the innovativeness of lecturers and become important variables in lecturers of the first 6 State Polytechnic Universities in the Ministry of Research and Technology. From the results of data testing, the most dominant variable affecting the innovativeness of lecturers is the academic integrity variable with a regression coefficient of $\xi_1=0.52$. The coefficient of determination which is the total influence of transformational leadership variables, knowledge sharing, and academic integrity on the innovativeness of lecturers is 0.73 (73%). While the rest (ζ =Zeta) of 0.27 (27%) is influenced by other variables not examined in this study. Hypothesis 4 is accepted.

V. CONCLUSION

1) Transformational leadership is partially proven to affect the innovativeness of lecturers in the work units of the first 6 State Polytechnic Universities in the Ministry of Education and Culture. The influence of transformational leadership is measured through four dimensions, namely idealized influence, inspirational motivation, intellectual stimulation, and individual attention. The dimension that has a dominant value to form the construct of transformational leadership variables is the intellectual stimulation dimension. This proves that transformational leadership is one of the factors that can influence the innovativeness of lecturers at the first 6 State Polytechnic Universities within the Ministry of Research and Technology.

2) Knowledge sharing is partially proven to have an effect on the innovativeness of lecturers in the work units of the first 6 State Polytechnic Universities within the Ministry of Education and Culture. The contribution of this influence is explained by the three dimensions used as measurements, namely the dimensions of knowledge donating, knowledge collecting, and technology. The dimension that contributes more dominantly is the knowledge collecting dimension. The indicators are collecting new ideas for research and service, collecting new information about work from colleagues, and colleagues from the same department and different departments like to invite to do research and service together. This proves that knowledge sharing is one of the factors that can influence the innovativeness of lecturers at the first 6 State Polytechnic Universities within the Ministry of Research and Technology.

3) Academic integrity is partially proven to affect the innovativeness of lecturers in the work units of the first 6 State Polytechnic Universities within the Ministry of Education and Culture. The contribution of this influence is explained by the five dimensions used as measurements, namely the dimensions of honesty, trust, justice, honor, and responsibility. The dimension that is more dominant in contributing is the dimension of trust. This proves that academic integrity is one of the factors that can influence the innovativeness of lecturers of the first 6 State Polytechnic Universities within the Ministry of Research and Technology.

4) Transformational leadership, knowledge sharing, and academic integrity are simultaneously proven to affect the innovativeness of lecturers. Of the three variables, the variable that has the most dominant effect is the academic integrity variable. Thus it can be explained that the three variables tested (transformational leadership, knowledge sharing, and academic integrity) proved to be important variables in fostering the innovativeness of lecturers in the work units of the first 6 State Polytechnic Universities in the Ministry of Research and Technology. Meanwhile, the innovativeness of lecturers is measured by three dimensions, namely product innovation, process innovation, and product application innovation. The dimension that more dominantly explains the contribution of influence is the dimension of product application innovation.

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