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THE ROLE OF ETHICAL LEADERSHIP, ORGANIZATIONAL SUPPORT AND PARTICIPATIVE DECISION-MAKING IN THE IMPLEMENTATION OF EFFECTIVE PERFORMANCE MEASUREMENT SYSTEMS IN HIGHER EDUCATION INSTITUTIONS

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ABSTRACT

The problem of poor performance of lecturers in Indonesian higher education institutions (HEIs) has led to an initiative by some HEIs to implement performance measurement systems (PMSs). Certain pivotal factors that determine effective PMS implementation have still not been explored sufficiently, and this is particularly the case in HEIs, in which the adoption of such systems is still at an early stage. That condition has been creating a research gap that needs further investigation. To meet this gap, this study aims to examine the relationship of ethical leadership, perceived organizational support and participative decision-making with perceived effective PMS implementation in HEIs. This study also examines participative decision-making as an intervening variable. Data were collected using a questionnaire survey distributed by post and online. The respondents were lecturers at private HEIs involved in PMS implementation in HEIs. Using a purposive sampling approach, a total of 1,000 lecturers were chosen for this study. Data from 203 usable questionnaires were analysed and hypotheses were tested using a partial least squares (PLS) approach. The results of this study indicate that there is a positive influence of ethical leadership (p-value 0.005), perceived organizational support (p-value 0.050), and participative decision-making (p-value 0.001) on the perceived effectiveness of PMS implementation. Moreover, participative decision-making also plays a role as the intervening variable (p-values 0.071 and 0.045). These findings show empirically pivotal factors that should be considered in achieving effective PMS implementation in HEIs.

Keywords: **Higher Education Institution (HEI), Ethical Leadership, Perceived Organizational Support, Participative Decision-Making, Perceived Effective Performance Measurement System**

INTRODUCTION

Globalization has put pressure not only on economic competition among for-profit organizations (FPOs) but also on not-for-profit-organizations (NFPOs) such as higher education institutions (HEIs). This pressure is particularly associated with efforts to improve competitive advantage in HEIs to sustain them in the current global-ranking environment. In recent years, the evolution of university global ranking and accreditation systems has influenced the HEI sector worldwide (Blanco-Ramírez & Berger, 2014; Janudin & Maelah, 2016), particularly in terms of how to target and measure institutional performance. Such conditions have pushed HEIs in many countries to develop their control-mechanism policies (Blanco-Ramírez & Berger, 2014; Chu & Westerheijden, 2018; Das & Mukherjee, 2017; Noaman, Ragab, Madbouly, Khedra, & Fayoumi, 2017), including the implementation of performance measurement systems (PMSs). Human resources, in this case lecturers, are the main actors in driving the competitive advantage of HEIs (Rasheed et al., 2016). Thus, to maintain their competitive advantage, HEIs need to implement PMSs to ensure lecturer performance is supportive of what each HEI is trying to achieve (Janudin & Maelah, 2016). In so doing, better lecturer performance would be achieved and HEI performance would be enhanced.

The performance of Indonesian lecturers is comparatively poor, as evidenced by the low number of publications they produce and their lack of participation in community service programmes funded by the government. Compared with other Southeast Asian countries, the number of publications from Indonesian institutions featured in the Scopus Indexed Journal database is lower than Malaysia, Singapore, and Thailand (see Table 1).

Table 1
Publications in the Scopus Indexed Journal from Southeast Asian Countries

Ranking	Country	Documents	Citable documents	Citations	H index
1	Malaysia	325,476	312,331	2,737,551	323
2	Singapore	317,592	292,112	6,839,745	589
3	Thailand	199,226	188,690	2,452,571	339
4	Indonesia	158,733	154,127	793,905	241
5	Vietnam	63,969	60,949	671,649	220
6	Philippines	38,024	34,839	571,112	246
7	Brunei Darussalam	4,917	4,335	48,497	82
8	Cambodia	4,553	4,085	82,660	111
9	Myanmar	3,789	3,458	45,036	77
10	Laos	3,037	2,789	47,899	88
11	Timor Leste	292	254	2183	23

Source: https://www.scimagojr.com/countryrank.php?region=Asiatic%20Region (accessed, October, 16th, 2020)

In addition, based on the 2015 Indonesia Ministry of Education annual report[1], only 9,000 lecturers participated in community service programmes funded by the Indonesian government. This number is still too low compared to the total number of lecturers in Indonesia of 270,263, meaning only 3.33% of lecturers participated in community service funded by the government.

In response to this situation, the Indonesian government has launched various programmes to improve lecturers' performance, such as a lecturer certification system, assistance to lecturers for research projects, publications and community service and teaching and learning development. However, the facts in the field show that not all lecturers in Indonesian HEIs are motivated to improve their performance. One of the reasons could be that most Indonesian HEIs have not developed effective PMS policies that could support performance improvement among lecturers. Some scholars argue that to enhance performance, the implementation of PMSs is crucial (Ahyaruddin & Akbar, 2018; Parwoto & Halim, 2020; Spekle & Verbeeten, 2014). By implementing PMSs, it is believed that lecturers would behave in ways and make decisions that serve the HEIs' institutional goals and objectives (Salleh et al., 2010). Moreover, the implementation of PMSs will support the aim of making lecturers behave as each HEI would wish, promoting superior performance and strengthening their discipline ethos, and thus upholding the essence of these institutions as centres for innovative teaching and learning (Molefe, 2012).

Some studies of PMSs have been conducted, yet attention directed towards this topic in the HEI sector context is still very

[1] We have been unable to locate the latest annual report of the Indonesian Ministry of Education. Hence, we used data from its 2015 report. From our observations in the field, we conclude that the situation today has not greatly changed.

limited. Rasheed et al. (2016) found that PMSs in HEIs can motivate educators to improve their performance. However, other studies have found contradictory results. Chan (2001) discovered that PMS implementation did not necessarily suit employees, particularly those who work in NFPOs such HEIs. This is because lecturers, as the main actors in HEIs, are professionals who follow different professional values from those commonly applying in FPOs (Decramer et al., 2013; Goh, 2012). However, some scholars (Chan, 2001; Maimela & Samuel, 2016) argue that lecturers cannot be managed using a managerialism model as applied in FPO such as companies through performance management policy. The managerialism model will result in lecturers being required to spare time for bureaucratical procedures, and this may lead to the neglect 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 good performance, a mechanism to manage this performance is needed, including for lecturers at HEIs. Similar arguments are found from several scholars (e.g. Alach, 2017; Cavicchi & Vagnoni, 2018; Janudin & Maelah, 2016; Johnes & Taylor, 1990; Molefe, 2012). These authors further believe that it is possible that lecturers cannot manage their own performance well. Hence, a PMS policy needs to be put in place to align lecturers' work with their institutions' goals. A PMS gives clear indicators of achievement targets to be fulfilled by lecturers to support their organization's goals. These clear targets in themselves will improve performance (Locke & Latham, 2013). PMSs are also particularly important for new lecturers who are just joining an HEI and so might not yet know the duties they have to perform as lecturers. The differences in research results suggest that effective PMS implementation is contingent on certain internal and external factors (Fiedler, 1964). Fiedler (1964) contends that these contingent factors include leadership, in terms of the atmosphere of leader/employee relationship, task structure concerning job clarity, and the existence of rewards/punishment.

While some of the literature proves that PMSs make a positive contribution to performance improvement, research related to the determinants of effective PMS implementation in the HEI context is still scarce. Salleh et al. (2010) believe that performance improvement may be achieved only when a PMS is implemented effectively and comprehensively (see: Alach, 2017; Hall, 2008; Rasit & Isa, 2014; Schulz et al., 2010). Walumbwa et al. (2011) contend that to achieve the expected benefits, PMS implementation needs to be supported by a leadership model, in this case ethical leadership as a form of moral management (Brown & Treviño, 2006). Ethical leaders use their social power to make decisions by producing certainty of action to influence the behaviour of others within the organization (Gini, 1997). Ethical leaders provide personal and professional examples of what constitutes appropriate ethical behaviour and actively manage ethical accountability and social responsibility within the organization (Den Hartog & De Hoogh, 2009). Recent research by Li and Bao (2020) found that ethical leadership can influence employees to behave positively. Employees consider the example of a leader as being something it is important to imitate. Therefore, the ethical attitude of the HEI leadership, especially in exemplifying how PMSs should be adhered to, might lead to employees' compliance in implementing the PMS mechanism, and this would eventually lead to effective PMS implementation.
Another important factor for effective implementation of PMSs is the organizational support in place, namely the expression of the organization's appreciation of what their employees contribute to the organization. This support takes both tangible and intangible forms. An employee who thinks that they are supported by the organization and feels they are part of the organization as a whole will be more strongly committed to that organization and will help it to achieve its goals. As a result, they will willingly assume the obligations involved in implementing the policies put in place by the organization (Rhoades & Eisenberger, 2002). Beheshtifar and Zare (2012) found that employees with higher levels of perceived organizational support are likely to have positive attitudes and behaviours. The perceived organizational support would increase employees' sense of obligation and affective commitment. With the expectation that improved performance would be rewarded, the employees would help the organization to reach its objectives.

In addition, lecturer involvement in the form of participative decision-making in PMS implementation is also an important consideration (Smith & Brannick, 1990; Sukirno & Siengthai, 2011). Lecturers as intellectuals should be treated not only as the object of PMSs but also as their subject. This means their participation, aspirations and inputs in developing and refining PMS should be taken into account by the institution's leaders. Participation is a real form of organizational support for subordinates in implementing a PMS policy, and the support provided should not be merely oral. In addition, the existence of participation opportunities shows fair leadership, in that the targets and performance achievement strategies imposed by the organization are negotiable and require the input of subordinates in determining them. As such, participative decision-making will encourage the intention to comply with the PMS policy mechanisms (Grissom, 2012). From this argument, it is logical to consider that the participation of lecturers in PMS implementation has a role as an intervening variable.

Research into the impact of ethical leadership, organizational support and participative decision-making on the effective implementation of PMSs is very limited. Thus, to fill the gap in the literature, this research aims to find answers to the following

research questions:

1) Do ethical leadership, perceived organizational support and participative decision-making have positive relationships with perceived effective PMS implementation?
2) Does participative decision-making have an intervening role in the relationship between ethical leadership and organizational support in perceived effective PMS implementation?

This research is crucial in producing empirical evidence related to the pivotal contingent factors that need to be considered in implementing PMSs in HEIs. Practically, this research gives valuable suggestions regarding key determinants of effective PMS implementation in HEIs. Specifically, for many HEIs in Indonesia this study's results are timely and relevant, given that PMS implementation in these institutions is still underway. Theoretically, this research contributes to the body of knowledge, especially in confirming contingency theory as tested within the study of PMS implementation at HEIs in a developing-country context, namely in Indonesia.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Contingency Theory and PMS Implementation in HEIs

The framework of this research is formulated by referring to contingency theory, a theoretical perspective of organizational behaviour that emphasizes how contingency factors such as structure and technology influence the organization's design and function (Fisher, 1998; Woodward, 1970). The 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 (dependent upon) internal and external situations. A contingent leader effectively applies their own leadership type in the right situations to optimize the management and implementation of organizational governance to achieve their goals (Ashour, 1973), in this case the effective implementation of PMSs. As highlighted in the introduction, PMS implementation at HEIs is contingent, as indicated by the contradictory results obtained by prior studies in terms of PMSs in the HEI context.

PMSs are important performance management tools for all types of organizations, since they can improve organizational efficiency and effectiveness and in turn help them to achieve their goals (Ferlie et al., 2008). In many previous studies, the investigation of PMS issues has focused mainly on the FPO sector (Vuksic & Bach, 2014) and research results have been implemented widely in companies. In the new public management era, research into performance management of employees in NFPOs has begun to receive some focus (Sofyani et al., 2018; Sole, 2009). Nevertheless, until recently, research into PMS implementation was mostly conducted in government institutions, particularly in Indonesia (Sofyani et al., 2019). Lately, HEIs have received some pressure to improve their contributions to the development of the sciences and social problem-solving. These two aspects are closely related to the roles of lecturers, i.e. in conducting research and actively participating in society. Therefore, a strategy to enhance lecturer performance through the implementation of PMSs needs to be formulated, to drive the creation of harmony between the demands placed on HEIs and the role of lecturers as the main actors within them.

Even though some studies of PMSs have been undertaken in the HEI realm, research in developing-country contexts such as Indonesia, in which the implementation of PMSs in HEIs is still in the initial stage, is very scarce. On the other hand, there are pros and cons in attitudes towards the urgency of PMS implementation in HEIs. Some academics feel that PMS implementation in NFPOs such as HEIs is not effective in improving performance and is often poorly conducted. This situation reflects a mismatch between the professional values held by lecturers and the more nuanced public management values that are in play in business organizations (Smeenk et al., 2009). Additionally, it can be observed in the field that many lecturers focus more on knowledge transfer rather than on complying with organizational control policies such as PMS implementation (Sofyani et al., 2020). In contrast, however, some scholars believe that the failure of PMS to trigger performance improvement is not due to such reasons, but is because the effectiveness of PMS implementation in HEI is poor (see: Alach, 2017; Hall, 2008; Rasit & Isa, 2014; Schulz et al., 2010). For this reason, it is necessary to study the contingent factors that may impact upon the effectiveness of PMS implementation.

Furthermore, some recent works on PMS implementation in HEIs use of Kaplan and Norton's balanced scorecard (BSC) to translate the characteristic strategic goals (e.g. research and teaching excellence) into performance measures (Franceschini & Turina, 2013). Several other studies focus on how PMSs in HEIs should be developed comprehensively (see: Alach, 2017; Brown, 2012; Franceschini & Turina, 2013; Hall, 2008; Hladchenko, 2015; Zangoueinezhad & Moshabaki, 2011). Moreover, some studies investigate how PMS has been adopted by HEIs (e.g. Goh, 2012; Maimela & Samuel, 2016; Mather & Seifert, 2011; Sofyani et al.,

2019; Vuksic & Bach, 2014). Nonetheless, related studies that examine the determinants of PMS implementation in HEIs as contingent factors are still difficult to find. Prior studies have concluded that a discrepancy exists between the professional values followed by lecturers and management reform values at HEIs which seem more like those applicable to the for-profit environment (Smeenk et al., 2009). Lecturers have their own autonomy, which sometimes does not match an HEI's management reform agenda, and they thus separate their activities from any formal structure (Meyer & Rowan, 1977). This might be a reason why PMS implementation at some HEIs is vulnerable to failure. As explained above, some academics propose that ethical leadership, organizational support and lecturers' participation in decision-making can be taken into consideration as contingent factors that might influence the effective implementation of PMSs. This study hopes to provide empirical evidence on whether these three factors contribute towards effective PMS implementation.

Ethical Leadership and PMS Implementation

According to Brown et al. (2005, p. 120), ethical leadership is defined as 'the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement, and decision-making'. Treviño, Hartman, and Brown (2000) contend that the ethical leadership process combines not only personal moral facets such as integrity, virtue, honesty, fairness and trustworthiness, but also facets of moral management such as holding subordinates accountable for their ethical/unethical behaviour by establishing and communicating ethical standards, and using rewards/penalties to explicitly reinforce those standards. Subordinates perceive ethical leaders as credible and legitimate role models that they can imitate, and try to respond to ethical leaders' treatment of them by engaging in desirable behaviours and upholding positive attitudes (Brown & Treviño, 2006).

A study of ethical leadership by Walumbwa et al. (2011) indicates its increased relevance for organizational practices. It is believed that one of the causes of organizational decline/collapse is the unethical behaviour of leaders, managers and professionals (Nazaruddin et al., 2018). A leader's unethical behaviour in organizational practices is very likely to undermine their subordinates' (employees) morals. Therefore, to maintain positive values and morals in an organization, a strong ethical leadership base is needed (Rehman & Scholar, 2011). Related studies have found that ethical leadership generally has beneficial impacts on the organization in terms of positive attitude of subordinates (Mayer et al., 2009).

Bandura (1978) contends that employees tend to mimic the behaviours of those they look up to at work, and this positions leaders as role models for employees due to their visibility and power. Thus, when leaders have strong ethical leadership qualities in terms of commitment to promoting effective implementation of PMSs, employees will support implementation and try to imitate leaders' behaviours. This is also supported by studies of leadership which indicate that effective leadership practice can improve the organization's overall performance because of the improved commitment, involvement, and motivation of employees to comply with leaders' directions (Shin et al., 2015). However, it is very difficult to find a study that empirically examines the role of ethical leadership in PMS implementation within organizations, especially HEIs. Based on the points highlighted above, the following hypothesis is proposed:

H_1: Ethical leadership has a positive relationship with perceived effective PMS implementation.

Perceived Organizational Support and PMS Implementation

Perceived organizational support refers to the extent to which employees believe that the organization appreciates their contribution, cares about their welfare and fulfils their socio-emotional needs (Rhoades & Eisenberger, 2002). Kurtessis et al. (2017) suggest that employees have general perceptions regarding the extent to which the organization appreciates them and cares about their needs. If employees think that they receive a high level of organizational support, then they will merge their membership of the organization with their self-identity and thus develop a more positive relationship with and perceptions about the organization (Shore & Wayne, 1993). Any employee who feels they receive organizational support will believe that they play a useful role and are meaningful to the organization, and their acceptance of the organization's policies will be high (Gupta et al., 2016).

Furthermore, perceived organizational support will cause employees' organizational membership to merge with their identity, leading them to have a sense of belonging to the organization and feeling that they are responsible for making contributions and delivering their best performance (Rhoades & Eisenberger, 2002). These aspects will increase their sense of responsibility and their trust and expectation that the attempts they are making (participation) within the organization will be appreciated (Kurtessis et al., 2017). At the present time, however, related study that examines empirically whether perceived organizational

support is associated with effective PMS implementation in organizations is still scarce, particularly in the HEI context. Based on the points highlighted above, the following hypothesis is proposed:

H_2: Perceived organizational support has a positive relationship with perceived effective PMS implementation.

Participative Decision-Making and PMS Implementation

Participative decision-making refers to the extent to which management allows or encourages employees to share or participate in organizational decision-making (Probst, 2005). Following Maslow's hierarchy-of-needs concept, to encourage a sense of belonging it is important to involve subordinates in the decision-making process, so that organizations can train employees' behaviour according to what the organization expects (McLeod, 2020). Thus, to achieve successful implementation of PMSs, lecturers' participation in decision-making is strongly indicated.

A PMS is developed in an effort to help in an organization identify a set of performance actions that reflect the right performance and targets in line with the its vision, mission, strategic management and global orientation (El Mola & Parsaei, 2010). Pashiardis (1994) contends that the lecturer's participation and involvement in making decisions will make the policies responsive to needs, in this context, in the implementation of PMSs. Sarafidou and Chatziioannidis (2013) argue that participative decision-making at HEIs can improve communication between lecturers and management, and that this will eventually have positive influence on the organization. Lecturers' involvement can take the form of participation in formulating their own targets, enabling stronger responsibility and commitment from lecturers towards achieve their performance targets (Kewo, 2014). Because targets come from the lecturers themselves, their sense of responsibility for fulfilling the targets will be stronger than in the absence of this participation (Hutama & Yudianto, 2019). Additionally, participation can also take the form of providing opportunities for input into improving PMS implementation. Increased feedback from lecturers on PMS practices will allow the performance of the organization to continue to thrive (Sukirno & Siengthai, 2011).

Although the arguments above show the potential of participation policy in encouraging effective PMS implementation, some scholars believe that lecturers are reluctant to comply with the control aspects of policy because that is not the main objective of their work (Decramer et al., 2013; Goh, 2012). However, empirical research examining whether the concept of participation in PMS implementation is able to promote effectiveness is still difficult to find, and this research therefore seeks to fill that research gap. Based on the points highlighted above, the following hypothesis is proposed:

H_3: Participative decision-making has a positive relationship with perceived effective PMS implementation.

Participative Decision-Making as an Intervening Variable

In implementing a new policy, namely a PMS, the involvement of all parties is crucial (Smith & Brannick, 1990). Lecturers' involvement will improve their willingness to address obstacles to PMS implementation and, in turn, to provide important feedback to deal with problems and improve implementation quality. The opposite will be likely to occur if lecturers' participation is limited. Limiting participation will result in lecturers' ignorance of the implementation of the PMS and may trigger the failure of this new policy implementation (Chenhall & Brownell, 1988; Sukirno & Siengthai, 2011).

Participative decision-making is a manifestation of the organization's real support for lecturers in achieving effective PMS implementation. Participation is crucial so that lecturers have a strong perception that the support provided by the organization is not only limited to statements of intent but also feels true in fact. In addition, the existence of participation space indicates fair leadership, namely that the targets and strategies for achieving the performance that are put in place can be negotiated. This mechanism also indicates openness of the leadership to the participation rights of lecturers as subordinates and subjects of performance management. Saying that, the participative decision-making in PMS implementation not only serves as a determinant of PMS but rather it also intervenes in the PMS implementation relationship with ethical leadership and organizational support, which are the other determinants in this study. Based on the points highlighted above, the following hypotheses are proposed:

H_{4a}: Participative decision-making mediates the relationship between ethical leadership and perceived effective PMS implementation.

H_{4b}: Participative decision-making intervenes in the relationship between perceived organizational support and perceived effective PMS implementation.

A research model of the study is presented in Figure 1.

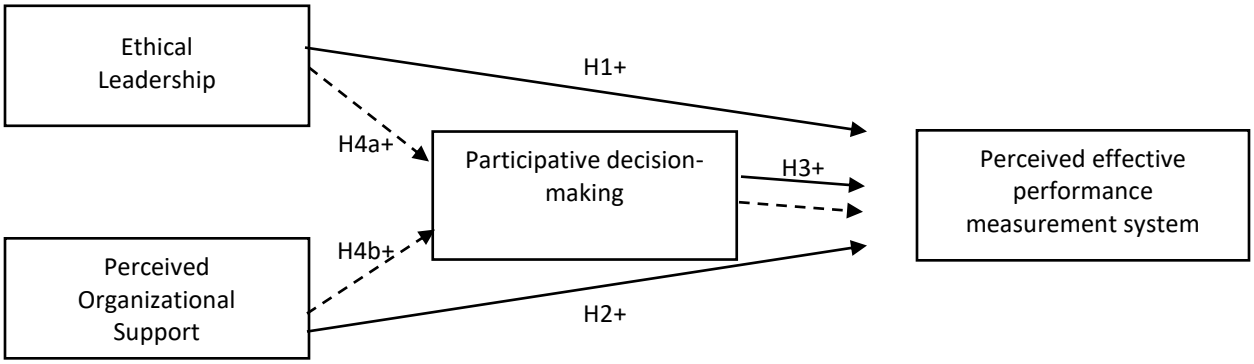

Figure 1. Research Model

METHOD

Research Design

This study uses a survey-based explanatory research approach which is useful for analysing how a variable affects other variables (Creswell, 2012). This study employs hypothesis testing and can be categorized as positivist in its research approach (Smith, 2019). The time dimension in this study is cross-sectional, that is, it is involving one specific time with many samples to examine the relationship between the independent variables and the dependent variable. It is important to note that although this study was conducted to examine the determinants of PMS implementation, it only tested the perceptions of the research respondents who were the samples. The research sample therefore refers to individuals, namely lecturers, and not to HEIs.

Population and Sampling

This study involved private HEIs lecturer as the research population, since problems related to poor lecturer performance were evident in that group of institutions. Moreover, private HEIs have just began to initiate and implement the development of PMSs. In addition, it is found that private HEIs have received much less attention than public HEIs in terms of research related to quality (Cao & Li, 2014). The sample was taken using a purposive sampling approach with the selection criterion that the HEIs should have already implemented a PMS. Thus, the respondents of this research are all permanent lecturers involved since they are subjects of PMS implementation.

Table 2 explains the characteristics of the respondents of the current study. The respondents of this research were lecturers at private HEIs in Java Island that had implemented PMSs. In detail, 128 responses were from Yogyakarta, 40 from Central Java and 35 from West Java. Of the respondents in this research, most (108) were women while the remaining 95 were men, giving a relatively equal gender split. Most of the respondents' age range was from 25 to 35 years old and married. The respondents were relatively experienced in their jobs as academic staff, even if most of them assumed the functional role of ordinary lecturer.

Table 2
Demographic Data

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
	Ordinary Lecturer	94	46.3
	No answer	36	17.7

Research Variables and Instruments

a. Endogenous variable: perceived effective PMS system implementation

A PMS is a system that gives comprehensive information on work goals and targets for every individual within an organization (Hall, 2008) and is one of the means available to organizations for the implementation of its overall strategies. In the current study, PMS is measured by using a questionnaire developed by Hall (2008), adapted to meet the specific context of the study. A PMS gives information on the most important performance criteria and is integrated into the institution's strategy at each level of the value chain. Since the performance management in this study is located in HEIs and reviews the performance of lecturers, the PMS instrument was adjusted accordingly. In this study's context, the question items for measuring perceived effective PMS implementation were adjusted to address the generally applicable measures of lecturers' performance in Indonesia, namely teaching and learning, research and publication, and community service activeness.

Additionally, performance indicators were also developed in reference to international accreditation such as AUN-QA and QS university rankings, as both these frameworks are adopted formally by the Indonesian government in measuring the performance and quality of lecturers and HEIs. The measurement indicators were formulated by testing their validity in three discussions with research experts. Eight indicators of PMS measurement were identified, as follows: PMS provides information on performance (1), complete documentation to evaluate performance (2), information on different performance according to lecturer's structural (3) and functional roles (4), PMS is in harmony with the HEI's strategy (5), PMS relates performance to the HEI's goals and target achievement (6), PMS indicates the interrelatedness of performance between one lecturer and another (7), and PMS provides key-indicator achievement of each lecturer (8).

b. Exogenous variable 1: participative decision-making

Participative decision-making is the involvement of lecturers in making decisions. Adopting a questionnaire from Marks and Louis (1997), the indicators to measure participative decision-making consist of eight dimensions. Participation in policy-making includes participation in making operational policy and institution management, the policy of student behaviour, the lecturer's work environment, and course materials. Operationally, the indicators of this variable are: lecturers' participation in determining teaching and learning schedules (1), determining teaching and learning tasks (2), preparing curriculums (3), preparing practice materials (4), drafting students' code of ethics (5), formulating disciplinary regulations (6), determining textbooks and teaching materials (7), and determining the topics and skills to be taught (8).

c. Exogenous variable 2: perceived organizational support

Organizational support refers to the organization's appreciation and care of its employees; in other words, the organization's commitment to its employees. The instrument adopted is as developed by Eisenberger et al. (1990). The questions to measure organizational support are leaders' willingness to listen to complaints (1) and aspirations (2), to consider the interests of all parties (3), and to consider welfare (4).

d. Exogenous variable 3: ethical leadership

Ethical leadership is defined as the right normative behaviours in the form of both personal actions and interpersonal relationships, as well as the demonstration of these behaviours to subordinates (followers) through two-way communication, reinforcement and in making decisions. These are measured using the instrument developed by Brown et al. (2005). The

indicators are: leader's care (1), leader's democratic and open attitude (2 and 3), leader's discipline (4), leader's ethical behaviour at the HEI (5), leader's siding with lecturer's interests (6), leader's objectivity (7) and fair attitude (8), leader's trustworthiness (9), and ethical role modelling by leaders (10).

Development of Research Instrument (Questionnaire)

Since this research used a survey approach, we developed a questionnaire prior to its distribution. The questionnaire was subjected to a pilot check and to validation by the researcher and four experts on three occasions. In the pilot test stage, the experts were asked to read and comment on whether the questionnaire was easy to read and understand, and whether it was too long, demanding or confusing. Once the feedback was collected, minor revisions relating to the questionnaire were carried out.

Data Collection

The data were collected by distributing both postal and online questionnaires. In the questionnaire, it was explained that the survey was anonymized so that participants' confidentiality would be maintained, and that the obtained data would be used only for academic purposes. The research questionnaire consisted of two parts, with the first part collecting respondents' demographic data, and the second part asking questions related to the research variables. All variables were scaled using Likert 1 (strongly disagree) to 5 (strongly agree).

Out of 1,000 distributed questionnaires, 256 were returned and usable. Of these, 53 questionnaires were incomplete and so had to be dropped, leaving 203 usable questionnaires for analysis. It is important to note that because this study was conducted at HEIs located in Java, the generalizability of the research results is relatively limited.

Data Analysis

The data were analysed using a partial least squares (PLS) method, specifically a variant-based structural equation modelling test performed using SmartPLS software. PLS is a technique for modelling a latent variable which combines several dependent constructs and explicitly acknowledges measurement errors (Fornell & Larcker, 1981) that has been used in a number of accounting studies (Akbar et al., 2012). The method is able to simultaneously perform measurement model tests while testing structural models (Chin et al., 2003; Hair Jr et al., 2014). The PLS model is performed in two stages. Firstly, the reliability and validity of the measurements and model are assessed. Secondly, the structural model is evaluated. 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. The results of the measurement model are presented first, followed by an investigation of the relationship between constructs (Hair Jr et al., 2014). PLS suits this research since it makes a minimum data assumption and requires a relatively small number of samples, as well as having theoretical bases that are not too strong (Chin et al., 2003).

RESULTS

Table 3 shows that the actual average for each variable was above the theoretical average.

Table 3
Descriptive Statistics

Variable	*Theoretical range*			*Actual Range*		
	Min	Max	Mean	Min	Max	Mean
Ethical leadership	10	50	30	18	50	39.17
Perceived organizational support	4	20	12	7	20	15.65
Participative decision making	8	40	24	8	40	30.99
Perceived effective PMS implementation	8	40	24	11	40	31.28

Non-Response Bias

Non-response bias testing was conducted to oversee the influence of different questionnaire distribution times (first and second two weeks). This non-response bias testing was performed using a proxy of respondents who in the beginning had answered as sincerely wishing 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 4).

Table 4
Non-Response Bias Testing

Variable	Mean Difference	Sig. (2-tailed)
Ethical leadership	-.1135	.892
Perceived organizational support	.3650	.329
Participative decision making	-.0294	.970
Perceived effective PMS implementation	.0213	.978

The Results of Construct Validity Test

The construct validity test is done to evaluate how well the results obtained from the measurements fit the theories around which the test is designed (Sekaran & Bougie, 2010). In doing so, we referred to loading and cross-loading. According to Hair, Black, Babin, Anderson, and Tatham (2010), a rule of thumb is that the loading score should be at least 0.5. The test results as shown in Table 5 revealed that all items measuring a particular construct loaded highly on that construct but lower on the other constructs, thus confirming construct validity (Hair et al., 2010).

Table 5
Loadings and Cross-Loadings

Items	Ethical Leadership	Perceived Organizational Support	Participative Decision-Making	Perceived effective PMS Implementation
EL1	0.768	0.381	0.387	0.403
EL2	0.576	0.275	0.239	0.344
EL3	0.662	0.332	0.379	0.354
EL4	0.822	0.203	0.297	0.375
EL5	0.813	0.378	0.288	0.387
EL6	0.830	0.181	0.333	0.393
EL7	0.855	0.224	0.364	0.236
EL8	0.847	0.335	0.277	0.139
EL9	0.809	0.223	0.362	0.326
EL10	0.763	0.379	0.331	0.396
POS1	0.116	0.619	0.134	0.207
POS2	0.270	0.811	0.294	0.379
POS3	0.285	0.842	0.126	0.205
POS4	0.381	0.878	0.348	0.110
PDM1	0.306	0.302	0.610	0.194
PDM2	0.378	0.351	0.768	0.355
PDM3	0.267	0.264	0.772	0.266
PDM4	0.263	0.277	0.726	0.315
PDM5	0.296	0.275	0.695	0.337
PDM6	0.249	0.245	0.590	0.249
PDM7	0.293	0.290	0.771	0.322
PDM8	0.339	0.309	0.736	0.327
PEPMS1	0.260	0.374	0.227	0.730
PEPMS2	0.210	0.304	0.350	0.776
PEPMS3	0.205	0.373	0.396	0.834
PEPMS4	0.233	0.366	0.335	0.873

PEPMS5	0.343	0.351	0.287	0.783
PEPMS6	0.320	0.170	0.362	0.891
PEPMS7	0.356	0.366	0.239	0.725
PEPMS8	0.210	0.321	0.298	0.829

The Results of Convergent Validity Testing

Convergent validity testing evaluates the degree to which multiple items measuring the same concept are in agreement. According to Hair et al. (2010), we referred to outer loading and average variance extracted (AVE) to test the convergent validity. From Table 6, it can be seen that the loading values for all items were higher than the recommended score of 0.5 (Hair et al. 2010). Moreover, it can be observed that all items showed AVE values that agreed with the rule of thumb required, being higher than 0.5 (Barclay et al., 1995; Fornell & Larcker, 1981).

Table 6
Results of the Measurement Model

Latent variable	Items*	Code	Loading	AVE
Ethical leadership	Leader's care	EL1	0.768	0.607
	Leader's democratic attitude	EL2	0.576	
	Leader's open attitude	EL3	0.662	
	Leader's discipline	EL4	0.822	
	Leader's ethical behaviour at HEI	EL5	0.813	
	Leader's siding with lecturer's interests	EL6	0.830	
	Leader's objective attitude	EL7	0.855	
	Leader's fair attitude	EL8	0.847	
	Leader's trustworthiness	EL9	0.809	
	Ethical role modelling by leaders	EL10	0.763	
Perceived organizational support	Leaders' willingness to listen to complaints	POS1	0.619	0.630
	Leaders' awards aspiration	POS2	0.811	
	Leaders' consideration of the interests of all parties	POS3	0.842	
	Leader's care for welfare	POS4	0.878	
Participative decision-making	Participation in determining teaching and learning schedule	PDM1	0.610	0.507
	Participation in determining teaching and learning tasks	PDM2	0.768	
	Participation in preparing curriculum	PDM3	0.772	
	Participation in determining practice materials	PDM4	0.726	
	Drafting students' code of ethics	PDM5	0.695	
	Participation in formulating disciplinary regulations	PDM6	0.590	
	Participation in determining textbooks and teaching materials	PDM7	0.771	
	Participation in determining the topics and skills to be taught	PDM8	0.736	
Perceived effective PMS Implementation	PMS provides information on performance	PEPMS1	0.730	0.652
	Complete document to evaluate performance	PEPMS2	0.776	
	Information on different performance according to lecturer's functional role	PEPMS3	0.834	
	Information on different performance according to lecturer's structural role	PEPMS4	0.873	
	PMS is in harmony with the HEI's strategy	PEPMS5	0.783	
	PMS relates performance to the HEI's goals and target achievement	PEPMS6	0.891	
	PMS indicates the interrelatedness of	PEPMS7	0.725	

	performance between one lecturer and another		
	PMS provides the key-indicator achievement of each lecture	PEPMS8	0.829

*negative questions are scaled in reverse.

The Results of Discriminant Validity Test

The discriminant validity test assesses the degree to which items are differentiated among the constructs (Hair Jr et al., 2014). We tested this by observing the correlations between the measures of potentially overlapping constructs. According to Compeau et al. (1999), in doing this test, it is important to note that the items should load more strongly on their constructs in the model, the average variance should be shared between each construct, and their measures should be higher than the variance shared between the construct and other constructs. In Table 7, it can be seen that the correlation score of the construct to the construct itself is higher than to other constructs. These results conclude that discriminant validity was fulfilled (Fornell & Larcker, 1981; Gefen & Straub, 2005).

Table 7
Discriminant Validity Test Results

Variable	1	2	3	4
Ethical leadership	*0.779*			
Perceived organisational support	0.628	*0.794*		
Participative decision-making	0.424	0.409	*0.712*	
Perceived effective PMS Implementation	0.555	0.537	0.422	*0.807*

The Results of Reliability Testing

To evaluate inter-item consistency of the measurement items, Cronbach's alpha and composite reliability were adopted. According to Table 8, all the alpha scores are higher than the required score of 0.6 (Chin et al., 2003), and the composite reliability scores range from 0.870 to 0.939. Fornell and Larcker (1981) contend that a composite reliability score of 0.50 or higher is considered acceptable. Therefore, it was concluded that the measurements of this research were reliable.

Table 8
Cronbach's Alpha and Composite Reliability Scores

Variable	Loading range	Cronbach's Alpha	Composite Reliability
Ethical leadership	0.576-0.855	0.932	0.939
Perceived organisational support	0.619-0.878	0.864	0.870
Participative decision-making	0.590-0.772	0.866	0.891
Perceived effective PMS Implementation	0.725-0.873	0.929	0.937

Furthermore, because of the self-reported nature of the survey data, there was a potential for common method variance (CMV) and so a Harman one-factor test was conducted to determine the extent of this. Podsakoff and Organ (1986) argue that common method bias is problematic if a single latent factor would account for the majority of any explained variance that is greater than 50%. Meanwhile, Fuller et al. (2016) contend that the score should not exceed 40%. Based on the CMV test, the unrotated factor analysis showed that the first factor accounted for 37.95% of the variance (see also: Doty & Glick, 1998; Pratolo et al., 2020; Tehseen et al., 2017). As such, the issue of common method bias is not significant in these study results.

The Results of Hypothesis Testing

The summary of hypothesis testing results in this paper is presented in Table 9. H_1 posited that ethical leadership has a significant relationship with PMS implementation at an original sample of 0.92 and p-value 0.005 ($p < 0.01$, one-tailed), thus H_1 was supported. H_2 suggested that ethical leadership has a significantly positive relationship with participative decision-making, having a positive original sample of 0.271 and p-value 0.050 ($p < 0.05$, one-tailed). Hence, H_2 was also supported. Meanwhile, H3 was also concluded as being supported, meaning that there was a positive relationship between participative decision-making and PMS implementation, as seen from the positive original sample score of 0.213 and p-value 0.001 ($p < 0.01$, one-

tailed).

Table 9
Summary of Hypothesis Testing Results (H_1, H_2 and H3)

Independent variables	Hypo-theses	Hypotheses direction	Beta/ Coefficient	P-value	Result
Ethical leadership	H_1	+	0.292	0.005	Supported
Perceived organizational support	H_2	+	0.209	0.050	Supported
Participative decision making	H_3	+	0.213	0.001	Supported

Dependent variables: perceived effective PMS implementation

In addition to testing the direct relationship hypotheses, the researchers also tested the indirect effect by placing participative decision-making as an intervening variable (see Table 10). The test result showed that participative decision-making intervenes in the relationship between ethical leadership and PMS implementation at an original sample value of 0.058, and the total effect of ethical leadership on PMS implementation increased to 0.350. This research result confirmed the results of Lestari (2016) and Najmulmunir (2013), who found that leadership would increase participation and had some influence on the implementation of a system. The same applied to Yukl's research, which suggested that leadership improved an organization's effectiveness (Yukl, 1989).

Table 10
Direct and Indirect Effect Test Results (H_{4a} and H_{4b})

Analysis	Correlation	Coefficient	P-Value
Direct Effect	EL → PEPMS	0,292	0,005*
	EL → PDM	0,272	0,010*
	POS → PMS	0,209	0,050*
	POS → PDM	0,183	0,044*
	PDM → PEPMS	0,213	0,001*
Indirect Effect	POS→ PDM → PEPMS	0.039	0,071**
	EL→ PDM → PEPMS	0.058	0,045*

*Note: * significant at alpha 0.05; ** significant at alpha 0.10; EL: Ethical leadership; POS: perceived organizational support; PDM: participative decision-making; PEPMS: perceived effective performance measurement system implementation*

The indirect effect of organizational support through participative decision-making on PMS implementation 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 HEI's support would associate with the success of PMS implementation 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 efforts, when the opportunity to participate was available and, eventually, this would increase lecturer's acceptance of the implementation of PMS policy (Rhoades & Eisenberger, 2002).

Table 11 shows the summary of this research in the form of research questions, hypothesis proposed, method used and findings.

Table 11
Summary of Research Findings

Research questions	Hypothesis	Method	Finding
1) Do ethical leadership, perceived organizational support and participative decision-making have positive relationship with perceived effective PMS implementation?	H_1 H_2 H_3	Survey with hypothesis testing using PLS (bootstrapping)	Ethical leadership, perceived organizational support and participative decision-making have positive relationship with perceived effective PMS implementation
2) Does participative decision-making have an intervening role in the relationship between ethical leadership and organizational support on perceived effective PMS implementation?	H_{4a} H_{4b}	Survey with hypothesis testing using PLS (bootstrapping)	Participative decision-making has an intervening role in the relationship between ethical leadership and organizational support on perceived effective PMS implementation

DISCUSSION

Ethical Leadership and Perceived Effective PMS Implementation

This research confirmed the first hypothesis, indicating that ethical leadership has a positive relationship with perceived effective PMS implementation. Lecturers as subordinates and subjects of PMS would carefully watch how their leaders behave and use this behaviour as their benchmark (Bandura, 1978). Any leadership capable of modelling compliance with new policies in an organization would be an initiator of mobilization or a role model for subordinates (Lu, 2014; Monzani et al., 2015). Subordinates would feel motivated to follow the new policies if they clearly saw that their leaders had behaved fairly, i.e. showing integrity in how they conduct themselves within the organization (Brown et al., 2005; Dadhich & Bhal, 2008).

Furthermore, this finding also affirms the contingency theory point of view, as suggested by Ashour (1973), that a leadership style in the right situation could promote the management and implementation of organizational governance to achieve the organization's goals, in this case through PMSs. This research finding implies that to support the effective implementation of PMSs in HEIs, ethical leadership as a contingent factor is pivotal.

Perceived Organizational Support and Perceived Effective PMS Implementation

This research also confirmed the claim that perceived organizational support had a positive relationship with perceived effective PMS implementation. This finding matches those of some previous studies, including Eisenberger et al. (1990), Shore and Wayne (1993), Eisenberger et al. (2002), and Gupta et al. (2016). However, in contrast to previous studies, this research was conducted in the context of PMS policy at HEIs and involved lecturers as subjects. Thus, this research contributes to providing new insights into the study of PMS in a different context.

It is undeniable that lecturers' aims in working in HEIs, in addition to pursuing their intellectual interests and contributing to the development of the academic world, include obtaining financial reward. If the employee's self-interest is not aligned with organizational goals, this might trigger the unsuccessful implementation of a particular policy in the HEI, because the determining factors for the success of a system or policy within the organization are contingent. As Rhoades and Eisenberger (2002) suggested, organizational support is what one perceives regarding the extent to which employees believe they are appreciated by the organization for their contribution and feel that their organization cares about their welfare. A good organization would support their lecturers, for both development of their passions (research, publication, community service, etc.) and for their welfare (salary, bonus, promotion, etc.) and this would engender lecturers' positive perceptions of policies within the HEI, in this case PMS implementation. This could be further strengthened if the implementation of PMS was also equipped with some form of reward system (Pratolo et al., 2020; Tahar & Sofyani, 2020). Any employee who perceives strong organizational support would feel themselves part of the organization, and their commitment to the organization would grow. This would trigger compliance with the PMS and, in turn, lead to improved performance of both lecturers and the HEI. This finding confirms that organizational support is a pivotal contingent factor in promoting effective PMS implementation in HEIs.

Participative Decision-Making and Perceived Effective PMS Implementation

This research also found that the practice of inviting lecturers to participate or involving lecturers in making decisions is an important determinant of PMS implementation. This study confirms the view of Sukirno and Siengthai (2011), who suggested that the new public management era in which good governance has been a focus of constant improvement has placed transparency and fairness as key points. Participation or involvement, in essence, is a transparent practice provided by an organization to all members to maintain fairness within the organization and which indirectly influences individual and organizational performance. Participation can nurture greater respect from members towards organizational leaders who establish and nurture environments of mutual trust (Lam et la., 2002; Parnell & Rick Crandall, 2003). Practically, participative decision-making in PMSs would identify the right performance indicators, since communication and coordination would, over time, take place between the HEI leaders, as those establishing the HEI's vision and missions, and lecturers, as the executors of programmes and activities related to how these goals can be achieved (Al-Yahya, 2008; Baraldi, 2013). The performance indicators directly suggested by lecturers could be corrected by leaders if they were not congruent with attempts to achieve the organization's vision and missions. Thanks to this practice, goal congruence between lecturers and their HEIs would be effectively established (Mowen & Hansen, 2006).

As contingency theory suggests that there is no 'best' control system that can be applied to all organizations, the application of a proper control system must consider the involvement of the contextual variables in which the organization is located (Fiedler, 1964). This study's findings indicate that participative decision-making contributes to realizing an effective control system through the PMS instrument in the context of HEIs. Participation can be an instrument for creating goal congruence through PMS policies, enabling the goals of HEIs to be achieved by aligning them with lecturers' goals as employees. The current study contributes to the literature by extending the discussion regarding determinants of effective PMS implementation in the context of the HEI sector, an area which rarely receives attention from academics.

Participative Decision-Making as an Intervening Variable

This research also found that participation in decision-making served as an intervening variable in the relationship between ethical leadership and perceived organizational support and perceived effective PMS implementation. In other words, the role of ethical leadership and organizational support on PMS implementation would be better if it is accompanied by participative decision-making practice within the HEI. This result contributes to examination of the determinants of PMS in which participative decision-making is positioned as an intervening variable, especially from the contingency theory perspective. In implementing a relatively new policy, in this case PMS implementation, lecturers, as its subject, know best the weaknesses of the system and the inputs required to improve implementation in the future. When a mechanism is available for lecturers to participate in making decisions, they are aware of the features of the newly implemented mechanism (Boumans et la., 2017) and will willingly think about and act upon ways the organization should work towards betterment (Lam et al., 2002). The absence of this participation leads to ignorance in the lecturer subjects of the PMS and this in turn leads to implementation falling short of expectations and interference in the PMS implementation itself (Tahar & Sofyani, 2018). In respect of this finding, it is suggested that a participation mechanism should be considered as a crucial aspect in promoting effective PMS implementation in HEIs in contingent environments as suggested by the contingency theory point of view.

CONCLUSION

This research aims to examine the relationship between ethical leadership, perceived organizational support and participative decision-making and perceived effective PMS implementation in Indonesian HEIs using a questionnaire-based survey method. By adopting a PLS technique to test the proposed hypotheses, this study found that ethical leadership, perceived organizational support and participative decision-making have a positive relationship with perceived effective PMS implementation in HEIs. In addition, this research concludes that participative decision-making plays an intervening variable role. This means that organizational support and ethical leadership would trigger a better implementation of PMS if participative decision-making is present. The implication of this research result is that to achieve effective PMS implementation, HEI managements need to consider three contingent factors: ethical leadership, organizational support and participative decision-making. The results of this study extend the discussion of contingent factors in the implementation of PMSs in HEIs, especially in the early adoption stage that forms the context of this study.

This research has, of course, its own limitations; in particular, it is conducted only at private HEIs located in Java Island. As such, it is important to consider with caution its generalizability in the Indonesian context. Based on this limitation, it is suggested

that further studies be conducted in HEIs located beyond Java Island, addressing the possibility that different locations might harbour different organizational cultures and contexts and therefore generate different results. Another limitation is that this study is only based on lecturers' perceptions and does not investigate the real experience of the top management of HEIs. Therefore, further research is needed to capture the real and actual development and implementation of PMS policy from an HEI top-management perspective. Last but not least, this study only uses a survey method, which, of course, has limitations in terms of depth of explanation about how PMS implementation is determined by the three factors addressed (ethical leadership, perceived organizational support and participative decision-making). To extend this study's results, the use of other approaches, such as qualitative or mixed-methods, is strongly recommended.

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