

Does Organizational Learning Affect the Performance of Higher Education Lecturers in Indonesia? The Mediating Role of Teaching Competence

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ABSTRACT

This study aims to analyze the relationship between lecturers' performance and their teaching competence, measured by antecedent variables of organizational learning and need for achievement. It used the Structure Equation Model as data analysis technique, and the random sampling method to collect data from 207 lecturers of private universities in Central Java, Indonesia. The finding showed a positive significant relationship between the lecturers' capability and performance. It reveals the valuable determinant of teaching competence in mediating the relationship between organizational learning and the performance. This study originally contributes significantly to the creation and transfer of knowledge in academic milieu, especially in higher education institutions.

KEYWORDS

organizational learning, need for achievement, teaching competence, lecturer performance

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Introduction

Organizational learning as an internally dynamic process of organization aims to create organizational knowledge and integrate resource capabilities (Lopez et al., 2005). The term 'organizational learning' mainly focuses on creating knowledge of knowledge acquisition and cognitive process (see Škerlavaj and Dimovski, 2006; Wittrock, 1992). It is of considerably significant role in analyzing the knowledge-acquisition in learning processes (e.g Wittrock, 1992), especially in the classroom setting (Osborne and Wittrock, 1992). The organizational learning processes emphasize the individual or group involvement, interactions, participation and networking (Engle, 2006; Lewis, Pea and Rosen, 2010; Honavar and Uhr, 1993; Kourilsky and Wittrock, 1992).

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However, it is probably worth considering that though organizational learning is a concept having attracted much attention from scholars in their studies, it actually is not a practical term, and indeed has relatively indirect effect on teaching practices. In other words, to borrow a phrase of Wittrock (1992, p. 531), organizational learning 'does not transform input into output'. It is only a form of internal processes of cognitive and brain functions, albeit perceived as to be able to actively generate plans of action (Wittrock, 1992). This fact probably leads to the tentative assumption why there are scarcely studies examining the effect of organizational learning on the teaching practices and the consideration of direct relationship between organizational learning and individual performance. Some examinations have been conducted in the context of relationship of organizational learning as of process of creating and transferring knowledge on behavioural patterns. Skerlavaj and Dimovski (2006), Tabatabaei and Ghorbi (2014) find a significant positive effect; while Choy Chong et al. (2011) contrastly find a significantly negative effect. Accordingly, these findings can be a considerable basis for further examination.

Additionally, some (e.g. Montes, Moreno and Morales, 2005; March, 1991; LePine, LePine and Jackson, 2004) emphasize the need to involve the organizational tangible resource that is perceived as able to transform the cognitive results of organizational learning into behavioural output and performance-based activities. For organizational leaders, notably in higher education institutions, the exploitation of available organizational tangible resources outside an individual, such as motivational factors of external rewards and achievement, can be used as valuable strategies to promote the actual result of organizational learning and attain desired outcomes of individual. In addition, some (e.g. Dabbagh, 2003; Cabrera, Colbeck and Terenzini, 2001) state that the achievement of collective organizational learning is also determined by the degree of teacher or lecturer competence to practically apply and transfer the organizational learning result in the classroom setting and teaching practices. Accordingly, this paper examines the effect of organizational learning on lecturer performance, by proposing the mediating variable of teaching competence. It also explores the motivational factor of the need for achievement as an independent determinant, which is perceived as able to drive individual capability which in turn impacts on positive behavior and actions of individuals (Rabideau, 2005).

Literature Review and Hypotheses

Philosophically, education needs highly capable teachers in practicing teaching, who in turn affect their students' performance (Ji-xiang, 2010). In this regard, March (1991) states organizational learning is a vital component in any effort to improve organizational performance and to strengthen competitive advantages. Primarily, this study is based on the resource-based view of Barney (1991), emphasizing the improvement of competitive advantages derived from the utilization of organization strategic resources (Barney, 1991; Teece et al., 1997). This advantage is more likely to enable an organization to achieve superior performance (Pitts and Lei, 2003). Moreover, Barney (1991) suggests that the ways of utilizing resources and capability can profoundly differentiate the organizational performance relative to the competitor (Grant, 1991; Amit and Schoemaker, 1993). Hence, the high level of managing the strategically

tangible and intangible assets is perceived to affect the sustainability of performance and competitive advantage.

Organizational Learning

In organizational learning processes, organizational members need to have cooperative relationship in cross-functional responsibilities, by social learning and interaction to transform accumulated tacit knowledge of individuals into explicit organizational knowledge, which is known as the process of externalization. This process, which is characterised by organizational learning and social interaction among organizational member, is more likely able to practically change the tacit ideas and cognitive process of individuals into informative and explicit knowledge and contextualize social relationship among them (Nonaka et al., 2005; Sessa and London 2006). During the process, an individual's tacit knowledge is shared and embedded into organizational knowledge repository to form a relatively fixed model of continuous organizational learning (Sessa and London, 2006; Ramanujam, 2003).

Additionally, the learning process involving a variety of functional capabilities is likely to increase the effectiveness and efficiency of organizational management (Schroeder et al, 2002). Individually, this capability is characterized by the extent to which the organizational members are willing to contribute to promoting performance and achieving organizational goals. Group learning involves a variety of individual activities for acquiring experience, and sharing knowledge within an organization. The collaboration of individuals likely promotes the degree of explicit and tacit knowledge (Argote et al., 2001). Organizational learning is positively related to the quality of the team cooperation (Sessa et al., 2011). Hence, organizational learning being associated with cognitive, social, and pedagogical capability positively correlates with innovative behavior (Kululanga, 2009).

***H1:** Organizational learning has a positive, significant effect on teaching competence.*

Chaston and Badger (1999) highlight the importance of organizational learning in establishing the personal or group capability within an organization. The higher capability enables individuals to continuously voluntarily apply the knowledge and skill achieved on organizational strategic issues. In this context, an organization can function the knowledge, skills, and initiative of the members as well as provide the organizational values, motivation and self-control (Sinnott, et.al: 2002).

Organizational learning being related to cognitive learning processes is perceived to be able to create and improve new skills, knowledge, and appropriate methods used to achieve the goals and promote the organizational level of performance (Sessa and London, 2006). Organizational learning has the potential to improve or alter more effective methods, processes and productivity. Organizational learning potentially is of influence on behavioral and performance improvement (Garvin, 2000).

Some previous studies find that organizational learning effectively improves organizational performance (e.g Brockmand and Morgan, 2003). Bontis et al. (2002) further show a positive relationship between organizational learning and performance at three levels: individual, group, and organization.



More specifically, in the higher education context, a lecturer's performance is apparently measured by his or her teaching, research, community service performance, and other supporting and developmental activities. Likewise, Skerlavaj and Dimovski (2006) find that organizational learning positively affects performance. Hence, the improvement of organizational member capability needs the process of constantly renewing the methods and processes, which is in turn expected to positively increase both individual organizational effectiveness and outcomes.

H2: Organizational learning has a positive significant effect on lecturer performance

Need for Achievement

Alongside the need for affiliation and power, the need for achievement is a form of motivational dimensions. The theory generally states that motivated persons are willing to use appropriate behavior in satisfying their needs. Hence, the objectives, as the cognitive representation (Harackiewicz, Barron, and Elliott 1998), are the main determinants of behavioral patterns, incorporating how they think, feel, and behave in pursuit of the objectives. The objectives provide them with the specific competencies in achieving the goals (Hulleman et al., 2010). Moreover, the different objectives will lead individuals to the different cognitive, affective, and behavioral patterns.

Motivational factors personally reflect the inner desire and attitude, built as a basis for further action to achieve the goals (Chang et al., 2007). Wu et al., (2007) find that the need for achievement positively affects entrepreneurial persistence. Ikpaahindi (2001) shows a positive but weak correlation between the need for achievement and scientific work productivity, measured by the number of papers published. The result of these empirical studies empirically indicates that motivation for achievement is perceived to have considerable effects on capability and performance.

H3: The need for achievement has a positive significant effect on teaching competence

The need for achievement is directly related to job achievement. Schultheiss and Brunstein (2005) state that the need for achievement as the degree of tendency to respond to difficult tasks. It is also often defined as a capacity to set a positive behavior in facing difficult tasks (Baumann & Scheffer) and responsiveness (Schultheiss et al., 2014). Sheldon and Cooper (2008) find that capability likely improves personal motivation. Some suggest the direct positive correlation between motivation for the teacher capability and achievement (Negovan and Bogdan, 2013; Weindog, 2005; Rice, 2009). Moreover, Bipp and van Dam, (2014) state that the need for achievement is a positive predictor of students' academic achievement, which is directly associated with adaptive learning strategies (Michou et al., 2013; Michou et al., 2014).

H4: The need for achievement has a positive significant effect on lecturer performance

Teaching Competence

The individual competence referring to the specific use of capability in the context of teaching enables the higher level of implementing organizational strategy by increasing the collective capability of an organization (Yang 2003).

Basically, the high level of an organization capability to design the collective learning events is more likely to improve an individual's capability to particularly perform a job (Garavan and McGuire, 2001). Practically, the competence improvement can be achieved by the utilization of some strategies of recruitment, placement, training, assessment, promotion, reward systems, and personnel planning.

However, the general term of capability in the context of organization theoretically implies different meanings and approaches. There are at least three terms related to this conception: organizational, occupational, and individual capabilities. The organizational capability is the primary basis determining the occupational and individual capability. In the context of educational environment, individual capability refers to the effectiveness and outstanding performance of individuals (Boyatzis, 2008). Likewise, Becker et al. (2001) state that this kind of capability is associated with individual knowledge, skills, abilities and personal characteristics thereby directly affecting job performance.

Particularly, the Ministry of Higher Education of Indonesia specified the main teaching competence of lecturers in terms of pedagogical, professional, social, and personal competence. Pedagogical capability highly distinguishing the teaching competence of lecturers from other professions is basically defined as the ability to manage learning. While professional capability refers to lecturers' ability to adhere to the latest dynamic developments of sciences, which they should develop simultaneously through continuous learning and reflective action. Social capability is related to the ability to cooperatively perform closely the teaching with the students, colleagues, society and other related parties. Personal capability is described as the role modeling comprising such positive behavior as psychological maturity, emotional stability, ethical and moral sensibility, and self-development. These competencies are expected to play a role in the improvement of lecturer performance, which is commonly proxied by teaching, research, community service and developmental activities.

H5: *teaching competence has a positive significant effect on lecturer performance*

Conceptual Framework and Related Hypotheses of the Research

This study conceptualizes the model consisting of two antecedent variables of teaching competence in the form of organizational learning and the need for achievement. This factor is perceived as affecting the lecturer performance.

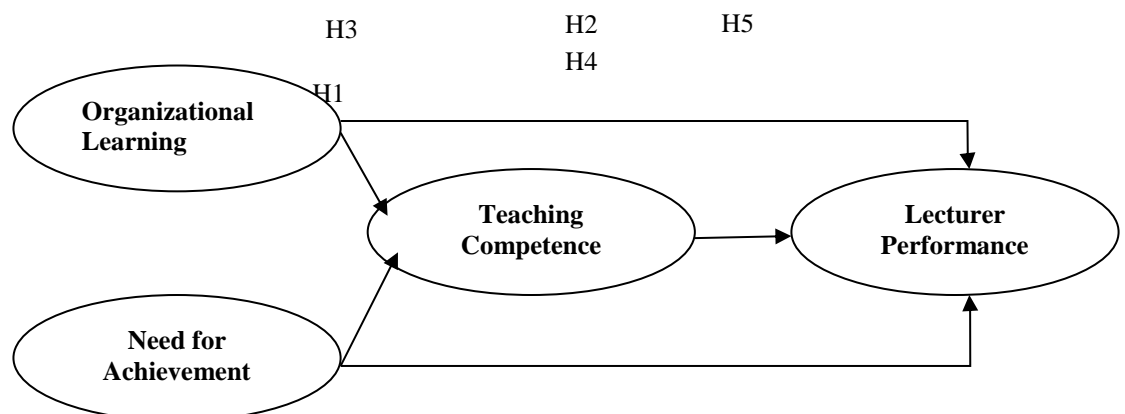




Figure 1. Conceptual Framework

Research Method

This study used the random sampling technique considering the same opportunity of each respondent to be chosen as the sample (Ferdinand, 2011). In addition, this study also employed the proportional sampling technique to determine the sample size in each university. Based on the theory of Hair et al., (1998) of the representative sample size, the size of the sample of this study is 207 lecturers, which meets with the analysis technique of Structure Equation Model (SEM). The sample consists of lecturers of seven most reputable private universities in Central Java that had the highest number of students in 2015.

Measurement of Variables

The organizational learning is measured by five questions adopted from previous studies (Argyris and Schon, 1996; Sessa et al., 2011; Van der Vegt and Bunderson 2005), including learning proactively, finding alternative methods, learning new knowledge, discussing the current issues, and trying a different perspective.

The variable of need for achievement is measured by five items adopted from Nandi (2008), Mas'ud (2004), Turabik and Baskan (2015), including persevering to work, enjoying the challenge, knowing the progress, reaching the realistic goals, and desiring to feel satisfaction.

The lecturer capability and performance are measured with four items suggested by the Act of the Republic of Indonesia No. 14 of 2005 on Teachers and Lecturers. The teaching competence is indicated by pedagogic, professional, social and personal capabilities.

The lecturer performance is measured by teaching, research, community service performance and other supporting and developmental activities. All items of questions employ a Likert scale ranging from strongly disagree (1) to strongly agree (7).

Data Analysis

The data were analyzed by using the structural equation with AMOS 22 that was used to produce a standardized coefficient path as consequences of model proposed. The study used the confirmatory factor analysis to test the validity and reliability of all constructs, in order that each indicator meets the statistical requirement for unidimension, preciseness, and consistency with the latent variables (Joreskog and Sorbom, 1993). The statistical result recommended for construct reliability is about ≥ 0.7 ; the average variance extracted (AVE) is ≥ 0.5 ; the loading factor is >0.6 (Hair et al., 2010). Table 1 shows that the testing result of all constructs has good construct reliability with the values resulted above the cut of value of 0.7; and the average variance extracted (AVE) shows a value greater than 0.5. In addition, the t-value of the loading factor on the latent variables shows a statistically significant result.

Table 1. Item dan Construct Reliability

Item	λ	CR	AVE	t-value
<i>Organizational Learning</i>		0.859	0.551	
Learning proactively	0.812			0.000
Finding alternative methods	0.779			0.000
Learning new things	0.688			0.000
Discussing the current issues	0.753			0.000
Trying a different perspective	0.668			-
<i>Need for Achievement</i>		0.880	0.596	
Persevering to work	0.729			0.000
Enjoying the challenge	0.690			0.000
Knowing the progress	0.766			0.000
Reaching the realistic goals	0.812			0.000
Desiring to feel satisfaction	0.851			-
<i>The Competence of the lecturers</i>		0.807	0.513	
Pedagogic competences	0.697			-
Professional competences	0.747			0.000
Social competences	0.655			0.000
Personal competences	0.760			0.000
<i>The Performance of the Lecturers</i>		0.805	0.511	
Education and teaching	0.662			-
Research	0.632			0.000
Community service	0.721			0.000
Other supporting and developmental	0.829			0.000

Note : λ = indicator loading, CR = Construct Reliability, AVE = Average Variance Extracted

Demographic Characteristics of Respondents

The respondents consist of lecturers (37.1%), assistant professors (33.2%), associate professors (26.3%), and professors (3.5%). The majority are males (56.8%), aged 40-49 years old. Most of them have 11-20 years of working experience and are master degree holders (84.2%), doctoral degree holders (15.8%), and married (91.1%).

Research Finding

Inferential Analysis

The normality testing reveals the value of the critical ratio of both skewness and kurtosis is smaller than the critical value of ± 1.96 and p-value of .05. The multicollinearity and singularity testing shows the value of covariance matrix determinant of $0,0278.10^{-7}$, meaning there is no multicollinearity and singularity in the data.

Goodness of Fit Index

The goodness of fit testing results in the value of Chi Square = 134.751 with df = 129, probability = .0347, Goodness of Fit Index (GFI) = .934, Adjusted Goodness of Fit Index (AGFI) = .913, Comparative Fit Index (CFI) = .996, TLI



=.996, and Root Mean Square Error of Approximation (RMSEA) = .015, CMIN/df = 1.045, meaning that the model proposed has good eligibility and, thus, can be used in the further analysis. The testing of coefficient determination (R^2) demonstrating the predicatability of independent variables to dependent ones reveals the value of 0.452. This means that the independent variables of organizational learning, need for achievement, and teaching competence have a relatively high value in predicting lecturer performance.

Table 2. Goodness of Fit

	Chi-Square	Prob.	GFI	AGFI	CFI	TLI	CMIN/DF	RMSEA
Cut of Value	($\alpha=0,05$, DF = 129)	$\geq 0,05$	$\geq 0,90$	$\geq 0,90$	$\geq 0,95$	$\geq 0,95$	$\leq 2,00$	$\leq 0,08$
Result	134,751 < 156,508	0,347	0,934	0,913	0,996	0,996	1,045	0,015

Hypothesis Testing

The result of the hypothesis testing revealed the significant positive relationship between organizational learning and capability ($\beta = 0.201$, CR = 2.481, $p < 0.05$), and lecturer performance ($\beta = 0.175$, CR=2.288, $p < 0.05$). Thus, hypotheses one and two stating the positive significant relationship of the organizational learning and teaching competence, and the lecturer performance, respectively, are accepted.

Table 3. Standardized path coefficientss

Path Analysis	Std Estimate	C.R	p-value
H ₁ : OL → TC	0.201	2.481	0.013
H ₂ : OL → PER	0.175	2.288	0.022
H ₃ : ACH → TC	0.462	5.362	***
H ₄ : ACH → PER	0.347	3.887	***
H ₅ : TC → PER	0.327	3.45	***

Note: p value < 0,05. OL :Organizational Learning; ACH : Need for Achievement; TC : Teaching Competence; PER : Lecturer Performance.

The subsequent testing of the relationship between need for achievement and teaching competence results in $\beta = 0.462$, CR = 5.362, $p < 0.05$; and that between the need for achievement and lecturer performance is $\beta = 0.347$, CR = 3.887, $p < 0.05$, which support the hypotheses proposed. Finally, the analysis reveals a positive and significant influence effect ($\beta = 0.327$, CR = 3.45, $p < 0.05$), of the relationship between the teaching competence and lecturer performance.

Mediation Factor Analysis

The result of the mediation factor analysis purposively suggests the empirical role of the mediating variable of teaching competence in strengthening the relationship of organizational learning and performance. However, the result of the hypothesis testing as stated in the previous section reveals the insufficient capability of teaching competence in mediating the relationship. Here, the Sobel test is conducted by online calculator from danielsooper.com, to directly examine the significance of the mediating variable. The result shows the t -value of 2.26 (significant at .011) that is greater than the t -table (1.96). This means that the mediating variable of lecturer capability is actually capable of strengthening the relationship between organizational learning and lecturer performance.

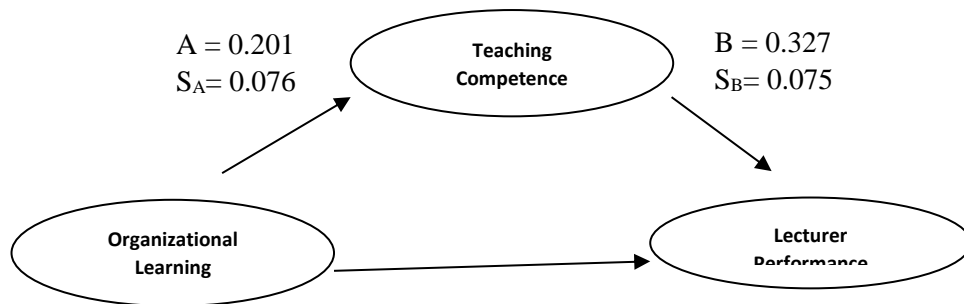


Figure 3. Mediation factor analysis between generative learning and lecturer's performance

Table 4. Sobel Test of mediation factor analysis between generative learning and lecturer's performance

Sobel test statistic :	2.26124141
One-tailed Probability :	0.01187216
Two-tailed Probability :	0.02374431

Moreover, the indirect effect of lecturer capability on the relationship between need for achievement and lecturer performance reveals the significance of mediating variable with t -value of 3.81 that is greater than the t -table (1.96), and the p -value of .00.

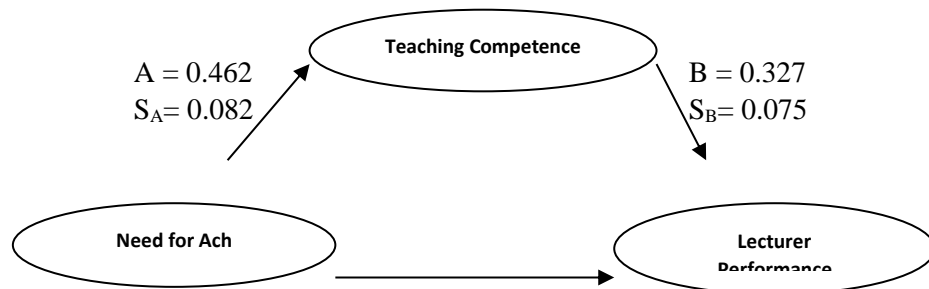




Figure 4. Mediation Factor Analysis between need for achievement and lecturer's performance

Table 4. Sobel Test of mediation factor analysis between need for achievement and lecturer's performance

Sobel test statistic :	3.81291667
One-tailed Probability :	0.00006867
Two-tailed Probability :	0.00013734

Discussion

The significant role of mediation variable of teaching competence in bridging the relationship between organizational learning and lecturer performance confirms the impetus of having involved in the organizational learning and need for achievement. This can be achieved, for instance, by lecturer readiness to receive and enthusiastically accomplish the challenging tasks. This is more effectively to lead to an individual's satisfaction at a task completion. Hence, the role of management of higher education institutions is profoundly required to provide a conducive work culture for both individual and organizational development continuous growth.

In the context of education emphasizing the cooperativeness of the teachers, the organizational support in terms of providing motivation and organizational learning is to overcome the negative impacts of individualism and high aggressiveness of individuals. Hence, the management necessarily needs to give a relatively equal competitive reward system and qualified leadership. The competitive reward is considered more likely capable of stimulating individual desires to perform the best teaching practices; while on the other hand, equal treatment is also required as it is capable of providing comfortable environment to create and disseminate the knowledge among members. In addition, the qualified transformational leadership is more likely able to create new ideas, which are useful for the sustainable improvement of teaching practices and organizational learning

Individually, lecturer professionalism profoundly requires the capabilities that are relevant to the professional duties of teaching. Practically, this can be achieved by accessing available organizational resources, such as information, facilities and infrastructure, research opportunities, and community service. This enables them to improve lecturers' capabilities, beside the professional qualification being obliged to be fulfilled, including pedagogical, professional, social, and personal capabilities.

Conclusion

The result of this study statistically shows the significant and positive effect of organizational learning and need for achievement on teaching competence and lecturer performance. Most importantly, the result reveals the significance of the mediating variable of teaching competence in strengthening the relationship between organizational learning and lecturer performance, that eventually leads to the conclusion that this study is capable of fulfilling the previous theoretical gap. These results theoretically have implications that the lecturers who can develop higher level of organizational learning and encouragement of need for higher achievement are more likely to effectively improve their pedagogical, professional, social, and personal competence. This thereby ultimately improves the lecturer performance and contribution in terms of teaching practices, research, community services, and other supporting developmental programs.

Disclosure statement

No potential conflict of interest was reported by the authors.

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