Journal of Business and Economics, ISSN 2155-7950, USA
August 2019, Volume 10, No. 8, pp. 717-733
DOI: 10.15341/jbe(2155-7950)/08.10.2019/003

http://www.academicstar.us

Key Success Factors the Implementation of Performance Measurement System for Lecturer: Evidence from Indonesia

Ietje Nazaruddin, Hafiez Sofyani, Erni Suryandari Fatmaningrum, Caesar Marga Putri
(Department of Accounting, Universitas Muhammadiyah Yogyakarta, Indonesia)

Abstract: The phenomenon of low performance of university lecturers in Indonesia has led to the emergence of an initiative by universities to develop a performance measurement system for lecturers (PMSL). Any factor that becomes the key success to the policy for implementing the PMSL is still an interesting research gap to be studied further. For that reason, this study aimed to examine ethical leadership, organizational support, and participative decision-making policies as PMSL implementation determinants. The latter variable was also analyzed as an intervening variable. Using 203 data from a questionnaire completed by lecturers at Indonesian top private universities (accredited A and in possession of the internationalization program), we tested the hypothesis using Partial Least Square (PLS) approach. The results of this study indicated that there was a positive influence of ethical leadership, organizational support, and participative decision-making for the successful PMSL implementation. Moreover, participative decision-making also played a prominent role in making PMSL implementation a success, namely as an intervening variable. Further discussion is presented in this paper.

Key words: ethical leadership; organizational support; participative decision-making; performance measurement system

JEL codes: G38, H11, H61, H83

1. Introduction

The development of the world and the influence of globalization have put pressure on universities to improve its competitive advantages to compete with other universities. Human resources, in this case, lecturers,are the main actor in driving the competitive advantage for a higher educational institution (Rasheed, Aslam, Yousaf & Noor, 2011). Therefore, one attempt that universities can do to maintain their competitive advantage is to implement a performance measurement system (PMS) for their educators to make their performance more supportive to what the higher educational institutions try to achieve.

Ietje Nazaruddin, Dr., Department of Accounting, Universitas Muhammadiyah Yogyakarta; research areas/interests: performance management system, business ethic. E-mail: ietje_effendi@yahoo.com.sg.

Hafiez Sofyani, M.Sc., Department of Accounting, Universitas Muhammadiyah Yogyakarta; research areas/interests: performance management system and corporate governace.

Erni Suryandari Fatmaningrum, M.Sc., Department of Accounting Universitas Muhammadiyah Yogyakarta; research areas/interests: performance management system and behavior accounting;

Caesar Marga Putri, M.Sc., Department of Accounting Universitas Muhammadiyah Yogyakarta; research areas/interests: performance management system and business ethic.

In terms of the development of universities in Indonesia, the 2018 report of the Ministry of Research, Technology and Higher Education of The Republic of Indonesia shows that the performance of universities in Indonesia is mostly associated with the performance of lecturers working for them which is left behind as compared to the development of universities across the world. One of the main factors is the limited number of research and publications of Indonesian lecturers' research in leading journals. In response to this, the country's government tries to catch up by launching various programs to improve these lecturers' performance. Some of these programs include the development of institutional ranking to complement study program ranking, preparation of the lecturer certification system, and the provision of many grants or assistances to lecturers for research projects, publication, community service, and teaching and learning development.

Ideally, these numerous stimulus programs from the government need to be followed up by all Indonesian universities to improve their lecturers' and, eventually, institutions' performance. This is because when no proper planning is done, these grants and stimuli from the government will only be responded reactively by lecturers, and eventually it will not be directed toward performance improvement, rather for gaining financial benefit only. However, the fact in the field shows that not all lecturers in Indonesian universities are motivated to improve their performance, despite the stimulus provided by the government. It is worsened by the fact that most Indonesian universities have not developed any performance management model. It is this fact which is suspected to be the contributor to the low competitiveness of lecturers in Indonesia as compared to those in other countries (Spekle & Verbeeten, 2014).

An attempt these universities can do to maintain their lecturers' performance quality is to develop a performance measurement system for the lecturer (PMSL). Doing so will allow these lecturers to behave in a way and make decisions which serve the university's institutional goals and objectives (Salleh, Jusoh, & Isa, 2010). The implementation of PMSL will support the aim of making the lecturers behave as the universities wish them to, promote superior performance, and strengthen their discipline ethos which upholds the essence of this institution as a center for innovative teaching and learning (Molefe, 2012). Some Indonesian universities, particularly those accredited A institutions (Excellent), have begun to develop PMSL in their effort of managing their lecturers' performance quality, wishing that it will eventually improve the quality of their graduates.

Some studies on PMSL have been conducted, yet the attention directed towards this topic is still highly limited. Rasheed, Humayon, Awan and Ahmed's (2016) research finds that implementing a performance management system can motivate educators to improve their performance. This performance measurement system is one part of performance management, which plays an important role to improve an institution's performance. Nevertheless, a study finds a contradicting result with Rasheed et al. (2016). This study is conducted by Chan (2001) who finds that PMS does not nessecarilly suit the employees, particularly those who work for profit-oriented organizations and universities. This is because lecturers as the main actors in a university are professionals who follow different professional values from those in the profit-oriented organization. Chan (2001), Maimela and Samuel (2016) also argue that lecturers cannot be managed using a managerialism model as in profit-oriented organizations, i.e., by implementing PMSL. The managerialism model will result in lecturers being required to spare some time for bureaucratical procedures. This will lead to the negletion of their main duties since they will be occupied with administrative tasks, namely reporting their own performance. However, Mather and Seifert (2011) have a different opinion. They believe that to achieve a good performance, a mechanism to manage this performance itself is needed, including for lecturers at universities. They further believe that it is possible that these lecturers cannot manage their own performance, hence performance management needs to be done through a

performance measurement system which has been aligned with the university's goals. PMSL gives clear indicators of achievement targets to be fulfilled by lecturers to support the university's goal achievement. These clear targets in themselves will improve performance (Locke & Latham, 2013), more importantly for lecturers who are just joining the university and might not know yet the duties they have to perform as a lecturer.

While some literature proves that PMS has a positive contribution to performance improvement, it is possible only when PMSL can be implemented effectively (Salleh et al., 2010). Effective implementation of a performance measurement system needs to be supported by a leadership model, in this case the ethical leadership (Walumbwa et al., 2011). From the perspective of a lecturer as the subject of PMSL, PMSL itself is seen as a policy set by the university's top management. The successful PMS policy in public sector is tightly related to the ethical leadership as can be seen from the management's commitment in supporting and promoting PMSL by playing the role as the first and main actors to comply with the regulations they ratify themselves (Cavalluzzo & Ittner, 2004). Another important factor is the organizational supports, i.e., its appreciation to their employees for what they have done for the organization. This supports take both material and immaterial forms. Any employee who thinks that they are supported by the organization will be more strongly committed to the organization and help the institution to achieve its goals and think they are part of the organization, thus they will willingly assume the obligation to implement the policies taken by the organization (Rhoades & Eisenberger, 2002). Additionally, the lecturer involvement in PMSL implementation is also important to be considered (Lipman, 1997; Siengthai, 2011). To make lecturers compliant with PMSL, their participation in the implementation and development of PMSL itself should be made. Lecturers as intellectuals should be treated not only as of the object, but also as the subject of PMSL. This means their aspirations and inputs in developing and refining PMSL should be taken into account by the institution's leaders. This will allow their intention to comply with PMSL policy mechanism to manifest. Based on the argumentation, in more detail this research aims at testing two problems as follows:

1) Do organizational support, ethical leadership and participative decision making have a positive influence on successful PMSL implementation?
2) Does participative decision making serve as an intervening variable of ethical leadership and organizational support's influence on successful PMSL implementation?

Practically speaking, this research gives an important explanation regarding the determinants of successful PMSL implementation at universities and then it can be considered by the managements at these universities, particularly for those who are developing or will develop a PMSL. Theoretically, this research gives a contribution to the development of contingency theory which is tested within the context of study at the public sector in developing countries, in particular at universities in Indonesia.

2. Literature Review

2.1 Supply Chain Management in Emerging Markets

This section is devoted to discuss SCM topics in Emerging Markets which include (1) integration between demand chain and supply chain, (2) product/service development fitting emerging markets (such as focusing on disruptive technology and reverse innovation), (3) differentiation of supply management style and inventory management, (4) consideration of marketing channels, (5) logistics strategy different from advanced markets, (6) strategy considering local government policy and institutional rules such as FTA and TPP.

2.1 PMS and Contingency Theory

The performance management system is one of the important management tools for all types of organization, including nonprofit ones. Nonprofit organizations benefit from this performance management system (Ferlie, Musselin, & Andresani, 2008) since it can improve their efficiency and effectiveness which, in turn, can help them achieve their goals. In many previous studies, the investigation on performance management issues focused more on profit-oriented organizations (Vukšić, Bach, & Tomičić-Pupek, 2014), in which the research results had been implemented widely in business companies. After the new public management era, research on performance management of employees at public organization began to receive some highlight (Sole, 2009). Nevertheless, until recently research on performance management was mostly conducted in government institutions and only a few in academic organizations. Lately, universities have received some pressure to improve their contribution to the development of sciences and social problem solving. These two aspects are tightly related to the role of a lecturer, i.e. conducting research actively participating in the society. Therefore, a comprehensive performance management for lecturers needs to be formulated to drive the harmony between demands placed on the university and the lecturers as the main actors within it.

However, previous studies have concluded that a discrepancy exists between the professional values followed by lecturers and management reform values at a higher educational institution which sounds more like a business organization (Smeenk, Teelken, Eisinga & Doorewaard, 2009). Professionals (lecturers) have their own autonomy which sometimes does not match a university's management reform and they separate their activities from any formal structure (Meyer & Rowan, 1977). This opinion is the reason why PMSL at universities is vulnerable to failure. Despite the great number of studies on PMS (Akbar, Pilcher & Perrin, 2015; Cavalluzzo & Ittner, 2004; Marchand & Raymond, 2008; Peixoto, Musetti & Mendonça, 2018; Salleh et al., 2010; Sofyani, Akbar & Ferrer, 2018; Spekle & Verbeeten, 2014), only a few have been conducted for university realm. Therefore, a study related to this issue is still highly needed in order to answer this gap.

The framework of this research is supported by the contingency theory. Contingency theory is basically a theoretical perspective of organizational behavior which emphasizes on how the contingency factors such as structure and technology influence the organization design and function (Fisher, 1998; Woodward, 1970). Contingency theory claims that there is no one best way to manage, lead and make decisions in an organization (Fiedler, 1964). On the contrary, the optimal action is contingent (depending on) to the internal and external situations. A contingent leader effectively applies their own leadership stype under the right situation to optimize the management and implementation of organization governance to achieve their goals (Ashour, 1973). Based on this, ethical leadership, organizational support and inviting lecturers to participate in making decisions can be taken into consideration as contingent factors for PMSL implementation.

2.2 Performance Measurement System (PMS)

Recent studies emphasize the importance of exploring the dimension of information needed from a comprehensive PMS (CPMS) (Hall, 2008). According to Hall, CPMS is a mechanism to measure performance which shows critical activities of the chain of an organization's activity values and to integrate these measures to a strategy to achieve the company's goals (Hall, 2011). CPMS integrates actions across functional borders, and focuses on strategic results. Comprehensive performance measurement (CPM) is extremely important in supporting an organization and the competitive environment the organization is facing (Chenhall, 2005; Ittner, Larcker, & Meyer, 2003; Nanni, Dixon, & Vollmann, 1992). Therefore, CPMS proves a set of varied actions related to the important parts of the organization, integrating strategic steps across functions in order to achieve

the organization's goals based on its vision and missions (Chenhall, 2005).

One of the PMS which identifies the comprehensive characteristics of a performance measurement system at the organization level is Balance scorecard (B. Kaplan & Norton, 1992). The balanced scorecard is said to have comprehensively measured performance if it gives the measures of an organization's overall performance. This comprehensive measurement model will equip the measurement of financial performance with non-financial performance in such a way that it reflects the strategic performance. Furthermore, CPMS will integrate actions or activities which lecturers should do to the strategies implemented by the university and provide information at every stage of the value chain (Chenhall, 2005; R. S. Kaplan, 2001). Due to the different natures of business and public organizations (Sofyani, 2018), particularly university, in this study's context, PMSL is the PMS which gives a tool to measure performances which include a lecturer's important performances in the tridarma of the university (teaching, research and publication). In addition, the tool measures lecturer's performance from the perspective of structural office dimension, a functional office which is integrated into the university's long-term objectives, targets and strategies.

2.3 Ethical Leadership, Participative Decision Making and PMSL

The principles, beliefs and values about right and wrong are the basis of organizational behavior, thus it is necessary to formulate the right leadership model to influence employees in achieving the goals (Al-sharafi & Rajiani, 2013). Ethical leadership is defined as a process of influencing employees through values, principles and beliefs which go hand to hand with the acceptable norms in the organization. A study on ethical leadership indicates an increased relevance with organizational practices (Walumbwa et al., 2011). One of the causes of the fall of an organization is the unethical behavior of their leaders, management, and professionals (Nazaruddin, Rezki & Rahmanda, 2018; Neubert Wu & Roberts, 2013). Leader's unethical behavior in organizational practices is highly likely to undermine their subordinates' (employees) morals. Therefore, to maintain the positive values and morals in an organization, there is a need for strong ethical leadership bases (Rehman, 2011) or the commonly known simply as ethical leadership (Lee, Kim & Kim, 2013).

Ethical leadership includes behaviors such as trustworthy, inclusive, fair, and those behaviors like extending punishment when employees behave unethically and communicating the importance of ethics (Brown & Mitchell, 2010). The ethical leadership aspects are more complete than transformational or transactional leadership (Piccolo, Greenbaum, Harrtog, & Folger, 2010). Ethical leadership will increase the employee's participation in decision making. Research on ethical leadership generally supports the idea that ethical leadership will have beneficial impacts on an organization (Mayer, Kuenzi, Greenbaum, Bardes & Salvador, 2009).

Social-learning theory (Bandura, 1978) states that employees tend to mimic the behaviors of those they look up to at work and place leaders as a role model for employees due to the visibility and power these leaders have. Thus, when the leaders have strong ethical leadership, the employees will support the implementation of certain policies, in this case PMSL (Mayer et al., 2009). This is also supported by literature of studies on leadership which indicate that an effective leadership practice can improve the organization's overall performance due to the improved commitment, involvement, and motivation of employees to comply with what the leaders are directing (Shin, Sung, Choi & Kim, 2015). From this argument, it can be concluded that ethical leadership will improve employees' trust in the institution and, eventually, will support the PMSL implementation.

H1: Ethical leadership has a positive influence on PMSL implementation.

2.4 Organizational Support, Participative Decision Making and PMSL

Organizational support theory suggests that employees have general perception regarding what extent the

organization appreciates them and care about their welfare (Kurtessis et al., 2017). Perceived organizational support is the extent to which employees believe that the organization appreciates their contribution and cares about their welfare and fulfills their socio-emotional needs (Rhoades & Eisenberger, 2002). If employees think that they receive a high level of organizational support, then these employees will merge their membership of the organization to their self-identity and, then, develop a more positive relationship and perception towards the organization. Any employee who thinks they get organizational support will think they play some role and are meaningful to the organization, and their acceptance of performance measurement system will be higher. Organizational support will cause employees' organizational membership to merge with their identity and, in turn, employees will have the sense of belonging to the organization and think that they are responsible for making some contribution and delivering their best performance to the organization (Rhoades & Eisenberger, 2002).

Furthermore, organizational support will lead to a more positive orientation of employees towards the organization, thus it will increase their sense of responsibility, and the trust and expectation that the attempts they are making (participation) for the organization will be appreciated (Kurtessis et al., 2017).

H2: Organizational support has a positive influence on PMSL.

2.5 Participative Decision Making and PMSL

Increasing lecturer's participation and involvement in making decisions will make the policies responsive to the needs, in this context it is the implementation of PMSL (Pashiardis, 1994). Participation plays an important role in improving good governance practices, not only in the business sector but also in the public sector. Participation in making decisions at educational institution improve communication between lecturers and the management and it eventually influences the the decision making quality (Sarafidou & Chatziioannidis, 2013).

PMSL is developed in the effort of helping an organization identify a set of performance actions which reflect the right performance and targets in line with the vision, missions and strategic management and it has a global orientation (El Mola & Parsaei, 2010). To be successful in implementing PMSL, lecturer's participation in making decisions is highly vital (Albertsen & Lueg, 2014; Philbin, 2011). Lecturer's involvement can take the form of their participation in formulating their own targets to allow a stronger responsibility and commitment from the lecturer to achieve their performance target. This is because the expected target comes from themselves, thus their sense of responsibility for fulfilling the target will be stronger as compared to the absence of this participation. Additionally, participation can also take the form of providing chances for them to give some input to improve the currently impleneted PMSL. The feedback from lecturers on PMSL practices will continue to rise so that the performance of the organization will continue to thrive.

H3: Participative decision making has a positive influence on PMSL.

In implementing a new policy, in this study's context the PMSL, it is important to involve all parties to jointly safeguard the PMSL implementation (Smith & Brannick, 1990). Involving lecturers will improve their intention to observe the obstacles in PMSL implementation and, in turn, to provide important feedback to deal with the problems and improve the implementation quality. The opposite will likely to occure if lecturer's participation is limited. Limiting participation will result in lecturer's ignorance of the implementation of PMSL and, thus, triggers the failure of this new policy (Chenhall & Brownell, 1988; Sukirno & Siengthai, 2011). Hence, participative decision making in PMSL implementation does not only serve as an aspect which influences PMSL itself, but rather it also mediates the relationship between PMSL and ethical leadership and organizational support.

H_{4a}: Participative decision making mediates the relationship between organizational support and PMSL.

H_{4b}: Participative decision making mediates the relationship between ethical leadership and PMSL.

From these hypothesis developments, we then formulate a research model as presented in Figure 1.

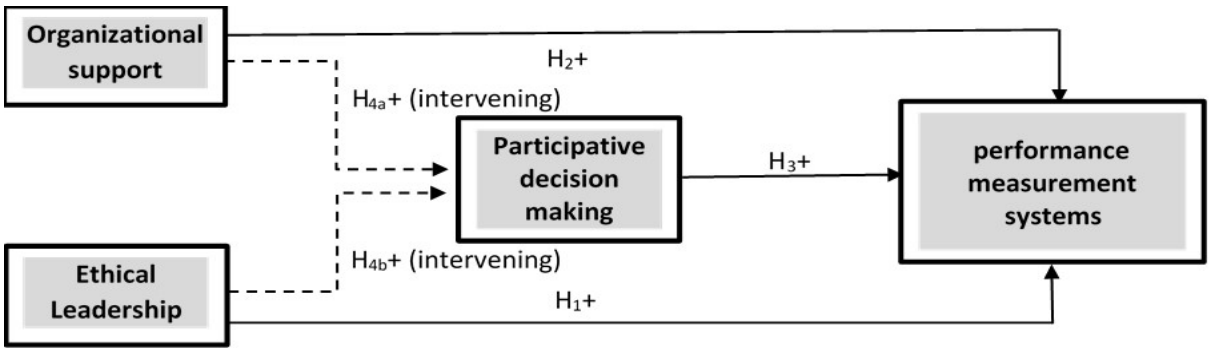

Figure 1 Research Model

3. Research Method

3.1 Sample Design and Data Collection

This study used a cross-sectional design from the population of all private universities in Indonesia. The private campuses were selected as this study's population since they just began to initiate and implement the development of PMSL. The sample was taken using a purposive sampling approach with three criteria, i.e. the campuses should have been accredited A (Excellent) and they have an international program, and have developed a comprehensive performance measurement system. These accredited campuses (Excellent) were selected due to the outcome this research tried to reach, i.e., to be an example for other campuses which were still accredited B (highly good). The sampling unit (respondent) of this research is all lecturers involved in the implementation of this comprehensive performance measurement system applied by these campuses. The data were collected by distributing a questionnaire online and in person. In this questionnaire, it was explained that the participants will be kept confidential and the obtained data were used only for academic purpose. Prior to its distribution, the questionnaire was first objected to a pilot check and validation from the researcher and experts three times. From 1000 distributed questionnaires, the returned data which could be used further were 203.

3.2 Operating Definition of Variables

The research questionnaire consisted of two parts. The first part asked the respondent to complete the demographic data and the second part asked the participant to complete the questions related to the research variables using 1-5 Likert scale. Finally, the definitions and measurement of variables are as follows:

3.2.1 Comprehensive Performance Measurement System for Lecturer

CPMS is a system which gives information on work goals and targets for every individual comprehensively (Hall, 2008). PMS is one of means to implement strategies. Another research finds that a comprehensive performance measurement system is an important performance measurement system (Malina & Selto, 2001). CPMS is measured using a questionnaire which had been developed by a previous study (Hall, 2008). Hall has developed CPMS which was previously developed by Chenhall (2005). CPMS gives information on the most important performance which is integrated into the institution strategy at each level of the value chain. Since it was conducted at a university and it reviewed performance management of lecturers, the CPMS instrument was adjusted with the nature of lecturer's performance indicator at universities. In this study's context, the question items for measuring PMSL were adjusted with the generally applicable measure of lecturer's performance in

Indonesia, namely teaching and learning, research and publication as well as community service activeness. Additionally, performance indicators were also developed in reference to the international accreditation such as AUN-QA and QS university ranking. The measurement indicators were formulated by testing the validation by discussing them with research experts three times. There were eight indicators of PMSL measurement, namely: PMSL provides information on performance, PMSL provides complete document to evaluate performance, PMSL provides information on different performance according to lecturer's structural office, PMSL provides information on different performance according to lecturer's functional office, PMSL is in harmony with the university's strategy, PMSL relates performance with the university's goal and target achievement, PMSL informs the interrelatedness of performance between one lecturer to another, and PMSL provides the key indicator achievement of each lecturer.

3.2.2 Participation in Decision Making

Participation in decision making is the involvement of lecturers in making decisions. The indicators of participative decision making consist of 4 dimensions (Marks & Louis, 1997). Participation in policy making includes participation in making operational policy and institution management, the policy of student behavior, lecturer's work environment, course materials. This instrument was also used by some previous research (Marks & Louis, 1997; Sukirno & Siengthai, 2011). The indicators of this variable are: lecturer's participation in determining teaching and learning schedule, determining teaching and learning tasks, preparing curriculum, recruiting new lecturers, practice materials, drafting student's code of ethics, formulating disciplinary regulations, determining textbooks and teaching materials, and determining the topics and skills to be taught.

3.2.3 Organizational Support

Organizational support is a relationship between employees and their organization. Organizational support is the organization's appreciation and cares to its employees, or it can be said as the organization's commitment to its employees. The instrument developed by Eisenberger and Huntington is used to measure organizational support (Eisenberger & Huntington, 1986). The question to measure organizational support consist of 4 items, including: leaders' willingness to listen to complaints, aspiration, considering the interests of all parties, and care for welfare.

3.2.4 Ethical Leadership

Ethical leadership is defined as a form of the right normative behaviors in the form of both personal actions and interpersonal relationship, as well as showing these behaviors to their subordinates (followers) through two-way communication, reinforcement, and in making decisions (Brown, Treviño, & Harrison, 2005). This variable is measured using such indicators as: leader's care, leader's democratic attitude, leader's discipline, leader's ethical behavior at university, leader's siding with lecturer's interests, leader's just and fair attitude, leader's trustworthiness, ethical role modeling by leaders.

3.3 The Technique for Analyzing Data

The data were analyzed using structural equation model with partial least square (PLS) regression. PLS is a technique of modelling latent variable which combines several dependent constructs and explicitly acknowledges measurement errors (Fornell & Larcker, 1981) and it had been used in a number of accounting studies (Hall, 2008; Ittner et al., 2003). PLS suits this research very well since it makes a minimum data assumption and requires a relatively small number of the sample as well as theoretical bases which have not been too strong (Chen et al., 2005; Akbar et al., 2014). PLS consisist of measurement and structural models. The measurement model determines the relationship between the observed items and the latent variable. The structural model determines the relationship between latent constructs. In PLS, the measurement and structural model are predicted

simultaneously. PLS model is performed in two stages. Firstly, the reliability and validity of measurement and model are assessed. Secondly, the structural model is assessed. These two stages are performed to ensure that the constructs or variables used are reliable and valid, prior to testing the nature of the relationship between constructs. This way, the results of the measurement model is presented first, followed by an investigation of the relationship between constructs.

4. Findings

Table 1 explains the sample and site of research as well as the characteristics of the respondent (sampling unit). The respondents of this research were lecturers at A-accredited universities in Java Island which had an internationalization program. From 1000 distributed questionnaires, only 219 questionnaires were returned. And from this number, only 203 could be used.

Table 1 Demographic Data

Campuses		**Sample**	**Unit sampling**
Universitas Muhammadiyah Yogyakarta		D.I. Yogyakarta	67
Universitas Ahmad Dahlan		D.I. Yogyakarta	46
Universitas Muhammadiyah Surakarta		Central Java	40
Universitas Islam Indonesia		D.I. Yogyakarta	15
Universitas Telkom		West Java	10
Universitas Parahyangan		West Java	25
Total unit sampling (n)			**203**
Description	**Category**	**Frequency (n = 203)**	**%**
Gender	Female	108	53.2
	Male	95	46.8
Age	25 – 35	101	49.8
	36 – 45	32	15.8
	46 – 55	50	24.6
	> 55	20	9.9
Experience	< 5 years	68	33.5
	5 to < 10 years	44	21.7
	10 to < 15 years	19	9.4
	>15 years	72	35.5
Academic Rank	Associate Professor	40	19.7
	Assistant Professor	33	16.3
	Lecturer	94	46.3
	None	36	17.7

The respondents of this research were mostly women (108) and the remaining (95) were men. While they might be different, the numbers of woman and man respondents were relatively equal. Most of these respondents were 25-35 years old and married. These respondents were relatively experienced in their jobs as academic staff even if most of them assumed the functional office of expert assistants. Table 2 shows that the actual average for each variable was above the theoretical average.

Table 2 Descriptive Statistic

Variable	Theoreticial range			Actual Range		
	Min	Max	Mean	Min	Max	Mean
Ethical Leadership	10	50	30	18	50	39.17
Organizational support	4	20	12	7	20	15.65
Participative decision making	8	40	24	8	40	30.99
Performance measurement systems	8	40	24	11	40	31.28

4.1 Non-Response Bias

The non-response bias testing was conducted to figure out the influence of different questionnaire distribution times (first and second weeks). This non-response bias was performed using a proxy of respondents who at the beginning answered as those who sincerely wished to participate with respondents who at the end answered as a proxy of respondents who were less eager to participate. The testing result indicated that there is no non-response bias. Thus, the data were found to have the same homogeneity.

Table 3 Non-Response Bias Testing

Variable	Mean Difference	Sig. (2-tailed)
Ethical Leadership	-.1135	.892
Organizational support	.3650	.329
Participative decision making	-.0294	.970
Performance measurement systems	.0213	.978

4.2 Measurement Model

The partial least squares approach was used to assess the psychometric nature of theoretical model and hypotheses proposed. The data were analyzed using SmartPLS version 3.0. The statistics of PLS measurement model was used to test the validity of indicators used to measure the variables. The result of outer loading testing (Table 4) showed that all items used were above the suggested minimum limit of 0.50 (Hulland, 1999). Furthermore, the internal reliability test was performed by judging the composite reliability, Cronbach's alpha (Fornell & Larcker, 2018). Table 5 showed that the Cronbach's alpha score was greater than the suggested score, i.e., 0.70 (Hair, Black, Babin, Anderson, & Tatham, 2006). The Cronbach's alpha scores from the data reliability test were 0.926 (ethical leadership), 0.809 (organizational support), 0.859 (participative decision making) and 0.923 (performance measurement system). Table 5 also showed that the composite reliability scores were 0.939 (ethical leadership), 0.873 (organizational support), 0.891 (participative decision making) and 0.937 (performance measurement system). The result showed satisfactory internal reliability.

Furthermore, the construct validity was tested to discover whether the question items in one construct showed relatively high correlation (convergent validity) as compared to the other construct items known as discriminant validity (Xu, Ryan, Prybutok, & Wen, 2012). The convergent validity of each variable could be seen from the statistics for the average variance extracted (AVE). The suggested AVE score was greater than 0.5. Table 5 showed that the AVE scores were 0.608 (ethical leadership), 0.635 (organizational support), 0.507 (participative decision making) and 0.652 (performance measurement system). Thus, the convergent validity of the data had been fulfilled. The result of discriminant validity test was also supported by the cross loading scores where each construct had a score > 0.6 (see Table 5).

Table 4 Outer Loading From the Final PLS Measurement Model

Indicator Number	Ethical Leadership	Organizational support	Participative decision making	Comprehensive performance measurement systems
1	0.767	0.646	0.611	0.731
2	0.575	0.822	0.769	0.776
3	0.669	0.819	0.772	0.834
4	0.831	0.880	0.725	0.873
5	0.823		0.694	0.783
6	0.835		0.590	0.891
7	0.853		0.771	0.725
8	0.846		0.736	0.829
9	0.798			
10	0.751			

Table 5 Reliability and Average Variance Extracted Statistics

Variable	Cronbach's Alpha	AVE	Cross Loading
Ethical Leadership	0.926	0.608	0.779
Organizational support	0.809	0.635	0.794
Participative decision making	0.859	0.507	0.712
Performance measurement systems	0.923	0.652	0.807

4.3 Evaluation of Structural Model

The test result of hypotheses one to five using the structural model was presented in Figure 2. H1 suspected that ethical leadership has a significant relationship with a performance measurement system for a lecturer at an original sample of 0.92 and p-value 0.005 ($p < 0.01$, one-tailed). Thus, H1 was confirmed. H2 suggested that ethical leadership was significantly associated with participative decision making, having a positive original sample of 0.271 and p-value 0.050 ($p < 0.05$, one-tailed). Hence, H2 was also confirmed. Meanwhile, H3 was also concluded as being confirmed, meaning that there was a relationship between organizational support and comprehensive performance measurement system and participative decision making. This could be seen from the organizational support's relationship with the performance measurement system for lecturer, having a positive original sample score of 0.213 and p-value 0.001 ($p < 0.01$, one-tailed).

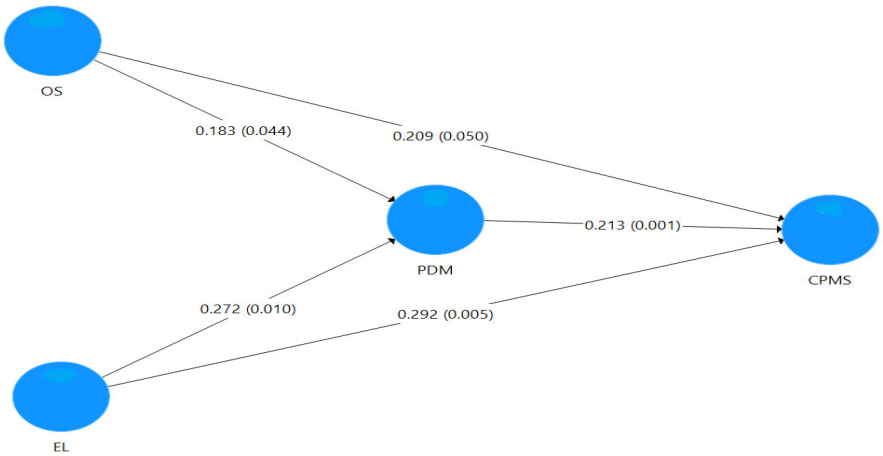

Figure 2 Structural Model (Path Coefficient)

The summary of the test results of hypotheses in this paper was presented in Table 6. In addition to testing the direct relationship hypotheses, we also tried to test the indirect effect by placing the participative decision making as an intervening variable (Table 7). The test result showed that participative decision making mediated the relationship between ethical leadership and performance measurement system for a lecturer at an original sample value of 0.058 and the total influence of ethical leadership on performance measurement system increased to 0.350. This research result confirmed Wulandari's research who found that leadership would increase participation and had some influence on the implementation of a system (Wulandari, Bendesa, & Saskara, 2014). The same applied to Yulk's research who suggested that leadership improved an organization's effectiveness (Yukl, 1989).

Table 6 Summary of Hypothesis Testing Result

Independent variables	Hypo-theses	Hypotheses direction	Original sample	P-value	Result
Ethical leadership	H_1	+	0.292	0.005	Supported
Organizational support	H_2	+	0.209	0.050	Supported
Participative decision making	H_3	+	0.213	0.001	Supported

Dependent Variables: Comprehensive performance measurement systems

The indirect influence of organizational support through participative decision making on performance measurement system for lecturers also showed a significant, weak positive association at p value <0.10, at an original sample value of 0.039, and the total effect of organizational support also increased to 0.248. Despite its weak significance, this research result showed that the university's support would associate with the successful implementation of PMSL when a mechanism of participative decision making for lecturers was in place. This research confirmed the previous research which found that organizational support would have a beneficial impact for an organization, including lecturer's willingness to devote their best competence when the medium to participate was available and, eventually, it would increase lecturer's acceptance in implementing PMSL (Rhoades & Eisenberger, 2002).

Table 7 Direct, Indirect Effect and the Total Effect

	Correlation	Original sampel	P-Value
Path Coefficients	EL → PMSL	0,292	0,005*
	EL → PDM	0,272	0,010*
	OS → PMSL	0,209	0,050*
	OS → PDM	0,183	0,044*
	PDM → PMSL	0,213	0,001*
Indirect Effect	OS→ PDM → PMSL	0.039	0,071**
	EL→ PDM → PMSL	0.058	0,045*
Total Effect	EL → PMSL	0,350	0,001*
	EL → PDM	0,272	0,010*
	OS → PMSL	0,248	0,022*
	OS → PDM	0,183	0,044*
	PDM → PMSL	0,213	0,001*

Note: * significant at alpha 0.05; ** significant at alpha 0.10

4.4 Discussions

The result of this research confirmed the first hypothesis which showed that ethical leasership could positively contribute to PMSL implementation. This result confirmed Lu's (2014) view that leadership served as a dominant factor in realizing the good management and governance practices in an organization, in this context the PMSL implementation. For lecturers as subordinates, they would carefully watch how their leaders behave and made it as a benchmark. Any leadership capable of modelling compliance with new regulations or policies in an organization would be an initiator of mobilization or a role model for their subordinates. These lecturers as subordinates of the management would feel motivated to follow the new policies if they clearly saw that their leaders had behaved fairly, i.e., showing integrity to what they ratified themselves within the organization (Brown, Treviño & Harrison, 2005). Even if no huge insentive was offered as compensation for performing the new policies, lecturers would still be geared up when there was strong ethical leadership from the top management (Jawahar, 2007).

This research also confirmed the claim that organizational support had a positive impact on PMSL implementation. This finding was just as what was found by some previous studies, including: Eisenberger, Fasolo, and Davis-LaMastro (1990), Shore and Wayne (1993), Eisenberger, Stinglhamber, Vandenberghe, Sucharski, and Rhoades (2002), and Gupta, Agarwal, and Khatri (2016). It was undeniable that lecturer's aim to be at HEI, in addition to pursuing their passion and contributing to the development of the academic world, was to get some financial welfare. As Rhoades & Eisenberger (2002) explained, organizational support was what one perceives regarding the extent to which employees believed that they were appreciated by the organization for their contribution and that their organization cared about their welfare. A good organization would support their lecturers, for both development of their passions (research, publication, community service, etc.) and welfare (salary, bonus, promotion, etc.) and this would give birth to lecturers' positive perception of what had been the policies within the university, in this case the PMSL implementation. This could even be strengthened if the implementation of PMSL was also equipped with some reward system. Any employee who perceived strong organizational support would feel as a part of the organization and their commitment to the organizationon would grow. This would trigger compliance with PMSL and, in turn, led to improved performance of both lecturers and the university.

Furthermore, this research also found that the practice of inviting lecturers to participate or involving lecturers in making decisions became an important determinant of the successful PMSL implementation. This confirmed Sukirno and Siengthai (2011) who suggested that the new public management era where good governance had been the focus of constant improvement, had placed transparency and fairness as the key points. Participation or involvement in essence was a transparency practice provided by the organization to all members to maintain fairness within the organization which indirectly affected individual and organization performances. Participation would nurture greater respect from members to the organization leaders that it gave birth to mutual trust (Lam, Chen & Schaubroeck, 2002; Parnell & Rick Crandall, 2003). Practically speaking, participative decision making in PMSL would find the right performance indicators since communication and coordination would eventually take place between the university leaders as the one setting the university's vision and missions and lecturers as the executors of programs and activities related to how these vision and missions could be achieved (Al-Yahya, 2008; Baraldi, 2013). The performance indicators directly suggested by lecturers could be corrected by leaders if they were not relevant with the attempt to achieve the vision and missions. Thanks to this

practice, the goal congruence between lecturers and the university would be easily manifested.

This research also found that participation in decision making served as a mediating variable of the relationship between ethical leadership and organizational support and PMSL implementation. In other words, ethical leadership and organizational support would have a greater effect on the successful PMSL implementation if this PMSL implementation was equipped with participative decision making practice within the organization. This finding confirmed further the previous studies (Chenhall & Brownell, 1988; Smith & Brannick, 1990) on the importance of participation in an organization. In implementing a relatively new policy, in this case PMSL, lecturers served as the subject who knew best the weaknesses and inputs to improve its implementation in the future. When a mechanism was available for lecturers to participate in making decisions, they would have room to be aware of the newly implemented mechanism. They would willingly think and act on how the organization should work towards betterment. It was possible that ethical leadership and organizational support would have a lesser influence on the PMSL implementation when no participation mechanism was available. This was because lecturers would think they were the only object of policy, and they had neither chance nor room to voice the weaknesses they found in the newly implemented system. The absence of this participation would lead to lecturer's ignorance and, in turn, the improvement to its implementation would not run as expected. This would interfere with the successful PMSL implementation itself. From this finding, it was clear that a participation mechanism in making PMSL-related decisions would be an important aspect of a successful PMSL implementation.

5. Conclusion

This research aims at testing the relationship between ethical leadership, organizational supportonal, and participative decision-making and comprehensive performance measurement system for lecturers. This study results showed that ethical leadership, organizational support, and participative decision-making had a positive relationship with a comprehensive performance measurement system for lecturers. From this result, a suggestion can be made, i.e., in order for the implementation of a comprehensive performance measurement system for lecturers to be successful, it is important to apply the three key factors above (ethical leasership, organizational supportonal, dan kebijakan participative decision-making). In addition, this research concludes that participative decision-making plays an intervening variable role. This means organizational support and ethical leadership will be able to trigger a successful implementation of a comprehensive performance measurement system for lecturers if participative decision-making is present. The implication of this research result, practically speaking, is that it can be a preliminary consideration for many other campuses in Indonesia who wish to develop and perform a comprehensive performance measurement system for lecturers.

This research has of course its own limitations, i.e. it is conducted only at A-accredited (excellent) campuses located in Java Island. Therefore, it is important to consider its generalizability, at least for Indonesia scope, more cautiously. Thus, it is suggested for further studies to be conducted at B-accredited (highly good) campuses located beyond Java Island. This is because it is possible that different locations might trigger different organizational culture and it might generate different results. Another limitation is that this study does not investigate the real experience of top managements at universities who serve as the research object in developing their comprehensive performance measurement system for lecturers. Therefore, further research needs to investigate this aspect to capture the real and actual development processes of this policy. The use of other

approaches such as qualittative or mixed method (triangulation) ones is strongly recommended as a methodology to be applied in further studies.

Acknowledgement

The researcher would like to extend his gratitude to the Ministry of Research, Technology and Higher Education (Kemenristekdikti) as the main sponsor of this research. This research is funded by the Kemenristekdikti under *Penelitian Dasar Unggulan Perguruan Tinggi* (PDUPT) 2018 (2018 University Excellent Basic Research) scheme entitled "*Pemodelan Dimensi Pengukuran Kinerja Excellent: Anteseden Dan Konsekuensi Dalam Mewujudkan Kinerja Dosen Berdaya Saing Global*" (Modelling Excellent Performance Measurement Dimensions: Antecedent And Consequence In Realizing The Performance Of Globally Competitive Lecturers). Letter of Assignment Number: 945/LP3M-UMY/2018. Contract Number: 007/HB-LIT/II/2018. This article is published as an evidence of acceptance of accountability report of the said grant.

References

Albertsen O. A. and Lueg R. (2014). "A literature review and an agenda for future research", *Journal of Accounting and Organizational Change*, Vol. 10, No. 4, pp. 431-465, doi: https://doi.org/10.1108/JAOC-03-2013-0024.

Bandura A. (1978). "Social learning theory of aggression", *Journal of Communication*, doi: https://doi.org/10.1111/j.1460-2466.1978.tb01621.x.

Brown M. E. and Mitchell M. S. (2010). "Ethical and unethical leadership: Exploring new avenues for euture research", *Business Ethics Quarterl*, Vol. 20, No. 4, pp. 583-616, doi: https://doi.org/10.5840/beq201020439.

Brown M. E., Treviño L. K. and Harrison D. A. (2005). "Ethical leadership: A social learning perspective for construct development and testing", *Organizational Behavior and Human Decision Processes*, Vol. 97, No. 2, pp. 117-134, doi: https://doi.org/10.1016/j.obhdp.2005.03.002.

Chan K. (2001). "The difficulties and dilemma of constructing a model for teacher evaluation in higher education", *Higher Education Management*, Vol. 13, No. 1, pp. 93-111, doi: https://doi.org/10.1787/hemp-v14-art8-en.

Chenhall R. H. (2005). "Integrative strategic performance measurement systems, strategic alignment of manufacturing, learning and strategic outcomes: An exploratory study", *Accounting, Organizations and Society*, Vol. 30, No. 5, pp. 395-422, doi: https://doi.org/10.1016/j.aos.2004.08.001.

Eisenberger R. and Huntington R. (1986). "Perceived organizational support", *Journal of Applied Psychology*, Vol. 71, No. 2, pp. 500-507.

El Mola K. G. and Parsaei H. (2010). "Integrated performance measurement systems: A review and analysis", in: *40th International Conference on Computers and Industrial Engineering: Soft Computing Techniques for Advanced Manufacturing and Service Systems, CIE40 2010*, p. 966, doi: https://doi.org/10.1109/ICCIE.2010.5668237.

Ferlie E., Musselin C. and Andresani G. (2008). "The steering of higher education systems: A public management perspective", *Higher Education*, doi: https://doi.org/10.1007/s10734-008-9125-5.

Fornell C. and Larcker D. F. (1981). "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18, No. 1, p. 39, doi: https://doi.org/10.2307/3151312.

Fornell C. and Larcker D. F. (2018). "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18, pp. 39-50, doi: https://doi.org/http://www.jstor.org.

Hair J. F., Black W., Babin B., Anderson R. and Tatham R. (2006). *Multivariate Data Analysis*, Pearson Prentice Hall, doi: https://doi.org/10.1080/19447013008687143.

Hall M. (2008). "The effect of comprehensive performance measurement systems on role clarity, psychological empowerment and managerial performance", *Accounting, Organizations and Society*, Vol. 33, No. 2-3, pp. 141-163, doi: https://doi.org/10.1016/j.aos.2007.02.004.

Hall M. (2011). "Do comprehensive performance measurement systems help or hinder managers' mental model development?", *Management Accounting Research*, Vol. *22*, No. 2, pp. 68-83, doi: https://doi.org/10.1016/j.mar.2010.10.002.

Hulland J. (1999). "Use of partial least squares (PLS) in strategic management research: A review of four recent studies", *Strategic Management Journal*, Vol. 20, pp. 195-204, doi: https://doi.org/10.1002/(SICI)1097-0266(199902)20:2<195::AID-SMJ13>3.3.CO;2-Z.

Ittner C. D., Larcker D. F. and Meyer M. W. (2003). "Subjectivity and the weighting of performance measures: Evidence from a balanced scorecard", *The Accounting Review*, Vol. 78, No. 3, p. 34, doi: https://doi.org/10.2308/accr.2003.78.3.725.

Kurtessis J. N., Eisenberger R., Ford M. T., Buffardi L. C., Stewart K. A. and Adis C. S. (2017). "Perceived organizational support: A meta-analytic evaluation of organizational support theory", *Journal of Management*, Vol. 43, No. 6, pp. 1854-1884, doi: https://doi.org/10.1177/0149206315575554.

Lee U. H., Kim H. K. and Kim Y. (2013). "Determinants of organizational citizenship behavior and its outcomes", *Global Business and Management*, Vol. 5, No. 1, pp. 54-65, available online at: http://www.gbmr.ioksp.com/pdf/vol.5no.1/5-Lee et al., 2013.pdf.

Maimela E. M. and Samuel M. O. (2016). "Perception of performance management system by academic staff in an open distance learning", *Journal of Human Resource Management*, pp. 1-11.

Malina M. A. and Selto F. H. (2001). "Communicating and controlling strategy: An empirical study of the effectiveness of the balanced scorecard", *Journal of Management Accounting Research*, Vol. 13, No. 1, pp. 47-90, doi: https://doi.org/10.2308/jmar.2001.13.1.47.

Marks H. M. and Louis K. S. (1997). "Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance", *Educational Evaluation and Policy Analysis*, Vol. 19, No. 3, pp. 245-275, doi: https://doi.org/10.3102/01623737019003245.

Mather K. and Seifert R. (2011). "Teacher, lecturer or labourer? Performance management issues in education", *Management in Education*, Vol. 25, No. 1, pp. 26-31, doi: https://doi.org/10.1177/0892020610388060.

Mayer D. M., Kuenzi M., Greenbaum R., Bardes M. and Salvador R. (Bombie) (2009). "How low does ethical leadership flow? Test of a trickle-down model", *Organizational Behavior and Human Decision Processes*, doi: https://doi.org/10.1016/j.obhdp.2008.04.002.

Meyer J. W. and Rowan B. (1977). "Institutionalized organizations: Formal structure as myth and ceremony", *American Journal of Sociology*, Vol. 83, No. 2, pp. 340-363, doi: https://doi.org/10.1086/226550.

Molefe G. N. (2012). "Performance measurement model and academic staff: A survey at selected Universities in South Africa and abroad", *African Journal of Business Management*, Vol. 6, No. 15, pp. 5249-5267, doi: https://doi.org/10.5897/AJBM10.1394.

Nanni A. J., Dixon J. R. and Vollmann T. E. (1992). "Integrated performance measurement: Management accounting to support the new manufacturing realities", *Journal of Management Accounting Research*, Vol. 4, pp. 1-19.

Nazaruddin I., Rezki S. B. and Rahmanda Y. (2018). "Love of money , gender , religiosity: The impact on ethical perceptions of future professional accountants", *Business and Economic Horizons*, Vol. 14, No. 2, pp. 424-436, available online at: http://dx.doi.org/10.15208/beh.2018.31.

Neubert M. J., Wu C. and Roberts J. A. (2013). "The influence of ethical leadership and regulatory focus on employee outcomes", *Business Ethics Quarterly*, Vol. 23, No. 2, pp. 269-296, doi: https://doi.org/10.5840/beq201323217.

Pashiardis P. (1994). "Teacher participation in decision making", *International Journal of Educational Management*, Vol. 8, No. 5, pp. 14-17.

Philbin S. P. (2011). "Design and implementation of the Balanced Scorecard at a university institute", *Measuring Business Excellence*, Vol. 15, No. 3, pp. 34-45, doi: https://doi.org/10.1108/13683041111161148.

Piccolo R. F., Greenbaum R., Harrtog D. N. and Folger R. (2010). "The relationship between ethical leadership and core job characteristics", *Journal of Organizational Behavior*, Vol. 31, pp. 259-278, doi: https://doi.org/10.1002/job.

Rasheed M. I., Aslam H. D., Yousaf S. and Noor A. (2011). "A critical analysis of performance appraisal system for teachers in public sector universities of Pakistan: A case study of the Islamia University of Bahawalpur (IUB)", *African Journal of Business Management*, Vol. 5, No. 9, pp. 3735-3744, doi: https://doi.org/10.5897/AJBM10.1157.

Rasheed M. I., Humayon A. A., Awan U. and Ahmed D. (2016). "Factors affecting teachers ' motivation An HRM challenge for

public sector higher educational institutions of Pakistan (HEIs)", *International Journal of Educational Management*, Vol. 30, No. 1, pp. 101-114, doi: https://doi.org/10.1108/IJEM-04-2014-0057.

Rehman R. R. (2011). "Role of emotional intelligence on the relationship among leadership styles, decision making styles and organizational performance: A review", *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 3, No. 1, pp. 409-416.

Rhoades L. and Eisenberger R. (2002). "Perceived organizational support: A review of the literature", *Journal of Applied Psychology*, Vol. 87, No. 4, pp. 698-714, doi: https://doi.org/10.1037/0021-9010.87.4.698.

Sarafidou J. O. and Chatziioannidis G. (2013). "Teacher participation in decision making and its impact on school and teachers", *International Journal of Educational Management*, Vol. 27, No. 2, pp. 170-183, doi: https://doi.org/10.1108/09513541311297586.

Shin Y., Sung S. Y., Choi J. N. and Kim M. S. (2015). "Top management ethical leadership and firm performance: Mediating role of ethical and procedural justice climate", *Journal of Business Ethics*, Vol. 129, No. 1, pp. 43-57, doi: https://doi.org/10.1007/s10551-014-2144-5.

Smeenk S., Teelken C., Eisinga R. and Doorewaard H. (2009). "Managerialism, organizational commitment, and quality of job performances among european university employees", *Research in Higher Education*, Vol. 50, No. 6, pp. 589-607, doi: https://doi.org/10.1007/s11162-009-9132-0.

Sole F. (2009). "A management model and factors driving performance in public organizations", *Measuring Business Excellence*, Vol. 13, No. 4, pp. 3-11, doi: https://doi.org/10.1108/13683040911006747.

Sukirno D. S. and Siengthai S. (2011). "Does participative decision making affect lecturer performance in higher education?", *International Journal of Educational Management*, Vol. 25, No. 5, pp. 494-508, doi: https://doi.org/10.1108/09513541111146387.

Vukšić V. B., Bach M. P. and Tomičić-Pupek K. (2014). "Process performance management in higher education regular paper", *International Journal of Engineering Business Management*, Vol. 6, No. 1, pp. 1-8, doi: https://doi.org/10.5772/58680.

Walumbwa F. O., Mayer D. M., Wang P., Wang H., Workman K. and Christensen A. L. (2011). "Linking ethical leadership to employee performance: The roles of leader-member exchange, self-efficacy, and organizational identification", *Organizational Behavior and Human Decision Processes*, Vol. 115, No. 2, pp. 204-213, doi: https://doi.org/10.1016/j.obhdp.2010.11.002.

Wulandari P. R., Bendesa I. and Saskara I. A. N. (2014). "The effect of leadership on public participation, public participation to influence project success rate, and the effect of leadership on project success rate of PNPM Mandiri Perdesaan in Gerokgak", *Jurnal Buletin Studi Ekonomi*, Vol. 19, No. 2, pp. 175-183.

Xu C., Ryan S., Prybutok V. and Wen C. (2012). "It is not for fun: An examination of social network site usage", *Information and Management*, Vol. 49, No. 5, pp. 210-217, doi: https://doi.org/10.1016/j.im.2012.05.001.

Yukl G. (1989). "Managerial leadership: A review of theory and research", *Journal of Management*, Vol. 15, No. 2, pp. 251-289, doi: https://doi.org/10.1177/014920638901500207.