

# THE IMPACT OF ECONOMIC LITERACY ON ORGANIZATIONAL PERFORMANCE

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## ABSTRACT

This study investigates the influence of lecturers' economic literacy on their organizational performance either directly or indirectly via commitment, teamwork, knowledge/skills and attitude. The basic theoretical framework consists of lecturers' economic literacy as independent variable and lecturers' organizational performance as dependent variable while knowledge/skills, teamwork, attitude and commitment as intervening variables. Five main hypotheses and fifteen specific hypotheses were posited and tested. The study was based on a survey design and the time horizon was cross sectional with minimal researcher's interference. The survey was carried out in 4 educational departments selected randomly from 7 clustered polytechnics out of 21 polytechnics in Malaysia. The final number of participants for this study was 28 departments. The sample size comprise of 200 respondents of the total population. The research hypotheses represented a conceptual model of performance. The model hypothesized that performance would be a function of human capital (economic literacy) and behavioral intervention is in the form of attitude, teamwork, skills/ knowledge and commitment. The study hypotheses were tested by employing Structural Equation Modeling (SEM) analysis method using AMOS 4 data fitting program which will better explain and postulate causal relationships. Besides, it examines more complex relationships and compares different models, nested and competing. This study is important in such a way that, it might help to promote the status of economic literacy of the respondents as well as improve their quality in rendering services to organization's customers. It will also benefit the management of the organization's system and other educational institutions' system by identifying and improving its weaknesses for the betterment of its future performance. In conclusion, this study provides an insight and further understanding of the interrelationships among economic literacy, attitude, teamwork, skills/ knowledge, commitment and organizational performance, and hence allows practitioners to gain in depth knowledge of the impact of economic literacy.

**Keywords** human capital, economic literacy, organizational performance, structural equation modeling.

## **BACKGROUND**

This study is based on the understanding of the importance of the economic literacy (human capital) among Malaysian adults and its impact on organizational performance. Economics of education is a subject that concern about the ‘value’ of education. The subject of economics of education is sometimes thought to be confined to such problems as the costing and financing of school places but in actual fact it is a branch of economics (Blaug, 1970). Education is often regarded as a basic human right and some people thought that it should therefore be freely available to all and that economic consideration should not be debated. However, logically, even basic human rights use up scarce resources and therefore economics does matter in education.

This study is interested to investigate the effect of human capital on educational organizations’ performance. The specially selected Malaysian Polytechnics are typically non-market multi-product organizations. Particular problems are attached to the measurement of its effectiveness and efficiency because of no such prices exist. Fortunately, recent developments in the field of multivariate data analysis, allow some progress to be made in evaluating the relative effectiveness and efficiency of educational institutions. In particular, the method of Structural Equation Modelling (SEM) analysis allows an assessment to be made of the influence or impact of the inputs (independent variables) with the intervention of moderating variables (moderators) towards the outputs (dependent variables) of educational institutions.

## **STATEMENT OF THE PROBLEM**

Much has been said about the need for economic literacy among the young students, but very few studies has been conducted among the adults. Hansen (1977) thus prefers opinion surveys in providing evidence about the level of “effectiveness” of the economic literacy among adults. Hansen believes that, what is sought is a measure that would show that the level of economic literacy has some observable consequences in people’s behavior and in their beliefs about the economic system.

There are studies in the field of capital market research, management accounting and financial accounting that have studied the importance of intangible assets such as human capital for organizational performance (Antti Pitkanen, 2006) but none of them tried to find out the influence of economic literacy, (which is part of human capital), towards organizational performance either directly or indirectly. Therefore, this study aims to fill in the gap by examining the influence of economic literacy on organizational performance.

## **PURPOSE OF THE STUDY**

The major purpose of the study is to investigate the importance of human capital *i.e* the economic literacy in the context of organizational performance. The aim of this study is to determine the level of lecturers’ economic literacy, to analyze the organizational environments, to highlight the importance of economic literacy and to examine its impact on performance. This study specifically, aims to examine the importance of economic literacy in the context of Malaysian polytechnic lecturers’s organizational performance.

## **SIGNIFICANCE OF THE STUDY**

The findings of the study is very important for many educational organizations. It allows practitioners to gain in depth knowledge about the impact of economic literacy and it will assist institutions to plan approaches and build action frameworks. Besides, it helps the institutions to distribute limited resources towards certain fields that need more attention in their efforts to improve the quality of education.

The research findings contribute to the literature about the importance and impact of economic literacy in educational sector through 3 aspects: 1) provides empirical proofs regarding the importance of economic literacy towards performance; 2) explains the interrelationships between economic literacy, teamwork, commitment, attitude, knowledge/skills and organizational performance; and 3) provides Malaysian perspective regarding this subject.

## **SCOPE AND LIMITATIONS OF THE STUDY**

The scope of the study covers economic literacy in departments of the Malaysian Polytechnics. Respondents for this research consist of administrators and lecturers in the departments of the Malaysian Polytechnics. However, lecturers from other learning organizations, officers at the ministry of education and officers at other departments are not included in this study.

## **RESEARCH QUESTIONS:**

This study attempts to answer the following research questions:

What is the impact of lecturers' economic literacy on:

1. lecturers' perceived organizational performance?
2. lecturers' perceived commitment?
3. lecturers' perceived teamwork?
4. on lecturers' perceived knowledge and skills?
5. lecturers' perceived attitude?

## **HYPOTHESES:**

There is a positive relationship between lecturers' economic literacy and lecturers' perceived:

1. organizational performance
2. commitment
3. teamwork
4. knowledge and skills
5. attitude

## **LITERATURE REVIEW**

In accordance with the ninth Malaysian Economic plan, human capital has become the focus of the country's economic and development programs. Abdullah Ahmad Badawi, (2005) urged his people to equip themselves with knowledge and good behavior in

the effort to attain human capital development with spiritual strength in order to face global competition.

Mohd Najib Abdul Razak (2005), also insisted on the importance of developing human capital among the nations in order to hasten economic development of the country. He insisted that:

*“If we want prosperity for one year, plant padi, for ten years plant trees and for hundred years develop human capital.”*

Apart from that, human capital development is becoming more important each day as the country becomes more advanced and more sophisticated. Otherwise, misuse of technology such as internet and video compact disc (VCD) may cause the young generation of today to become interested in surfing and watching immoral, obscene and useless web. As such, the stress on the importance of human capital development can never be denied.

### **Human capital theory**

The Human capital theory explains the role played by education in the economy. Skills and knowledge or literacy is a form of capital and that this capital is in substantial part a product of deliberate investment. Today it is known as human capital. It is a form of capital which is categorized under intangible asset. Human capital theory with special focus on economic literacy is part of economics of education (Blaug, 1976).

According to Johnes (1993), human capital is divided into two parts;

1. general human capital (which includes literacy, numeracy and other fruits of formal education)
2. specific human capital (which includes familiarity with filing systems, and network of contacts within the firm )

### **Human capital, social capital and intellectual capital**

The rise of the knowledge-based economy is attributed to the increasing importance of intellectual capital as an intangible and important resource for companies' sustainable competitive advantages (Roos & Roos, 1997). Human capital and social capital embedded in employees are viewed as the fundamental components of intellectual capital, because intelligence is created through knowledge exchange among organizational members (Nahapiet & Ghoshal, 1998)

Human capital and social capital are interrelated (Coleman, 1988) and also positively related to organizational success (Friedman & Krackhardt, 1997). Leenders and Gabbay (1999) indicated that human capital and social capital has a causal relationship. Florin *et al.*, (2003) also agreed that the interaction between human capital and social capital has a positive effect on organizational financial performance.

## **ECONOMIC LITERACY**

Economic literacy is part of general human capital. It is the skill, awareness, understanding or knowledge of how to make choices in the world of limited inputs in order to produce maximum outputs. It is a vital characteristic for human capital development. The meanings attached to the concept of “literacy” itself are very diverse (Ballard & Clanchy, 1988). Literacy which is like beauty, lies in the eyes of the beholder. Clearly there are also many different views on what is meant by economic literacy.

Economic literacy was an issue which was hotly debated about three decades ago. Many researchers were interested to conduct surveys on this issue during those days. Economic literacy is the basic skill, knowledge or information which is vital to manage man’s living be it at individual level or organizational level.

## **KNOWLEDGE BASED WORKER**

Knowledge or literacy has long been recognized as an important tool for individual or organizational development. Nik Ahmad Hisham (1999) reported that, since the beginning of human existence, knowledge have been expanding and becoming the birthright for human. From the very first revelation in the Quran (surah al-Iqra’), Muslims have been instructed to strive for knowledge, which is considered an important element that could elevate Muslims towards success both in this world and the hereafter.

Futurists predict that mankind will enter a marvelous history in which information and intelligence, not labor or capital, will play the key role in production. Thus educated men will be the focus of human civilization (Nik Ahmad Hisham, 1999). In other words, not only the physical capital that matters but what is more important is the “unseen” or intangible human capital that motivates the physical capital.

## **ORGANIZATIONAL COMMITMENT**

The importance of organizational commitment as a determinant of employee performance and organizational success is generally accepted by management theorists and practitioners. The concept has attracted a substantial body of research since the early work of Becker (1960), which considered commitment in terms of utility. The concept itself has developed, and while Morrow (1993) examines five commonly used concepts/operationalizations, a range of alternatives exist.

Organizational commitment is a psychological state that characterizes the employee’s relationship with the organization. This has implications in terms of continuing his or her membership in the organization. A committed employee is one who stays with the organization under any favorable or unfavorable circumstances affecting the organization (Meyer & Allen, 1997.)

### **Teamwork**

Businesses and organizations must have a competitive edge against their competitors in order not only to survive but thrive for success. This is because of today’s tough economic climate businesses which have not only a unique product but they have to present an image of excellence to lure customers and become successful. Tworney *et*

*al.*, (1996) reported that it is a well known fact that one in three businesses will fail within the first year.

Teamwork will promote a sense of camaraderie within an organization and can be transmitted to all clients or customers who do business with the organization. A successful team building can bring an astounding result. Business with successful teams has people who work well together in it towards the completion of a main goal. Consequently, the organization will achieve success with less stress and greater enjoyment while completing the task at hand.

### **Attitude**

Attitude has long been recognized as an important element for successful performance or productivity (Hertzberg *et al.*, 1967, Salomawati, 1998). In this study, the attitude refers to attitude toward work. According to them, one of the most important factors that has influenced the success of business and industry is a positive attitude toward work.

Thus, attitude of young people toward work have made employers more concerned about the attitudes of their potential workers. This attitude has had a dramatic impact on the meaning of work and the quality of life. Consequently, it has also had an enormous impact on organizations and their ability to serve and function effectively (Salomawati, 1998).

### **Organizational performance**

To measure the performance of any organization, it is first necessary to know the goals which it seeks to achieve (Johnes, 1993). In the context of polytechnic, its goal is similar to that of universities or other higher educational institutions i.e to render services for the satisfaction of their customers.

Otley (1999), claims that the concept of organizational performance is an abstract concept rather than a concrete concept and therefore it seems rather fuzzy and imprecise. The existing literature indicates that there are two other terms associated with Organizational Performance, i.e. “Performances” and “Business Performance”. According to Merriam-Webster’s Collegiate Dictionary, 1993, performance equals to “achievement”. It also defines performance as “*how well it does or how successful it is*”.

According to Sun (2000), performance involves a wider dimensions, such as:

- 1) Product quality and customer satisfaction,
- 2) Productivity and profitability,
- 3) Market position and competitiveness,
- 4) Employee satisfaction, and
- 5) Environment protection.

## **Educational institutions' performance, productivity and quality in education**

Polytechnic is an educational institution which operates at a non-profit basis. One of its main objectives is to maximize satisfaction of its customers by rendering quality services. A successful Total Quality Management (TQM) usually have a quality system approach which is similar to ISO 9000 (Corrigan, 1994; Ho, 1999). A quality system approach is thus required in its endeavour to reach its target.

According to Gronroos (1990), the dimensions of quality can be classified into three groups: technical quality, functional quality and corporate image. This theory is similar to those proposed by Lehtinen and Lehtinen (1991) - *i.e.* physical quality, interactive quality and corporate quality.

The dimensions associated with technical quality are those that can be measured objectively, regardless of customers' opinion, while those concerned with functional quality are related to the interaction between the provider and recipient of the service and are often perceived in a subjective manner.

## **Student services and Graduate's employability**

Students' achievement and success in their courses of study has always been one of the most important objectives of the academic endeavour. Therefore, Petruzzellis *et al.*, (2006) suggest that there are two main areas in which universities ought to concentrate their efforts:

1. The improvement of quality of teaching and not teaching services, in order to promptly respond to the target, ever more formed by adults and workers who require space, services, etc.
2. A stronger relationship with local economies and productive systems, in order to respond to the demand for training and competence.

In order to face the new competitive scenario, universities need to involve in a change process and trying to adopt an entrepreneurial approach to better serve their customers/students.

Today's challenging economic situation indicates that it is no longer sufficient for a new graduate to have knowledge of an academic subject (Fallows *et al.*, 2000). Increasingly it is necessary for students to gain those skills which will enhance their prospects of employment. Among other employability skills include the following abilities: the retrieval and handling of information; communication and presentation; planning and problem solving; and social development and interaction

Nowadays, it is recognized that employer expectations are getting more demanding (Tenopir, 2000) and the ability to move seamlessly from graduation to employment greatly concerns employers (Goulding, 2001). Continual changes in the work environment have raised debate amongst employers and the professional associations that the academic curricula should keep pace with the skills demanded by employers (Fisher *et al.*, 2005).

Hence, educators need to design curricula with the intention of providing students with the best preparation for employment in the related professions. After all, students enroll on these courses in order to gain a qualification that, they trust, will increase their chances of finding professional employment.

## **Research Design**

This study also involves in hypotheses testing (analyzing and forecasting) in order to understand the relationship between endogenous variables and exogenous variables. By using certain statistical procedure like Structural Equation Modelling (SEM) analysis, causal relationships that might exist among the variables can be examined without conducting experimental study. So, for this research, the researcher uses SEM technique to understand interrelationships and causal effects that exist and being administered among the constructs of economic literacy (exogenous variable), teamwork, attitude, knowledge/ skills and commitment (intervening variables) as well as organizational performance (endogenous variable).

The analysis unit for the study are the departments at all local polytechnics which is under the administration of Malaysian Ministry of Higher Education or Kementerian Pengajian Tinggi Malaysia. The primary data needed for this study will be gathered through the administration of questionnaire forms to the polytechnic lecturers.

## **Sampling Method**

The population for this research covers all directors, deputy directors, head of departments and lecturers from all departments of the Malaysian Polytechnics which offer certificate and diploma programmers at all local Malaysian Polytechnics.

Due to time constraint, high administration cost and difficulty in getting list of lecturers from polytechnics all over Malaysia, the researcher decided to use cluster sampling method, whereby polytechnics in the northern region of West Malaysia are chosen as the cluster.

The shortlisted lecturers chosen are only the directors, deputy directors, head of departments, deputy head of departments and lecturers who are confirmed in service with minimum 3 years of experience in service at the polytechnic from all departments. They are chosen because all of them have involved either directly or indirectly in the management of the polytechnics.

In SEM analysis, there are many factors impacting the required sample size (Hair *et al.*, 1998). As a matter of course, it is recommended that a sample size of 200, with increases occurring if misconception is suspected, the model is overly large or complex, the data exhibit non-normal characteristics, or an alternative estimation procedure is used.

## **Instrument**

The survey method using a questionnaire will be employed. The researcher is going to use Instrument for economic literacy i.e Test on Economic Literacy (TEL) which is being adapted and adopted from Che Noraini (1995) and National Council on Economic Education (2003) to find out the level of economic literacy (independent variable). The (TEL) items will be modified to justify the economic efficacy as suggested by Hansen (2001).

Another questionnaire for the dependent variable, the organizational performance will be developed. The construct will be adopted and adapted from Illias Said (2005) and Abdul Isa Ismail (2003). Changes will be made to suit the non-profit learning organization instead of the profit oriented business firm. By using Confirmatory Factor



Analysis (CFA), the construct or underlying dimensions of organizational performance which consist of Efficiency and productivity, student intake, student services and graduates' employability will be tested.

As for the intervening variables (commitment, teamwork, knowledge/skills and attitude), the questionnaire will be developed based on the previous literature. To check on the items' reliability for each of the constructs investigated, cronbach's  $\alpha$  was used.

Structural Equation modeling (SEM) technique using AMOS 4 will be employed to find out the influence of economic literacy directly on organizational performance. SEM will also be used to examine the indirect influence of economic literacy on organizational performance via teamwork, via commitment, via skills/knowledge and via attitude.

### **Pilot study**

Prior to the real study, a pilot test will be conducted at one of the Malaysian polytechnics, that is Politeknik Sultan Azlan Shah (PSAS) in Tanjong Malim. The purpose of the pilot study is to test if the respondents understand and able to answer the questions. Besides, it intends to test the reliability of the sets of items in each construct of the questionnaire.

Within each of these factors, several questions or items were constructed to assess respondents' literacy on economics as well as their level of agreement on statements that are of interest to this study. The domains investigated were; a) economic literacy (ECONLIT), b) micro understanding of market (MICRO), c) macro understanding of market (MACRO), d) understanding of government policy (GOVPOL), e) teamwork (TEAMWK), f) commitment (COMMT), g) attitude (ATTD), h) knowledge/skills (KNOWLS) and i) organizational performance (ORGPREF), j) student services (STUDSERV), k) student intake (STUDINT), l) graduates' employability (GRADEMPL) and m) productivity and efficiency (PRODTVT). 50 respondents each from four departments of Politeknik Sultan Azlan Shah which made up 200 respondents will be approached.

### **Framework**

The basic theoretical framework consists of lecturers' economic literacy as independent variables and lecturers' organizational performance as dependent variables while knowledge/skills, teamwork, attitude and commitment as intervening variables.

### **Data Analysis**

To answer research questions, the Structural Equation Modeling method will be employed. To conduct model estimation, the study used AMOS 4 data fitting program (Arbuckle & Wothke, 1999). The program adopted maximum likelihood estimation in generating estimates of the full-fledged SEM. Once the model has been estimated, the study applied a set of measures to evaluate the goodness of fit of each model. The consistency of the model with the data was determined using five measures of model fit.

The study examined the magnitude and direction of individual parameter estimate to determine its reasonableness. Finally, the study examined R<sup>2</sup> of the organizational performance, the higher the value of the R<sup>2</sup>, the better the explanation of the endogenous variable by the model.

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