



ACHIEVE Model on Research and Publication Performance

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ABSTRACT

Objective - The number of publications written by Indonesian lecturers and researchers has increased both in terms of quantity and quality. However, it is still lower than some neighboring countries such as Singapore, Malaysia and Thailand. Hence, academics in Indonesia, especially in West Kalimantan, still need to improve their research and publication performance. This research aims to analyze the effect of the ACHIEVE model which stands for Ability, Clarity, Help, Incentive, Evaluation, Validity, and Environment, on research and publication performance.

Methodology/Technique – The research questions that must be answered in this research was whether Ability, Clarity, Help, Incentive, Evaluation, Validity, and Environment significantly influenced the performance of lecturers' research and publications. The data were collected by distributing self-report questionnaires to 100 lecturers.

Finding - The data were also supported by a secondary source taken from the literature study. Measurement variables were developed from the theory and results of previous studies. The data, then, were analyzed by using multiple linear regression with SPSS software. The novelty in this article is the use of the Achieve model to study research and publication performance in higher education institution.

Novelty - This research suggested that Ability, Clarity, Help, Incentive, Evaluation, Validity and Environment had a significant effect on research performance. The research also found that the Ability had the highest effect on the research performance.

Type of Paper: Empirical.

Keywords: Performance, ACHIEVE, Ability, Clarity, Incentive, Performance.

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JEL Classification: M12, M19.

1. Introduction

Innovation is the newness of things which are used by end users (Miles, 2013), which was firstly used in business sector organizations (BSOs) (Borins, 2001) and is now broadly used in public sector organizations (PSOs) (Joyce, 1998; Horton, 2008; Gault, 2018). The development of the business world is inseparable from the development of technology. When business technology has developed, the need for knowledge-based employees is larger than those with less potential in knowledge.

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Knowledge is an advantage possessed by human resources compared to other resources. In Indonesia, the quality of human resources can be identified from the Human Development Index (HDI). In this measure, education is considered as one of the key factors. The index placed West Kalimantan Province in the "moderate" category. It increases slightly rather than the previous year but is still lower than provinces in the "high" category. Hence, improving the quality of education is the main task of Higher Educations in West Kalimantan in order to prepare high-standard human resources. The quality of lecturers determines the success of the Higher Education process. Higher education strives to improve the quality of human resources through the development of science, one of which is through research. The results of the research conducted will not be beneficial for improving the quality of human resources if it is not shared with other parties (Costa & Monteiro, 2012). Therefore, the dissemination of the results must be available, for example, through academic publications.

The number of publications written by Indonesian lecturers and researchers in Indonesia has increased both in terms of quantity and quality. However, it is still lower than some neighboring countries such as Singapore, Malaysia and Thailand (<http://www.scopus.com>). Similarly, universities in West Kalimantan are still far behind compared to the top 10 universities and research institutions in Indonesia (<http://www.sinta2.ristekdikti.com>). Hence, academics in Indonesia, especially in West Kalimantan, still need to improve research and publication performance.

Human resource performance can be influenced by many factors. Hersey & Goldsmith (1980) called factors that affect performance as the ACHIEVE model which stood for Ability, Clarity, Help, Incentive, Evaluation, Validity, and Environment. A lecturer must have the ability to carry out research. The intended abilities cover the knowledge of research methods, the knowledge related to subject matter, the experience of conducting research and publications, skills in using data analysis tools. In addition, the lecturers should be proficient in using Indonesian and English languages in the academic writing style. Clarity of work goals or objectives is important because human resources will work well if they understand the goals or objectives of the task they are working on. Lecturer job targets are listed in "The Tri Darma of Higher Education", namely Education, Research, and Community service. Lecturers must understand that research and publication are one of the obligations mentioned in "The Tri Darma of Higher Education". Nevertheless, the lecturer's ability will not be maximal if there is no encouragement (help) from the university where he works. Thus, the high performance of research and publication is difficult to achieve. An incentive is a form of appreciation that can motivate human resources. Financial and non-financial awards are believed to increase the motivation of lecturers to conduct research and publications better. Evaluation is the feedback that makes the research more focused. The evaluation allows the researcher to repeat the research and good publications and leave the methods that are less effective according to the direction of the evaluator. Validity shows the legality of the existence of lecturers and their assignments which convince lecturers to perform the main tasks listed in "Tri Darma", including research. The environment shows the suitability of the lecturers with their environment. The appropriateness of lecturers with jobs, co-workers, and institutions will facilitate lecturers in carrying out research and publication tasks.

This paper aims to examine the effect of ability, clarity, help, incentive, evaluation, validity, and environment on lecturers' performance. The results of this study can help college management determine policies to improve their lecturer performance. To start with, this paper provides a review of the current literature as well as the development of the hypothesis in this research. After that, the paper elaborated how the research was carried by describing research samples, variables, test instruments, and the regression model for data analysis. Following this, the paper highlights key results and links them with findings from relevant research. Finally, conclusion and recommendation are presented in the final section for those who are interested in investigating this topic in the future.

Literature Review

Research and Publication Performance

In Indonesia, lecturer performance is measured based on 'the Tri Darma of Higher Education' established by the government, which consists of Education and teaching, Research, and Community service. This study, however, specifically examines the lecturer's performance from 'Research' dimension. Some studies have discussed the performance of human resources using the ACHIEVE model (Nazem et al., 2014; Rajaei & Arghavani, 2016). Some other studies put ACHIEVE as factors affecting human resource performance (Yustin & Utama, 2016).

Ability and Work Performance

Hersey & Goldsmith (1980) proposed the ACHIEVE model to help managers identify factors that cause performance problems and then resolve these problems. According to Rajaei & Arghavani (2016), the ability component includes the knowledge related to the task (formal and informal training that will facilitate the completion of certain tasks), the experience relevant to the task (previous work experience that helps complete successful work), and the functionality related to the assignment (potential abilities or traits that strengthen successful completion). In assigning tasks, managers must consider whether the employee has the knowledge and skills needed to complete the task successfully or not. Employees with better and higher education usually can use capital more effectively and efficiently and create more products.

H1: Ability has a positive and significant effect on research and publication performance.

Clarity and work performance

This aspect refers to the clarity of role that involves understanding and accepting work procedures; where and how the work is done. Employees are required to fully understand organizational problems, main objectives. They must know how to achieve goals and objectives. In addition to that, organizational priorities must be quite clear to employees (Rezaeeian, 1993). Scholars conclude that the clarity of the role of human resources and organizational goals has a positive and significant effect on the performance of human resources (Ahmad & Rehman, 2011; Anderson & Stritch, 2016; Samie, Riahi, & Tabibi, 2015).

H2: Clarity has a positive and significant effect on research and publication performance.

Help and Work Performance

Help refers to organizational encouragement which is support or assistance to employees in carrying out their duties (Hersey, et al, 2001). Organizational assistance includes budget, equipment, and facilities to fulfil commitments. Also, support is needed from other departments and can be manifested in the forms of product availability and quality as well as the adequate stock of human resources (Hersey & Blanchard, 2001). If the employee considers that he receives high organizational support, the employee will integrate organizational membership into their identity and then develop a more positive relationship and perception towards the organization (Rhoades & Eisenberger, 2002).

H3: Help has a positive and significant effect on research and publication performance.

Incentive and Work Performance

The incentive is the stimulation of employees to perform tasks or complete certain tasks (Hersey, et al., 2001). Many people are motivated to complete certain tasks when they receive intrinsic or extrinsic rewards. Humans have social and economic needs. The provision of social and economic demands can increase staff motivation to achieve the organization's goals and plans (Yaghoubi, Rakhsh, Javadi, & Bahadori, 2013).

H4: Incentive has a positive and significant effect on research and publication performance.

Evaluation and Work Performance

Evaluation refers to performance appraisals and feedback for daily performance. The cause of many performance problems is the lack of performance feedback needed (Rajaei & Arghavani, 2016). The ongoing feedback process allows employees to find out how they work. If the employees are not aware of their performance problems, it is difficult to improve their own performance.

H5: Evaluation has a positive and significant effect on research and publication performance.

Validity and Work Performance

Validity refers to the suitability and legality of managers' decisions regarding human resources. Everything related to human resources must be accompanied by evidence and based on performance-oriented policies. According to Nazem, Mozaiini, & Seifi (2014), validity refers to valid manager decisions related to human resources. Managers must consider company laws and policies when making human resource decisions. Yaghoubi et al. (2013) conclude that validity has a significant effect on human resource performance even though the effect is the least among the other factors.

H6: Validity has a positive and significant effect on research and publication performance.

Environment and Work Performance

Environment refers to external factors that influence performance (Hersey, Blanchard, & Johnson, 2001). Person-environment fit occurs when the individual and work environment characteristics consisted of jobs, co-working, and organization are appropriate. Employees can only work according to their environment (Hersey, et al., 2001). Therefore, the suitability of individuals and the environment is very important for improving the performance of human resources.

H7: Environment has a positive and significant effect on research and publication performance.

3. Research Methodology

Sample in this study involved 100 lecturers in West Kalimantan province who had National Lecturer Registration Numbers. The questionnaires were developed from theories and previous studies. Indicators of research and publication performance in this context covered several elements such as the number of research in 1 year, the number of publications in 1 year, the number of journal performance where the lecturer published his/her article, and the number of academic conferences where he/she served as presenters. Meanwhile, the indicators of ability variables were knowledge, experience, and a special skill. The indicators for clarity variables included the lecturer's understanding of the obligation to research and the understanding of the obligation to make a publication. Then, the indicators of Help variable covered budget, work facilities, internal seminar/ training, and encouragement from superiors. Indicators of incentive variable were appreciation in terms of the fund according to achievements and awards from the leader. Indicators of evaluation variable included the presence of a team that reviewed the results of lecturer's research, a team that reviewed the results of lecturers' publications, reviewers that provided feedbacks on research that had been done, and reviewers that provided feedback on publications that had been made. After that, the indicators of validity variable were 'the Tri Dharma' of higher education which regulated the lecturer's workload. Finally, the indicators of environment variables were lecturer-job fit, lecturer-coworkers fit, and lecturer-institution fit.

A validity test was done by comparing Corrected Item-total Correlation value with the standard value with a significance of 5%, which was 0.3610. If the Corrected Item-total Correlation coefficient > 0.3610, the

instrument is valid (Hair, Black, Babin, & Anderson, 2014). Based on the results of the validity test, all statements in the questionnaire were valid. The reliability of this study's scale ranged from 0.6110 to 0.8680 which meant all variables had a Cronbach's alpha coefficient >0.6 . Therefore, it could be concluded that all variables in this research were reliable (Hair, et al., 2014). Hypothesis testing was performed by using a multiple linear regression test, T-test, and coefficient of determination analysis. The sets of the test were administered by using the SPSS software. The classic assumption tests (multicollinearity test, heteroscedasticity test, and normality test) were carried out before the multiple linear regression test.

4. Results and Discussion

The output on the coefficients showed that all tolerance values were above 0.10 and VIF values were less than 10. Thus, it was concluded that the regression model was free from multicollinearity. In the Scatterplot image, the points spread between -2 to 1 and did not form a specific pattern. The regression model concluded that the output visible points spread around the diagonal line so it was decided that the regression model was normally distributed.

Table 1. Hypothesis Test Result

Variable	Ability	Clarity	Help	Incentive	Evaluation	Value	Environment
Coefficient (β)	.250	.201	.168	.268	.083	.133	.132
T stat (Sig. $p<.05$)	.039	.046	.041	.004	.030	.049	.010
R square	.459						

All seven variables included in the regression equation emerged as significant predictors of research and publication performance. As hypothesized, these variables were reported to have significant influences on research and publication performance. The obtained R square indicated that these factors account for 45.9% of the variation in the research and publication performance. Based on the size of beta values, the predictors variables which had the most influence on research and publication performance was incentive ($\beta = .268$), followed respectively by ability ($\beta = .250$), clarity ($\beta = .201$), help ($\beta = .168$), validity ($\beta = .133$), environment ($\beta = .132$), and evaluation ($\beta = .083$).

Aseanty (2016) and Aisha & Hardjomidjojo (2013) investigate empirically the impact of work ability on the performance of human resources. The results of their studies are in line with the results of the present research. The lecturer should have the ability in research methods, theories related to the subject matter, and the English language proficiency. Thus, the lecturers become motivated to conduct research and write scientific publications. Furthermore, the lecturers are required to fully understand organizational problems, main objectives, and organizational goals (Choon, 2016). They must also know how to achieve goals and objectives. The results of this study support several studies (Ahmad & Rehman, 2011; Anderson & Stritch, 2016; and Samie et al., 2015) claiming that the clarity of the role of human resources and organizational goals had a positive and significant effect on human resource performance.

If the lecturers consider that they received high organizational support, they will integrate organizational membership into their identity and then develop more positive relationships and perceptions of the organization (Rhoades & Eisenberger, 2002). Several previous studies have concluded that organizational support has a positive and significant effect on human resource performance (Arshadi & Hayavi, 2013; Darolia, Kumari, & Darolia, 2010; Mohamed & Ali, 2015; Na-nan, Joungtrakul, & Dhienhirun, 2018). The results of this study are congruent with the results of the previous studies where the elements of help should be considered to be accepted by the lecturer in doing their work.

The incentive is a lecturer's impulse to do a task or complete a specific task (Hersey, et al., 2001). Many people are motivated to complete assignments when they receive intrinsic or extrinsic rewards. Individuals have several needs and demand some of them are social and some are economic. Each individual needs adequate income and benefits, security, group membership, respect, growth and proliferation, identity, etc.

Therefore, the provision of some of these demands can increase staff motivation to realize goals and plans. The results of this study support several previous studies which conclude that incentives have a positive and significant effect on the performance of human resources (Condly, Clark, & Stolovitch, 2008; Alfandi & Alkawsawneh, 2014; Al-omari et al., 2017). Najafi, Hamidi, Ghiasi, Shahhoseini, & Emami (2011) argue that the existence of an annual performance evaluation is a major factor that increases work motivation of human resources which ultimately has an impact on the performance of high human resources. Al-qudah & Jordan (2011) suggest that performance evaluation has a positive effect on the performance and effectiveness of human resources. The results of this study, therefore, confirm the results of previous studies. Evaluations should not be perceived merely as a routine. It should be able to encourage lecturers to keep on improving their research and publication performance.

Everything related to human resources must be accompanied by evidence and based on performance-oriented policies. For instance, Yaghoubi et al. (2013) examine the effect of the ACHIEVE model on human resource performance. They believe that validity has a significant effect on human resource performance even though the effect is the least among the other factors under their study. Interestingly, the results of this study seem to reinforce the result of their research. The present study also claims that validity has a significant effect on research performance and publication. Finally, the person-environment fit is very important for improving the performance of human resources. Ahmad & Rehman (2011); Al-omari et al., (2017) mentioned in their study that the environment influences the performance of human resources. The results of this study showed the same results.

5. Conclusion

All seven variables included in the regression equation emerged as significant predictors of research and publication performance. As hypothesized, these variables were reported to have positive influences on research and publication performance. The most influential variable on research and publication performance was the incentive, followed by ability, clarity, help, validity, environment, and evaluation respectively.

For that reason, the management of higher education must keep increasing the incentives for the lecturers in an effort to increase the quantity and quality of lecturer's research and publications. The ability of lecturers in research and writing methods is the main capital in working on research and publications. The ability of lecturers to conduct research and publications can be improved by sending the lecturers to attend training in research methods and academic writing for reputable scientific journals. In addition, higher education management must verify that the lecturers really understand their obligations to research and publish academic papers so as to obey the obligation. These obligations must be valid, stated in regulations, in addition to 'the Tri Darma', also in the indicators of lecturer performance appraisal indicators. Improving research and publications require assistance from university management in the form of supporting facilities. Therefore, higher education management should increase access to scientific journals, increase internet capacity, provide the necessary software, and provide office stationeries. With these facilities, research and publications are easier to do. The suitability of the lecturer with the environment that he interacts with every day also affects the lecturer to conduct research and publications. Higher education management must work towards compatibility between lecturers and university organizations, workgroups, and tasks that must be performed. The results of research and publications by lecturers must be given feedback from experts so that lecturers can do better research and publications in the future.

It should be borne in mind, however, that this study still has some limitations. First of all, the status of the lecturers who were based in public and private higher education institutions was not differentiated where different human resource management might apply. In addition, the research was only conducted in one province so that it could not generalize the results to higher education institutions on a national scale. Therefore, further research is expected to be able to compare research and publication performance between lecturers of public and private universities to find out which factors play a greater role in each category.

Future studies can also expand the number of population and research sample, for example on a national scale so that the results are generalizable.

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