



Supervision Improves Research Performance in Midwifery Departement Poltekkes Semarang

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Abstract. Lecturers as one of the resources in higher education carry out research to fulfill the Tri Dharma of Higher Education. The main task of lecturers is to conduct research. In carrying out research, it is necessary to supervise to get maximum results. Supervision is part of management. The purpose of this study is to examine the influence of information systems and motivation on supervision. Research method: Research population: midwifery lecturers at 6 Semarang Poltekkes campuses Respondents: lecturers who have conducted research Type of research: quantitative, Data type: primary data, questionnaire tool divided: 72 lecturers Analysis technique: multiple linear regression Principal results: Information systems harm supervision. Motivation has a positive effect on supervision. There is a strong influence between motivation and supervision in conducting lecturer research. The results of this research can be utilized in human resource management in conducting supervision.

Keywords: Midwifery; Motivation; Research Performance; Supervision.

1. Introduction

Lecturers as human resources who are professionals. Lecturers must carry out teaching duties, conduct research, and community service. Research needs to be carried out by lecturers to continue to develop qualifications and the development of science following their science [1].

Universities around the world determine the quality of lecturers through strategies to achieve research excellence. Strategies need to be prepared by university managers by preparing evaluation standards for decision-making in supervising research, learning, and community service. A multi-criteria supervisory framework is needed, this has been applied in universities in the Middle East. [2] It is necessary to improve the optimal performance of lecturer research to realize a superior research university.

Lecturers in carrying out research need to get supervision and guidance from university leaders. One part of human resource management, leaders need to develop existing

personnel. To improve the quality of lecturer research, instructional leadership is needed so that the goals of national and international education are achieved. The goal that has been set by UNESCO 2030 is Continuing education that is valid for life [3].

The Midwifery Department is a unique profession that is mostly women. The surrounding community still sees from a gender perspective for women at work. Midwifery lecturers and women leaders face patriarchal and stereotyped culture in society. Facing gender injustice, midwifery lecturers need support from family, spiritual strength, and strong motivation to succeed [4].

The principle of research conducted by midwives is to focus on midwifery services in carrying out midwifery care in the reproductive mass. In Indonesia, research is implemented from health regulation number 02.02/P/8120/2023. Research is expected to support the program that is becoming Current health problems include stunting, tuberculosis, non-communicable diseases, and maternal and child health. Midwifery service standards and practices have been recognized worldwide globally [5].

Midwifery lecturers need to conduct research for Millennials (Gen Y) and the post-Millennial generation (Gen Z or i-gen) so that all activities are inseparable from digital technology and applications. Lecturers as educators must be able to integrate teaching with critical thinking in the global leadership curriculum using the latest technology.[6]

Collaboration of various sciences has been carried out in Australia to develop the right curriculum for graduates. Higher education institutions try to prepare learning and lecturer contributions in developing contemporary knowledge so that students can graduate and work according to the demands of the Health industry [7]. The University of North Carolina (UNC) offers programs for leadership development, practice-based research conduct, and a dissertation incorporating a change plan [2]

Humans are social creatures who have selfish desires. Various efforts can be made to obtain results that are not following his efforts. So there needs to be supervision. Supervision in the world of trading aims to reduce losses to business owners, supervision can be carried out by a team from the institution or called an internal auditor. The role of this auditor in addition to supervising also provides direction and solutions. The purpose of auditors in general is to avoid information asymmetry between university managers and lecturers [8].

Research problems conducted by lecturers are also influenced by motivation and experience in conducting research. Senior lecturers have advantages in conducting research. Beginner and intermediate lecturers need to get assistance in conducting research. However, this effort has not been maximized because other factors influence it, namely individual motivation [9]

Until now, research on lecturer supervision in carrying out research is still very rare. It is important to conduct this research to provide consideration for university management so that maximum supervision of lecturer research. The solution offered in this study looks at the influence of information systems and appropriate motivation on lecturer supervision in conducting research. Supervision is carried out by internal and external from the beginning of the research contract until the end of the contract.

2. Method

The research design is descriptive. The population in the Poltekkes department of the Ministry of Health Semarang, with a random sampling of 72 lecturers. The research instrument uses a questionnaire containing question items system information, motivation, and supervision. Data analysis uses multiple linear regression.

3. Result

The variables in this study consist of variable X1 (information system), and variable X2 (motivation).

Table 1. Multicolorniacity test results

| Model | Collinearity Statistics | |
|---------------------|-------------------------|-------|
| | Tolerance | VIF |
| Information systems | 0.573 | 1.746 |
| Motivation | 0.164 | 6.099 |

Information system variable (x!) with a VIF value of 1.746 and tolerance of 0.573 and motivation with VIF value of 6.099 with tolerance value of 0.164, it can be said to be a clean model of multicollinearity symptoms with an average value of VIF <10 and tolerance >0.10.

Table 2. Results of Multiple Regression Analysis

| Model | Unstandardized Coefficients | | T | sig | Information |
|-------------------------|-----------------------------|-----------|--------|-------|---------------------|
| | B | std Error | | | |
| Constant | 14.480 | 1.493 | 9.697 | 0.00 | |
| Sistem information (X1) | -0.01 | 0.62 | -0.161 | 0.872 | Hypothesis rejected |

| | | | | | |
|--------------------|-------|------|-------|-------|------------------------|
| Motivation (X2) | 0.100 | 0.37 | 2.692 | 0.009 | Hypothesis accepted |
| Regression F | 8.424 | | | 0.001 | |
| Adjusted R2 | 0.521 | | | | |

Based on Table 2 can be analyzed the equation model as follows:

$$Y = 14,480 - 0,010 X_1 + 0,100(x_2) + e \quad (1)$$

Constant value 14.480 If the information system and motivation variables are constant (0), then the supervisory value is 14.480. The regression efficiency of the information system variable (B1) is negative at -0.01 units. This shows that if the information system decreases by one unit, it will reduce the supervisory value of supervision by 0.10 units. The coefficient of motivation regression (b2) is positive at 0.100. this shows that if motivation increases by one unit, it will increase supervision by 0.100. Error = m1.493 error contained in the regression equation above indicates the risk of error, this means that few or many decisions in the rejection or acceptance of the hypothesis contain the possibility of error. Based on Table 2 can be seen the calculated F value is 8.138 and the value F value of the table for 72 respondents with 2 independent variables obtained is 3.130 then it can be concluded that F calculate >F table which is 8.138>3.130 with an significance of 0.00<0.05, then it can be concluded that there is a joint influence of independent variables on related variables. Adjusted R Square from the results of the data processing above is 0.521. This means that the contribution of information system variables and motivation to supervision is 52.1% while other factors as much as 47.9% outside the model that was not detected in this study.

The first hypothesis is that the information system negatively affects the supervision of research implementation in the midwifery department of the Semarang Poltekkes. The information system variable (x1) has a calculated t of -0.161 and the sig value is 0.87 then t calculated < t table. the β coefficient value of the information system variable (X1) is negative of -0.010. this proves that the information system (x1) has a negative significant effect on supervision, thus the first hypothesis is rejected.

The second hypothesis is that motivation has a positive effect on the supervision of lecturer research in the Midwifery Department of Semarang Poltekkes. With a calculated t value of 2.692 and a sig value of 0.009. thus it can be said that t calculate >t table is 2.692> 0.009 or a signification value of 0.009<0.05. β coefficient value of 0.100. this proves that clarity of motivation (x2) has a significant positive effect on supervising the implementation of research as the second hypothesis of H2 is accepted. B

4. Discussion

4.1. The influence of information systems on supervision

Appropriate information is all forms of data or information that are presented in a complete, timely, relevant, usable display of both good formats and easy to understand and use [10]. A business or educational institution's success can be determined by information systems. Because success is obtained when existing information can be utilized, information systems can be an opportunity to succeed by collecting data, processing data, and distributing data appropriately and not limited by geography and time is the basis for the success of information systems. The efficiency and effectiveness of the institution have an impact on productivity and competitiveness [10]

In general, the definition of Supervision is one of the ways of the organization to realize performance effectively and efficiently and support the achievement of the vision and mission of the organization. Supervision is an act of observation carried out thoroughly, by looking at the comparison between what is in the constitution and what should be carried out. Supervision can have a positive as well as significant influence on performance [11]

4.2. The influence of motivation on supervision of research implementation

Motivation is the desire of individuals to perform certain activities to achieve goals. Motivation can be interpreted as a motivating factor of a person. If the leader's Lack of attention to employee motivation causes less than optimal performance and becomes a burden on the leader [11]. Employee supervision and physical work environment have a positive and significant effect on employee performance individually and together [12].

An internal audit is a managerial oversight whose function is to measure and evaluate the system[8] Control assists all members of management in effectively managing their accountability by providing analysis, assessment, recommendations, and comments related to the activities reviewed. Internal Audit is an independent assessment function made in an organization with the aim of testing and evaluating various activities carried out by the organization/company. Many management reports produced by supervisory agencies mention guidance groups whose operations propose and promote the exchange of pedagogical practices among themselves and with supervisors. Instruments standardizing supervisory performance were identified, focusing on the duration of the visit and its objectives, among other issues.[13]

The practice of supervision carried out on teachers to improve their learning is an important emphasis of the Ministry of Education. The national strategy in Oman concerning Education is to provide good learning facilities by increasing supervision to build the quality of Education. [14]

In some monitoring practices, it turns out that it does not correlate with teacher performance and attitudes. Only directive supervision has a positive and significant relationship with teacher performance and attitude. Proper supervision can benefit policymakers, school superintendents, and principals in choosing the right types of supervision practices that can contribute to better teaching performance [15].

Supervisors need to develop mental supervision and provide directive assistance when teachers have problems with low levels of development, expertise, and commitment. Supervisors have the responsibility to solve problems faced by teachers. Teachers who are at a level of development, expertise, and commitment are being equipped with collaborative assistance. In a collaborative approach, teachers and supervisors work as a team to solve problems. The non-directive approach appropriates teachers for high levels of development and teaching commitment [15].

Midwifery education programs have various levels and characteristics in each country. So it is important to provide learning materials in theory and practice appropriately and use the latest knowledge from research results on the focus of normative birth and midwifery care. [16]

Leadership theories often differ when discussing individual styles and models. The values and behaviors that the leader must have are to be comfortable with strength and courage good at maintaining relationships be cooperative and optimistic, with the capacity to lead by example contribute actively, able to give direction, honest, competent, and finally, be authentic, altruistic, collectively have a vision and be forward-looking, have a combination of behaviors that show the leader is inspiring, resolute. [17]

To monitor the implementation of lecturer research, it is necessary to conduct an evaluation. Evaluate the results of lecturer performance in the field of research at the end of each year by inviting all faculty leaders, and units so that each leader can monitor, and control the improvement of lecturer research performance, both ordinary lecturers monitor research performance and evaluate. Lecturers with additional duties and professorial lecturers. The existence of this PPEPP activity will be able to bring up risk management for the quality/quality of research strength [18].

The results of the researcher's work are seen from the recognition of published and acceptable works. Good research is a form of reflection of existing theories and conditions that are being encountered in everyday life. In general, lecturers' research works can be grouped into book publications and journals containing concepts presented in the work that have directly investigated or commented on practitioners' activities; Research results as a form of contribution to official government and non-governmental, national, and international bodies, as well as institutional policies so that supervision is needed [17].

But a person's motivation in doing research is a reaction of achievement to others. In conducting research, it is also necessary to pay attention to the reactivation of leaders and existing organizations and communities. So that the existing motivation needs to be increased to conduct research. And good motivation will be useful for supervising the implementation of assigned tasks. People's reaction to a leader's perceived success is critical to the social and emotional well-being of the entire community. There needs to be healthy self-esteem and a sense of community-based control, as well as collective emotional resilience [17].

5. Conclusion and Suggestion

The right information system provides supervisory benefits to assess the conduct of research. Strong motivation and family support without gender discrimination and conflict in the family. provide ease of research supervision. Effective supervision is supported by information systems and lecturer motivation in conducting research. Agency theory can be used to supervise the implementation of lecturer research. so that the problem that exists in agency theory, namely information asymmetry, which is a condition where agents have more information about the company and the company's prospects in the future than the principal, can be prevented. There is no motive to commit fraud in making activity reports [8].

Author's Contributions

The contribution of the main author is to prepare research materials, the second and third researchers are tasked with strengthening the material and data collection, and the fourth researcher carries out data processing and presentation.

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