Economic Literacy amongst the Secondary School Teachers in Perak Malaysia

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Abstract: The aim of the study is to determine the relationship between economics education exposure, saving, expenditure, investment and economics literacy amongst teachers in secondary schools in Perak. The theoretical framework was designed based on the literature and hence five hypotheses for the study were formulated. The samples were selected by quota sampling methods. The data were collected by distributing structured 35 items questionnaires to 100 teachers in secondary schools in eight districts in Perak. The instrument was adapted form Leader Behaviour Description Questionnaires which were used to measure economic literacy. Only 60 questionnaires were returned and analysed which gave 60% respond rate. Data collected were sorted out and keyed in into SPSS version 17. The data were analysed using descriptive and inferential statistics to answer the research questions. The result of the analyses showed that there was significant relationship between economics education and its predictors. Together the independent variables explained 81.7% of the variance in the dependent variables. The remaining 18.3% was due to unidentified variables. In relation to that, the study had contributed some knowledge about the understanding of economic of literacy. For future research, it is recommended that other than the above variables might influence economic literacy perhaps with a bigger samples and wider scope.

Keywords: Economic literacy, investment, saving, economic education and expenditure.

1. Introduction

The rapid development of economic market causes individuals to face situation whereby they have to make the right and smart decision. Various choices of products and services in the market allow healthy competition amongst the producers. As consumers, the main conflict in making choices is where there is inadequate knowledge especially regarding economic information. Economist has long conducted researches regarding cause and effect on individuals who are lacking in economic information (Walsh & Mitchell, 2005). Most societies are not used to basic economic concept that related to economic problem solving in one's family or household. Economic literacy may sound a bit of new idea but this field has long been explored and it is so important because it measures how far an individual understands economic knowledge that gives effect towards quality of life (Stern, 2002).

Problem Statement

The effort of changing Malaysian economy based on knowledge started as early as in the 1990s. Framework of the Third Long Term Plan (2001-2010), elaborates in detail the Malaysian objectives to develop knowledge based economics as strategy to escalate economic growth and competitiveness. The effort to establish Malaysian society with economic knowledge especially for manpower and economic sector is given priority by the Malaysian government.

According to Salemi (2005) when individuals are asked about basic economic concept, most of them give wrong answer. In reality, as consumers each individual are exposed to basic economic problems in everyday life. However, majority of the consumers do not understand basic economic concept such as why government raise price of certain goods, relationship between inflation and interest rate and any issue related to current activities. Although government has taken various steps to stabilize price, government's action will not be successful if without co operation of consumers with economic information. Individuals with no economic knowledge or literacy have the tendency to have wrong

decision syndrome. Unfortunately, many consumers do not relate the importance of economic literacy with economic decision in life.

As such, teachers who are educated consumers are perceived to be able to make wise decision in solving economic based problem, either it involves professional or personal life. The importance of economic literacy can never be denied for adults especially teachers. According to Rivlin (1999), without knowledge regarding how economic activities operate, understanding of terms and concept of basic economy, people will be left behind and have the tendency to make wrong decision. In the United States, college and university students are exposed to courses regarding basic economic concept so that they can benefit from it (Salemi, 2005). This is proven with serious efforts by the National Council on Economic Education (NCEE) by organizing Economic Literacy Campaign to ensure the adults are sensitive and experts in making the right decision when faced with economic problem. Based on the problems being stated, this study tries to answer research questions such as:

- 1. Does economic education, savings, spending and investment affect economic literacy?
- 2. To what extent do economic education, savings, spending and investment influence economic literacy?

The objectives of the research is to identify whether economic studies exposure, savings, spending and investment has relationships with economic literacy and to measure to what extent economic studies exposure, savings, spending and investment affects economic literacy.

Research Significance

This study is conducted as an effort to widen the knowledge regarding issues on economic literacy among teachers. Each individual is facing problem solving of basic economic problems. Hence, it is important for each teacher to have enough knowledge regarding basic economy to ensure that they can make wise economic decisions. It is hoped that the results of this study will give information on effective financial among teachers which include aspects of spending, saving and investment. World economy causes each teacher to face problems of making decisions with limited resource that needs expertise on means and methods to manage money effectively taking into consideration the current economic factors. Besides that, this research is aimed to give new shine and intrinsic motivation to teachers to escalate knowledge about latest economic information. Therefore, teachers as adults are supposed to take initiative to improve economic literacy either through printed media or electronic media (Rivlin, 1999). Services of accessing information through internet facilitate learning process. Other than that, government should improve effort through related agencies to distribute economic information to society as a whole. Various programs that are suitable can be arranged such as editing of journals, economic awareness campaign, seminars, forum, workshops and others. These efforts may create awareness on the importance of economic literacy among the people. Schools are responsible to shape good values through curriculum in the aspect of intellectual, physiological, emotional and spiritual. Hence, this study is hoped to be cooperated by the schools in order to enrich knowledge on economic literacy among students since from primary schools and will be practiced later on in life.

Economic Literacy

In this study, this term simply means knowledge and expertise of secondary school teachers in handling spending expenditure, savings, investment and awareness regarding finance.

Economics Education

Economics Education is a study about social science on how human being distributes limited economic resources to fulfil the unlimited needs of human. Exposure on economic literacy enables a person to act using knowledge or education to make right decision regarding finance (Kuhlin, 2009).

Spending

Theng (1999) insisted that spending is the usable income of an individual within a given period of time. Besides, spending is defined as sum of money withdrawal or spent to buy goods or services to satisfy needs and wants (Wahab, 2002). Extra spending may cause price of goods in the market to rise up due to greater demand by the consumers and opportunities grabbed by the irresponsible suppliers.

Savings

Savings is defined as the difference between income and spending (Hashim, 2005). Savings may aim to be used personally, organisationally or by the government to run certain activities or project in the future. Savings may also mean fund or a certain amount of money to be spent and saved to buy durable goods or to increase income (Theng, 1999).

Investment

Investment is another form of saving that is to keep money aside for the purpose of making profit in the future. According to Graham, Stendardi, Myers and Graham (2002) investment is defined as money deposited in the bank, financial institution, business and property which will bear profit within specified time. Investment is the ability to take risk, confidence, and information for process of investing market information, market financial analysis, and return on investment in the long term.

Economic literacy

Individual who is ignorance towards economic literacy will grow up as an adult whom do not know how manage their own money, involved in heavy dept, and having problems in her/his career (Harris, 2009). Beside that, that individual will become an incompetence consumer, investor, depositor and work force whom will not make a sound decision especially when making better choice. The economic situation will regulate itself without any problems provided the members of the society understand their role in the economy (Rivlin, 1999). Research conducted by Harris (2009) with NCEE also showed that nearly two third of respondents did not understand about money and inflation terminology. About 54% did not understand the relationship between money and deficit budget and 35% did not understand about making decision related to limited resources. This has raised concern amongst academician and economist about how weak is economic literacy in our society, whereas economic literacy is the main pillar that enables an individual to properly manage his personal and family economic matters efficiently.

2. Economic Education Exposure

According to Wood and Doyle (2002), there is a significant relationship between educated individual and economic literacy. This is due to those individual who took economic courses at least once, whether at college or university levels are more knowledgeable that those who did not in making right decision in economic problems. Transformation in economic world takes place simultaneously with evolution of time that demand every individual involved in making decision and choices that need accurate and effective evaluation. Promotion to boost the awareness and understanding related economic and monetary issue should have been a concerted and continuous effort (Aziz, 2004). The main focus is not only to prepare a suitable economic education program but also to accommodate financial services that could help and protect consumers. Currently with the advantage of technologies which help in searching for information for economics education is much easier especially using TV and internet. Walstad and Soper (1988) study found that student who have taken economic courses at college, have higher economic literacy than students from other course that did not offer economics course. Besides that, teachers who have taken courses in economics were able to improve their students' economic knowledge. The more teachers having high economic knowledge the better the students score in economic literacy.

Expenditure

Generally, all mankind are consumers because we are involved directly in consuming products and services in the market for our own or family consumption. According to Walsh and Mitchell (2005), consumers sometimes confuse in making decision to buy and shopping. Difficulty in making decision on spending may due to two factors. First, due to busy at work and tight schedule in the office thus they have little time and second could be due to their cognitive skills. In this case, smart consumers role are needed to reduce expenditure in buying luxury products and services (Walsh & Mitchell, 2005). Money plays an important role during shopping. Thus consumers should spend wisely according to ones affordability, taking consideration the economics situation and not necessarily to spend more using credit cards as this will increase liability in future. Studies show that consumers afford to spend more when they pay by using credit cards compared to paying in cash as influenced by some factors (Prelec & Simester, 2001). These phenomena contributed to barriers to smart purchase decision and thus consumers spent more than when they pay in cash. This will end up consumers spending more than what they earned and will result a deficit in earning.

Saving

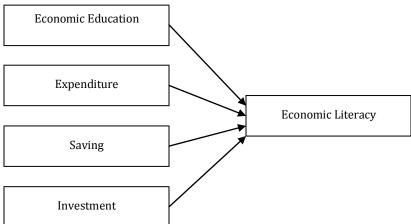
Kraay (2000) had used data from a study about China household to analyse determinants of saving rate on household income in the urban and rural area. The study found that the urban household had a negative growth on income and significant on the rate of saving. The household allocated the biggest portion of the income on food and this had a negative significant rate on saving. This could be due to the household could not afford to save thus the significant negative dependent on their saving. Adults should be more aware of the benefit and aims of saving (Aziz, 2004). For meeting certain need in future. The habits to encourage saving for education, health care, personal assets and for retirement plans. Still many of adults saving less for family protection and happiness in future. Besides that, a number of consumers are ignorance to relate current economic situation with benefit they will receive when they save with financial institutions (Rivlin, 1999).

Investment

Saving could contribute as capital for one to invest in long term (Kautz, 2007). Investment made must be considered very well as understanding the current economic market. It also provides guidance in turbulent time and uncertaint situation. Before investing, consumers should undertand the risk management. Apart from that consumer also have to take consideration the economic growth issues so that they prepare to face any posiblities that might happen in the money market. Strategies in investment are influenced by gender factor (Graham et al., 2002) and the confidence of taking risk. The outcome of the study showed that, mens are more confident in making investment decision, skillful in reading the economics influence factor, capable of relating the return of investment which they will receive, and are more tegar in taking higher risk as compared to women. This is could be due to men are more informative about economics as compared to women (Graham et al., 2002) and invetment made by men are more successful than made by women. This shows how important is the economic literacy influence in deciding whether to invest or not in any portfolio.

Conceptual framework

The conceptual framework has been developed which consist of a collection of concept, construct and main variables. From the literature review, a conceptual framework has been developed, as shown in Figure 1 below.



Hypothesis

- Ho1. There is no significant relationship between economic education and economic literacy.
- Ho2. There is no significant relationship between saving and economic literacy.
- Ho3. There is no significant relationship between expenditure and economic literacy.
- Ho4. There is no significant relationship between investment and economic literacy.
- Ho5. There is no significant contribution of independent variables to the economic literacy.

3. Methodology

The research was designed as descriptive, cross sectional in nature and using survey method to explain the phenomena under study (Majid Konting, 2004). Black and Champion (1976) stated that survey method was one of the good ways to gather specific data from the population. Data were collected by distributing 35 item-structured questionnaires to teachers in Perak State. The self administered questionnares was adapted from Hashim (1995). The systematic random sampling procedures were employed. A group of teachers helped with data collection and the researchers would like to thank Azwa Mohd Noor, Asni Othman, Nor Faezah and Roszaini for their helps.100 sets of questionnaires were distributed but only 60 were returned and analysed, that gave a 60% rate of return which is very encouraging. The questionnaires comprised of six parts, i.e. A, B, C, D, E dan F. Table 1 below explains the questionnaires in detail.

Table 1: The Questionnaires in Detail

Parts	Subjects	Items	No of Item
A	Demography	1, 2, 3, 4, 5, 6	6
В	Economic education exposure	B1, B2, B3, B4, B5, B6, B7, B8	8
С	Saving	C1, C2, C3, C4, C5, C6, C7, C8	8
D	Expenditure	D1, D2, D3, D4, D5, D6, D7, D8	8
E	Investment	E1, E2, E3, E4, E5, E6, E7, E8	8
F	Economic literacy	F1, F2, F3, F4, F5, F6, F7, F8	8

The respondents attitude towards the economics literacy was measured by using 1 to 5 Likert scale (1 = strongly disagree, 5=strongly agree). Data collected were sorted out and keyed in into the computer and were analyzed using the Statistical Package for Social Science (SPSS) version 17.0. Two statistical analyses were employed i.e the descriptive and inferential in order to answer the research questions. Prior to the data collection, the questionnaires was pilot tested among the teachers in Tanjong Malim schools to check its reliability and validity. Table 2 explains the detail of the pilot test result.

Table 2: Value of Cronbach Alpha for pilot test and real study

Pilot test (30)	Real study (60)
.771	.815
.937	.929
.817	.814
.838	.805
.909	.906
	.771 .937 .817 .838

4. Results

Descriptive Analysis

The majority of the respondent taking part in this study were women 32(53.3%) and 28(46.7%) were men. Malays were 39(65%), Chinese 8(13.3%) and Indian 13(21.7%). The Malay respondents were all Muslim by faith 39(65%), but Hinduism and Buddhism comprised of 13(21.7%) and 8(13.3%) respectively. Whereas, the majority of the respondents aged between 30-40 years 45(75%) and most of them i.e. 41(68.3%) earn more than RM3500 monthly. For educational level, most of the

respondents 38(63.3%) have Bachelor degrees. Table 3 below explains the respondents' demographics in detail.

Table 3: Demographic Characteristics of Respondents

Items	Characteristics	f (n)	Percentage (%)
Gender	Male	32	53.3
	Female	28	46.7
Race	Malays	39	65.0
	Chinese	8	13.3
	Indian	13	21.7
Religion	Moslem	39	65.0
	Hindusm	13	21.7
	Buddhism	8	13.3
Age (years)	20-30	4	6.7
	30-40	9	15.0
	40-50	45	75.0
	50 and above	2	3.3
Income	RM 2 501 - RM 3 000	11	18.3
	RM 3 001 - RM 3 500	8	13.3
	More than RM 3 500	41	68.3
Education level	STPM	2	3.3
	Diploma	5	8.3
	Bachelor Degree	38	63.3
	Masters Degree	15	25.0

Correlation Analysis

The result of the analysis found that the more the respondents know about economics the better their economic literacy is. Based on Table 4, the correlation coefficient for exposure on economics r=.457 which means there is a significant relationship between economic knowledge and economic literacy at .01 significant level. For the saving, the correlation coefficient is, r=.525 which means that there is significant relationship between saving and economic literacy at 0.01 significant level. Next, the correlation coefficient for expenditure is r=.861 which means that there is significant relationship between expenditure and economic literacy at .01 significant level. For the school teachers investment, the correlation coefficient, r=.903 which means that there is significant relationship between investment and economics literacy at .01 significant level.

Table 4: Correlation between independent and dependent variables

Dependent variables		Econ	Saving	Expend	Invest
Econ Literacy	Pearson	.457**	.525**	.861**	.903**
	Significant	.000	.000	.000	.000

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Multiple Regression Analysis

The result of the MRA showed that $R^2 = 0.817$ which means that 81.7% of the variance in the dependent variables were explained by the independent variables. The remaining 18.3% were due to unidentified factors. The detail of the analysis was shown in Table 5 below.

Table 5: Multiple Regression Coefficients, Standard Errors in parenthesis, t-values in brackets, p-values and F-statistics in italics.

Constant	Econ Know	Saving	Expend	Invest	\mathbb{R}^2	F-Stat
025	058	014	.061	1.023	.817	61.379
(.395)	(.099)	(.054)	(.227)	(.234)		
[062]	[586]	[254]	[.271]	[4.380]		
.951	.560	.800	.788	.000		.000

Predictors: (Constant), Investment, Econknow, Expend, Saving Dependent Variable: Econliteracy Level of significance at p< 0.01

Therefore, the linear regression model of the study is,

$$y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + e$$

y = economice literacy

a = constant

b = coefficient

 $X_1 - X_4 = Independent variables$

e = standard error

The result of the analysis showed that R^2 is statistically significant i.e. F=61.38 at p <0.01.

Therefore the linear regression equation of the study is,

The result of the multiple regression analysis showed that R^2 and \underline{p} means there is a significant relationship between independent variables with dependent variables which explain the hypothesis posited at the earlier part of the paper. This means that the independent variables (economic education, saving, expenditures, and investment) together contributed to the economic literacy phenomena. Nevertheless, economic education and saving have an inversely proportional relationship or have no relationship at all. Thus, it means that the higher the teachers economic education and saving, the higher their economic literacy is. The situation is due to even though some of the teachers have no basic economic education or been never taking any formal economic course in any higher learning education, they still can make a sound decision in their own family consumption. This is because could be due to their experience and they learn from their close friends and personal observations. Furthermore, saving doesn't mean that an individual masters economic literacy. A number of the teachers save for various purposes without even knowing the economic aspect as a whole. This statement is supported by Aziz (2004) who stated that adult are supposedly more concern about the benefits of saving as to cater for special needs such as for rainy days. Generally, most individual including teachers involved in buying decision process, rental, or other consumption of goods and services for personal or family use. Nevertheless, teacher as a highly educated individual is perceived to be able to play bigger role as smart consumers. Teachers should as the saying goes, save during the sunny season for the rainy days. Make hays while the sun shines and not penny wise but pound foolish. This urge was supported by Walsh and Mitchell (2005) who stated that gender, age and education level influenced consumer's decision making in the market place.

5. Conclusion, Discussion and Recommendation

Discussion

The aim of the study is to discuss the result and the implication based on previous study and relevant theories. Besides it also aim at answering research questions and testing the hypothesis posited earlier in the paper. The independent variables are economic knowledge, saving, investment and expenditure while the dependent variables is economic literacy. The result of the analysis showed that the independent variables were correlated with economic literacy. The result also showed that the economic knowledge is significantly correlated (r=.457, p<0.01) with economic literacy thus the null hypothesis saying that there is no significant relationship between economic knowledge and economic literacy is rejected.

The result of the study is relevant and consistent with study done by Wood and Doyle (2005) which mean that those teachers who have taken economic as subject in high schools have more economic literacy than those who didn't. Contrary to that, Salemi (2005) found that even though an individual knew economic concepts but he or she does not have the courage to apply it in their current economic pursuit. The result of the analysis showed that the independent variables were correlated with economic literacy. The result also showed that the economic knowledge is significantly correlated (r=.457, p< 0.01) with economic literacy thus the null hypothesis saying that there is no significant relationship between economic knowledge and economic literacy is rejected.

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The result of the analysis showed that there is no significant relationship between saving and economic literacy thus the null hypothesis is rejected. The result of the study was inline with what Graham et al. (2002) found that the economic knowledge is shown by correlation analysis. The third null hypothesis was rejected. The outcome of this study was same with the outcome which consistent with Walsh and Mitchell (2005) which shows that the smart consumer will purchase according to their ability, take into consideration of the economic situation, will not spend more using credit cards, because doing so will, only to get into more troubles. The finding is consistent to Wash and Mitchell (2005) study which found that a smart consumer will spend if they can afford it, taking

into consideration of the current economic situation. They will not use credit cards because by doing so will only increase their liability in future.

The fourth null hypothesis was rejected. It is found that the investment is significant with economic knowledge (r=.861, p<.01). The finding of the study was same with the that of Graham et. al., (2002) which supported that the hypothesis that there is significant correlation between invest ment with economic literacy. That shows that, adult is more guided towards making the right investment decision because they were bale to process the information related to economic market and the return on investment. Other than that, the awareness to accumulate wealth and having asset to create income whether around the home or in business is increasing (Aziz, 2004). The second objective is to measure how far economic education, saving, expenditures and investment influence economic literacy. The result of multiple regression analysis showed that 81.7% of the varience in the dependent variables ie the economic literacy has been explained by the independent variable. But the remaining 18.3% is due to unexplained and unidentifed factors in the linear regression.

Summary and Recommendation

The general aim of the paper was to study the economic literacy amongst the school teachers in Perak state. This is important because teachers as consumers are facing the problem of making wise decision in the market. The objective of the study was to determine whether economic education exposure, saving, expenditure and investment have significant relationship with economic literacy. Besides that, the paper attempt to answer question such as how much the independent variables influence the economics literacy. Based on the finding of the study, the outcome of the research showed that there is significant relationship between saying, education, expenditure, investment, and economics literacy. Based on the result of the analysis, a few recommendations have been offered for future research directions. Due to investment which was found to be the most dominant variable in this study; future research should explore other variables that might influence investment and saving. By collecting data using other methods than questionnaires perhaps might give an interesting result. By employing a more efficient method of selecting respondents e.g. using stratified random sampling methods might yield a more reliable result which could be generalised across bigger population. A wider scope of study across gender amongst students of the higher learning institutions could give an exotic finding. As conclusion, economics literacy is an important current issue that involved every walks of life i.e. right from children to adults. Basics understanding in economics literacy will enable an individual to make a right decision for him or family in the ever changing economic problems. In relation to that, everyone should seriously look into this issue in order to have a competence economics citizen.

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