# THE EFFECT OF COMPUTER SELF-EFFICACY, COMPETENCE, AND WORK ENVIRONMENT ON THE PERFOMANCE OF UNISNU JEPARA EDUCATIONAL STAFF

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*ABSTRACT*

*This research aims to analyze the effect of computer self-efficacy, competence, and work environment on the performance of UNISNU Jepara educational staff. This study uses quantitative methodology involving 62 educational staff as samples, with data collected through questionnaires and distributed directly to respondents. Data analysis was carried out using Partial Least Square 3.0 software. The results showed that computer self-efficacy and competence have a significant influence on the performance of educational staff. Meanwhile, the work environment does not directly affect performance but has a significant influence on competence. This indicates an indirect effect of the work environment on performance through competence. Further findings also tested age as a control variable for computer self-efficacy. These results indicate that increasing computer self-efficacy is in line with improving the performance of educational staff. However, efforts to improve performance will be more effective if supported by competency development and a supportive work environment so that the performance of educational staff can reach a more optimal level.*

*Keywords: Computer Self-Efficacy; Competence; Work Environment; Perfomance*

## INTRODUCTION

The advancement of information innovation has brought significant changes in various sectors, including in improving performance in the field of education. The performance of educational staff is a fundamental aspect in supporting the successful implementation of education in an institution (Nendi et al., 2024). According to Langi et al. (2022), good performance has a positive impact on the educational institution and bad performance has a negative impact on the educational institution. According to Timpe (1992) and Fadillah et al. (2017), the performance of educational institution staff is the level of achievement of an individual in an educational institution that allows the development of performance. It has been stated. According to Mangkunegara and Prabu (2009), productivity is defined as the result of the quantity and quality of work achieved by educational institution staff in performing their duties in accordance with their assigned responsibilities. Thus, performance can be defined as the results of the work achievements of educational staff which reflect productivity and quality according to responsibilities.

There are several research findings that indicate that the performance of educational staff can be influenced by many factors, including computer self-efficacy, as explained by Rustiana (2006) is a paradigm picture of each educational staff regarding their ability to use computers and software to complete tasks and work. According to Aini (2016), that computer self-efficacy has a positive correlation and a significant effect on librarian performance. Other researchers, such as Kuncoro (2017), Setio (2021), and Triyatno (2017) also found that computer self-efficacy has a positive correlation and significant influence on librarians' performance.

Another factor that affects performance is competence (Bawono & Arifianto, 2023). Competence is an important element required to perform a job (Basri & Umar, 2021). According to Wibowo (2014), competence is the ability to perform a job or task based on skills and knowledge, supported by the attitude required for the job. According to As'ad (2021), competence affects the performance of employees. The results of this study are consistent with Wulandari and Mujanah (2024) that competence affects employee performance. However, this contradicts the study of Fuad (2016) that competence has no direct effect on performance.

Apart from computer self-efficacy and competence, as per Winanda et al. (2023) the work environment is also associated with influencing the performance of educational staff. The work environment has a direct impact on the performance of educational staff in fulfilling their responsibilities to the institution. This is supported studies conducted by Rahman et al. (2022) which found that the working environment affects the performance of staff. However, studies conducted by Fadillah et al. (2017) and Hajiali et al. (2021) stated that work environment is not significant to employee performance.

The main reason why researchers chose UNISNU Jepara as the object of research is the challenges in managing human resources, especially educational staff. Until now, UNISNU Jepara has not had a clear standard for evaluating the performance of educational staff. This can have an impact on uncertainty in performance evaluation. This lack of clarity in evaluation can have an impact on the difficulty of institutions in determining strategic steps to improve the quality of work and achieve optimal organisational goals. Therefore, it is an obligation for institutions to create educational staff who are able to create optimal performance to achieve institutional goals (Ali & Wardoyo, 2021). The variables used in this study are considered the most relevant to the conditions in the field and are in line with the research previous research. Based on the

phenomena that have been described, along with the theoretical gaps, previous research gaps, and these reasons, this research is designed to fill the existing gaps.

The purpose of this study was to analyse the effect of computer self-efficacy, competence, and work environment on the performance of educational staff at UNISNU Jepara. This study also aims to identify the indirect relationship between work environment and performance through competence and test the role of age as a control variable for computer self-efficacy. By understanding the factors that influence the performance of education personnel, the results of this study are expected to provide insight for institutions in designing performance improvement strategies through strengthening competencies and creating a more supportive work environment.

## LITERATURE REVIEW, RESEARCH FRAMEWORK, AND HYPOTHESES
### Performance of Educational Staff
The performance of educational staff has It plays an important role in the success of institutions (Ali & Wardoyo, 2021). Effectiveness of educational staff contribution made by educational staff to the implementation of a job at the institution (Hartati et al., 2020). According to Gailea et al. (2018) the performance of educational staff is the output achieved by individuals with their roles or responsibilities for a certain period with the size, value or work standards of the institution where educational staff work.

Performance indicators for educational staff according to Cheng & Kalleberg (1996), includes:
1. Quality of Performance
   Measuring the extent to which the work of educational staff meets the expected quality standards.
2. Performance Quantity
   Measuring how much work is completed by educational staff. The quantity of performance is more influenced by motivational factors such as the importance of task significance.
3. Motivation and Task Characteristics
   This study also shows that characteristics such as motivation, ability, and the nature of the tasks of educational staff play a major role in influencing both dimensions of performance (quality and quantity).

### Computer Self-Efficacy
Self-efficacy as the basis of the word according to Priyantono (2017), self-efficacy is a person's belief in his or her ability to perform and cope with a task to achieve a goal. According to Rustiana (2006), computer self-efficacy is the belief of every educational worker in his or her ability to use computers and software to accomplish a task or job. It is a paradigmatic image. This is supported by the following studies by Dong et al. (2020), the performance of educational staff who have high computer self-efficacy can improve work performance.

Indicators of computer self-efficacy variables according to Bandura (1997) which are based on self-efficacy theory, includes:
1. Magnitude
   The extent to which individuals feel able to cope with difficult or complex tasks associated with computer use. For example, the ability to solve technical problems or use more complex software.

2.  Strength of Belief
    The level of individual confidence in completing certain computer-related tasks, ranging from the most basic to the more complicated. Educational staff with high computer self-efficacy will usually be more trusting themselves to try out new computer applications or software that they have never used before. themselves to try out new computer applications or software that they have never used before.
3.  Generality
    The extent to which educational staff confidence in using computers can be applied to other types of devices or technology systems.

## Competence

Competence refers to the abilities and skills that educators possess to perform their duties and functions effectively (Jan & Bashir, 2017). According to Hartati et al. (2020), competence is a characteristic of educators related to job performance, which can be manifested in behaviors, behavioral styles, and thinking styles. On the other hand, according to Wulandari and Mujanah (2024), competence refers to ability reflect a way of thinking or behaving, the ability to adapt to situations, and support long-term performance. The competence of educational staff is considered to have a significant influence on individual performance in carrying out predetermined tasks. Therefore, increasing the competence of each individual is considered very important to improve efficiency and effectiveness in carrying out work (Adihardja & Hendarsjah, 2020).

Indicators of competency variables according to Alexandra and Brad (2015) emphasises several indicators of competence, namely:

1.  Knowledge
    Knowledge is an individual's understanding of relevant concepts and information that supports effective task performance.
2.  Skills
    Skills are practical abilities possessed by educational staff to carry out tasks in an efficient manner.
3.  Abilities
    Ability refers to an individual's capacity to practically apply knowledge and skills in a work environment.
4.  Attitudes
    Attitude involves an individual's approach or disposition in performing tasks responsibly.

## Work Environment

The work environment is the place where educational staff carry out their work activities. According to Langi et al. (2022), the work environment is a place for many education workers where there are various aids to help them achieve their goals in accordance with the vision and mission of the institution. On the other hand, according to Nitisemito (2001), the work environment is everything that surrounds education workers and can affect the performance of their duties. The work environment can have a positive impact if it creates a supportive atmosphere. Conversely, an environment that is not conducive can negatively affect the performance of educational staff and their work outcomes in the long term (Baharuddin, 2021).

Work environment indicators by Saidi et al. (2019) which is as follows:

1. Support from Leadership
   The support provided by leaders to educational staff has an important role in creating a positive work environment and motivating educational staff to improve their performance.
2. Workplace Comfort
   A safe and healthy working environment is essential to prevent accidents and increase productivity.
3. Self-development
   Self-development is an opportunity for training and developing the skills of educational staff.

Table 1 presents the main variables analysed include performance of educational staff, computer self-efficacy, competence, and work environment, each with specific indicators measured through related questionnaire items.

**Table 1**
**Variables, Indicators and Questionnaire Items**

| No | Variable | Indicator | Questionnaire Items |
|---|---|---|---|
| 1. | Performance of Education Staff (Y1) (Cheng & Kalleberg, 1996) | Performance Quanlity ($Y_{1.1}$) | The results of my work always meet or exceed the standards set by the institution. ($Y_{1.1.1}$) |
| | | Performance Quantity ($Y_{1.2}$) | I can complete my tasks in accordance with the given time target. ($Y_{1.2.1}$) |
| | | Motivation and Task Characteristics ($Y_{1.3}$) | I am motivated to give my best because the responsibilities given to me are in accordance with my abilities. ($Y_{1.3.1}$) |
| 2. | Computer Self-Efficacy (X1) (Bandura, 1997) | Magnitude ($X_{1.1}$) | I feel able to solve technical problems that arise when using a computer. ($X_{1.1.1}$) |
| | | Strength of Belief ($X_{1.2}$) | I am confident in using a computer to complete my daily work. ($X_{1.2.1}$) |
| | | Generality ($X_{1.3}$) | I can adapt well to changes in the software I use. ($X_{1.3.1}$) |
| 3. | Competence (X2) (Alexandra & Brad, 2015) | Knowledge ($X_{2.1}$) | I keep up with the latest developments in my field of work to remain competent. ($X_{2.1.1}$) |
| | | Skills ($X_{2.2}$) | I have sufficient technical skills to solve technical problems that arise in the course of my work. ($X_{2.2.1}$) |
| | | Abilities ($X_{2.3}$) | I am able to make quick and correct decisions based on the information available. ($X_{2.3.1}$) |
| | | Attitudes ($X_{2.4}$) | I have a strong commitment to carry out my work with full responsibility. ($X_{2.4.1}$) |
| 4. | Work Environment (X3) (Saidi et al., 2019) | Support from Leadership ($X_{3.1}$) | My boss always provides support in my daily work. ($X_{3.2.1}$) |
| | | Workplace Comfort ($X_{3.2}$) | My work environment is comfortable and supports productivity. ($X_{3.2.1}$) |
| | | Self-development ($X_{3.3}$) | The institution provides facilities for self-development and work skills improvement. ($X_{3.3.1}$) |

Source: Documents processed by researchers, 2024

**Research Framework**
Figure 1 is a model for research illustrates how three independent factors, namely computer self-efficacy (X1), competence (X2), and work environment (X3) connect to the dependent factor, which is educational staff performance (Y1). The research design presented below highlights how computer self-efficacy, competence, and work environment influence the performance of staff in education.
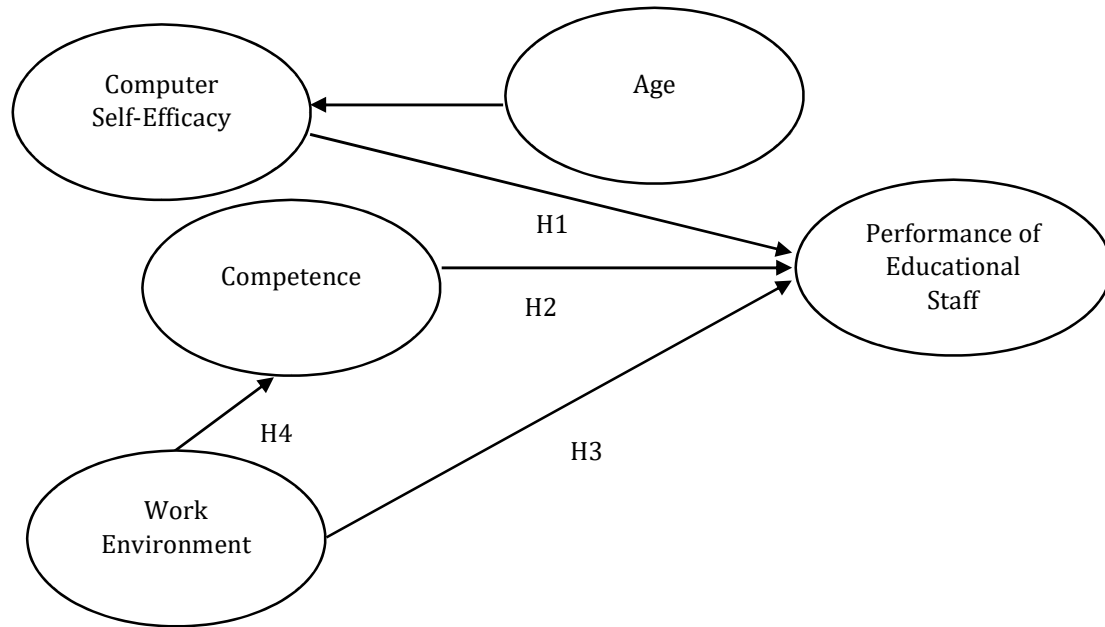
Source: Constructed for this research, 2024

**Figure 1**
**Conceptual Framework**

## Hypothesis

Mastery of technology, especially Computer Self-Efficacy, can be said to be important because without sufficient confidence in using computers, the performance of educational staff will not be maximised, both for individuals and institutions (Numanovich & Abbosxonovich, 2020). Each institution has its own strategy in increasing computer self-efficacy in its work environment. By strengthening the ability and confidence of educational staff in using technology, the productivity and confidence of educational staff will increase, because they feel more capable of completing digital-based tasks. Previous research says that computer self-efficacy affects performance (Katsarou, 2021). So that in this study hypotheses can be developed:

*H1: The Effect of Computer Self-Efficacy on the Performance of Educational Staff*

Apart from Computer Self-Efficacy, competence is also very necessary in an institution to improve the performance of its education staff (Bawono & Arifianto, 2023). With the competence possessed by education staff being a valuable asset for the institution, so that the implementation of job duties and responsibilities can be fulfilled, an institution must develop its potential competencies, and be given a place to process for the progress of the institution (Wulandari & Mujanah, 2024). One institution that implements competency development for education staff is UNISNU Jepara. UNISNU Jepara has developed several competencies such as technical guidance on website management, SIAKAD, SIMAIL, and administrative management training to the faculty administration unit, design training to the LPM unit, security training from desnet to the Database Unit and Information System Development. According to Lestari (2018) competence simultaneously has a major effect on how well people perform. Research by Rahman et al. (2022) and Tambingon and Tewal (2019), indicates that skill level greatly influences the performance of employees in a positive way. This suggests that having

good competencies significantly enhances performance. of educational staff. Therefore, a hypothesis can be developed:

*H2 : The Effect of Competence on the Performance of Educational Staff*

For the successful execution of tasks and timely completion, it is essential for educators to have a supportive and pleasant work atmosphere (Anwar et al., 2022). Such an environment not only enhances the efficiency of individuals and teams but also significantly contributes to the overall advancement of educational organizations (Chang et al., 2020). Research has indicated that the workplace setting positively affects the effectiveness of workers within educational institutions (Antares & Lestariningsih, 2019). According to further research by Indriyani and Dewi (2020), and Yani and Indrawati (2016) the work environment also has a notably positive effect on employees' skills. Therefore, this study will propose a hypothesis:

*H3 : The Effect of Work Environment on the Performance of Educational Staff*
*H4 : The Effect of Work Environment on Competence*
*H5 : The Effect of Environment on Work through Competence on the Performance of Educational Staff*

If educational staff have good computer self-efficacy, they tend to be able to work more effectively and achieve institutional targets. This also encourages increased competence potential in the workplace. Therefore, research on the effect of computer self-efficacy, competence, and work environment on the performance of UNISNU Jepara educational staff is very important. By understanding the relationship between these three factors, leaders can formulate more effective strategies to improve the performance of educational staff at UNISNU Jepara.

## METHOD

The issues outlined in this research, as described in the background and problem formulation, are categorized as explanatory research intended for hypothesis testing (Neuman, 2014). A quantitative approach is employed in this study to assess theoretical hypotheses, determine facts, explore relationships and effects among variables, and deliver statistical analyses, interpretations, and forecasts of outcomes (Creswell, 2014). Questionnaires were used to gather primary data from the educational staff at UNISNU Jepara. For secondary data, resources were collected from institutional publications, available information both printed and online, originating from internal and external sources, including various websites. The analysis of the data was conducted with the help of Smart Partial Least Square (Smart PLS) 3 software.

The population in this study were UNISNU Jepara educational staff, which includes faculties, departments, service units and bureaus with a population of 114 educational staff. For sampling in this study, a nonprobability approach, specifically purposive sampling, was respondent. Following this approach, 62 respondents were selected based on the following criteria: (1) they must be educational staff at UNISNU Jepara; (2) they should utilize computers for their work; (3) they must have been employed for over one year; and (4) educational staff with an age of more than 20 years.

## RESULTS AND DISCUSSION
### Respondent Characteristics
Respondents with age criteria of more than 30 years were 44 respondents (71%) and educational staff aged 20-30 years were 18 respondents (29%). This is because

educational staff with more than 30 years of age are educational staff with longer work experience and tend to correlate with a more stable career path in the institutional environment.

Next, the criteria for male respondents dominated the respondents in this study as many as 38 respondents (61%) when compared to female educational staff as many as 24 respondents (39%). This is because the types of work at UNISNU Jepara mostly require more dominant technical and physical skills, so that more male educational staff are involved.

Furthermore, the characteristics of respondents based on length of service show the dominance of educational staff with a tenure of more than 3 years, namely 49 respondents (79%), followed by educational staff with a tenure of 1-3 years as many as 13 respondents (21%). This is because most of the UNISNU Jepara educational staff work for a relatively long period of time, showing a high level of loyalty to the institution.

## Measurement Model (Outer Model)
### Outer Loading
The validity test aims to measure whether or not the data obtained from the research is valid. Pearson correlation was used as a test of validity. The significance of the Pearson correlation used in this study is considered reliable if the value of the loading factor is 0.7 or higher and fulfils convergent validity (Blumberg et al., 2005).

**Table 2**
**Loading Factor**

| Variable | Item | Outer Loadings | Result |
|---|---|---|---|
| Performance of Education Staff | $Y_{1.1}$ | 0.811 | Valid |
| | $Y_{1.2}$ | 0.763 | Valid |
| | $Y_{1.3}$ | 0.794 | Valid |
| Computer Self-Efficacy | $X_{1.1}$ | 0.940 | Valid |
| | $X_{1.2}$ | 0.921 | Valid |
| | $X_{1.3}$ | 0.946 | Valid |
| Competence | $X_{2.1}$ | 0.848 | Valid |
| | $X_{2.2}$ | 0.796 | Valid |
| | $X_{2.3}$ | 0.841 | Valid |
| | $X_{2.4}$ | 0.811 | Valid |
| Work Environment | $X_{3.1}$ | 0.811 | Valid |
| | $X_{3.2}$ | 0.763 | Valid |
| | $X_{3.3}$ | 0.794 | Valid |

Source: Primary data processed, 2024

From Table 2, the outer loading factor values for each variable exceed 0.7 all variable indicators are declared valid.

### Discriminant Validity and Average Variance Extracted (AVE)
Discriminant Validity and Average Variance Extracted (AVE) values are used to test the validity of variable indicators by ensuring that the indicators are able to reflect the measured variables consistently and have clear differences with other variables (Fornell & Larcker, 1981).

**Tabel 3**
**Discriminant Validity dan AVE**

| Variabel | Discriminant Validity | | | | AVE | Result |
|---|---|---|---|---|---|---|
| Computer Self Efficacy | 0.936 | | | | 0.876 | Valid |
| Competence | 0.598 | 0.824 | | | 0.679 | Valid |
| Performance of Education Staff | 0.678 | 0.721 | 0.790 | | 0.623 | Valid |
| Work Environment | 0.600 | 0.565 | 0.488 | 0.785 | 0.616 | Valid |

Source: Primary data processed, 2024

The validity test uses Discriminant validity is the confidence that the loading factors for each observed variable and its constructs have higher values than the weighted values for other constructs (Sekaran & Bougie, 2016). Table 3 shows that the variables of computer self-efficacy, competence, and work environment are considered valid in this study because they have the highest loading factors compared to other factors.

The average variance extracted, known as AVE, serves as a metric for assessing validity. When the AVE score exceeds 0. 5, it indicates that the test is valid and meets the criteria for convergent validity (Ghozali, 2016). In Table 3, it is evident that the AVE score surpasses 0. 5, confirming that all constructs in this research are considered valid.

*Reliability Tests*
Reliability tests are used to measure their accuracy and consistency indicators contained in the questionnaire (Sugiyono, 2019). Reliability is tested through the composite reliability value.

**Table 4**
**Composite Reliability Value**

| Variable | Composite Reliability | Result |
|---|---|---|
| Computer Self-Efficacy | 0.955 | Reliable |
| Competence | 0.894 | Reliable |
| Performance of Education Staff | 0.832 | Reliable |
| Work Environment | 0.828 | Reliable |

Source: Primary data processed, 2024

A composite reliability value of 0.7 or higher can be considered reliable (Fornell & Larcker, 1981). Table 4 shows that computer self-efficacy, competence, educational staff performance, and work environment have a composite reliability value of 0.7 or higher. Four constructs are declared reliable.

## Structural Model Testing (Inner Model)
The R square test, known as the coefficient of determination, is utilized to assess how well the independent variable can account for the dependent variable in a research model (Blumberg et al., 2005).

**Table 5**
**R-Square Value**

| Variable | R-Square |
|---|---|
| Performance of educational staff | 0.616 |

Source: Primary data processed, 2024

Table 5 shows that computer self-efficacy, competence and work environment have 61.6% influence on the performance of educational staff while the remaining 38.4% is influenced by variables not relevant to the study.

**Hypothesis Test**

Hypothesis testing is This process involves looking at the tstatistic and comparing it to the t-table. If the t statistic is higher than the t-table number or if the p value is below 0.05, we accept the hypothesis. On the other hand, if the tstatistic is lower than the t table number and the p value exceeds 0. 05, we reject the hypothesis (Hair et al., 2019).

**Table 6**
**Path Coefficients**

| Hypothesis | Variable | Original Sample (O) | T Statistics (|O/STDEV|) | P Values | Result |
|---|---|---|---|---|---|
| H1 | CSE -> PES | 0.398 | 3.487 | 0.000 | Supported |
| H2 | C -> PES | 0.503 | 3.830 | 0.000 | Supported |
| H3 | WE -> PES | 0.249 | 0.227 | 0.410 | Not Supported |
| H4 | WE -> C | 0.565 | 5.186 | 0.000 | Supported |
| H5 | WE -> C -> PES | 0.284 | 2.917 | 0.002 | Supported |
| Variable Control | | | | | |
| Age -> CSE | | -0.238 | 2.424 | 0.008 | Supported |

Source: Primary data processed, 2024

Based on Table 6, Path Coefficients, the explanation is as follows:
1. H1 It can be explained that the t-statistic for the effect of computer self-efficacy (CSE) on the performance of educational staff (PES) is 3.487 greater than the t-table 2.001, with a p-value of 0.000 which means <0.05. So in this study, H1 is accepted.
2. H2 It can be explained that the t-statistic for the effect of competence (C) on the performance of educational staff (PES) is 3.830 greater than the t-table of 2.001 with a p-value in this study of 0.000 which means <0.05 so it can be concluded that H2 in this study is accepted.
3. H3 is rejected in this study because t-statistic for the influence of the work environment (WE) on educational staff performance(PES) is 0.227, which is lower than the t-table value of 2.001. Additionally, the p value is 0.410, indicating it is higher than 0.05.
4. H4 concludes that the t-statistics influence of the work environment (WE) on competence (C) has produced a p value of 5. 186, which exceeds the t table value of 2.001. Additionally, the p value is 0.000, indicating it is less than 0.05. Therefore, it can be concluded that the fourth hypothesis in this research is accepted.
5. H5 this explains why the t-statistic for the direct effect of work environment (WE) on the performance of education employees (PES) is 1.746 while the t-statistic for the indirect effect of work environment (WE) on the performance of education employees (PES) is 1.746. educational staff (PES) through competence (C) can be obtained by (WE -> C) x (C -> PES) = 5.186 x 3.830 = 19.862 which means that The value of the tstatistic for the direct relationship is greater than that of the indirect relationship. However, the tstatistic value for the indirect relationship exceeds the t table value of 2. 001, with a p value of 0. 002, which is less than 0. 05. Therefore,

this study concludes that the work environment through competence affects the performance of educational staff (PES). H5 is accepted.

**The Effect of Computer Self-Efficacy on the Performance of Educational Staff**

The hypothesis shows that computer self-efficacy affects the performance of educational staff. Respondents argue that the more confidence they have in using computers and technology, the better the performance they produce. Meanwhile, respondents' perceptions of the educational staff performance variable are that the performance of educational staff is assessed by their ability to complete tasks efficiently. With the role of computer self-efficacy, educational staff feel their work is more organised, so their performance will be more optimal and productive when working using relevant computer technology and systems. The outcomes of this research align with the results found in studies carried out by Mudrikah et al. (2022) which says that computer self-efficacy affects performance.

**The Effect of Competence on the Performance of Educational Staff**

Based on the results of hypothesis testing, it shows that competence has an influence on the performance of educational staff. This means that the more developed the competencies possessed by the institution, the more the quality of human resources will improve in carrying out their duties. Institutions develop competencies to improve the quality of human resources in carrying out their duties. This statement is supported by the perceptions of respondents who stated that increasing competence carried out regularly will encourage educational staff to show maximum performance.

The results of this study are the same as previous research conducted by As'ad (2021) which states that competence has a significant positive effect on performance. However, this is different from the results of research conducted by Anam (2018) which says that competence does not have a significant effect on performance.

**The Effect of Work Environment on the Performance of Educational Staff**

The results of hypothesis testing show that work environment does not affect the productivity of education employees; respondents' perception of work environment in UNISNU Jepara indicates that good or bad work environment does not affect productivity. No effect of work environment on productivity of educational staff can be due to the comfort of the workplace or less routine self-development.

The findings from this research indicate that the work environment does not significantly influence performance (Fadillah et al., 2017). On the other hand, there is proof that the work environment does have a notable impact on performance (Apridani et al., 2021).

**The Effect of Work Environment on Competence**

The results of hypothesis testing explain that respondents indicated that environmental conditions, both restrictive and conducive, are not considered to have a significant impact on performance.

This study is consistent with the findings of Indriyani and Dewi (2020) who showed that work environment has a significant impact on competencies. However, this differs from the findings of Sultan et al. (2023) positively but not significantly affects the competence of the workplace.

## The Effect of Environment on Work through Competence on the Performance of Educational Staff

Based on the results of hypothesis testing, the performance of educational staff does not only depend on a conducive work environment, but can also be improved through competency development, both from within the individual and those obtained from outside. Better competence will encourage significant performance improvement. With a combination of a supportive work environment and high competence, educational staff can improve the quality and quantity of their work. In addition, educational staff who feel they have competence and work in a positive environment will achieve higher job satisfaction, which in turn has an impact on their productivity and dedication.

The outcomes of this test align with the research by Indriyani and Dewi (2020), which indicates that the work environment positively influences performance by enhancing competence.

## Age as a Control Variable for Computer Self-Efficacy

Based on the results of the original sample, it also shows an O value of -0.238, which means that educational staff with ages under 30 years are more confident in their confidence in using computers and the effect is greater. So that the position of age as a control variable needs to be maintained to strengthen or increase the accuracy of the independent variable research on the dependent variable so that it is not influenced by other factors outside the study. The results of this study have similarities with research that has been conducted by Harahap (2019), Meutia et al. (2022), Zuliyanti and Hidayati (2021) age of educational staff has a positive and meaningful impact on performance and needs to be maintained as a control variable.

## CONCLUSIONS AND SUGGESTIONS

Based on the results of the study, it can be concluded that computer self-efficacy has a significant effect on the performance of UNISNU Jepara education staff, Competence greatly influence how well education staff at UNISNU Jepara perform, whereas the work environment does not impact their performance. It is clear that the work environment significantly affects the competence of UNISNU Jepara education staff, as this effect has been confirmed. Additionally, age acts as a control factor in the connection between computer self efficacy and competence among UNISNU Jepara education staff. The results of the study proved that age plays a role in the relationship between computer self-efficacy.

There are suggestions that can be considered by UNISNU Jepara, it is hoped that it can improve the competence of educational staff in order to improve performance, it is even better if computer self-efficacy training and work environment empowerment are also improved, so that performance will also increase. For future researchers, it is expected to expand the research by adding independent variables such as professionalism. According to Miranda and Kurniawati (2024) research, this is because basically professionalism includes commitment to professional standards, ethics, and integrity, which affect responsibility and objectivity to the performance of educational staff.

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