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Performance Measurement System and Lecturers' Performance: Testing The Mediation Role of Competency In Malaysian Research Universities

Sharul Effendy Janudin[a], Ruhanita Maelah[b], Amizawati Mohd Amir[b], Nor Liza Abdullah[b]

[a]*Universiti Pendidikan Sultan Idris, Malaysia, sharul@fpe.upsi.edu.my*
[b]*Universiti Kebangsaan Malaysia, Malaysia*

Abstract

Since performance of lecturers is the key contributor of academic excellence, universities need to empower their human capital to be competitive and subsequently achieve world-class status. Unfortunately, efforts to conduct research on measuring the performance of higher education institutions face a major setback compared to other industries due to its complex nature and difficulty in measuring its outputs. Furthermore, a review of literature indicates that research conducted in the education environment mainly focuses on organizational performance rather than work performance. This study fills the gap by providing a research framework focusing on the Theory of Work Performance. The interaction between performance measurement system and competency on the work performance of lecturers at the individual level was investigated through the analysis of data gathered from 368 academic staff from five Malaysian research universities. The findings indicate that 1) performance measurement system (PMS) is positively associated with lecturers' performance; 2) competency is positively associated with lecturers' performance; 3) competency partially mediates the relationship between performance measurement system and lecturers' performance.

Keyword:

Performance Measurement System, Competency, Institute of Higher Learning

INTRODUCTION

The transformation introduced by the universities in recent times had been due to various factors such as the increasing number of students, budget constraints, globalization, and the desire to introduce a more rational management style. As a result, the public sector management style was introduced in the early 1980s and modifications in management control systems were initiated. For example, special attention has been given to the provision of financial budgets, management, models of workload allocation and performance measurement quality. Even though research with respect to allocation of resources and the accounting system at the university level is growing, a study of performance measurement and management at department and staff level in university is still lacking (Bogt & Scapens, 2009).

External and internal pressures force the university to improve its governance system, organizational structure and management style. Evidence can be seen through the adaptation of management tools and practices by profit entities, especially performance measurement system into the university's management activities. For example, University of Siena, Italy has been actively using dynamic performance measurement system when carrying out teaching, research activities and management (Barnabè & Riccaboni, 2007). University corporatization and transformation into an autonomous university forces the management to find the best way to get financial resources. A new style of public management has been adapted to the very essence of corporate management styles in university. The most significant effect is the basis of defining the university management style, mission, shared values and lecturer roles (Parker, 2011).

In this paper, the present PMS of university was evaluated based on a comprehensive PMS model. Prior research in the area of PMS has focused on its relationship with organizational performance rather than work performance. In addition, there are limited studies which examine the behavioural consequences and motivational mechanisms of performance measurement system on individual work performance especially in the education environment. Therefore, this framework will examine the relationship between PMS and work performance at public research universities in Malaysia. This study also investigates the influence of competency on work performance. Competency refers to individuals feeling proud and happy with their achievement as the working environment satisfies their expectations (Na, Amzat, & Abolhaija, 2011). Several studies found that competency has influence on work performance of individuals, including in education settings. The interest to study competency among academics is motivated by the operational nature of university which is labour-intensive and the fact that budget spending of university is dominated by academic development expenses (Toker, 2011). Competency is expected to influence work and subsequently organization performance.

Effects of PMS in the organization have always been the focus of many researchers, but studies on its effects at the individual level is still lacking despite the fact that measurement of university excellence in teaching, research, publications and community service merely depends on the individual academics. This study also fills the gap by focusing on work performance of lecturers. The framework to analyze the interaction was established between PMS and competency based on Theory of Work Performance which emphasizes on the interaction between opportunity and willingness to achieve high work performance. This paper will thus attempt to answer the following questions:

1. Does the performance measurement system influence the lecturers' work performance?
2. Does the competency influence the lecturers' work performance?
3. Does the competency mediate the relationship between performance measurement system and lecturers' work performance?

LITERATURE REVIEW

Higher education in Malaysia

Malaysia has been successful in democratizing higher education and in producing sufficient graduates to meet its manpower requirements over the last three decades. As an example, the higher education capacity in Malaysia has grown from the formation of the country's first university, Universiti Malaya in 1961, to 20 public universities, 24 private universities, 22 university colleges, four branches campuses of international universities, 21 polytechnics, 37 public community colleges and 390 private colleges as end of 2011 (Ministry of Higher Education Malaysia, 2012).

As a platform to move forward, The National Higher Education Action Plan 2007-2010 was formalized and it currently functions as a stepping stone towards promoting long-term objectives of human capital development contained in the National Higher Education Strategic Plan (Ministry of Higher Education Malaysia, 2007). The ultimate aim is to empower the Malaysian higher education in order to meet the nation's developmental needs and to build its stature both at home and internationally. Seven strategic thrusts have been outlined:

1. Widening access and enhancing equity
2. Improving the quality of teaching and learning
3. Enhancing research and innovation
4. Strengthening Institution of higher education
5. Intensifying Internalization
6. Enculturation of lifelong learning
7. Reinforcing the Higher Education Ministry's delivery system

Due to the globalization of higher education, universities around the world have widened their influence in recent years through classifications such as world university rankings, global university rankings using bibliometrics and global university rankings using web metrics (Liu & Cheng, 2011). Each ranking system has specific dimensions to measure university performance. For example, Times Higher Education System (THES) in 2014 used five dimensions (Table 1) and the dimensions used by this ranking show that the performance of lecturers contributes to merely 60 percent of the overall performance of the university. Therefore, universities need to empower its human capital to be competitive and subsequently achieve world-class status.

Table 1: THES 2014 Indicator

Dimensions	Weighted (%)
Teaching – the learning environment	30%
Research – volume, income and reputation	30%
Citation – research influence	30%
Industry Income – innovation	2.5%
International outlook – staff, students and research	7.5%

Source : Times Higher Education (2015)

The demand for higher education in Malaysia is expected to grow as population increases in tandem with the government's emphasis on human capital development. Ranking classification among universities has significant influence towards the universities' management process in Malaysia. The World Bank Report entitled Malaysian Economic Monitor: Smart Cities 2011 highlighted the fact that Malaysia spends slightly more than most countries on its tertiary educations. Unfortunately, leading Malaysian universities perform relatively poorly in global rankings. As an immediate action, further measures to improve university performance should be adopted (The World Bank, 2011).

The Ministry of Education Malaysia has carried out various efforts to improve the status of Malaysian higher education institutions as a centre of excellence in education internationally. For example, public universities are categorized into either research, focused or comprehensive universities. In another development, the government grants autonomy status to public universities which meet the requirements. Financial allocation to these universities is given based on the performance of the institutions and the code of governance and governance index have been developed to enhance accountability. Autonomy is also expected to expedite the transformation process of the universities. *Accelerated Programme for Excellence* (APEX) was introduced in 2008 with the underlying purpose to increase innovation, performance and encourage excellence among public universities. In February 2015, the Malaysian Education Blueprint 2015 – 2025 (Higher Education) with 10 thrusts was launched. It is expected to be a robust action plan to make Malaysia a global player and leading education hub at the international level (Ministry of Education Malaysia, 2015). As an agent of economic environment change, universities have to be proactive in planning and controlling their activities as they have to responsible and accountable to the stakeholders.

Performance measurement system is workable as a means to implement strategy, align behaviours and support decision making (Franco-Santos et al., 2007).

Performance measurement system (PMS)

PMS is a mechanism used by the management to supervise and control the direction of the organization. It plays an important role in developing corporate strategy and performance evaluation for the organization to be more competitive in the global economy (Ukko, Tenhunen, & Rantanen, 2007). It identifies individual effectiveness at all hierarchical levels within an organization (Ubeda & Santos, 2007). Performance measurement also prepares useful information in the decision-making process (Ukko et al., 2007) and assists managers in planning and controlling (Chenhall & Langfield-Smith, 2007) in order to achieve good results.

A comprehensive PMS relates to its multiple measurements, focus on strategic planning, integrative and incentive (Buhovac & Groff, 2012). Hall (2011) defines comprehensive PMS as the ability of the system to supply enhanced performance information which links performance and individual role by providing a broad set of measures related to the importance of the organization, the integration of measures with strategy and valued organizational outcomes, and the integration of measures across functional boundaries and the value chain. Multidimensionality refers to a combination of financial and non-financial measures, objectives and performance measures. Generally, comprehensive performance measurement system refers to the use of various performance measures which combine financial and non-financial measures, emphasize the role of information in the organization and connect all the activities carried out within the organization. All measurements having relationships with each other will interact and integrate to form a consensus. As a result, performance measurement systems used by an organization enables information-sharing among employees.

The consequences of performance measurement system can be divided into three categories: people's behaviour, organizational capabilities, and performance consequences (Franco-Santosa, Lucianetti, & Bournea, 2012). A few examples of positive effects on behaviour are managerial learning and decision-making (Grafton, Lillis, & Widener, 2010), role clarity (Hall, 2008) while positive consequences on organizational capabilities are the quality of being innovative (Henri, 2006), strategic alignment (R. Chenhall, 2005) and management practices (Ukko et al., 2007). Empirical research clearly promotes the significant relationship between performance measurement system and performances at the organizational level and individual level. Furthermore, research on performance measurement system at service organization especially in universities is scarce due to the difficulty in measuring output and processes (Zangoueinezhad & Moshabaki, 2011). Most of the research conducted focus on university aggregate performance by using contingency theory (Chung, Harrison, & Robert C, 2009), institutional theory (Bogt & Scapens, 2009).

Competency

Competency in employment affects work productivity as well as the survival of an organization. Competencies can be divided into two types: specific and general. Specific competency refers to the cognitive requirements needed by employees to enable them to work. Examples are the skills possessed by a carpenter to design furniture which is required by the customer. However, technological change and transition requirements of the labour market has made competency vulnerable to depreciation (Allen, Ramaekers, & Velden, 2005). General competency refers to the knowledge, skills, codes of conduct, and personal

characteristics possessed by every member in organization. Examples of general competency are discipline, integrity, transparency, self-leadership qualities, team collaboration, initiative, creativity and analytical skills.

Competency is also defined as the ability and talent which translates the ability, behaviour and manifestation of intention owned by individuals (Boyatzis, 2008). Talent is measured through values, vision and personal philosophy; knowledge, competency, career development, interests and style. According to Boyatzis (2008b), there are three clusters of competencies: expertise and experience, knowledge and cognitive efficiency. This competency would not be static because it can be developed in the performance measurement system. According to Slocum, Jackson and Hellriegel (2008), competency is a combination of knowledge, skills, behaviour and attitude which contributes to the efficiency of the individual. For example, a manager should possess six core competencies: communication, planning and administration, teamwork, strategic action, cultural diversity and self-management. According to existing literature, competency theory can be divided into three perspectives: competencies at the individual level, organizational competencies and competency as a tool of communication between the education field and the labour market (Garavan & McGuire, 2001; Kalargyrou and Woods, 2001). In the higher education sector, lecturers should have high competency in teaching (Ullah, Khan, Murtaza, & Din, 2011), research (Clarke, Flanagan, & O'Neill, 2012), supervision (Paglis, Green, & Bauer, 2006) and publication (Mayrath, 2008).

Lecturers' work performance

Performance measurement process of an organization is an important and challenging task for the management due to the difficulty in determining the appropriate constructs during the process. The task becomes more significant when it involves many employees in large organizations particularly if the process of reviewing will be carried out at individual level. Murphy (2008) stated that academic debates about the relationship between performance measurement and performance are interesting and useful, but they might not be helpful to the practitioners in improving performance measurement. Hence, the basic question to be answered is whether the constructs could be related to job performance.

The main objective of university is to develop knowledge through teaching, research and social service. The university requires lecturers with high competencies to ensure teaching and learning activities work effectively. At the individual level, lecturers were affected by participation in decision-making process (Sukirno & Siengthai, 2011), emotional intelligent (Mustafa & Amjad, 2011), teaching and research efficiency (Sellers-Rubio, Mas-Ruiz, & Casado-Díaz, 2010), goal orientation (Jackson, Hobman, Jimmieson, & Martin, 2009), goal orientation (Jackson et al., 2009), job stress (Kalyani R., Panchanatham N., & Parimala R., 2009), organizational commitment (Smeenk, Teelken, Eisinga, & Doorewaard, 2009) and psychological ownership (Samsinar Md-Sidin, Sambasivan, & Muniandy, 2009).

In measuring lecturers' work performance, researchers used particular dimensions. For example, Abdulsalam and Mawoli (2012) identified positive and moderate relationship between motivation and teaching performance while the relationship between motivation and research was negative. In Indonesia, Sukirno and Siengthai (2011) found lecturers' participation in decision making process has significant effect towards lectures' work performance in teaching, research activities, publication, social works and consultation. Universities in South Africa, United States of America, United Kingdom, Australia and Nigeria pay more attention on teaching and research performance among their lecturers (Molefe, 2010).

HYPOTHESIS DEVELOPMENT

Theory of work performance

The Theory of Work Performance by Blumberg and Pringle (1982) was used in the development of the structural relationship among the variables of the study. The following sections briefly explain the theory to provide a deeper understanding on how it might explain the hypothesized relationship.

Organizational excellence depends on its ability to optimize resources such as financial, equipment and manpower. However, existing theories have failed to provide the basis to forecast individual employee excellence (Blumberg & Pringle, 1982). Therefore, the interaction between the ability to perform tasks, willingness to perform tasks and opportunity has been recommended by Blumberg and Pringle (1982) as a theory which can be used to predict individual work performance. In their working paper on the proposed exploration of the three-dimensional aspects, Blumberg and Pringle have called it as the theory of work performance.

The ability to perform refers to the physiological and cognitive capacity allowing individuals perform effectively. Examples are individual knowledge, skills, intelligence, health and stamina. While the psychological characteristics and emotions which influence the degree of an individual's ability to perform each task refers to the willingness to carry out tasks. Willingness can be associated with the effects of job satisfaction, personality, job involvement, attitude and expectations for the role of perception.

Even if an individual has the ability to perform the work and willingness to do their work, there are also situations in which the individual fails to achieve excellence performance. This is because there are environmental factors which contribute towards the excellence of the work done. Examples of environmental factors which affect an individual's work are colleagues, supervision, policies and rules of the organization. Blumberg and Pringle (1982) suggest three interactional factors as a function of individual work performance and forecasting can be noted in the form p = f (capacity x willingness x opportunities). This interaction is shown in Figure 1.

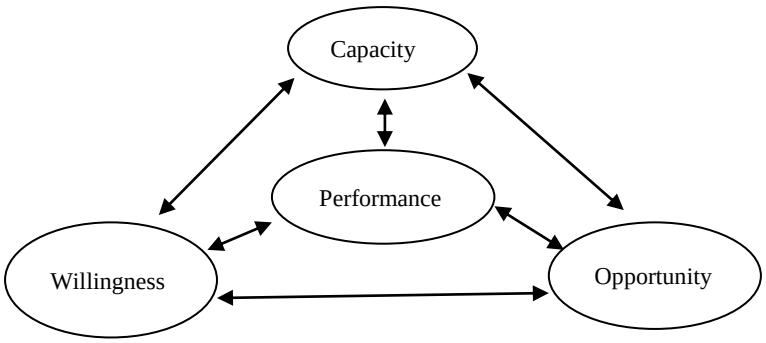

Figure 1: Dimensions of Work Performance

Pringle and Blumberg (1986) suggest several aspects of the opportunity to increase performance and need to be given attention by the manager. They point out the managers are responsible for providing a good working environment. Among the measures proposed are to analyze the level of technology used in an organization, upgrade production system uses,

selecting employees which could affect colleagues, mentoring system and widen the employee empowerment by giving more responsibilities to employees.

Research framework in a university setting

The variables used in this study are PMS, and competency which represent the two dimensions of Theory of Work Performance (opportunity and capacity). PMS refers to the process performed by managers in planning, controlling and measuring expected performance. The management of an organization needs to ensure staff have high competency to perform effectively. In order to excel at work, individuals need to have the capacity to perform. Competency refers to a combination of knowledge, skills and abilities of individual employees and it relates directly to the work of the individual. The independent variable in this study is work performance. Work performance is used to measure the contribution of academics through in-role performance. The research framework of this study is shown in Figure 2 below:

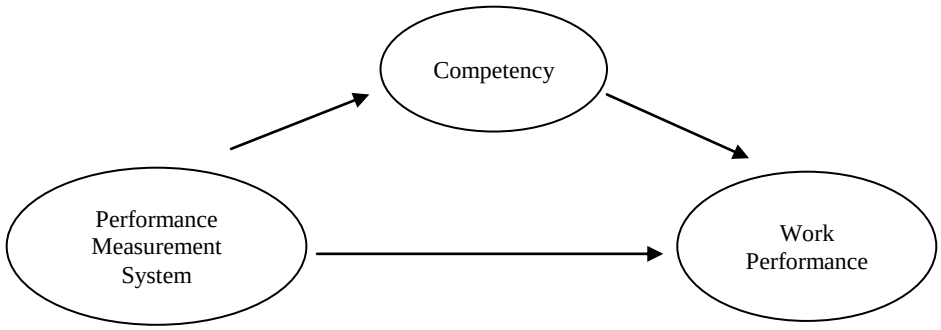

Figure 2: Research framework

Performance measurement system and work performance

PMS is an important and effective mechanism to control and ensure that managers' performance is in line with the objectives of organization. According to Hoque (2004), the adaptation of multiple performance measurement is able to provide signal and motivation. Hall (2008) shows that comprehensive PMS prepares operational and strategic information for managers to better understand their role and responsibilities to achieve better performance. Similarly, comprehensive PMS has an impact on the performance improvement of individuals (Webb, 2004; Hall 2008). In addition, PMS is argued to be strategic (Burney and Widener, 2007) and dynamic (Gimbert, Bisbe, & Mendoza, 2010) in order to be effective. Rahman and Shah (2012) found a positive relationship between PMS and performance of academics from 16 public universities in Khyber Pakhtunkhwa, Pakistan. In Australia, non-financial items in performance measurement system influence managers' performance rather than financial items (Hall, 2011). Therefore, the following effect is hypothesized:

H_1: PMS is positively associated with lecturers' work performance

Competencies and work performance

Individuals with high competency are expected to achieve high work performance because competency is a trait found in one individual which allows them to carry out a task given effectively (Dubois, Rothwell, Stern, & Kemp, 2004). Chreptaviciene and Starkute (2012) acknowledge that work performance increases when individuals believe they have the power to decide on how the work should be performed. Competency in carrying out

responsibilities is stated as defined in the specification of work (Boyatzis, 2008). Analysis made on 53,660 assessments by the manager, head of private companies and cooperatives in Italy found that emotional competence, social competence and cognitive competence influence management and leadership (Boyatzis and Ratti, 2009). In addition, a study conducted among executives in Spain shows emotional competence and personality are important predictors of work performance (Ramo, Saris, & Boyatzis, 2009). Furthermore emotional and social intelligence competencies are found to be practical, have a level of trust and high validity for assessing and developing individual workers in different cultures (Emmerling & Boyatzis, 2012). In general, positive relationship exists between competency and work performance. Therefore, the following effects are hypothesized:

H_2: Competency is positively associated with lecturers' work performance

PMS, competency and work performance

The nature of working as a lecturer requires teaching competency, competency inquiry, social competency and personal competency (Shavaran, Rajaeepour, Kazemi, & Zamani, 2012). The issue of imbalance competency is expected to be reduced through comprehensive PMS. Marin (2012) identified performance measurement system as having positive influence towards work performance and competency of middle managers in Canada. Changes in performance measurement system will encourage employees to react to the level of competency needed in performing their job (Medlin & Jr, 2009). Furthermore, feedback in management accounting needs to be analysed critically to avoid misunderstanding among employees (Pitkanen & Lukka, 2011). Basically, high competency would result in continuously increased effort which would eventually improve the performance. Therefore, the following effects are hypothesized:

H_3: Competency mediates the relationship between PMS and lecturers' work performance

RESEARCH METHOD

Data collection

The study was conducted using a survey method. The sample consisted of 1500 lecturers from Malaysian Public Research universities who were selected based on stratified random sampling method. Three levels of strata applied were faculties, departments and job ranks. The questionnaire was divided into four parts: Part A (items) to obtain background information on the respondents, Section B (five items) aims at measuring the performance measurement system. The questionnaire on performance measurement system was adapted from Hall (2008) and Chenhall (2005). An example of items on performance measurement system are "The performance measurement system (PMSs) provides a broad range of performance information about different areas of the university" and "(PMSs) provides a diverse set of measures related to the key performance areas of the university". An instrument developed by Jeya and Mohamad Sahari (2011) was used in part C to measure teaching competency level among lecturers. An example of items on teaching competency includes preparing materials for teaching and facilitating student discussion in class. Lecturers' work performance was measured based on an instrument developed by Smeenk et al. (2009). Seven items on measuring lecturers' performance included teaching, supervision, research, consultation, publication, paper presentation and overall performance. Respondents were required to give response on a statement based on scale 1 – 7.

Profile of respondents

A total of 1500 questionnaires were distributed and 384 questionnaires were returned. After deleting 16 questionnaires due to incomplete responses, only 368 were included in the final analysis. Even though the response rate was only 26%, this fulfilled the requirement of structural equation modelling with more than 300 (Tabachnick & Fidell, 2013). The test on common method bias by Harman single factor test showed no single factor existing as the dominant factor (Podsakoff & Organ, 1986). Table 2 shows the demographic profile of the respondents.

Table 2 : Demographics of respondent

	Frequency	Percentage (%)
Gender		
Male	183	49.7
Female	185	50.3
Age (years)		
25 – 30	6	1.6
31 – 35	29	7.9
36 - 40	60	16.3
41 – 45	103	28
46 - 50	62	16.8
Above 50	108	29.3
Academic Qualification		
Bachelors	1	0.3
Masters	33	9.0
Doctor of Philosophy	305	82.9
Profesional / Specialize	29	7.9
JJob Position		
Lecturer	33	9.0
Senior Lecturer	141	38.3
Associate Professor	118	32.1
Professor	76	20.7
Working Experience in current university (years)		
1 – 5	46	12.5
6 – 10	69	18.8
11 – 15	83	22.6
16 – 20	68	18.5
Above 20	102	27.7

ANALYSIS AND RESULTS

The research framework in which the relationship between CPMS and work performance is mediated by competency is presented in Figure 2. A structural equation model (SEM) was used to test for the mediation in H_3 in one stage, rather than using the two-stage approach of Baron and Kenny (1986). The SEM was estimated using a full information maximum likelihood procedure. A bootstrapping method was used to construct a sampling distribution in order to develop test statistics and assess the uncertainty. This method makes fewer assumptions and has more power (while maintaining reasonable type-1 error), and is therefore the currently recommended analysis approach (MacKinnon, Fairchild, & Fritz, 2007). One thousand resample (with replacement) were drawn from the original sample and bias corrected bootstrap confidence intervals were computed for the indirect effects. Descriptive statistic and inferential statistics were used to analyse the data. The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0.05$) for confirmatory factor analysis and a value of 99% ($p \leq 0.01$) for correlations.

Table 3 shows the result of data reliability (Cronbach's α), factor items and mean, factor loading (β), critical ratio (CR), standard errors (SE) and significance level (P). The reliability results show that each factor has Cronbach's alpha more than 0.70 which indicates that each factor has high reliability (Hair, Black, & Anderson, 2010). Factor loadings for each item were also above 0.50. Hair et al. (2010) recommend the minimum factor loading of 0.30 for a sample of more than 350 respondents.

Table 3 : Results of Confirmatory Factor Analysis (CFA)

Factors	Cronbach's α	Items	Mean	β	CR	SE	P
Compreh Performance Measurement System (CPMS)	0.937	cp1	5.2310	0.832			
		cp2	5.2554	0.870	20.919	.051	***
		cp3	5.0408	0.882	21.382	.056	***
		cp4	5.0815	0.885	21.496	.055	***
		cp5	5.0082	0.859	20.461	.057	***
Teaching Competency (TEA)	0.930	t1	5.8207	0.742			
		t2	5.7799	0.770	15.001	.075	***
		t4	5.6875	0.728	14.095	.077	***
		t5	5.8234	0.785	15.306	.072	***
		t6	5.4647	0.709	13.703	.082	***
		t7	5.9592	0.815	15.972	.072	***
		t8	5.6495	0.827	16.225	.074	***
		t9	5.6875	0.746	14.477	.073	***
		t11	5.7799	0.730	14.140	.079	***
		t12	5.7120	0.727	14.078	.077	***
Work Performance (WORKPERF)	0.892	wi1	4.0897	0.584			
		wi2	3.8777	0.698	14.717	.093	***
		wi3	3.6060	0.863	12.155	.167	***
		wi4	3.4538	0.882	12.297	.180	***
		wi5	3.1495	0.517	8.511	.160	***
		wi6	3.5027	0.736	11.023	.145	***
		wi7	3.7418	0.894	12.386	.139	***

Note: *** indicates the level of significance at 0.01

As can be seen from Figure 3, the ratio of chi-square to the degree of freedom (χ^2/df) is 2.603. This value is acceptable and below the threshold value (≤ 3) and thus indicate a good fit (Kline, 2011). Furthermore, additional goodness-of-fit parameters of CFI (comparative fit index) and TLI (Tucker-Lewis index) are over the minimum threshold of 0.9 (Hair et al., 2010). These findings are also supported by RMSEA (root mean square of approximation) and SRMR (standardized root mean square residual) value less than the recommended value of 0.08 (Hu and Bentler, 1999; Bentler, 1990). All this data indicate that the proposed model does fit the research data.

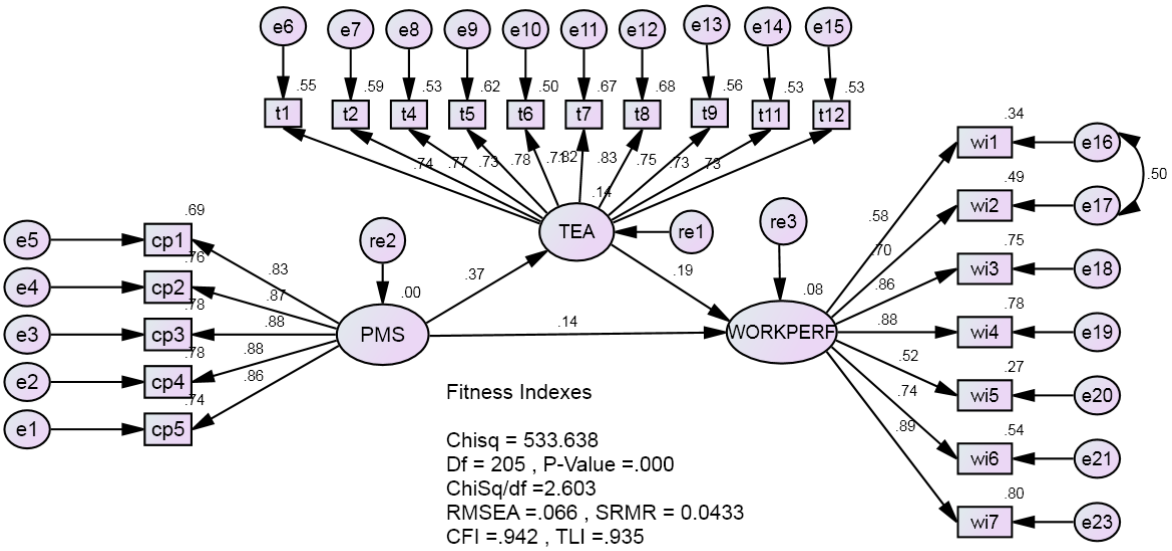

Figure 3 : Structural model of relationship between performance measurement system, competency and work performance

Three hypotheses had been developed and tested for this research. Table 4 shows the result of direct relationship between performance measurement system, competency and work performance. Both hypotheses were supported and significant at $p \leq 0.01$. Bootstrapping was used to test the mediation effect and the result showed that competency partially mediated the relationship between performance measurement system and work performance (Table 5). According to Zainudin (2014), if the result of indirect and direct relationship is significant, the nature of mediation is partial mediation.

Table 4 : Result of direct relationship

Hypotheses	Path			Estimate	S.E.	C.R.	P	Result
H_1	WORKPERF	<---	PMS	0.099	0.027	3.682	***	Significant
H_2	WORKPERF	<---	TEA	0.147	0.035	4.149	***	Significant

Note: *** indicates the level of significance at 0.01
PMS = Performance Measurement System
TEA = Teaching Competency

Table 5 : Result of mediation testing (PMS → TEA → WORKPERF)

	Indirect effect	**Direct effect**
Bootstrapping P-Value	0.007	0.025
Result	Significant	Significant
Type of mediation	Partial mediation since both direct and indirect effects are significant	

Note: *** indicates the level of significance at 0.05

DISCUSSION AND RECOMMENDATION FOR FUTURE RESEARCH

This study utilized SEM to explore the positive effect of performance measurement system on work performance via competency as the mediator. Although many previous studies explored the issue of performance measurement system and performance, there is little research that has actually explored the relationship of performance measurement system and work performance at the individual level. Interestingly, the research model developed in this study is based on theory of work performance (Blumberg & Pringle, 1982) which

highlights the interaction of opportunity and capacity to increase the level of work performance.

The study results showed that the relationship between performance measurement system applied by the university management and the lecturers' work performance is significant. In Malaysia, the internalization and autonomy received by the university becomes a push factor in achieving world-class university status. Any action and goals taken by the management must take into consideration the stakeholder needs. Since a lecturer contributes significantly in fulfilling the key performance indicator of the university, this study showed that university performance measurement system had a significant effect on lecturers' work performance. The test on the relationship between competency and work performance also showed that it is also significant. The mediation test indicated that competency partially mediated the relationship between performance measurement system and lecturers' work performance. This is an evidence for any organization while doing the strategic planning process to consider the capacity of their employee. The effect of performance measurement system can be more effective if the goal of the organization is designed based on human capacity in the organization.

This study contributes to the theory and practice by providing Malaysian evidence on PMS design for the education sector. The study also provides empirical evidence of the interaction between the two dimensions (opportunity and capacity) in the theory of work performance which leads to high performance. For regulators and administrators, the results can be meaningfully used as a guide to design and implement effective PMS, training, and work setting for the academics. PMS should be a comprehensive tool in planning and monitoring university performance as it provides a broad range of performance information. PMS also covers a critical area of key performance measures and functions as a formal document for sharing the strategic mission of the university.

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