Influence of Leadership Behaviour, Academic Culture and Innovative Behaviour in Effective Teaching of Lecturers

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Abstract:- Universities are now designing and participating in the world of Education and creating new innovations and effective ways of teaching. In addition, to meet market demand, especially now is a very interesting era for millennials and they are the generation of technology literacy Likewise the equal role of lecturers to actively participate in technological developments by making teaching innovations. This fact will be the basis and purpose of this study to examine whether leadership Behaviour, academic culture and innovative Behaviour will affect the effective teaching of lecturers. The questionnaire used a small target population of lecturers at 5 universities in Jakarta and surrounding areas and produced 101 respondents. This analysis uses the Structural Equation Model (SEM) using the Linear Structural Model (LISREL) version 8.71. After analysis, the results of the study show that Leadership Behaviour, Academic Culture and Innovative Behaviour affect Effective Teaching. And to improve and develop future education methods, it is hoped that further research will add suitable variables in order to find methods to prepare good and qualified graduates, compete and be able to take control of developments in the technological world, and develop innovations to be able to compete in the global world.

Keywords:- Leadership Behaviour, Academic Culture, Innovative Behaviour, Effective Teaching.

I. INTRODUCTION

The period of technological development and the current millennial era, technological development is very worldwide and the dissemination of information can no longer be dammed. Very often we see children under five are so smart to play their fingers on a tablet. (DOI: 10.31004 / obsession.vli1.26) [11]

Changes in information and technology in the world are increasingly fast and have entered into a new era or a new revolution, namely the industrial revolution 4.0 or the fourth world industrial revolution, where information and communication technology will become the most decisive basis in human life. Many universities or schools in Indonesia are designing majors in the field of technology and communication to meet market demands, especially now that this is a very interesting era for millennials and they are the generation of technology literate so that the

parties involved in this matter Education organizers are competing to meet market demand for knowledge. Along with the development of these technologies, the government is also very supportive of these developments and the government hopes that the organizers of Education will always be ready to create good graduates and are able to develop innovations to be able to compete. This is a very important and crucial thing for everyone, both for now and for the future of a country (Kanematsu & Berry, 2016).

This research is motivated by technological developments, where the lecturers are not ready to follow and are ready to respond to the wishes of the students. Millennial children are now very much using technology for learning, because according to them this will be very effective and efficient to achieve optimal results. This is the problematic of the lecturers by seeing the existing conditions and the phenomenon of technological development, where the lecturers have difficulty adjusting these developments. So the lecturers still apply the old ways of teaching. That is the main reason that lecturers must participate in being prepared to face this by making new breakthroughs or innovations in terms of developing ways of learning and teaching by adjusting to millennial children. As mentioned by Paul R. Burden and David M. Byrd [2] "An effective teacher must be able to integrate knowledge content with the specific strengths and needs of students to ensure that all students learn and perform at high levels". And Mai Neo and Ken T. K. Neo [10], "multimedia-oriented projects, like many other problembased learning solutions, can be used or as innovative and effective tools in the problem-based learning environment for the acquisition of problem solving skills". Very often the process of going there is not supported by the leadership of the organization and does not see the response of the students. This process must be supported by the leadership of higher education so that lecturers strive towards these innovations. If this is done in a sustainable manner it will make innovation a culture within the organization. "A need for formal leaders and academics to reach agreement on evidence of effective leadership in learning and teaching; academics sharing innovations to effectively lead teaching teams and to promote quality teaching experiences for students; and mentoring colleagues in learning and teaching ".

(Anne Hofmeyer and Brenda Helen Sheingold George) [13] The government is very hopeful that education organizers will take part in promoting the development of the quality of education, the development of research and the level of innovation that is consistent and supports readiness in a world of higher competition, especially in the era of the industrial revolution 4.0

This research is aimed at educational organizations that are managed by the private sector. The leadership of the Education organizer is expected to participate in developing Education technology by giving birth to innovations. Leaders must support the lecturers to participate in conducting research to find ways how to make effective teaching methods.

The government is now aware that the ability and competitiveness of universities in Indonesia, whether public or private at the national, global or international level is still low. This can be known from various national and international media and at the same time statements from the Minister of Research and Technology and which are in line with the results of the ranking of the best universities in the world published by QS WUR 2019/2020, that Indonesia succeeded in placing 9 high schools in the ranking This year. QS WUR also becomes a reference from the official rating and also becomes a reference from the Ministry of Research and Indonesian Universities in order to measure the quality standards of universities in Indonesia in the framework of leading world-class universities. Especially at the international level, the facts show that Indonesia's ranking is still low, including 9 State Universities in Indonesia in the 2019/2020 WUR ranking.

There are four ranks taken by Asian countries, and Indonesia is ranked 87th out of 157 countries. It can be said that Indonesia's position is worse than the five ASEAN countries, but it is better than the two BRICS members, namely India and South Africa.

In addition to academic culture, which influences the implementation of education well the second is managerial effectiveness which has a close relationship with the leadership role played by a leader in an educational organization. To get maximum and satisfying work results, the third one that influences the implementation of a good and maximum Education program is innovative Behaviour carried out by lecturers who are supported by organizational leaders. The fourth thing in influencing the improvement of education at the University is effective teaching or teaching effectiveness conducted by lecturers. In this case, there has not yet been found an effective matter in carrying out teaching duties of lecturers, and if it has been achieved and produce jobs with better quality and ultimately is for the progress of the organization and for the achievement of reliable graduates.

The objectives of this research are:

- > Test whether leadership Behaviour has an effect on effective teaching
- > Test whether academic culture has an effect on effective teaching?
- > Test whether leadership Behaviour influences Innovative Behaviour?
- > Test whether academic culture has an influence on innovative Behaviour?
- > Test whether innovative Behaviour has an effect on effective teaching?

In the environment of higher education organizations, we have seen various kinds of highlights addressed to educational institutions or organizations. The criticisms that are addressed are not far from the problem of quantity and quality of education. Especially regarding the quality, or the quality of the graduates and also the issue of competence of the graduates because arguably the graduates are very far from what is expected by the community because the graduates are unable to compete and are reluctant to improve their quality in order to increase competitiveness. Here we need a form of leadership that is reliable and is interpreted to be something implementing and influencing people, members in a group or organization with members, or others to provide mutual support to achieve their goals. Then let's look at quotations from House, et al, Yuki [3] who argue and define leadership as an ability of a person to influence, motivate and make others able to contribute towards the effectiveness and success of an organization.

Laurie J. Mullins [9] also defines that leadership is: "the influence of one person influences the Behaviour or actions of other people relationship through is the Leadership ". Someone can be influenced by the actions and Behaviour of someone else in a relationship where a person can be influenced by his Behaviour called Leadership. If the definition of leadership mentioned above is associated with Behaviour, then leadership Behaviour is a relationship where the actions and Behaviour of people can be influenced by others.

In an educational organization the term is Academic Culture and is considered to be very useful and has an important role in the process of developing the University and ultimately it will improve the quality of Education, because academic culture will be a reference and guide for the University to plan, act and carry out tasks and be able to finish work well. and right. Therefore it is fitting that academic culture must be built in various Education providers, namely colleges or universities and is expected to be a driver in realizing the goals of the University. Furthermore in connection with that as explained by Shen and Tian (2012): "Academic culture on campus is actually an external reflection of shared values, spirits, norms and also the Behaviour of people on campus who are always ready to pursue and develop their studies and research. This can be realized in rules and regulations, Behaviour patterns and material facilities. Academic culture can also be seen

from an academic perspective, academic sprit, academic ethics and academic environment ". It is explained here that the statement shows that the academic culture on campus is actually an external reflection of the values, passion, norms, and also the Behaviour of people on campus who are always ready to pursue and develop their studies and research. This can be realized in rules and regulations, Behaviour patterns and material facilities. Academic culture can also be seen from an academic perspective, academic sprit, academic ethics, and academic environment.

The role of lecturers and lecturer performance will greatly determine the quality of a university can be realized if the lecturer carries out his tasks with full creativity through innovative Behaviour. Innovative Behaviour can be used as a definition that is something that is deliberately in the work, work groups and organizations for a given benefit, so that new ideas can be generated, improved, and realized. Matters related to and closely related to the creativity of organizational members consisting of the emergence of new ideas and benefits, related to the processes and procedures of innovative Behaviour (Amabile, 1988) and implementing creative ideas (Anderson and West, 1998). What do we know about effective teaching? When viewed from the terminology different words from effective and teaching. Teaching in this context is defined as individuals who are willing to give time and opportunity to students to be taught and given lessons or learning. Often we see there are students or students do not understand what is taught by teachers and vice versa lecturers also can not always understand and understand what is meant by students or students.

This incident is closely related to the theory and previous opinion that Ramsden [12] underlined that the purpose of teaching is actually very simple, which is to make students understand what is being taught. However, in the teaching process, it is not that simple. Teaching will always involve enthusiasm and efforts to create and build a good understanding and understanding of the students so that they are able to conceptualize a phenomenon that occurs then what is taught will be expressed in ideas with and in this case pouring ideas in ways that can be easily understood and can be accounted for by scientists scientifically.

The novelty of this research is: 1. The researcher concludes that compared to previous studies using partial variables and no variables were used but simultaneously. 2. Innovative Behaviour variables as intervening variables have not been found in previous studies. 3. There is no research that covers all the variables mentioned above in full. 4. There has not been one previous study that raised the effective teaching of lecturers as a dependent variable in a study of lecturers from several private universities in Jakarta and surrounding areas, so researchers have difficulty finding more accurate references.

II. METHODOLOGY

Based on the results of previous studies and supported by the theories that have been stated previously, then the conceptual framework of the research is compiled with the path analysis as follows:

Figure 1: Research Conceptual Framework

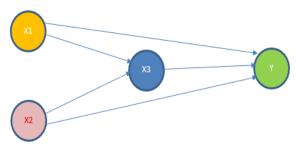


Fig 1

X1 = Leadership Behaviour (PK);

X2 = Academic Culture (BA)

X3 = Innovative Behaviour (PI);

Y = Effective Teaching (ET)

➤ Hypothesis

Based on the hypotheses and research model as seen and made above, the hypotheses formulated from this research are made as follows:

Hypothesis 1: Leadership Behaviour has a significant and positive effect on effective teaching

Hypothesis 2: Academic culture has a significant and positive effect on effective teaching

Hypothesis 3: Leadership Behaviour has a significant and positive effect on Innovative Behaviour

Hypothesis 4: Academic culture has a significant and positive effect on innovative Behaviour

Hypothesis 5: Innovative Behaviour has a significant and positive effect on effective teaching

The following are the variables used for the above research:

- Independent variable (i.e. i.e. i.e. variable) that gives an influence and also gives a change in the dependent variable and whether it has a positive or negative relationship than the other dependent variable. In this study there are 2 variables which are used as independent variables, namely leadership Behaviour (X1), academic culture (X2),
- Mediating variables, namely as intermediary variables and whether they are influenced by innovative Behaviour (X3)

> Location and Research Object

Location and object of this research were conducted at 5 private universities in Jakarta and surrounding areas and as the subject of this study were lecturers, especially lecturers in economics.

> Sampling

The population in this study is the lecturers who have received the title of S2 (Strata 2) education from 5 private universities in Jakarta and surrounding areas. In particular, the Faculty of Economics lecturers numbered 101 people and the determination of the number of samples using the Slovin formula with a degree of confidence of 95%. The method used to draw samples is to use a survey of lecturers. Data needed in this study are primary data from respondents. Primary data collection methods used "Questionnaire Method", while the measurement method with a Likert scale is a scale used to measure attitudes, opinions, perceptions of someone about social phenomena (Sugiyono, 2008).

➤ Data Analysis Method

The data analysis that researchers used was carried out using Structural Equation Modeling (SEM) with the Linear Structural Model (LISREL) aid version 8.71. With Lisrel, one can test the relationship between latent variables, and their indicators (Ghozali, 2012: 7). The validity and reliability of the constructs of the indicators in this study is to use Hair Confirmatory Factor Analysis (CFA), et al., (2010) to state if the construct has good reliability when the Construct Reliability (CR) value ≥ 0.70 and the variance extracted value ≥ 0.50 .

III. RESEARCH RESULT

After being tested with Data Analysis using data processing like that above, it will get the results and can be seen as shown in Figure 2 below:

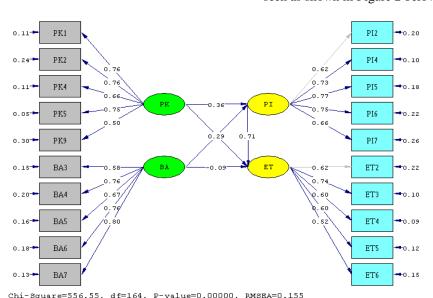


Fig 2:- Value Loading Factor Order

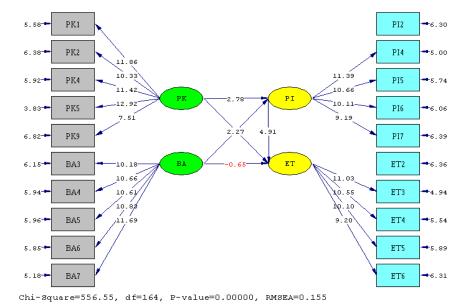


Fig 3:- Value of t Order

Based on Figure 1 and Figure 2 above, it can be seen that there is a negative error variance value, namely the relationship between academic culture and effective teaching. If there is an error variance that is negative, then the observed variables in the equation will be removed from the model.

The initial step of the analysis is carried out from the latent construct of the aspects to the indicators. Based on the results of the analysis of the data above shows that the value of the loading factors are all above $0.5\ (>0.5)$ and all the calculated t values needed to test the significance of the factor loading values are greater than $1.96\ (>1.96)$. This is to say that all items are valid and significant. A summary of the results of the analysis can be seen in the following table:

Latent	SLF	Error	CR	VE	Conclusion
Variable	Score	score	Score	Score	
PK1	0.76	0.15	0.93	0.74	
PK2	0.76	0.20			Valid and
					Reliable
PK4	0.66	0.16			
PK5	0.75	0.05			
PK9	0.50	0.30			

Table 1:- Validity and Reliability of PK Latent Variables (Leadership Behaviour)

SLF = Standardized Loading Factor, Good if the score is \geq 0.50

 $CR = Constructability Realiability, Good if the score \ge 0.70$

VE = Variance Extract, Good if the score is ≥ 0.50

In the next stage it is seen that based on table 1 above the PK latent variable has good reliability with CR Score of ≥ 0.70 and VE Score ≥ 0.50 and has good validity with SLF Score ≥ 0.50 so it can be concluded that the PK variable has good validity and reliability.

Latent	SLF	Error	CR	VE	Conclusion
Variable	Score	score	Score	Score	
BA3	0.58	0.11	1.00	0.77	
					Valid and
BA4	0.76	0.24			Reliable
					Kenabic
BA5	0.67	0.11			
BA6	0.76	0.18			
BA7	0.80	0.13			

Table 2:- Validity and Reliability of the BA Latent Variables (Academic Culture)

SLF = Standardized Loading Factor, Good if the score is ≥ 0.50

 $CR = Constructability Realiability, Good if the score \ge 0.70$

VE = Variance Extract, Good if the score is ≥ 0.50

Based on the table above latent variables BA has good reliability with CR Score of ≥ 0.70 and VE Score ≥ 0.50 and sounds good validity with SLF Score ≥ 0.50 so it can be concluded that BA variable has good validity and reliability

Latent	SLF	Error	CR	VE	Conclusion
Variable	Score	score	Score	Score	
PI2	0.62	0.20	1.00	0.73	
					Valid and
PI4	0.73	0.10			
I 14	0.73	0.10			Reliable
PI5	0.77	0.18			
PI6	0.75	0.22			
P10	0.73	0.22			
PI7	0.76	0.26			
		5.20			
1	1	ı	ı	1	1

Table 3:- Validity and Reliability of PI Latent Variables (Innovative Behaviour)

SLF = Standardized Loading Factor, Good if the score is \geq 0.50

 $CR = Constructability Reliability, Good if the score \ge 0.70$

VE = Variance Extract, Good if the score is ≥ 0.50

Based on the table above the latent variable PI has good reliability with a CR Score of ≥ 0.70 and VE Score ≥ 0.50 and sounds good validity with an SLF Score ≥ 0.50 so it can be concluded that the PI variable has good validity and reliability.

Latent	SLF	Error	CR	VE	Conclusion
Variable	Score	score	Score	Score	
ET2	0.62	0.22	1.00	0.74	
ET3	0.74	0.10			Valid and
					Reliable
ET4	0.62	0.09			
ET5	0.60	0.12			
ET6	0.52	0.15			

Table 4:- Validity and Reliability of ET (Effective Teaching) Latent Variables

SLF = Standardized Loading Factor, Good if the score is \geq 0.50

CR = Constructability Realiability, Good if the score ≥ 0.70

VE = Variance Extract, Good if the score is ≥ 0.50

Based on the table above the latent variable ET has good reliability with CR Score of ≥ 0.70 and VE Score ≥ 0.50 and sounds good validity with SLF Score ≥ 0.50 so it can be concluded that the ET variable has good validity and reliability.

➤ Goodness of Fit (GOF) Analysis

The overall suitability test of the model or overall model fit is related to the analysis of GOF statistics and the results of GOF statistics are in Figure 2. For the suitability of the model (model fit) is generally good and the criteria for the model fit are as in table 5 below.

Indicator GOFI	Calculated GOFI Score	Standard Score for Good	Conclusion
		Fit	
(RMSEA) Root Mean Square Error of	0.16	≤ 0.08	Less Fit
Approximation			
(NFI) Normed Fit Index	0.91	≥ 0.90	Good Fit
(NNFI) Non-Normed Fit Index	0.92	≥ 0.90	Good Fit
(CFI) Comparative Fit Index	0.93	≥ 0.90	Good Fit
(IFI) Incremental Fit Index	0.93	≥ 0.90	Good Fit
(RFI) Relative Fit Index	0.89	≥ 0.90	Less Fit

Table 5:- Goodness of Index (GOFI)

Based on the table above, there are 4 out of 6 GOFI indicators showing Good Fit and can be it was concluded that the examined variable models are good and the data support the model for research of these variables.

Structural Equations

Fig 4:- Hasil Structural Equations

Based on the results of Structural Equations in Figure 3 above, it can then perform an analysis of the suitability of the whole model and the results of the analysis of the GOF measurements above there are 2 indicators that are not fit that refer to the Standard Score for Good Fit size, namely Root Mean Square Error of Approach (RMSEA) with the calculated GOFI Score 0.16 (less Fit because it is below the standard ≤ 0.08 and Relative Fit Index (RFI) with the calculated Calculated GOFI Score 0.89 (less Fit because it is below the standard ≥ 0.90 .

IV. RESEARCH DISCUSSION

Based on the results of the Structural Equations the PK variable has a positive and significant effect on the PI variable. with the value of t obtained for 2.84> 1.96 with a non-standard coefficient (unstandardized coefficient) of 0.36. and BA variable has positive and significant effect on PI variable, with the value of t obtained for 3.85> 1.96 with its unstandardized coefficient of 0.52, the PI variable has a positive and significant effect on the ET variable. with the value of t obtained for 4.91> 1.96 with its unstandardized coefficient of 0.71, the PK variable has a positive and significant effect on the ET variable. with the value of t obtained at 2.27> 1.96 with the unstandardized coefficient of 0.29, likewise the BA variable has a negative effect and indicates an insignificant presence on the PI variable. t value obtained is -0.65 <1.96 with its unstandardized coefficient of - 0.09. Here will be discussed and explained the first: Based on the results of testing the hypothesis, then the explanation for the hypothesis The direct influence of Leadership Behaviour on Effective teaching, there is a positive influence, this is in line with research by Saowanee Sirissookslipa, Wallapha Ariratanaa, Tang Keow Ngango [14], with the statement "Therefore the two types of

leadership style are able to predict the outcomes of teacher effectiveness, with supportive leadership, the most on teacher effectiveness". So this study supports the leadership hypothesis of a direct and positive effect on effective teaching. The results of the second hypothesis analysis are that academic culture does not have a positive effect on effective teaching. In contrast to the Afriza research (2019) using Academic Culture as a mediating variable, stating that Academic Culture has a direct positive effect on teaching effectiveness. Previous studies found no innovative Behavioural variables as a mediating effect on effective teaching. The research clearly shows that there is a significant and positive influence of innovative Behaviour on effective teaching, and this is the novelty of this research. So it was clear that there was a significant and positive effect of innovative Behaviour on effective teaching. This will be the most important part to be applied in future education methods.

With the above explanation it can be concluded that previous research with the Effective Teaching variable as dependent but not using Innovative Behaviour as mediating, and the results show that in this study stated that innovative Behaviour is very influential on effective teaching.

V. CONCLUSION

Based on the analysis of the results of the study it can be concluded that the application of Innovative Behaviour has a positive and significant impact on the Effective Teaching shown from the GOFI Score Good Fit. The object of research is not only in Jakarta and its surroundings but can also be extended to other provinces. The results of the implementation research of this study have an influence on organizational competition. Education has not significantly made innovative Behaviour as an academic culture and it is recommended to immediately implement it, this study reinforces the results of previous studies.

VI. SUGGESTION

Efforts to increase the effectiveness of quality teaching in universities, especially private universities, can be achieved with an increase in various elements of quality as well. By increasing the leadership Behaviour of superiors, which is conducive, giving direction, academic culture within the organization or university and the commitment of the lecturers to always wish to always have ideas aimed at improving learning methods on campus in

particular and the Indonesian education method and this innovative Behaviour will also invite other lecturers to keep trying to support and improve educational methods in general. The most recent method at this time is the online teaching method because this innovation is very popular with millennials. This must be accommodated by schools and especially universities because it will provide more effective learning motivation and ultimately will also improve effective teaching. If this is improved, it will produce reliable, quality graduates in the future. This research still needs to be developed by adding better and more accurate variables to be implemented so that the final results of Teaching Effectiveness can be achieved to the maximum.

REFERENCES

- [1]. Atkins, G. B. dan M. (2002) effective Teaching in High Education. London, Methuen & Co Ltd.
- [2]. Byrd, P. R. B. and D. M. (2017) *Methods for Effective Teaching MEETING THE NEEDS OF ALL STUDENTS*. Kansas State University and University of Rhode Island.
- [3]. Gary Yuki (2010) *Leadearship in Organizations*. New Jersey: Pearson Education, Inc.
- [4]. Gough, S. dan W. S. (2017) Highher Education and Sustainable Development Paradox and Possiblity. New York: Rouledge.
- [5]. Heollenbeck, J. A. W. I. dan J. R. (2010) Organizational Behaviour, securing competitive advantage. John A Wagner III dan John R. Heollenbeck.
- [6]. Jones, J. M. G. dan G. R. (2008) *Understanding and Managing Organizational Behaviour*. New Jersey: Pearson Education, Inc.
- [7]. Kompas 14 August 2019 (2019) 'Index modal Manusia Indonesia masih kalah jauh dibanding Singapura dan Vietnam'.
- [8]. Lubis, C. P. 2004 (2015) 'Implementasi Tri Dharma Perguruan Tinggi dalam Mendukung Disiplin Nasional'.
- [9]. Mullins, L. J. (2010) 'Management and organisational Behaviour', 9th Editio.
- [10]. Neo, M. N. and K. T. K. (2001) 'Inovatif teaching: Using multimedia in a problem-based learning environment', *Educational Technology & Society*, 4(4) 2001).
- [11]. Pebriana, P. H. (2017) 'Analisis Penggunaan Gadget terhadap Kemampuan Interaksi Sosial pada Anak Usia Dini', *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*. doi: DOI: 10.31004/obsesi.v1i1.26.
- [12] Ramsden, P. (2002) Learning to teach in Higher Eduction. London. Rouledge, 2002.
- [13]. Sheingold, A. H. and B. H. (2015) 'Leadership In Learning And Teaching In Higher Education: Perspectives Of Academics In Non-Formal Leadership', Roles (Contemporary Issues In Education Research, Third Quar.

- [14]. Sirisookslipa, Saowanee, Wallapa Ariratanaa, T. K. N. (2016) The Impact of Leadership Styles of School Administrators on Affecting Teacher Effectiveness, Procedia Social and Behavioural Sciences. Faculty of Education, Khon kaen University, Khon Khaen and 40002, Thailand Schools of Educational Studies, Universiti Sains Malaysia, Minden and 11800, Malaysia.
- [15]. Slameto (2010) Belajar dan Faktor-faktor yang mempengaruhinya. Jakarta: Rineka Cipta.
- [16]. Tse, H. (2007) Profesional Development Through Transformation: Linking Two Assessment Models of Theachers. Reflective Thinking and Practice dalam T. Townsend dan R. Bates. Eds. Handbook of Teacher Education.
- [17]. Venkatraman, R. R. N. dan S. (2010) 'A Pilot Study into International Students' Academic Culture; The Context of Indian Business Students in an Australian University', e-Journal of Business Eduction & Scholarship of Teaching, Vol. 4 No. 2, 2010.
- [18]. Wijatno, S. (2009) Pengelolaan Perguruan Tinggi Secara Efisien, Efektif, dan Ekonomis. Jakarta: Salemba Empat.
- [19]. Xi Shen, dan X. T. (2012) 'Äcademic Culture and Campus of Universities, "Higher Eduction Studies', *Higher Eduction Studies*, Vol. 2 No. 2, 2012