ROLE AMBIGUITY AND PSYCHOLOGICAL EMPOWERMENT MEDIATE PERFORMANCE MEASUREMENT SYSTEMS TO MANAGERIAL PERFORMANCE

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Abstract: The purpose of this study is to analyze the effect of Performance Measurement System to Managerial Performance with mediation variables Role Ambiguity and Psychological Empowerment. This type of research is causality. This research was conducted on non-profit organization that is 7 Private University in Malang. The sample in this study the educational staff equivalent to the manager, the number of samples in this study was 79. The data analysis method used in this study is SEM PLS using WarpPLS 5.0 software. The results of this study indicate that the Performance Measurement System has a positive effect on Managerial Performance through mediation variables Role Ambiguity and Psychological Empowerment. Performance Measurement System has a positive and significant effect on managerial performance. The Performance Measurement System has an indirect relationship with Managerial Performance through Psychological Empowerment. The conclusion is that this study supports the hypothesis developed by Marginson, et al. (2015), but there are some unsupported hypotheses because of the different research objects that each type of organization has different characteristics.

Keywords: Performance Measurement System, Managerial Performance, Role Ambiguity, and Psychological Empowerment

The management control system at this time is something important in the field of management accounting. According to Anthony and Govindarajan (2012), states that management control systems (SPM) are a necessity in an organization that practices decentralization. One element of the management control system is the allocation of resources which include measurement, evaluation, and appreciation for the performance. Performance measurement systems are expected to help managers understand and realize their role in achieving organizational goals and improving the performance of individuals and organizations. To be able to assess good or bad behavior or assess the performance of managers, there needs to be a performance measurement system.

According to Kaplan and Norton (1996), states that the measurement of non-financial performance is believed to be used to complement the measurement figures for short-term financial performance and become indicators of long-term performance. Therefore it is important to conduct an assessment...
of human resources. The good or bad of human resources owned by the company determines the success of achieving goals. In this case, the manager becomes the spearhead of the company to achieve its goals. Managerial performance is one of the factors that can improve organizational effectiveness. Khairiyah (2015) and Rahman, et al. (2007), prove that the Performance Measurement System has a relationship to managerial performance. This means that Performance Measurement System can provide relevant information on decision making by managers because performance information gives managers more accurate predictions about the state of the environment, resulting in a better decision making with a series of effective and efficient actions and impacts on improving managerial performance (Rahman, et al., 2007).

According to Hall (2008), states that the Performance Measurement System has an indirect relationship with Managerial Performance through role clarity and Psychological Empowerment. According to Saputra (2014), states that role ambiguity occurs when prescription roles contain contradictory or fuzzy elements. This gives rise to role pressure and uncertainty which is an inconsistency in behavior. Marginson, et al. (2014) and Khairiyah (2015), prove that Role Ambiguity has a negative effect on Managerial Performance. Meanwhile, according to Sartika (2017), the clarity of roles has a positive effect on Managerial Performance. According to Thomas and Velthouse (1990), states that Psychological Empowerment is a cognitive construct that refers to the intrinsic motivation of each, which is useful as an encouragement to improve performance. Sartika (2017), proves that Psychological Empowerment has a strong influence or is positively related to Managerial Performance.

The results of the Sartika study (2017), are not consistent with the results of Marginson, et al. (2014) and Khairiyah (2015). According to Sartika (2017), the clarity of roles can have a negative effect on Managerial Performance because the samples taken are from Private Universities that have different characteristics from previous studies conducted in manufacturing companies.

This research was conducted at Private Universities in Malang, namely at 7 Private Universities. This research was conducted at Private Universities because universities provide a significant contribution to development in Indonesia. In addition, because the development of the world of education is now increasingly competing to provide the best service to prospective students and college students. Requires human resources that can drive the success and progress of these private universities. For this reason, universities must also be able to measure organizational performance as a form of performance evaluation through a Performance Measurement System in making decisions both short and long term.

The purpose of this study was to examine the effect of Performance Measurement Systems on Managerial Performance with mediating variables Role Ambiguity and Psychological Empowerment. From this explanation, it is expected that broadly this research will contribute to the field of education by improving the quality of service or the performance of private universities in Indonesia.

HYPOTHESIS DEVELOPMENT
Effect of Performance Measurement System on Managerial Performance

Previous research states that the Performance Measurement System affects Managerial Performance. Research results of Rahman, et al. (2007) and Khairiyah (2015), stated that the Performance Measurement System has a positive effect on Managerial Performance. The Performance Measurement System provides information that is relevant to decision making. This information is believed to be able to help managers understand cross-functional relationships that lead to better and appropriate problem solving and decision making (Banker, et al., 2002). So that it can be said that the Performance Measurement System has a positive relationship to Managerial Performance because it provides relevant information that can improve Managerial Performance.

H1: Performance Measurement System has a positive effect on Managerial Performance
Effect of Performance Measurement System on Role Ambiguity

The Performance Measurement System in relation to increasing the clarity of individual roles is carried out in several ways, namely by explaining these expectations and roles. Explain the right behavior to meet these expectations, and can explain the expectations of a role by providing strategic and operational information of a comprehensive company (Hall, 2008). The results of the study of Khairiyah (2015) and Marginson, et al. (2014), states that the Performance Measurement System has a negative effect on Role Ambiguity.

H2 : Performance Measurement System has a negative effect on Role Ambiguity

The effects of Role Ambiguity on Managerial Performance

According to Kreitner and Kinicki (2014), stating that prolonged Role Ambiguity can cause things such as dissatisfaction with work, erode self-confidence, hinder job performance. So, it can be said that the impact of Role Ambiguity is a decrease in employee performance. Empirical research indicates that Role Ambiguity or role ambiguity will reduce the performance of a job (Marginson, et al., 2014 and Khairiyah, 2015).

H3 : Role Ambiguity has a negative effect on managerial performance

Effect of Performance Measurement System on Psychological Empowerment

According to Spreitzer (1995), states that the dimension in Psychological Empowerment is Meaning, Competence, Self determination, and Impact. Performance Measurement System makes the task of an individual more meaningful (Meaning) because comprehensive information about a strategy and performance can help someone to realize where the organization will move. Information about performance will strengthen an individual’s perception of understanding a goal (Self determination). Competence perception is strengthened by the provision of information that can increase an individual’s understanding of a task, the complexity of the task and the task environment (Rahman, et al., 2007). Researcher Spreitzer (1997), found empirical evidence that access to performance information is positively related to Psychological Empowerment.

H4 : Performance Measurement System has a positive effect on Managerial Performance.

Effect of Psychological Empowerment on Managerial Performance

Meyerson and Kline (2008), explained that Psychological Empowerment is related to how people who are competent or able to feel empowered in their work environment. Those who feel more competent about their abilities and are successfully empowered or have a higher Psychological Empowerment level will show more positive performance. From the explanation of Meyerson and Kline (2008), states that Psychological Empowerment should have a positive impact on Managerial Performance.

H5 : Psychological Empowerment has a positive effect on Managerial Performance.

Effect of Role Ambiguity on Psychological Empowerment

Role Ambiguity is defined as confusion about a person’s roles and responsibilities in an organization. Role Ambiguity can result in job dissatisfaction, erode self-confidence and hinder job performance (Kreitner and Kinicki, 2014). Spreitzer (1996), states that if they want to create clear goals, the task and line of responsibility must be able to improve Psychological Empowerment in their work environment. The low clarity of roles related to individuals who feel less empowered will reduce the perception of the impact (Impact) in their work environment (Spreitzer, et al., 1997). Sawyer (1992), states that individuals who understand work roles tend to take actions and decisions that can affect the end result in their work environment.

H6 : Role Ambiguity has a negative effect on Psychological Empowerment

METHOD

This research is a study of causality. The method used is the survey method using a questionnaire.
The data analysis method used in this study used the Structural Equation Modeling-Partial Least Square (SEM-PLS) approach with the WarpPLS 5.0 program (Latan and Ghozali, 2017). This study uses a population of education staff in 7 (seven) Private Universities in the City and Malang Regency namely Ma Chung University, Merdeka University, Widya Karya University, Kanjuruhan University, Gajayana University, Widagama University, and Malang Islamic University. Based on the population, samples were chosen based on several criteria, namely being a permanent employee in the organization, having served more than one year and serving as assistant chairman or equivalent to a manager. Such positions are as Head of Section, Head of UPT, Head of Subdivision, Head of Study Program and others. These criteria are made as a limitation for research respondents and for selecting respondents who are in accordance with the aims and objectives of this study.

Variable Measurement

Comprehensive Performance Measurement System (PMS) is measured using a questionnaire developed by Hall (2008) and Chenhall (2005), which consists of nine questions. The instrument asks how much information about the Performance Measurement System and its relation to the level of integration in strategy steps. Role Ambiguity was measured using a questionnaire developed by Marginson, et al. (2014). Six questions about authority, responsibility, clarity of purpose and scope of work.

The Psychological Empowerment instrument was measured using a questionnaire developed by Marginson, et al. (2014), and consists of ten questions. The question was made based on four dimensions of Psychological Empowerment theoretically, namely the value of a job, competence, self-determination and influence (Thomas and V ethouse, 1990 and Spreitzer, 1995). Managerial Performance is measured by a questionnaire developed by Hall (2008), consisting of nine questions. The performance referred to in this study is Managerial Performance as a manager’s ability to carry out managerial activities namely planning, investigation, evaluation, supervision, recruitment, negotiation and representation, and overall performance appraisal (Mahoney, et al., 1963). All instruments in this study used a seven-point Likert scale with ranges ranging from points 1 to 7.

RESULTS

In this study, the number of questionnaires distributed was 160 questionnaires, while the questionnaire returned as many as 110 questionnaires. But some questionnaires cannot be used because they are not intended and do not fill in the data or answer the question completely. Questionnaires that cannot be used are 31 questionnaires. The questionnaire meets the criteria and can be analyzed as many as 79 questionnaires or equivalent to 71.81%.

The majority of respondents in this study were 63% male (50 respondents) and the rest were 37% women (29 respondents). The highest age range of respondents is 41-50 years, 37% (29 respondents) the rest above and below that age. The education level of the majority of respondents is S2, which is 47% (37 respondents). Respondents’ positions were dominated by several positions, namely Head of Study Program 22%, Head of Section 20% and Head of Sub Division 19%.

Outer Model

The variables in this study are reflective and formative. Reflective variables are Role Ambiguity and Psychological Empowerment. Based on the Outer Model variable has a composite composite value > 0.70 (RA = 0.931, PE = 0.915). So that the indicators meet the composite reliability criteria, and it can be said that the variables are reliable. The variable data validity test uses the value of Average Variance Extracted (AVE), the AVE value > 0.05 (RA = 0.692, PE = 0.611) means the variable is valid. VIF Full Colinearity value < 3.3 (RA = 2.690, PE = 2.612) means that each construct is also very good, so there is no collinearity problem in the model.

To evaluate the construct of Performance Measurement System and Managerial Performance which are formative concerning VIF and WLS values VIF values per indicator < 5 but there are several indicators that VIF values exceed 5, namely
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SPK 6, SPK 8, SPK 9 and KM 6. So that it can be seen that the value of weight-loading sign (WLS) is equal to 1, which means it meets the recommended conditions.

**Iner Model**

![Iner Model Diagram](image)

**Information:**
- **PMS**: Performance Measurement System
- **PP**: Psychological Empowerment (Psychological Empowerment)
- **RE**: Role Ambiguity
- **MP**: Managerial Performance (Managerial Performance)

**Figure 1 Iner Model**

**Table 1 Path Coefficients and P value**

| Hypothesis | Coefficient Path | P value          | Information    |
|------------|------------------|-----------------|----------------|
| PMS → MP   | 0.295 (Positive) | 0.002 (Significant) | Be accepted    |
| PMS → RA   | 0.206 (Positive) | 0.054 (Not significant) | Rejected      |
| RA → MP    | 0.094 (Positive) | 0.310 (Not significant) | Rejected      |
| PMS → PE   | 0.267 (Positive) | 0.006 (Significant) | Be accepted    |
| PE → MP    | 0.346 (Positive) | 0.018 (Significant) | Be accepted    |
| RA → PE    | 0.711 (Positive) | <0.001 (Significant) | Rejected      |

**Source:** Data processed

The first hypothesis (H1) states that the Performance Measurement System (PMS) has a positive effect on Managerial Performance (MP). The test results on the regression coefficients between the Performance Measurement System and Managerial Performance show a positive effect of 0.295 and significant at 0.002, thus the first hypothesis is accepted.

The second hypothesis (H2) states that the Performance Measurement System (PMS) has a negative effect on Role Ambiguity (RA). The test results on the regression coefficients between the
Performance Measurement System for the Role Ambiguity show the Positive effect of 0.206 but not significant at 0.054. This means that the second hypothesis is rejected.

The third hypothesis (H3) states that Role Ambiguity (RA) has a negative effect on Managerial Performance (MP). The test results on the regression coefficient between Role Ambiguity have a negative effect on Managerial Performance showing a Positive effect of 0.094 but not significant at 0.310 (above 0.05). This means that the third hypothesis is rejected.

The fourth hypothesis (H4) states that the Performance Measurement System (PMS) has a positive effect on Psychological Empowerment (PE). The test results on the regression coefficients between the Performance Measurement System for Psychological Empowerment show the Positive effect of 0.267 and significant at 0.006 <0.05. This means that the fourth hypothesis is accepted.

The fifth hypothesis (H5) states that Psychological Empowerment (PE) has a positive effect on Managerial Performance (MP). The test results on the regression coefficient between Psychological Empowerment Positive effect on Managerial Performance shows the effect of Positive at 0.346 and significant at 0.018 (below 0.05). This means that the fifth hypothesis is accepted.

The sixth hypothesis (H6) states that Role Ambiguity (RA) has a positive effect on Psychological Empowerment (PE). The test results on the regression coefficient between the Role Ambiguity Positive effect on Psychological Empowerment showed the effect of Positive 0.711 and significant at < 0.001. This means that the sixth hypothesis is rejected.

Indirect Effect

The indirect effect of the Performance Measurement System on Managerial Performance is mediated by Role Ambiguity of 0.0261. Whereas for the mediation test the value of VAF Role Ambiguity is 0.0825 or 8.25%. It can be concluded, that the value of VAF 8.25% is included in the category of almost no mediation effect because the value is less than 20% (8.25% < 20%).

The indirect effect of the Performance Measurement System on Managerial Performance is mediated by Psychological Empowerment of 0.1015. Whereas for the mediation test the value of VAF Psychological Empowerment is 0.25925 or 25.9%. It can be concluded that the value of VAF 25.9% is included in the category of partial mediation because the value is delivered between 20% - 80%.

DISCUSSION

Performance Measurement System Positive effect on Managerial Performance. This means that the results of this study are consistent with Rahman, et al. (2007) and Khairiyah (2015), but it is not consistent with the results of Sartika’s research (2017). This means that the Performance Measurement System has a good influence on Managerial Performance. The better the Performance Measurement System in the organization, the better managerial performance will be.

In addition, the results of this study prove that the Performance Measurement System can provide relevant information to managers within the company. The relevant information can provide accurate predictions and are more specific to managers to make the right decisions. It is expected to increase Managerial Performance.

The results of the study prove that Performance Measurement System has a positive effect on Role Ambiguity, but the effect is not significant. This means that the results of this study are not consistent with previous studies namely Khairiyah (2015) and Marginson, et al. (2014). Role Ambiguity according to Chusway and Lodge (1995), defined as a dual role means that employees who have a dual role in the organization are likely to experience Role Ambiguity.

Respondents in this study have a dual role, namely as lecturers and as assistant heads or equivalent to managers in organizations. Respondents in this study were educators indicated to experience Role Ambiguity. This has become a characteristic inherent in private universities. But in organizations
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also still have a good Performance Measurement System that is with the existence of job descriptions. The Performance Measurement System has a positive effect on Role Ambiguity. Role Ambiguity Positive effect but not significant to Managerial Performance. The results of this study are not consistent with Marginson, et al. (2014) and Khairiyah (2015). But the results of this study support the Sartika (2017), states that Clarity of Roles has a negative effect on Managerial Performance.

Based on this research, the characteristic that distinguishes between Private Universities and profit-oriented organizations is the position of organizational members or employees in the company. In manufacturing companies, employees have clear duties and responsibilities, namely the roles they carry out. The employee does not have a dual role. Educators in Private Universities have multiple roles as explained in the previous variable. In addition, based on the results of the research, the Role Ambiguity variable proved to not be a mediating variable between the Performance Measurement System and Managerial Performance.

The results of the study prove that Performance Measurement Systems have a positive and significant effect on Psychological Empowerment. The results of this study are consistent with previous studies conducted by Marginson, et al. (2014), Khairiyah (2015), and Sartika (2017). Their research also stated that Performance Measurement System has a positive impact on Psychological Empowerment (Impact).

Psychological Empowerment has a positive and significant influence on Managerial Performance. The results of this study are consistent with previous studies conducted by Rahman, et al. (2007), Marginson, et al. (2014), Khairiyah (2015), and Sartika (2017). Their research also stated that Psychological Empowerment had a positive effect on Managerial Performance.

Furthermore, Role Ambiguity has a positive and significant effect on Psychological Empowerment. The results of this study are not consistent with previous studies conducted by Marginson, et al. (2014) and Khairiyah (2015). Rahman, et al. (2007), states that role clarity does not provide enough evidence to influence Psychological Empowerment from Managers. Managers in their duties are given authority and responsibility and targets that must be achieved by their superiors, but excessive authority and responsibility will make the manager feel exploited rather than empowered.

The results of this study mean that an empowered individual will work better than individuals who are less empowered. Empowered employees will have intrinsic motivation and show more positive performance so that it can have an impact on increasing performance. Psychological Empowerment contributes to Managerial Performance because it can improve employee performance in an organization.

**Implications**

The results of this study support the assumption of Contingency Theory that no system of controls is universally always appropriate to be applied to all organizations in each situation, it depends on organizational factors and situational factors. Organizational factors and situational factors are explained by mediating variables, namely Role Ambiguity and Psychological Empowerment. This study supports this assumption because several unsupported hypotheses could be due to research conducted on different types of organizations from previous studies.
In general, the results of this study are Performance Measurement Systems Positive effect on Managerial Performance through mediating variables Role Ambiguity and Psychological Empowerment. This means that a good Performance Measurement System in an organization will improve Managerial Performance. A good Performance Measurement System if supported by Psychological Empowerment for employees of the organization and providing relevant information to employees. Psychological Empowerment is done to provide intrinsic motivation to employees so that employees are expected to work better. In addition, provide clear information about their duties and responsibilities so that employees can work optimally or provide their best ability to work.

CONCLUSIONS AND RECOMMENDATIONS

Conclusion
This research aims to examine the effect of the Performance Measurement System on Managerial Performance through mediating variable Role Ambiguity and Psychological Empowerment. The results of this study are not all hypotheses support previous research. The unsupported hypothesis is that the Performance Measurement System has positive effects on Role Ambiguity, Role Ambiguity Positive effect on Managerial Performance and Role Ambiguity Positive effect on Psychological Empowerment. Furthermore, Psychological Empowerment has a partial mediation relationship. The Role Ambiguity proved to not have a mediating relationship between the variable Performance Measurement System to Managerial Performance. From the explanation above, a good Performance Measurement System can improve Managerial Performance through Psychological Empowerment for organizational employees.

Recommendation
Suggestions for future research can do more extensive research in other non-profit organizations such as service companies, hotels or banks because the results can be different. In addition, it can add other variables that can affect Managerial Performance to get a comparison between variables that have been studied with other variables that can be used as research instruments. Further research can also use other mediating variables because the Role Ambiguity variable in this study cannot be a mediating variable. Mediating variables that may be used in future studies such as rewards for performance or reward. Rewards may have a good or positive influence on Managerial Performance.

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