Organizational Learning in Higher Education Institutions: A Case Study of A Public University in Vietnam

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Abstract

Organizational learning has been discussed by a number of scholars. However, few of them have empirically addressed the issue in an educational context. The purpose of this paper is to contribute to the limited previous research on organizational learning in higher education by examining the impact of employee participation on the organizational learning process and the relationship between the organizational learning process and performance of a public university in Vietnam. A survey of 136 employees of a public university in Hanoi, targeted at managers, lecturers and researchers having more than a 5-year working experience, was conducted in 2015. Multiple regression techniques were used to analyse the data. The study findings indicate that the organizational learning process is positively influenced by employee participation in decision-making and significantly associates with the performance of the university.

Keywords: Organizational learning; higher education; public university.

1. Introduction

Recently, organizational learning has been a big concern and has been studied by various scholars and practitioners (Bapuji and Crossan, 2004). Previous findings show that organizational learning is much related to the organizational performance, innovation and competitiveness of companies in different countries, namely Spain, India and Malaysia (Pérez et al., 2005; Jain and Moreno, 2015; Wan Hooi and Sing Ngui, 2014). In the literature there are several papers analyzing organizational learning in an education context (Veisi, 2010; Nafei et al., 2012; Guţă, 2014), but these are considered insufficient and inadequate.

In reality, higher education institutions have long been regarded as centers of knowledge creation and application for the larger society, but not only as learning organizations developing and transferring knowledge for the improvement of their own basic processes. For accountability, learning should be the central work of higher education institutions. However, universities have been highlighted as an example of organizations that do not engage in organizational learning effectively (Dill, 1999). In their competitive environment throughout the world, universities should be given the incentives to become active learning organizations or should promote learning activities at the organizational level to enhance the quality of teaching and doing research and developing sustainably.

Thus, the aim of this research is to analyze organizational learning in higher education institutions and clarify its antecedents and consequences. First, we consider organizational learning as a process to analyze how the organizational

nizations promote learning. We then propose and test several hypotheses about the role of the processas the mediator of employee participation in decision-making and performance using data collected from 136 employees in a public university in Vietnam. Finally, our findings and the implications for further study are discussed.

2. Literature review

2.1. Organizational learning

Organizational learning has been defined by a number of scholars with the focus on the improvement of organizational knowledge to solve problems and firm performance (Simon, 1969). Nevertheless, the definition in this way is still controversial amongst various scholars as knowledge development does not always lead to better performance at the same time (Fiol and Lyles, 1985). Some scholars consider organizational learning as synthesis of the learning by individuals in organizations. Argyris and Schon in their publication in 1978 declared that individuals are the main factors for organizational learning and it is the process of error detection and correction (Argyris and Schon, 1978). Referring to this definition, Hedberg states, "Although organizational learning occurs through individuals, it would be a mistake to conclude that organizational learning is nothing but the cumulative result of their members' learning. Organizations do not have brains but they have their cognition systems and memories. As individuals develop their personalities, personal habits and beliefs over time, organizations develop worldviews and ideologies. Members come and go, and leadership changes but organizations' memories preserve certain behaviors, mental maps, norms and values over time" (Hedberg, 1981).

Moreover, organizational learning also relates to culture and knowledge management in organizations. According to Lyles, organizational learning is the change of organization activities by improving knowledge and understanding (Fiol and Lyles, 1985).

Although a number of definitions of organizational learning have been discussed and published, Linda Argote stated that most scholars agree with the definition: "Organizational learning is the change of organizational knowledge through practical experiences" (Argote and Ella Miron-Spektor, 2011). The organizational knowledge then is divided into tacit and explicit - individual or organizational habits. It is abstract to define and measure organizational knowledge (Hargadon and Fanelli, 2002) with two different approaches: (1) experiential values by actions or practices of organizations - procedures, technology, habits and products, and (2) talent values by organizational belief and values. Some scholars measured organizational knowledge by perceptions of its individuals (Huff and Jenkins, 2001) or patents of organization (Alcacer and Gittleman, 2006). Others are interested in practical experiences or organizational habits and consider their changes as organizational knowledge and that would be the signal of learning in organizations (Gherardi, 2006). In this research, we follow the definition of organizational learning stated above by Argote and Ella Miron-Spector (2011) to place emphasis on the organizational knowledge in higher education institutions through their professional and management experiences.

The above-mentioned literature tends to examine the outcomes of learning, rather than delve into what learning actually is and how

these outcomes are achieved. Therefore, it is important to analyze the learning process that shows how the organizational knowledge changed or improved through experiences (Huber, 1991; Argote and Ella Miron-Spektor, 2011). In fact, the process can be defined as the process of knowledge acquisition, information distribution, information interpretation and organizational memory (Huber, 1991). These processes are analyzed in the context of higher education institutions below:

Knowledge acquisition: This process explains how an organization gets information and knowledge during operations and it consists of 5 sub-constructs: congenital learning, experiential learning, vicarious learning, grafting and searching (Huber, 1991). In higher education institutions, congenital learning takesplace when new actors in the institution (faculty, staff, administrators) get information about the history, initial environments, missions and other congenital knowledge inherited at its conception and additional knowledge acquired prior to its birth. Then, they all learn from their work experiences in both production (teaching and doing research) and management processes. Higher education institutions differ from other types of organizations in that the production process is also related to knowledge thuspromoting the experiential learning more actively with knowledge transferring to students and research being undertaken. In the management process, data and information about students and their study progress is collected at the time of their entrance to the university and also frequently for quality insurance and to ensure better services. Additionally, vicarious learning is very important for faculty and administrators in higher education institutions by joining exhibitions, workshops and conferences to learn from other institutions' experiences about strategies, administrative practices, technologies and professional knowledge. One of the good ways that institutions could obtain knowledge is by grafting on new members who possess knowledge not previously available within the organization. This process may happen by either attracting and recruiting experienced lecturers, researchers, administrators and staff from others or inviting them to work as part-time lecturers and researchers for the institutions. Finally, the activities of searching and noticing by scanning, focused searching and performance monitoring also help institutions to obtain knowledge and information. For example, environment changes such as education management regulations on student recruitment or evaluation should be captured. Benchmarking the institution's performance with national or regional standards also helps organization improvements.

Information distribution: This process is a determinant of both the occurrence and breadth of organizational learning by spreading knowledge among the members of the organization (Huber, 1991). In higher education institutions, when information is distributed from one department to another, new information is created that helps in improving the department's work performance and leads to more broadly based organizational learning. For example, up-to-date information on the study results of students from faculties or departments of training management will help the quality insurance or facilitate academic departments in realizing the problem of quality early enough to prepare for

improvement. The systems that routinely index and store such information and are convenient to use for retrieval will likely help individuals, teams and organizations to learn. In teaching activities, lecturers and students are motivated to share information on the learning subjects, or on their obstacles to learning, and this might lead to better academic outcomes.

Information interpretation: Daft and Weick (1984) define information interpretation as "the process through which information is given meaning" and "the process of translating events and developing shared understandings and conceptual schemes". The above definitions and practices show that more varied interpretations develop the organization's potential behaviors and organizational learning will occur when more of the organization's units understand the nature of the various interpretations held by other units. In a higher education context, strategic information such as the direction of autonomy or a research-based university should be explained and interpreted by leaders to all institutional members to share common targets and co-ordination in decision-making at all levels. Professional knowledge and information in institutions also needs to be shared and interpreted among faculty and administration staff so that the management process canachieve good results. However, these activities in higher educational organizations are not as effective as expected. Data and information have been collected and distributed quite well in universitiesbut its applications and uses for internal decisions or public accountability is not effective (Bauman, 2005). For example, some activities such as technology applications or accounting and finance management in some universities,

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specialized in technologies or accounting and finance, are not as good as the average level or their expectations.

Organizational memory: The means by which knowledge is stored for future use, either in organizational systems designed for this purpose or in the form of rules, procedures and other systems (Huber, 1991). In higher education institutions, this memory is very important and knowledge in both the production (teaching, doing research) and management process of the organizations needs to be electronically stored and retrieved. The stored organizational knowledge might be in the form of standard operating procedures such as examination management, training program and document development and other accounting and finance procedures. In the teaching activities of a faculty, professional knowledge and information related to the subjects is stored in the forms of textbooks, the syllabus and tests. In addition to the above information, the "soft" information that higher education institution has learned is stored in the minds of its members, such as the lecturers, researchers and managers. The schools grow their own experts by accumulating practical experiences such as diagnosing and solving problems of education quality reduction, teaching methodologies and professional knowledge on their own.

In this paper, to study the process of organizational learning in higher education institutions and the relationship of the process with performance, we follow its four dimensions: knowledge acquisition, information distribution, information interpretation and organizational memory (Huber, 1991) and adapt it to the context of Vietnamese universities.

2.2. Employee participation in decision-making and organizational learning

Employee participation is the mechanism of the work dialog among workers to exchange information and ideas. It ensures that employees are given the chance to influence management decisions and to contribute to the improvement of organizational performance (Abdulkadir et al., 2012). In knowledge management organizations, employee participation in decision-making is positively correlated with knowledge management activities as an overall or individual correlation (acquisition, documentation, transfer, creation and application) but it is less important than other human resource management practices such as: training, performance appraisal and compensation (Yahya and Goh, 2002). Yahya and Goh explained that knowledge management companies are already mature and stable so participation is not so significant in influencing knowledge management implementation. However, employee participation and involvement in decision-making in higher education institutions needs to be considered and improved in order for institutions to adapt to the challenges from a rapidly changing environment and from competition (Kok et al., 2014). The result was empirically tested in one university in South Africa in 2014 and it is also suitable in the current context of higher education reform in Vietnam (Grant Harman et al., 2010).

Employee participation in decision-making is an essential element in learning organizations since it is the practice that most closely correlates with the organizational learning process of knowledge acquisition, information distribution, information interpretation and organizational memory (Pérez et al., 2006). Moreover, it is also related to organizational learning capabilities and knowledge management of accumulation, sharing andutilizing in the empirical research in Greek manufacturing firms reported by N. Theriou and Chatzoglou (2014). However, the relationship between employee participation and organizational learning in these above researches is in the context of manufacturing firms in Greeceand Spainand that context could be different from that of higher education institutions where employees are knowledge workers such as lecturers, researchers.

In the higher education context, employee participation in decision-making has a positive influence on the organizational learning process and consists of 4 dimensions: knowledge acquisition, information distribution, information interpretation and organizational memory and employee participation and was found to have the greatest ability to influence in comparison with other human resource activities (Saeed and Syed, 2015). Participation in decision-making in higher education institutions encourages both academics and administrators to acquire knowledge from outside for their better work performance and promotes lecturers and researchers sharing information related to their professional field to enhance the management process. In addition, this employee participation helps actors in universities (administrators, academics and staff) to have common understandings in related matters which then leads to proper decisions being made to ensure the university's performance.

The above-mentioned studies describe the role of employee participation in decision-mak-

ing in the organizational learning process in enterprises and universities in different countries. Therefore, based on this analysis, the following hypothesis is proposed:

Hypothesis 1: Employee participation in decision-making is positively associated with the organizational learning process in higher education institutions.

2.3. Organizational learning and performance in higher education institutions

The scientific literature associates organizational learning with superior organizational performance to develop competitive advantages for sustainable development because organizational learning constitutes a complex capability difficult to imitate, replicate and transfer; it results from the change and evolution through the specific history of each firm (Gută, 2014; Pérez et al., 2005). Previous studies confirmed that organizational learning is a determining factor in business performance in differentindustries, such as the telecommunications industry in Thailand, to promote new service development (Tharinee and Lalit, 2009) and the metal industry to associate with employee satisfaction, customer orientation and the financial index of firms (Aydin and Adnan, 2009). Moreover, in the study conducted by Ángel et al. (2010), the hypothesis that "the organizational learning has a direct and positive effect on the business performance" in a manufacturer's experience was validated.

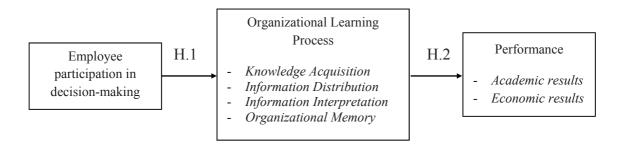
In higher education settings, organizational learning should be paid more attention because universities and colleges do not learn as effectively as they could. Institutional actors are capable of applying their practices as communities of researchers to the studies of the

institution itself. The potential for institutional learning exists, but institutional improvement depends on the effectiveness of faculty and staff putting this learning into action (Bauman, 2005). The behavior and attitude of the faculty members that much is related to organizational learning is also one of the most important organizational factors for outstanding university performance (Nafei et al., 2012). In his empirical study, Guță (2014) confirmed the positive relationships between the components of the organizational learning process (knowledge acquisition, information distribution, information interpretation and organizational memory) and organizational performance in two Romanian universities. These above studies confirmed the importance of organizational learning in higher education institutions and its relationship with performance with different general variables and measures of organization success, customer and employee satisfaction and happiness and financial performance targets. The more suitable variables and measures for university performance and relevant to organizational learning need to be analyzed and selected for this research.

Currently, there are different studies relating to measuring university performance, of which, Perkins (1973) stated that the main functions in a university are teaching, research and services. Measurement of university performance could be based on these three functions (Donald, 1984). Cross and Lynch (1992) propose that the performance of a university is based on a pyramid model that consists of academic results (comprising of teaching and researching outputs) and management results (Xiaocheng, 2010). The academic results are very important

factors to classify the university quality. Some indexes could be used to evaluate academic results such as individual/group capabilities, budget, research resources and publications. In addition, a balanced scorecard (BSC) has been introduced to enterprises as an efficient tool for strategic management and performance appraisals. As the publication of Kaplan and Norton shows, BSC could be applied for non-profit organizations and universities (Kaplan and Norton, 2001). In this system, the university performance could be considered in 4 perspectives: finance, customer, process and learning (Umashankar and Kirti, 2007) with different key performance indicators (KPIs). However, it is quite hard to collect the data on such KPIs to do empirical analysis because BSC is not widely applied in universities in Vietnam. In conclusion, university performance could be comprised of teaching, research and economic results and measured by some KPIs (as proposed in the above article) such as degree of student satisfaction, student capability after graduation, number of publications and tuition fees. As long as the above organizational learning process has been carried out properly and effectively, faculties in higher education institutions are capable enough to deliver their lectures with more practice. In addition, with the common understanding among institutional actors, faculties are more supported by administrators and staff during their teaching activities to ensure better academic results. Moreover, the economic results would be better when professional knowledge from faculties has been transferred and applied to administration work with good cooperation between actors in universities. Therefore, we proposed the second

Figure 1: Theoretical framework



hypothesis below.

Hypothesis 2: The organizational learning process is positively associated with performance in higher education institutions.

Based on the literature review and the above-given research hypotheses, our theoretical model is proposed as in Figure 1.

3. Methodology

Quantitative methodology has been applied to this study to empirically clarify the relationship between the organizational learning process and performance in higher education institutions as well as their antecedents. This study is concentrated on organizational learning in a public university in Vietnam as a part of the research on the relationship between organizational learning and performance in all Vietnamese universities. A series of discussions with human resource experts and managers of different universities have been carried out to clarify the theoretical model, variables and measures to make sure that they are suitable and adaptable for the Vietnamese university context. Moreover, there were several indepth interviews with managers, lecturers and researchers in the public university to understand the current situation of employee participation in decision-making, the organizational learning process and performance. Those qualitative research activities helped to prepare for the survey questionnaires and data collection plan. The detailed methodologies of sampling, data collection, measures and data analysis are shown as follows.

3.1. Sample and data collection

Survey methodology has been used for the empirical analysis and an online questionnaire was sent to 250 employees of a public university, specialized in information and communications technology industry and who have had more than 5 years of experience. Of these university employees 70 are managers, 100 are lecturers and 80 are researchers. These samples are suitable with the methodology used by Guță (2014) in which respondents were lecturers and researchers with or without management positions. The questionnaire consists of 34 questions in Vietnamese language related to employee participation, the organizational learning process and performance, including academic and economic results in a public university. Through the application of an online survey, we find out the opinion of the

Table 1: Demographic profile of respondents

Demographic variables	Frequency	9/0
Work position		
Managers	51	37.5
Lecturers	36	26.5
Researchers	27	19.9
Others	22	16.2
Work seniority		
From 5 to 10 years	38	27.9
More than 10 years	98	72.1

employees regarding the issues. A number of approaches were used to ensure response quality and to enhance the response rate. Among the surveyed employees, a total of 136 surveys were returned, with a response rate of 54.4 percent.

Table 1 presents the characteristics of the sample. It can be seen that more than 70 percent of the respondents have worked for the university for at least 10 years, so their answers that they have offered are based on a thorough understanding of the organization. Additionally, the positions held by respondents in the sample show that they are working in most of the departments and faculties in the university. That means the sample is good enough to analyze the data and test the hypotheses.

3.2. Measurement development

A research instrument was developed to serve as the basis for collecting data pertaining to employee participation in decision-making, the organizational learning process and performance. All constructs were measured using a multiple five-point Likert scale with response options ranging from 1 = "Strongly Disagree" to 5 = "Strongly Agree".

Employee participation in decision-making

Employee participation in decision-making helps to get more satisfaction and commitments in organizations and this could be very important to promote organizational learning (Marquardt and Reynolds, 1994) and more creativity and innovation with empowerment (Yahya and Goh, 2002). To serve our study, 3 items adapted from Roche (1999) and Pérez et al. (2006) were employed, namely: participation in decision-making, sharing of information on performance and strategy as well as level of personnel empowerment in the university.

Organizational learning process

Empirical research into the organizational learning process in higher education institutions has not yet reached maturity. This learning process is made up of 4 dimensions: knowledge acquisition, information distribution, information interpretation and organizational memory as described in previous papers

(Pérez et al., 2006; Guţă, 2014). The original scale had to be modified based on the theoretical contribution from the literature and extensive discussions with academics and managers during the pre-testing phase of questionnaire development.

- Knowledge acquisition: As mentioned previously, knowledge may be acquired from the experience of others or through direct experience. The measures of knowledge acquisition were adapted from Nonaka (1994) and Goh and Richards (1997), and were empirically tested by Pérez et al. (2006) and Guță (2014). Seven items were used to measure both external and internal knowledge acquisition in the context of a public university in Vietnam including: strategic alliances, networking with experts, benchmarking, participating in workshops and exhibitions, the support and encourage of new work methods and innovative process.
- Information distribution: We selected five items to assess the extent to which the university has developed the distribution mechanism based on Pérez et al. (2006) and Guţă (2014). Information distribution may occur through sharing strategic information, face-to-face meetings, experience sharings, integration roles, liaison positions.
- Information interpretation: The scale assesses elements, such as shared aim or vision commitment, effective conflict resolution, teamwork, internal rotation and enactive liaison activities, were derived and adapted from Nonaka (1994) and Pérez et al. (2006).
- Organizational memory: The scale of organizational learning was based on Huber (1991) and Pérez et al. (2006). It comprises five items that reflect the consignmement or retention of

experiences and information to memory and the retrieval of previous experiences that are stored in the memory such as: knowledge database, directories, up-to-date student database, software and convenience of usage.

University performance

Following the results of the previous studies by Chen et al. (2009) and Xiaocheng (2010), we selected academic results, including teaching and researching activities and economic results to be contructs of university performance. Measurement scales were designed to measure the change of teaching, researching and economics results in 3 consecutive years by the perception of the university's faculties and administrators. The teaching results are measured by: full-time lecturer to student ratio, the degree of student satisfaction of teaching activities and student capability after graduation, assessed by employers. The research results can be measured by the number of publications, research projects and researching servicecontracts for enterprises. The economic results reflect the financial status of the university measured by tuition income, research service income from enterprises and the degree of employee salary sastifaction. The items used in this study to measure the academic and economic results were adapted from Chen et al. (2009), Xiaocheng (2010) and the university quality standards from the Ministry of Education and Training of Vietnam issued by the decision number 65, MOET (2007). Most of the items measuring participation, organizational learning process and performance were adapted from previous empirical studies and they are translated into Vietnamese with some minor modification to adapt to thepublic university context in Vietnam.

Table 2: Results of factor and reliability analyses of organizational learning process

Variables	Items	Factor Loading	Cronbach's Alpha
Knowledge Acquisition (KA)	KA 1 –good relationship with strategic alliances KA 2 – networking with professors, scholars and	0.665 0.628	0.851
	experts outside for cooperation in teaching and research KA 3 –faculties and administrators are encouraged	0.720	
	to join other professional networks KA 4 –faculties and administrators regularly	0.804	
	participatein workshops and exhibitions KA 5 –encouraging policies for research development in the university	0.776	
	KA 6 –new ideas and approaches for better performance are tried and applied in the university	0.742	
	KA 7 –internal procedures and policies support innovation in the university	0.748	
Information Distribution (ID)	ID 1- strategic information of university objectives is shared with faculties and staff	0.748	0.886
	ID 2- conferences and meetings are regularly held to distribute the new ideas and approaches	0.863	
	ID 3- experience sharings are encouraged between different sections	0.884	
	ID 4- some staff to join different teams to act as integration roles for transparency of information and quick information distribution	0.850	
	ID 5- liaison positions in university to collect and share new ideas and work approaches	0.800	
Information Interpretation (II)	II 1- faculties and staff share the university vision and objectives for work commitment	0.798	0.854
. ,	II 2- effective conflict resolution between faculties by discussion and experience sharing	0.836	
	II 3- teamwork is popular in university	0.844	
	II 4- internal job rotation between administrators and staff for getting more experience	0.715	
	II 5- experience sharing between departments is regularly organized for shared understanding in the university	0.790	
Organizational Memory (OM)	OM 1- computer database for research results storing and retrieval	0.845	0.813
	OM 2- directories of lecturers, scholars and experts for convenient contact	0.784	
	OM 3- up-to-date student database in the university	0.765	
	OM 4- application softwares are used for different operations in the university	0.699	
Organizational	OM 5- the database is convenient for faculty usage Knowledge Acquisition (KA)	0.689	0.888
Learning Process	Information Distribution (ID)	0.898	0.000
(OLP)	Information Interpretation (II)	0.898	
(OLI)	Organizational Memory (OM)	0.780	

Table 3: Results of factor and reliability analyses of employee participation

Variables	Items	Factor Loading	Cronbach's Alpha
Employee	EP1- participation in decision-making	0.807	0.754
Participation	EP2- sharing of information on performance and strategy	0.807	
(EP)	EP3- level of personnel empowerment in the university	0.848	

3.3. Measurement assessment

As reported in Table 2, 3 and 4, the results of testing validity and reliability of measurement of constructs indicated that all Cronbach's coefficient alpha of constructs were greater than 0.7. According to Hair et al. (2006), a set of items with a coefficient alpha greater than or equal to 0.7 is considered highly internally consistent. In addition, an exploratory factor analysis was performed to ensure the reasonable constructs of the instrument. Using principal component analysis and varimax rotation, factors with eigenvalues greater than one and factor loadings greater than 0.6 were retained.

Table 2, 3 and 4 presented detailed results of factor analysis and reliability analysis for all constructs in the research model.

4. Main results

4.1. Correlation analysis

Table 5 presents the correlation matrix assessing the means, standard deviations, and bi-variate relationships by Pearson correlation among the variables in this study. All the correlations that we are interested in are statistically significant (sig. <0.01) and most of the Pearson correlation coefficients are more than 0.4. As can be seen in this table, the organizational learning variable is significantly

Table 4: Results of factor and reliability analyses of university performance

Variables	Items	Factor Loadings	Cronbach's Alpha
	AR 1- changes of full time lecturer to student ratio	0.661	0.803
Academic	AR 2- degree of student satisfaction about teaching activities	0.719	
Results	AR 3- changes in student capability assessed by employers	0.692	
(AR)	AR 4- increasing trend of publications	0.853	
	AR 5- increasing trend of research projects	0.816	
Economic	ER 1- the growth of tuition income	0.661	0.803
Results	ER 2- research service income from enterprises	0.719	
(ER)	ER 3- degree of employee salary sastifaction	0.692	
Performance	AR – Academic Results	0.661	0.803
(P)	ER – Economic Results	0.719	

Table 5: Correlation matrix

	Mean	SD	1	2	3	4	5	6	7	8
1-Employee participation	2.89	0.89								
2-Knowledge acquisition	3.19	0.79	.746**							
3-Information distribution	2.44	0.88	.743**	.716**						
4-Information interpretation	2.99	0.84	.691**	.728**	.794**					
5-Organizational memory	3.02	0.84	.482**	.552**	.576**	.618**				
6-Organizational learning	2.91	0.72	.769**	.861**	.896**	.908**	.795**			
7-Academic results	3.16	0.64	.534**	.543**	.507**	.561**	.394**	.578**		
8-Economic results	2.91	0.74	.437**	.600**	.514**	.463**	.400**	.570**	.464**	
9-Performance	3.03	0.59	.563**	.669**	.596**	.593**	.464**	.670**	.832**	.878**

Notes: **Correlation is significant at the 0.01 level (2-tailed).

related to performance (r = .662, p<.01). The organizational learning process is also correlated with employee participation (r = .773, p<.01). That means there are close relationships between employee participation, the organizational learning process and performance as in our hypotheses. Moreover, there is correlation between the participation and each dimension of organizational learning such as knowledge acquisition, information distribution, information interpretation and organizational memory with the coefficients of 0.765, 0.743, 0.691 and 0.482 respectively. Finally, employee participation is also correlated with performance with a coefficient of 0.573 at p<0.01.

4.2. Hypotheses testing

Hypotheses testing included examination of regression analyses in predicting organizational learning and university performance. For each of the independent variables in the regression models, the square root of the variable inflation factor (VIF) was calculated (Fox, 1991). All of the variables in the analyses fell well within the

accepted limits, indicating no problems with multicollinearity.

To test the first hypothesis, simple regression analysis was performed to establish the predictive power of employee participation in the organizational learning process. The resulting linear regression and its corresponding adjusted R^2 with standardization coefficients is presented in the Table 6. This regression model is statistically significant with p < 0.01, explaining 61,5% of the variation of the organizational learning process. The result shows employee participation indecision-making (β =0.755, p<0.01) as having a positive effect on the organizational learning process. Therefore, hypothesis 1 is supported.

In order to test the relationship between the organizational learning process and performance, simple linear regression was used with the dependent variable of performance. This simple regression model is statistically significant with p<0.01, explaining 44% of the variation ofperformance. The result shows that

Table 6: Regression results

	Organizational Learning	Performance (Model 1)	Performance (Model 2)
Independent variables			
Experiences	0.72**	-0.063	-0.048
Job category	-0.3	0.041	0.041
Employee participation	.755***		.132
Organizational learning		.687***	.582***
Adjusted R ²	.615	.440	.442
F Statistic	72.838***	36.299***	27.778***

Notes: *p < 0.05, **p < 0.01 and ***p < 0.001

the organizational learning process positively affects overall performance (with β =0.687, p<0.01), indicating significant support for the organizational learning process and performance relationship. In short, the study of standardized coefficients, which relate organizational learning to performance, provides a significant support for hypothesis 2 of this study. With this collected data, we also test the relationship between participation, organizational learning and performance by linear regression. In this model, the employee participation is not significant and only organizational learning still positively affects the university's performance. This result is consistent with the earlier empirical research on the relationship between organizational learning and performance (Pérez et al., 2005).

5. Discussion

Consistent with previous studies (Pérez et al., 2006; Saeed and Syed, 2015), it was found in this research that employee participation in decision-making is significantly associated with the organizational learning process in a higher education institution in Vietnam. This-finding provides initial empirical support for

the important role of human resource practices on employee commitment to core organizational values on learning development.

First, in line with our prediction, our results confirmed that employee participation in decision-making is an essential element in learning organizations, because it is the practice that most closely correlates to the learning process. In Vietnamese universities, if lecturers or researchers involve themselves in the university's decision-making, there will be good commitment to work and to creating a good environment for learning. This highlights the need for employees in universities to participate in decision-making in their professional activities of teaching and the learning process.

In addition, the second objective of this research is that the link between the organizational learning process and university performance measured by academic and economic results has been empirically confirmed. This result shows that if teaching staff is more involved in the learning process at the organizational level then their lectures will be more successful because of the inspiration of knowledge transferralto students. Moreover, with a better learn-

ing environment in universities, professional knowledge and experiences in the teaching and research activities will be shared and applied to management works, leading to better academic and economic results.

With these above findings, we would like to recommend leaders and managers in universities to pay more attention to the participation of lecturers, researchers and management staff in decision-making opportunities to achieve their commitments for sustainable development. In addition, learning should be promoted and supported in universities at the organizational level so that the organizational knowledge will be created and transferred among employees so that they canapply this to their work for the better performance and competitiveness of the organization.

Finally, we should mention that this research has a number of limitations leading us to possible further studies. Perhaps, its most significant limitation is associated with its data collection from only one universityand that makes itdifficult to conclude the relations and that promotes the need for further study in universities all over Vietnam. The second limitation of the current study relates to its use of perceptual measures for university performance instead of using both objective measures and perceptual ones.

6. Conclusion

The organizational learning process in universities has been explored and the influencing factor of employee participation and its consequences have been described. These results help to increase understanding about organizational learning theory in higher education settings.

Further research could address the weaknesses seen in this paper by further studying organizational learning in the larger context of all universities in Vietnam and empirically testing its relationship with other antecedents and consequences.

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