

The Influence of Intellectual Ability on Lecturers' Performance and Competencies

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Abstract

Objective: The main objective of this study is to analyze the importance of intellectual abilities in increasing the role of competence and strengthening the performance of lecturers in the management study program at private universities in Surabaya.

Design/Methods/Approach: The study utilizes 200 samples obtained by distributing questionnaires to respondents. The explanatory method makes it possible to measure confirmatory factor analysis and SEM analysis to test the model.

Finding: The results indicate that intellectual ability has a significant effect on lecturer competencies and indirect positive effect on performance. However, the indirect effect is less strong than its direct effect on performance. These results indicate that they have a logical, inspirational, creative, and innovative mindset in carrying out the "tri dharma", such as education, producing scientific papers published in reputable national and international journals, publishing the results of community service, and contributing to other activities. In short, the stronger the professional competence, the higher the performance because of the contribution of intellectual ability as an independent domain of lecturers.

Originality: This is the first comprehensive study conducted at the 18 private universities in Indonesia. Therefore, it will be valuable to better understand the intellectual abilities of lecturers and improve the relationship between their performance and competencies.

Practical/Policy implication: The success of lecturers in "tri dharma" activities is an important policy for the academic community, that characterized by their success in producing high performance, not only for individual but also for the universities. In addition, the study concludes with a location model that can be used as an important tool by university leaders in conducting their national and international business because this model can also be applied in various sectors other than the higher education sector.

Keywords: Intellectual Ability, Competency, Performance

JEL Classification: I20, M510

I. Introduction

Talking about the performance of lecturers is endless. Performance is an employee's work in completing a job (Rachman, 2017). Performance management as a planned process has six key elements: agreement, measurement, support, feedback, and positive reinforcement that shape the results in terms of performance expectations (Islami et al., 2018). Meanwhile, Smith and Bititc (2017) emphasize improving performance measurement systems and performance management practices, and work environment factors to increase employee engagement. Achievement of performance does not depend on working conditions but is related to individuals' competence and intellectual abilities.

Some researchers study people's intellectual abilities, often linked as reinforcement for performance. As Bettin (2001), the role of experience is more relevant to intellectual ability and predicts leader performance. Sinabariba et al. (2018) stated that intellectual ability is needed to carry out mental activities. The more intelligence needed to do work, the higher the success. This relates to a person's intellectual connections as reinforcement for their performance. Development of mindset, for example, lecturer's intellectual. They have mastery of the process of implementing the tri dharma. Strengthening intellectual abilities for lecturer performance has been shown by high IQ. Produce performance as a profession and more easily absorb knowledge in the process of implementing the tri dharma (Makkasau, 2018). The successful performance of lecturers has marked success because of their intellectual abilities. This also has an impact on the results of their unsuccessful performance.

Meanwhile, the intellectual abilities of several lecturers in the Management Studi Program of Surabaya Private University are still a priority for discussion among leaders. However, there are doubts, and they will be answered even though some management study programs have B or A accreditation ratings. As Rachman (2012), individual lecturers are able to think rationally, creatively and innovatively, make decisions correctly and fairly, produce work, and have confidence in themselves, according to their scientific expertise.

They not only rely on intellectual ability, but competence is also important. Competence is a person's ability shown by knowledge, skills and attitudes, and behavior in work activities. According to Pramudyo (2010), competence is a set of knowledge, skills, and behaviors that a person must possess in carrying out his profession. According to Rivai et al. (2018), that competence is the desire to have an impact on others and the ability to influence others using persuasion and influence strategies. While Robbins (2015) states that intellectual ability can make individual human beings competent in carrying out their duties, it is undoubtedly wrong. This reflects that the higher the individual intellectual abilities of people, the higher the competence in carrying out their duties.

Several researchers discuss intellectual abilities that have an important role in organizations. They both link intellectual abilities with professional competence and individual performance. High intellectual ability is followed by an increase in performance (Jariah, 2011; Rachman, 2012; Rahmasari, 2012; Lukiyana and Arsinta, 2019; Pakpahan et al., 2020; Kurniawan, 2020). On the other hand, the intellectual ability has a weak relationship (Triwahyudianto, 2017; Damanik, 2018) and the intellectual ability of lecturers is not optimal because the intellectual ability is a strong predictor of academic achievement of lecturers (Veas et al., 2016; Sherly and Fahmi, 2020), the intellectual ability has an important role in building high performance (Badiah et al., 2020), there is a positive influence between intellectual ability and the level of competence of lecturers (Rapika and Sari, 2017; Rachman, 2012; Latifah, 2018).

Other researchers reveal that competence has a role in improving their job performance (Zumali et al., 2020; Imawati et al., 2020, Aththaariq et al., 2014, Atbar S., 2012); development and assessment of required competencies as a viable tool, to manage and develop human resources, to build and maintain competitiveness, and to manage individual performance in their current job (Boyatzis, 1991; De Vos et al., 2015). Then Munene et al. (2008) and Feryal (2010), the main role of educator competence is to prepare human resources to organize management competency-based training, including educator competency-based and educator performance assessment targets. Meanwhile, according to Rachman (2012), Hakim (2015), Kholik (2016), Deswarta (2017), Lilawati and Mashari (2017), Riyadi et al. (2017), Utama et al. (2017), Latifah (2018), and Wahyuni (2019), that lecturer competence can contribute to their performance.

The differences expressed by the researchers will strengthen and convince researchers to review these differences because it is believed that the domain of lecturers has a mindset that can develop their skills and knowledge to improve their performance. The main objective of this study is to analyze the importance of intellectual abilities in increasing the role of competence and strengthening the performance of lecturers in the management study program at a private university in Surabaya. Furthermore, the results of this research may provide benefits or contributions to lecturers in management study programs and universities. Besides that, it can also be an example for university lecturers in Surabaya.

2. Literature Review and Hypothesis Development

2.1. Relationship between Intellectual Ability and Performance

Intellectual ability is the capacity needed to carry out mental activities (Robbins and Jugde, 2019). Therefore, the intellectual ability has an important role in individual intelligence because it can be used to solve problems both experienced by oneself and in the environment, so that one can think rationally, act purposefully, and deal with the

environment effectively to be able to achieve success. Intellectual ability is an ability needed to carry out various mental activities, thinking, reasoning, and solving problems for his work (Rachman, 2012).

According to Goleman (2012), intellectual ability is the ability to recognize our feelings and the feelings of others, the ability to motivate oneself, and the ability to manage emotions well in oneself and relationships with others. According to Spencer and Spencer (1993), intellectual ability is the capacity for a person to carry out high mental activities at all levels of work. This arises through knowledge, skills, and perceptions to be able to optimize their performance. Tilaar (2002) states that intellectual abilities are various sets of knowledge that exit individuals need to carry out various aspects of performance as a profession, such as the professional ability of teachers and lecturers. In comparison, Robbins (2015) reveals that intellectual ability is the mental ability needed to carry out mental activities.

According to Robbins and Judge (2019), good mental ability predicts the performance of new employees, and awareness predicts the performance of experienced employees. Some researchers reveal that the role of experience is more relevant to intellectual abilities that can predict leadership performance (Bettin, 2001). According to Robbins (2015), various requirements are needed in hundreds of jobs. They have identified nine basic abilities included in the performance of physical tasks. So that each individual has different basic abilities and has high intellectual abilities, they must have high achievements. Logically, someone with high intellectual ability is supported by high achievement, resulting in high performance.

On the other hand, people with low intellectual abilities and low morale will also produce low performance, and the positive influence of intellectual abilities can improve employee performance (Pakpahan et al., 2020; Kurniawan, 2020). Then the mindset of Spencer and Spencer (1993) assesses three indicators of intellectual abilities developed by Rachman (2012). Intellectual abilities are expressed as thinking (cognitive) competencies that have individual work functions, including (1) analytical thinking; (2) conceptual thinking; (3) professional technical expertise; and (4) practically developing scientific mastery thinking patterns.

From the analysis of the study of the relationship between intellectual ability and performance, a hypothesis is proposed in this study as follows;

H₁: Intellectual ability positively affect the performance of management lecturers.

2.2. Relationship between Intellectual Ability and Competence

Intellectual ability is the ability needed to perform various mental activities-thinking, reasoning, and solving problems. People with high intellectual understanding use logic to think, so they understand what a person does and the consequences of this action. According to Heryadi (2017), intellectually lecturers have carried out expository lectures based on logical theory for thinking, increasing understanding of lecture content, and supporting the growth of academic character. These intellectuals offer the ability to plan, collect, and manage factual information by thinking rationally about their work.

Individual intellectual abilities of people in organizations require competence and authority. Individuals who have high intellectual ability to work more easily absorb knowledge and skills in improving their abilities. According to Robbins (2015), which is necessary for different thinking activities, problem-solving, and information, in reality, concluded and managed. Previous research by Wiguna and Yadhana (2019) states that intellectual ability can affect individual competence results in success. A person's level of competence is measured through awareness and related (cognitive) thinking. Meanwhile, Bargava and Pathy (2011) stated that the intellectual ability of an educator could serve as a guide to increase the level of self-confidence of students and foster independent learning among students. In addition, teaching experience and decision-making ability strengthen the main competencies.

Robert et al. (2014) emphasize that intellectual abilities are used as measurement activities in real-time delivered by lecturers and can be observed by fellow lecturers, senior management, external moderators, and students related to competence. Therefore, students are an important source to provide feedback and comments on the competence of lecturers. In article 5 of the Law of the Republic of Indonesia Number 14 of 2005, lecturers' competence is measured by perception through educational competence, professional competence, social competence, and personality competence. Robbins (2015) reiterates that intellectual ability is an individual's capacity to be competent in performing tasks with certain types of work to meet organizational goals.

From the analysis of the study of the relationship between intellectual ability and competence, a hypothesis is proposed in this study as follows;

H₂: Intellectual ability positively affects the competence of management lecturers.

2.3. Relationship between Competence and Performance

Individuals perceive competence as an activity. According to Ayoubi and Massoud (2007), Competence covers various aspects, not only physical and mental but also spiritual aspects. Besides that, lecturer competence is a combination of individual, logical, innovative, social, and deep capacities of ability of the standard of the teaching profession, which combines material authority, understanding of students, instructive learning, self-development, and polished skills. While Ngainun (2011), Competence is a collection of information, behavior, and abilities that an educator

must possess to achieve learning and teaching goals activity. Through instruction, preparation, and independent learning, it is acquired using learning assets. Then, in Government Regulation number 19 of 2005 concerning National Education Standards, teachers' and lecturers' competence includes pedagogic, personal, social, and professional competencies.

Furthermore, the resulting competence of a person requires skills, knowledge, attitudes and behavior, and abilities in accordance with the work. Many studies discuss competency development and assessment, focusing on various fields and professions in various countries (Chung & Wu, 2011). Therefore, Competence is perceived as a result of the work done and can be measured. People's competencies are very strong when used to influence performance. According to Rachman (2020), an employee's performance in an organization can be used as a tool to measure success at work or the achievement of work results based on their competence.

The concept of competence is a personal characteristic (skill, knowledge, trait, and motive) that guides behavior towards achieving the expected performance (Masdar et al., 2009). According to Boyatzis (1991), the competence of employees in certain fields of work is based on the characteristics of the employee (such as motives, nature/character, skills and aspects related to social roles, and/or knowledge) that result in effective performance or superior at work. While Spencer and Spencer (1993) state that a person's competence is a basic characteristic of individuals associated with superior performance criteria standards and/or effective work.

This competency also reflects individuals who are full of motivation, optimism, and hope and who are able to overcome obstacles, such as decisions to succeed or fail to achieve their performance. As Sukirno (2020), competence is also used to develop a teacher performance appraisal model at other levels of education. According to Rachman (2012), competence is needed by lecturers. Lecturers improve their professional knowledge, skills, instructional planning, implementation, and evaluation, and improve language aspects, such as English and listening, speaking, and writing skills, as reinforcement for their performance. Furthermore, it was reiterated by Rachman (2012) that the quality of lecturer performance could be seen from the implementation of their duties and responsibilities as lecturers, both in the fields of education, research, community service, and other activities related to the tri dharma. Meanwhile, Lucky and Yusoff (2013) suggest that lecturers' qualifications, characteristics, and competencies will affect their performance because teaching lecturers who have carried out these three activities are superior to lecturers who have not carried out these three activities.

Several approaches to measuring competence are often identified with performance appraisals conveyed by Rachman (2017), that measuring or evaluating employee performance in organizations has three approaches, including (1) actor-based performance appraisal or measurement, (2) actor-based performance appraisal or measurement of behavior, and (3) assessment or performance measurement based on competency outcomes. According to Suparman (2010), lecturer performance assessment is carried out by evaluating activities or activities (processes) carried out by lecturers and related to the implementation of competencies as their main tasks, including aspects of planning, implementation, and evaluation of education. Then Raka (1980) formed a professional competency profile of education staff or lecturers, including; pedagogic competence, personal competence, and professional competence. As in Article 5 of the Law of the Republic of Indonesia Number 14 of 2005, lecturers' competence is measured perceptually through educational competence, professional competence, social competence, and personality competence. As also in the Regulation of the Minister of National Education Number 37 of 2009 concerning the main tasks of assessing lecturer performance, namely: (1) academic qualifications, (2) improving the quality of teaching, research/scientific works, and community service, (3) self-assessment, colleagues, direct superiors, and students, (4) awards relevant to the tri dharma, (5) participation or participation in scientific forums and their roles, (6) developing lecturer competencies, (7) professional development. Then Ramsden (1992) used lecturer performance assessments through education, research, community service, and activities supporting elements of the tri dharma.

From the analysis of the study of the relationship between competence and lecturer performance, a hypothesis is proposed in this study as follows;

H₃: Competence positively affects the performance of management lecturers.

2.4. The Relationship of Intellectual Ability on Lecturer Performance through Competence

The success of lecturers in achieving high performance cannot be separated from the support of competence. This is related to the intellectual abilities of the lecturers themselves. The higher their intellectual improvement, the higher the performance they will achieve. Their success is also supported by competence because the competencies achieved have a strong influence on their performance (Rachman, 2012). Therefore, competence is an important instrument of intellectual ability to measure lecturer performance. Performance is an employee's success in achieving the results of work carried out within a certain time (Lilawati and Mashari, 2017). The application of competence for lecturers is very appropriate to describe those competent in managing their intellectual abilities. This flexibility is also reflected in their flexibility in responding to change so that the impression that appears is their intellectual ability to continue to learn about something new, fulfill their curiosity, and always strive to achieve high achievements. This competency also reflects someone full of motivation, hope, and optimism, able to overcome obstacles, his decisions succeed or fail. It depends on their intellectual ability to achieve high-performance success. It is also necessary to achieve long-term life or business goals.

According to Boyatzis (1991), several special intellectual abilities, including achievement drive, commitment, initiative, optimism, and aspects related to employee competence in achieving performance results. Many people often use the term competence as a person's intellectual ability to excel. This is because the effectiveness of work is strongly influenced by the skills, knowledge, behavior/attitudes, and abilities that are in accordance with the job's demands. According to Berge et al. (2002), the current and future success of an organization depends on a combination of effective leadership abilities and the competence of its workforce. From the analysis of the study of the relationship between intellectual ability, competence, and lecturer performance, this study proposes the following hypothesis;

H₄: Intellectual ability positively on lecturer performance through competence.

Based on the hypotheses proposed in this study, we develop a model, a hypothetical conceptual framework built from three variables as described below;

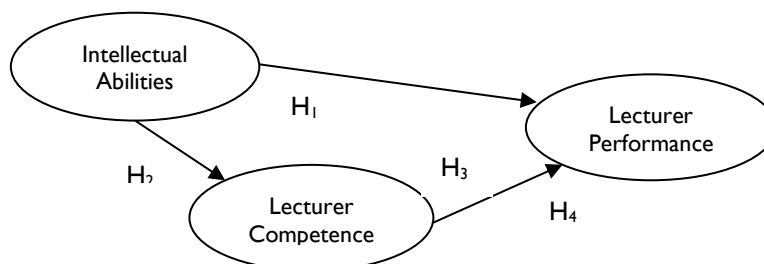


Figure 1. Hypothesis Model

3. Method

3.1. Design and Sampling Technique

This study is designed to explain the relationship between constructs that affect endogenous variables using the explanatory method. This study has a population of 592 permanent lecturers of management study programs with accreditation A and B at 18 private universities in Surabaya.

This study took a sample of 200 research respondents using the proportional stratified random sampling technique. It can be applied to data collected from universities (2021). While the method of distributing questionnaires is done offline, that is, meeting the respondents directly at the lecturers of the management study program with the incidental technique as the delivery of the questionnaire distribution

3.1. Variables and Operational Definitions of Variables

To clarify, the measurement of variables and operational definitions of variables can be shown in Table 1.

Table 1. Operational Definitions of Variables

Name of Variables	Operational Definitions of Variables	Measurement of Variables	Source
Intellectual Ability	An ability needed to carry out various mental activities-thinking, reasoning, and solving problems in the work he does	1. Analytical thinking 2. Conceptual thinking 3. Technical expertise 4. Scientific thinking	Spencer and Spencer (1993) developed by Rachman (2012)
Lecturer Competency	The ability of a lecturer not only to be required as a person with professional abilities but must have abilities that are in accordance with their profession	1. Educational 2. Personality 3. Social 4. Professional	Raka (1980), developed by Rachman (2012)
Lecturer Performance	The final result of work or the level of individual achievement achieved in accordance with the respective authorities and responsibilities legally during a certain period of time	1. Education 2. Research 3. Community service 4. Other activities that support the Tri Dharma	Ramsden (1992) developed by Rachman (2012)

This study uses SEM analysis to test the relationship model between constructs formed from 12 observation indicators with 36 items. The test instrument is carried out as a measurement to produce reliability with confirmatory factor analysis and proof of the relationship between constructs as formulated in the hypothesis.

4. Results and Discussion

4.1. Description of Respondent Characteristics

The characteristics of the respondents used in this study were 200 lecturers of management study programs from 18 private universities in Surabaya, with gender for men as much as 51% and women as much as 49%. 102 males and 98 females. In addition, 73% of people have Master's education levels, 27% of Doctoral education levels, and 41% of people have functional positions as lecturers and 59% as head lecturers. The characteristics of the research respondents have experiences and expectations that can help provide information for this research. They also have the ability and skills in the field of tri dharma and are professional and innovative in applying qualified knowledge.

4.2. Structural Equation Modeling (SEM) Analysis

The results were met in the statistical test using the SPSS vers.26 program in testing the research instrument from 200 research respondents. All items from each observation indicator tested were declared valid. Using the measurement model process, further testing was carried out by analyzing the confirmatory factor (CFA). As the CFA test below:

1. Intellectual Ability Confirmatory Factor Analysis

The intellectual ability variable, which has four indicators as forming variables, has a significance extracted from the standard loading factor coefficient and is declared significant with the standard loading factor coefficient of each indicator, for the X_1 indicator has a loading factor of .661 with a probability of $.000 < .05$, the result is significant. The X_2 indicator has a loading factor of .849 with a probability of $.000 < .05$. The result is significant. The X_3 indicator has a loading factor of .763 with a probability of $.000 < .05$. The results are significant. The X_4 indicator has a loading factor of .777 with a probability of $.000 < .05$ the results are significant. This significant result shows that the standardized loading factor value of all indicators has met the requirements of .50 and concludes that the indicators forming the construct of intellectual ability used are valid, and the analysis of the construct reliability coefficient is $.819 > .70$; the results are reliable. While the coefficient of variance extracted, which was analyzed, the results exceeded the implied $.532 > .50$; it means that the indicators used as observed on the intellectual ability variable are relatively able to explain the variables that are formed. The results accept the theoretical concepts used in the study.

2. Lecturer Competency Confirmatory Factor Analysis

The variable of lecturer competence which has four indicators as a constructor which has extracted significance on the standardized loading factor coefficient is stated to be significant on the standardized loading factor coefficient of each indicator for the X_5 indicator, which has a loading factor of .703 with a probability of $.000 < .05$, the results are significant. The X_6 indicator has a loading factor of .812 with a probability of $.000 < .05$, the result is significant. The X_7 indicator has a loading factor of .867 with a probability of $.000 < .05$, the results are significant, and the X_8 indicator has a loading factor of .703 with a probability of $.000 < .05$, the results are significant. This significant result shows that the standardized loading factor of all indicators has met the requirements of .50 and concludes that the indicators forming the constructs of lecturer competence used are valid, and the analysis on the construct reliability coefficient is $.661 < .70$; the results are moderate-reliable (good enough), but can be tolerated (accepted). While the coefficient of variance extracted, which was analyzed, the results exceeded the implied $.532 > .50$; it means that the indicators used as observed on the variable competence of the lecturers are relatively able to explain the variables that are formed. The results accept the theoretical concepts used in the study.

3. Analysis of Lecturer Performance Confirmatory Factors

The lecturer performance variable, which has four indicators as a constructor which has extracted significance on the standardized loading factor coefficient, is declared significant on the standardized loading factor coefficient of each indicator, for the X_9 indicator, which has a loading factor of .930 with a probability of $.000 < .05$, the results are significant. The X_{10} indicator has a loading factor of .865 with a probability of $.000 < .05$, the results are significant. The X_{11} indicator has a loading factor of .851 with a probability of $.000 < .05$, the results are significant, and the X_{12} indicator has a loading factor of .854 with a probability of $.000 < .05$, the results are significant. This significant result shows that the standardized loading factor of all indicators has met the requirements of .50 and concludes that the indicators for constructing the lecturers' performance are valid, and the analysis of the construct reliability coefficient is $.762 > .70$; the results are reliable. Meanwhile, the variance extracted coefficient value shown by the results exceeds the implied $.737 > .50$; it means that the indicators used as observed variables of lecturer performance are relatively able to explain the variables that are formed. The results accept the theoretical concepts used in the study.

4.3. Evaluation of the Goodness of Fit Index

Structural equation modeling (SEM) analysis is able to meet the research objectives formed from the structural relationship between variables so that the analysis of the suitability test can be shown in the Goodness of Fit Index. As in Figure 2.

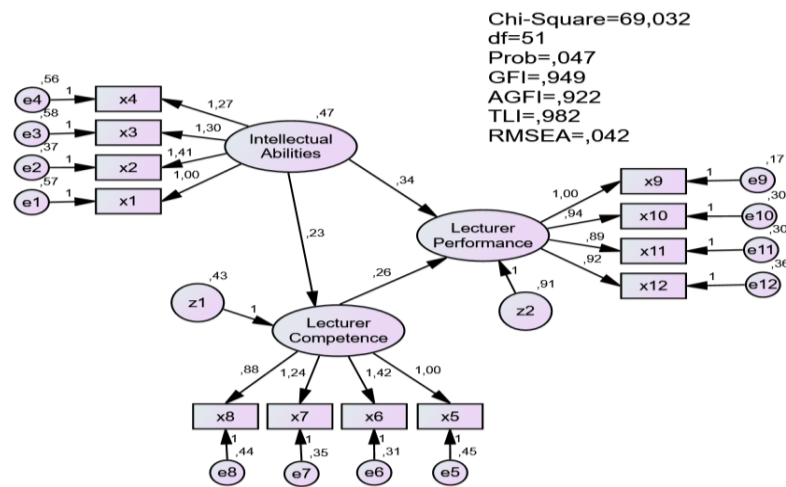


Figure 2. Model The Relationship Between Constructs

An estimation of the measurement model on the Structural Equation Modeling (SEM) construct using the Maximum Likelihood (ML) estimation method has a fit or suitability of the results. As shown in Figure 2. the assessment of Goodness of Fit Indices is shown in Table 2.

Table 2. The goodness of Fit Indices on SEM

The goodness of Fit Indices	Results of Analysis df. 51	Cut-off Value	Evaluation of Model
Chi-Square	69.032	It is expected that small	Less Good
CMIN/DF	1.354	≤ 2.00	Good
Significance Probability	.047	≤ .05	Less Good
GFI	.949	≥ .90	Good
AGFI	.922	≥ .90	Good
CFI	.986	≥ .95	Good
RMSEA	.042	≤ .08	Good
TLI	.982	≥ .95	Good
NFI	.950	≥ .90	Good

Source: Data Analysis SEM

From Table 1. The analysis process of the relationship model between constructs in fulfilling the goodness of fit indices criteria is explained that the fit results that meet the required criteria, are to have a coefficient value of RMSEA = .042 < .080; GFI = .949 > .90; AGFI = .922 > .90; TLI = .982 > .95; CFI = .986 > .95; and NFI = .950 > .90; and the results are good, while at Significance Probability = .047 < .05, the results are said to be less good. Then the resulting Chi-Square coefficient has a poor rating because the coefficient value is 69.032 > 3. Even though the criteria that produce the chi-square are much greater than the requirements (Cut-off Value), the results are still accepted as structural equation modeling because there is no difference between the sample covariance matrix and the covariance matrix in the estimated population, so that the model used as research can be accepted.

Furthermore, statistical tests to prove the relationship between the constructs used in the research model can be shown in the analysis results, as shown in Table 3. Based on Table 3. that intellectual ability has a positive influence on the performance of management lecturers with an estimated coefficient of 0.342 and proves the positive influence of intellectual ability is shown by the C.R. 2,209 with probability (p) 0.027 < 0.050, and the result of this positive influence is accepted. Then intellectual ability has a positive influence on the competence of management lecturers with a coefficient estimate of 0.229 and proves the positive influence of intellectual ability is indicated by the C.R value of 2.777 with a probability (p) of 0.005 < 0.050. The results of this positive influence are accepted. While competence has a positive influence on the performance of lecturers in the management study program with an estimated coefficient of

0.264 and proves the positive influence of lecturer competence is shown by the C.R. 2.105 with probability (p) $0.035 < 0.050$, and the result of this positive influence is accepted.

Table 3. Standardized Regression Weights

		Estimate	SE	Standardized Estimate	CR	P	Description
Competence_Lecturers	← Intellectual_Abilities	.229	.116	.233	2.777	.005	Significant
Performance_Lecturers	← Competence_Lecturers	.264	.104	.176	2.105	.035	Significant
Performance_Lecturers	← Intellectual_Abilities	.342	.077	.233	2.209	.027	Significant
Performance_Lecturers	← Intellectual_Abilities	.060		.041 (Indirect Effects)			

Source: Data Analysis SEM

Other findings in this study show that intellectual ability has a positive effect on lecturer performance through competence. This positive effect is indicated by the magnitude of the estimated coefficient value of 0.041. This shows that there is an increase in the performance of lecturers who meet university goals by carrying out tri dharma tasks.

Based on table 2, it can be discussed as is known that Intellectual ability has a positive and significant influence on the performance of management lecturers. Lecturers understand the needs of themselves and the university as a manifestation of the success of their performance results which are supported by several indicators. This shows their progress in developing intelligent and creative thinking patterns toward the tri dharma task. The higher the intellectual level in producing performance, the higher the ability to develop their profession because the mastery of analytical thinking skills and conceptual thinking skills must be integrated. The intellectual formation of lecturers has been answered and approved by respondents on questions from indicators of intellectual ability, including analytical thinking, conceptual thinking, professional technical skills, and developing intelligent and creative thinking patterns for their scientific mastery. The results of this study are identical to the results of research by Pakpahan et al. (2019) that the intellectual ability of employees has a positive effect on improving their performance because the level of intellectual intelligence possessed is able to carry out their professional duties. The results of this study are not much different from those of Triwahyudianto (2017), Jariah (2011), and Rachman (2012), that intellectual ability has a positive effect on their work achievement. Basically, there is no fundamental difference between a lecturer's intellectual competence and professional competence. This is realized, they master their field of expertise in developing professional competence by implementing education, research, community service, and other activities that support tri dharma activities. Evidence of success in improving their performance manifests the achievement of the university's tri dharma implementation strategy. Therefore, they do not waste the opportunity to improve their integrity to produce work that meets the university's needs, especially the management study program. The intellectual ability has a positive and significant influence on the competence of management lecturers.

The positive intellectual influence of this lecturer has the pattern and ability to think intelligently and creatively. As shown by the mastery of professional competencies capable of carrying out the tri dharma, including mastery of knowledge, skills, and development of competitiveness to produce appropriate competencies. with his profession. The respondents have accepted the mastery of mindset and development for scientific mastery. The influence of intellectual ability on competence also changes the behavior of lecturers. It is able to develop conceptual thinking patterns as knowledge. This study is in line with research conducted by Sinabariba et al. (2018) and Makkasau (2019), that intellectual ability strongly contributes to improving professional competence. Then there is the same research conducted by Rapika and Sari (2017), that intellectual ability has a positive effect on professional competence, but they develop their ability to understand their duties better.

In contrast to this study's results, lecturers' success in improving their intellectual abilities toward professional competencies contribute strongly. A whole unified marks this as professional competence, including in the fields of education, personality, and society. In addition, the progress of lecturers in developing their knowledge and intelligent and creative thinking patterns can develop without difficulty in carrying out the tri dharma tasks. Lecturers always attend training, participate in scientific activities, and develop their talents to meet university goals.

Competence has a positive and significant influence on the performance of lecturers. This positive influence on lecturer performance indicates the success of lecturer competence which is realized as professional competence. The success of lecturers in implementing the tri dharma is able to build their intellectual strength. They understand and master the indicators of professional competence, as in the fields of education, research, social, and inner personality that can affect their performance. The positive influence of competence on lecturer performance is as a performance strengthening, being able to change attitudes, and developing intelligent and creative thinking patterns in implementing the tri dharma. This research is in line with research conducted by Atbar (2012), Aththaariq et al. (2014), and Wahyuni

(2019) that the positive influence of competence on lecturer performance is the key to obtaining optimal lecturer performance results. Then other research was also conducted by Zumali et al. (2020) and Imawati et al. (2020), that lecturer competence has an important role in improving their performance. The competence of the lecturers also reflects the level of understanding of the teaching material, the ability to understand concepts, and the relationship with other sciences. A strong contribution marks the success of this lecturer's competence because it is related to the relationship between professional competence and performance. The achievement of their performance results is marked by the success of carrying out the performance process in the field of education, producing scientific papers published in reputable national and international journals, publishing articles for community service, and other activities outside the tri dharma. The positive influence of their performance is manifested by the success of the lecturer's professional competence, the higher the performance achievement, the more developed their professional competence in producing quality works.

Other findings indirectly stated that intellectual ability has an influence on lecturer performance through lecturer competence. The positive influence of intellectual ability is shown by the increase in the performance results of those who have met the university's goals. The influence of intellectual abilities is indirectly identical to the results of their performance because they are able to fulfill their duties in completing the tri dharma easily. According to research conducted by Rachman (2012), the intellectual ability has a positive effect on lecturer performance by developing professional competence. This is manifested from the results of improving their performance, which is related to their intellect through intelligent, inspirational, creative, and innovative intellectuals in their role to achieve the goals they want. In addition, they also take advantage of the environmental conditions in their workplace and develop a smart and creative mindset through professional, personality, social, and educational competencies as mastery of their field of expertise in completing the tri dharma task. This is related to the results achieved by the lecturer himself on his professional competence.

5. Conclusion

The purpose of this paper is to understand the activities of lecturers and ensure that they can improve their performance. This is related to intellectual abilities, which have a positive effect on strengthening the competence of lecturers in improving their performance. These three things are important factors in supporting the university's quality. This paper aims to understand the activities of lecturers and ensure that they can improve their performance. This is related to their intellectual ability and competence. Both of these are important factors in supporting the quality of higher education. This research has been supported by several theories, such as intellectual ability, one of which was expressed by Spencer and Spencer (1993). Lecturer competence was expressed by Ayoubi and Massoud (2007), and lecturer performance was expressed by Rachman (2012).

Meanwhile, this study took a sample of 200 research respondents using the proportional stratified random sampling technique, which can be applied to data collected from universities (2021). While the method of distributing questionnaires is done offline, that is, by meeting the respondents directly at the lecturers of the management study program with the incidental technique as the delivery of the questionnaire distribution. In addition, it also uses the explanatory method and SEM as an analytical model.

The findings of this study have proven that intellectual ability has a positive and significant effect on lecturer performance. Their success has fulfilled the implementation of the tri dharma and the activities of supporting elements outside the tri dharma. This is related to applying professional competencies, including mastery of knowledge and skills, and developing competitive thinking patterns to produce a unified whole. Strong intellectual abilities affect the competence of lecturers in realizing the development of intelligent and creative thinking patterns in educational, professional, social, and personality competencies. So that the competence of lecturers can improve their performance, this is marked by an increase in academics and participation in activities outside the tri dharma so that it makes a useful contribution to the university, especially in the management study program. Another finding shows that intellectual ability has a positive effect on their performance through competence. This is manifested from the pattern of thinking in intellectual, intelligent, inspirational, creative, and innovative development by utilizing current conditions so that future goals are able to develop intelligent and creative thinking patterns. It is also characterized by professional competence and intellectual ability as an independent domain that can contribute through analytical thinking patterns, organize and think conceptually, demonstrate areas of expertise, and develop intelligent and creative thinking patterns as mastery of skills. According to their expertise and knowledge in the implementation of the three dharmas. The stronger the professional competence, the higher the successful performance achieved because of the contribution of intellectual ability as an independent domain of lecturers.

The practical implication is that the success of lecturers in tri dharma activities is an important policy for the academic community. This is marked by their success in producing high performance, not only for them but also for management study programs and universities. In addition, the study concludes with a location model that can be used as an important tool by university leaders in conducting their national and international business because this model can also be applied in various sectors other than the higher education sector.

Research limitations/implications: This analysis is limited to only three variables taken for research in 2021. Therefore, future research in this area is encouraged to use more variables related to competency strengthening for improving the performance of university lecturers and apply the analysis on a longitudinal basis in order to obtain results that cover a wider range of aspects of intellectual ability, competence, and performance and allow observation of the development of the matrix over time.

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Author Contribution

Author 1: conceptualization, original draft writing, data curation, formal analysis, methodology, analysis, and statistical data processing.

Author 2: review and editing, writing review and editing, validation.

Author 3: review and editing, writing review and editing, supervision, validation.

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Conflict of Interest

The authors state that there is no conflict of interest

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