

**IOI Indonesia 2015**

2015 International Conference  
of Organizational Innovation



## International Conference of Organizational Innovation

### Sponsor



International Association of  
Organizational Innovation, USA



Huaqiao University, China



Airlangga University, Surabaya,  
Indonesia



Chang Jung Christian  
University, Taiwan ROC

### Cosponsor



De La Salle University, Manila,  
Philippines



Nanjing Audit University, China



International College of Suan  
Sunandha Rajabhat University,  
Thailand



Swinburne University of  
Technology, Australia



National Kaohsiung First  
University of Science and  
Technology, Taiwan ROC



University Kebangsaan  
Malaysia, Malaysia



Southeastern Louisiana  
University, USA



Tunghai University,  
Taiwan ROC

### Conference Date

Aug. 4-6 2015

### Location

Location, Royal Ambarrukmo Hotel. Address: Jl. Laksda Adisucipto 81,  
Yogyakarta - 55281, Indonesia

# **PROCEEDINGS OF 2015 ICOI THE INTERNATIONAL CONFERENCE ON ORGANIZATIONAL INNOVATION**

**Aug., 4 – 6, 2015**

**Editor in Chief**

**Dr. Shieh, Chich-Jen**

Department of International Business  
Chang Jung Christian University, Taiwan, ROC

**Editor**

**Dr. Chou, Jyh-Rong**

Department of Creative Product Design, I-Shou University, Taiwan, ROC

**Mr. T. Aria Auliandri**

Department of Management, Faculty of Economics and Business,  
Airlangga University, Surabaya, Indonesia

## **HOSTED & ORGANIZED**

### **Institute of Sponsor:**

International Association of Organizational Innovations, USA  
Airlangga University, Surabaya, Faculty of Economics and Business, Indonesia  
Huaqiao University, School of Economics and Finance, China  
Chang Jung Christian University, Department of International Business, Taiwan  
Jasmine Publications, Taiwan, ROC

### **Institute of Cosponsor:**

Beijing University of Chemical Technology, School of Economics and Management,  
China  
International College of Suan Sunandha Rajabhat University, Thailand  
National Kaohsiung First University of Science and Technology, Library and  
Information Center, Taiwan ROC  
Tunghai University, Department of Industrial Design, Taiwan ROC  
Swinburne University of Technology, Centre for Transformative Innovation, Au  
Nanjing Audit University, School of Economics, China  
De La Salle University, Ramon V. del Rosario College of Business, Manila, Philippines

## 2015 ICOI ORGANIZATION LISTING

<b>Honorable Chairs</b>	
Dr. Fred Dembowski	President of International Association of Organizational Innovation , USA
Dr. Muslich Anshori	Dean of Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia
<b>Conference Chairs</b>	
Dr. Lee Yung-Lung	President of Chang Jung Christian University. Taiwan
Dr Alex Maritz	Program Director, Master of Entrepreneurship & Innovation, Swinburne University of Technology, Australia
Dr. Fernando Cardoso de Sousa	Founder and director of the Marketing Research Office (GAIM) and the Portuguese Creativity and innovation Association (Apgico)
Dr. Kenneth E. Lane	Southeastern Louisiana University, USA
Dr. Pei Yu	Vice president of Nanjing Auditing University, Nanjing China
Dr. Mohd Fauzi Mohd Jani	Director, Center of Entrepreneurship and SMEs Development (UKM-CESMED), University Kebangsaan Malaysia, Malaysia
Dr. Hu Ridong	Dean of School of Economics and Finance, HuaQiao University, China
Dr. Szu-Yuan Sun	Dean of Academic affairs, National Kaohsiung First University of Science & Technology, Taiwan
Dr. Chwen-Ming Chang	Dean of college of Management at Chang Jung Christian University, Taiwan, R.O.C
Dr. Lean Yu	Dean of School of Economics And Management, Beijing University of Chemical Technology, Beijing, China
Dr. Indrianawati Usman	Dr. Indrianawati Usman, Vice Dean of Financial and HRD, Faculty of Economics and Businesses, Airlangga University, Surabaya, Indonesia
Prof. Jenn-Yang Lin	Professor in Far East University, Taiwan, R.O.C
Dr. Sri Gunawan	Head of Department of Management, Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia
Dr. Harold G. Kaufman	Professor in department of Technology Management & Innovation at NYU Polytechnic School of Engineering, USA
Dr. Sydney Engelberg	Faculty of The Schwarz Program in Non-Profit Management and The Community Leadership and Management Program at The Hebrew University
Dr. Ing. Barbara Cimatti	DIEM Department Mechanical, Nuclear, Aviation, and Metallurgical Engineering University of Bologna, Italy
Dr. Giampaolo Campana	Professor in department of Industrial Engineering DIN - University of Bologna, Italy



Dr. Denis S. Ushakov	Suan Sunandha Rajabhat University, Bangkok, Thailand
Dr. Andy Klein	American University of Sharjah, UAE.
Dr. Oleg V. Lokota	Vice Rector of South Russia branch of Russia academy for national economy and public administration, head of Department of International Economy, Russia
Dr. Tomáš Tichý	Professor in VSB-Technical University Ostrava, Czech Republic.
Dr. Bal Kishan Dass	Professor in Department of Mathematics, at University of Delhi, India
Dr. Shih Wen Hsiao	Department of Industrial Design at the National Cheng Kung University, Taiwan.
Dr. Marius Potgieter,	Tshwane University of Technology, South Africa
Dr. Matos Eloiza	Universidade Tecnológica Federal do Paraná - UTFPR
<b>Conference Co-Chairs</b>	
Dr. Pawan. K. Dhiman	Sant Longowal Institute of Engineering & Technology, India
Dr. Jian Li	Associate Dean of School of Economics And Management, Beijing University of Chemical Technology, Beijing, China
Dr. Chih Yuan Huang	Professor in Kao Yuan University, Taiwan
Dr. Anton de Waal	Senior Lecturer in Innovation and Entrepreneurship ,New Zealand
Dr. Shang-Pao Yeh	Dean of office of student affairs, I-Shou University, Taiwan
Dr. Chen,Chi-Min	Professor in Department of International Business and Trade, Aletheia University, Taiwan, R.O.C
Dr. Chou, Jyh-Rong	Professor in I-Shou University, Taiwan
Dr. Nasser Alomaim	Riyadh College of Technology, Kingdom of Saudi Arabia
Ms. Darina Prokhorova	Managing editor, Actual Problems of Economics, National Academy of Management, Ukraine
Dr. Sergey Ivanov	Association professor at University of the District of Columbia,USA
<b>Conference Executive Director</b>	
Dr. Shieh, Chich-Jen	Department of International Business, Chang Jung Christian University. Taiwan ROC
T. Aria Auliandri	T. Aria Auliandri, Department of Management, Faculty of Economics and Business, Airlangga University, Surabaya, Indonesia
<b>Program Chairs</b>	
Prof. Harvey T. Ong	Decision Sciences and Innovation (DSI) Dept. Ramon V. del Rosario College of Business De La Salle University, Manila , Philippines
Dr. Li Bin	School of Economics and Management, Beijing University of Chemical Technology, China

Dr. Madeline Berma	Faculty of Economics and Business University Kebangsaan Malaysia, Malaysia
Dr. Prof. Datin. Shamshubaridah Ramlee	Chairperson of Economics and Business University Kebangsaan Malaysia, Malaysia
Dr. Ying-Jye Lee	Department Head of Cultural Development, National Kaohsiung University of Applied Sciences. Taiwan
Dr. Hong-Cheng Liu	Department of Public Policy and Management, I-Shou University, Taiwan R.O.C
Dr. Chin-Huang Lin	Chung Hua University, Taiwan, R.O.C
<b>Executive Secretaries</b>	
Prof. Wen-Hwa Cheng	Department of Multimedia Design, National Formosa University. Taiwan
Dr. Chi-Hung Lo	Department of Industrial Design, Tunghai University, Taiwan
Dr. Cheng, Yi Chung	Department of International Business Tainan University of Technology, Taiwan
Dr. Shu-Han Jiang	Department of International Business, Chung Yung Christian University
Dr. Kai-Ping Huang	Department of Business Administration, Fu Jen Catholic University, Taiwan ROC
Dr. I-Ying Chang	Department of Tourism and MICE Management Chung Hua University, Taiwan, R.O.C.
Dr. Wan-Yu Chang	Department of Tourism Industry Management, Taiwan ShoufuUniversity, Taiwan, R.O.C.
<b>Paper reviewers</b>	
Dr. Wu, Yi-Te	Department Head of Marketing and Logistics Management, Hsing Kuo University of Management
Dr. Li-Shan Chen	Department of Information Management Fortune Institute of Technology, Taiwan
Dr. Jui-Fang Chang	National Kaohsiung University of Applied Sciences, Taiwan
Dr. Yu-Jia Hu	Department of Marketing and Distribution Management Fortune Institute of Technology, Taiwan

## **2015 The International Conference on Organizational Innovation Agenda**

**DATE :** Aug, 4 2015, Tuesday

**LOCATION :** Royal Ambarukmo Hotel, Yogyakarta, Indonesia

TIME	ACTIVITY	PLACE
08 : 30 – 09 : 00	<b>REGISTRATION</b>	
09 : 00 – 10 : 00	<p><b><u>Conference Host :</u></b> Prof. Dr. Muslich Anshori</p> <p><b><u>Conference Grand Opening Speech :</u></b>            1. Prof. Dr. Frederick Dembowski, President of International Association of Organizational Innovation. USA            2. Prof. Dr. Muslich Anshori, Dean of Faculty of Economics and Business, Airlangga University. Indonesia</p> <p><b><u>Honored VIP Speech :</u></b>            1. Dr. Lean Yu, Dean of College of Economics and Management, Beijing University of Chemical Technology, China            2. Dr. Fernando Cardoso de Sousa, Director of Portuguese Creativity and innovation Association (Apgico).            3. Dr. Alex Maritz: Swinburne University of Technology, Australia            4. Dr. Giampaolo Campana, Department of Industrial Engineering DIN - University of Bologna, Italy            5. Dr. Bal Kishan Dass, Department of Mathematics, University of Delhi, India            6. Dr. Tomáš Tichý, VŠB-TU Ostrava, Czech Republic            7. Ms. Darina Prokhorova, Actual Problems of Economics, National Academy of Management, Ukraine            8. Dr. Denis S. Ushakov, International College at Suan Sunandha Rajabhat University, Thailand            9. Dr. Chih Yuan Huang, Kao Yuan University, Taiwan, ROC</p>	Keraton Ballroom, Royal Ambarrukmo Hotel
10 : 00 – 10 : 30	<b>Tea Time and Academic Networking</b>	
10 : 30 – 11 : 00	<p style="text-align: center;"><b>Keynote Presentation (1)</b>            Speaker : Dr. Barbara Cimatti            Topic: The concept of slowness and its implications for industrial organizational patterns.</p>	Keraton Ballroom, Royal Ambarrukmo Hotel
11 : 00 – 11 : 30	<p style="text-align: center;"><b>Keynote Presentation (2)</b>            Speaker : Dr. Sydney Engelberg            Topic: Organizational Design: The Key to Overcoming Organizational Myths</p>	
11 : 30 – 12 : 30	<p style="text-align: center;"><b>Keynote Presentation (3)</b>            Speaker : Dr. Harold G. Kaufman            Topic: Organizational Diversity and Innovation</p>	
12 : 30 – 13 : 30	<b>Lunch</b>	

**DATE : Aug, 4, 2015, Tuesday**

**LOCATION : Keraton-1**

**Royal Ambarukmo Hotel, Yogyakarta, Indonesia**

Time	Topic of Seminar	Country/Region
<b>Session 7.1</b> 13 : 30   14 : 50	<b>Chair : Dr. Sydney Engelberg Hebrew University Jerusale, Israel</b>	
	1. 15R-066: Business Risk, Financial Risk And Firm Performance An Empirical Study Of Indonesian Manufacturing Sector Listed At Bursa Efek Indonesia	I Made Sudana, Indonesia
	2. 15R-039: Application Of Sales And Financial Information Systems The Company CV "XYZ" Based Smartphone	Zulhawati, Indonesia
	3. 15R-041: Measuring Students' Financial Literacy: Comparison between Gender and Concentration Courses	Fakhrurrozi, Indonesia
	4. 15R-053: Bank Health Rating Evaluation Based on Risk Profile, Earnings and Capital Approach: Conventional Banks in Indonesia.	Lis Sintha, Indonesia
	5. 15R-100: Accuracy of Unbiased Beta Optimum Stock Portfolio In Predicting the Expected Return	Ferikawita Magdalena Sembiring, Indonesia
14 : 50   15 : 00	<b>Tea Time</b>	
<b>Session 7.2</b> 15 : 10   16 : 30	<b>Chair : Dr. Fitri Ismiyanti, Universitas Airlangga, Indonesia</b>	
	1. 15R-029: An Analysis Of Telecommunication Vendor Company Bankruptcy Potency Based On The Problematic Financial Ratio With Altman, Springate And Zmijewski Methods	Norita, Indonesia
	2. 15R-064: Linear And Non Linear Relationship Between Degree Of Internationalization And Firm Performance	Fitri Ismiyanti, Indonesia
	3. 15R-017: The Effect Of Management System On Corporate Performance (A Study Of 179 Companies, Manufacturing Sector, Listed On The Jakarta Stock Exchange Year 1998 - 2000)	Asep Sudrajat, Indonesia
	4. 15R-196: Correlation Study on Organizational Learning, Management Innovation, and Technological Capability of SMEs	Zhen-Gang Zhang, China
18 : 00	<b>Welcoming Dinner</b>	Pendopo Royal Ambarrukmo



# CONTENTS

## 1. Business Administration

15R-033: The Role of Corporate Strategy, Learning Culture, and Human Capital in Facing the Global Competitive Environment-----	1
15R-035: The Feasibility of Implementing E-Commerce in Sudan-----	2
15R-039: Application of Sales and Financial Information Systems the Company CV “XYZ” Based Smartphone-----	3
15R-058: Application of Polite Business Environment Young Entrepreneur of the Seller Clothes Imported Used in Royal Plaza Surabaya-----	4
15R-063: The Effects of Reverse Logistic Capability Factors on Cost Savings-----	5
15R-066: Business Risk, Financial Risk and Firm Performance an Empirical Study of Indonesian Manufacturing Sector Listed at Bursa Efek Indonesia-----	6
15R-084: The Relationship between Earnings Quality, Information Asymmetry and Cost of Capital: Test Using Path Analysis-----	7
15R-089: Situational Factors Influencing Online Negative Word of Mouth-----	8
15R-097: Never Stop, Giving a Life Light (Case Study of Female Leadership in Developing Family Business)-----	9
15R-167: The Effects of Emotional Labor on Job Involvement: The Moderating Roles of Perceived Person-Environment Fits-----	10

## 2. Case Study

15R-003:The Effect of Conflict, Stress and Motivation on Performance and Its Impact on Productivity of Employee in the Bureau of Investment Services Batu City Government.-----	11
15R-024:Effect of Knowledge Inertia and Environmental Perception on Entrepreneurial Behavior in the Development of Strategic Adaptability Behavior: Case of Indonesian National Gas Company-----	12
15R-049: Below the Line: Media Strategy in Improving Promotion of Independent Choir in Surabaya. Case Study: Concert of Coro Semplice Indonesia-----	13
15R-055:Study of Creation and Development of Small and Medium Scale Enterprises Finance (Case Study of Smes in District of East Ende, Regency of Ende)-----	14
15R-057: How Unions Recruit and Retain Their Members? (Case Study on Unions of Federasi Serikat Pekerja of Tekstil Sandang Kulit Serikat Pekerja Seluruh Indonesia in Surabaya)-----	15



15R-053: Bank Health Rating Evaluation Based on Risk Profile, Earnings and Capital Approach: Conventional Banks in Indonesia-----	46
15R-086: Dynamic Interactions between Housing and Stock Prices in Indonesia: an Empirical Analysis-----	47
15R-098: Accuracy of Unbiased Beta Optimum Stock Portfolio in Predicting the Expected Return-----	48
15R-148: Efficiency Analysis of Banks at Selected Markets with Various Dea-Based approaches-----	49

## 8. General Management

15R-025: Intrinsic Motivation Preference on Volunteer in Indonesia International Work Camp-----	50
15R-067: Four I's Transformational Leadership Style of the First-Line Manager-----	51
15R-068:The Effect of Perceived Organizational Support on Work Attitude: the Role of Career Commitment-----	52
15R-070: Corporate Governance, Ownership Structure, and Cash Holdings-----	53
15R-078:Service Quality Improvement (case study in small business and enterprise)	54
15R-081:The Antecedent of Relationship Commitment Donors to Nonprofit Organizations in B2C Relationship Context-----	55
15R-087:The Role of Power and Conflict Resolution in Small and Medium Enterprise Supply Chain Collaboration: The Mediating effect of Commitment to Collaborate-----	56
15R-186:The Effect of Supervisor-Subordinate Guanxi Style on Power Based and Trust-----	57
15R-187: Cultural Influences on Services Cape Expectation-----	58
15R-190: The Plan of Critical Disaster Rescue Mission for Taiwan Military Forces--	59
15R-194:Does Supervisor-subordinate Guanxi Matter in Employee's Turnover Intention?-----	60

## 9. Higher Education

15R-022:Applied ICT Innovation Services of Academic Information System: Strategy for Higher Education Management -----	61
15R-034: The Relationship between Big Five Personality and Career Adaptability among Fresh Graduate Students-----	62
15R-041: Measuring Students' Financial Literacy: Comparison between Gender and Concentration Courses-----	63



**IEOI** Indonesia  
**2013**  
Joint International Conference  
of Engineering Education

# **Measuring Students' Financial Literacy: Comparison between Gender and Concentration Courses**

Julina

Faculty of Economics UIN SUSKA RIAU, julina@uin-suska.ac.id

Susnaningsih Mu'at

Faculty of Economics UIN SUSKA RIAU, susnaningsih.m@uin-suska.ac.id

Fakhrurrozi

Faculty of Economics UIN SUSKA RIAU, fakhrurrozi@uin-suska.ac.id

## **Abstract**

*Financial literacy is an interesting issue that received much attention of the researchers. Based on previous research, it found that the level of financial literacy is relatively low. This paper attempts to find out the level of students financial literacy and whether there are financial literacy differences if the terms of gender and concentration courses. 113 students from the concentration of marketing and financial management participated in this study. Data were collected using questionnaire that measures the level of financial literacy. The sampling technique used is accidental sampling and then analyzed by descriptive and quantitative method. Research shows there are differences in the level of financial literacy both in terms of gender and course of concentration. Lack of knowledge of financial management will result in the student less effectively and efficiently manage capital resources owned to achieve a better future. Having the ability to manage finances well, not only benefit themselves but also the wider community and even countries. One way of improving financial literacy is as early as possible to teach students through a variety of educational institutions and preparing facilities of financial institutions.*

*Keyword: Financial Literacy, Gender, Course Concentration*

## **Introduction**

Financial system plays an important role in the growth and development of a nation. Financial literacy has been considered by the economist around the world as a key pillar for the development of financial system of a country. Creating financial literacy can play a critical role in equipping the consumers with the information, basic knowledge, and skills to evaluate their options and enables them to understand the implications of alternative financial decisions (Sane, 2014). There is enormous research found that financial development promotes economic growth. Rajan and Zingales (1998) stated that there has been extensive theoretical work on the relationship between financial development and economic growth. Economist have emphasized

the role of financial development in better recognizing investment opportunities, decreasing investment unproductive asset, mobilizing savings, boosting technological innovation, and improving risk taking. All these activities can lead to greater economic growth. However, skeptic people could have a number of arguments against attributing causality, such as the relation could be driven by people propensity to save or financial development predicts economic growth just because financial market anticipates future growth.

Although there are differences of opinion about the role of the financial sector to economic growth, understanding the financial sector remains an important issue. Financial literacy can be a significant influence on the soundness and efficiency of the financial system. A financially literate, well-informed public could be expected to have beneficial effects on the soundness and efficiency of the financial system. It is because financial literacy could facilitate a more prudent management of household balance sheets, it could reduce lending risks for banks and other providers of credit. Next, improved financial literacy could result in more discerning choice of investment and other financial products by consumers. In turn, this is likely to strengthen the incentives for financial institutions to respond innovatively to consumer demand, leading to a more dynamically efficient financial system. A more financially literate society could be expected to exert stronger market disciplines on financial service providers by exercising greater scrutiny over the risks of particular financial institutions and their products, and through a greater awareness of risk-return tradeoffs. In turn, stronger market disciplines are likely to encourage more prudent management of risks by financial institutions and a higher standard of financial service delivery. Against, knowledgeable investment decisions, based on a high level of financial literacy, could be expected to result in a more productive allocation of resources through time, reflecting a more discerning approach to the balancing of risk and return. In turn, this should contribute to a higher potential growth rate, and possibly a less cyclically volatile economy, with longer-term flow-on benefits for financial stability.

Financial literacy is important for individual consumers of financial services, the financial system and the wider economy. It influences how people save, borrow, invest and manage their financial affairs. It therefore affects their capacity to grow their wealth and income, and has significant implications for people's lifestyle choices. Financial literacy also has a significant part to play in influencing how financial institutions – such as banks, non-bank deposit takers and insurers – manage their affairs and what products they provide. Because financial literacy



influences people's investment decisions, including risk/return tradeoffs, it also affects how resources in the economy are allocated. In turn, this has implications for the potential growth rate and stability of the economy (Widdowson and Hailwood, 2007).

Financial literacy is a basic need for everyone to avoid financial problems. According to Clark, Matsukura, and Ogawa, financial difficulties not only a function of low income, but also arise from lack of financial management. The study of financial literacy and its importance has emerged as a major focus of economic analysis in recent years. Studies have attempted to assess the level of financial literacy by examining a few key questions. The level of financial literacy has been shown to be relatively low in many countries and the lack of financial knowledge results in suboptimal consumption/saving decisions and in retirement planning (Lusardi and Mitchell 2011b).

By looking at the importance of financial literacy, the need for being financially literate has grown rapidly over the last decade. Moreover, the development and marketing of financial products and services has grown rapidly that need financial skill to make purchase decision (Marcolin and Abraham, 2006). Young people in particular must understand the basics of managing their capital resource. The high number of people with low levels of financial literacy presents a serious problem for both the economic well-being of nations and the personal well-being of such individuals. Not knowledgeable in financial matters and that this would tend to impact negatively on their future lives through incompetent financial management (Beal and Delpachitra, 2003). This paper attempts to measure the level of financial literacy among students, then comparing its level of financial literacy based on gender and course concentration.

## **Literature Review**

Noctor, Stoney and Stradling (1992) conceptualized and defined the term financial literacy as the ability to make informed judgments and to take effective decisions regarding the use and management of money. Anthes (2004) stated that personal financial literacy is the ability to read, analyse, manage and communicate about the personal financial conditions that affect material well being. OECD (2005) defines financial education as the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction and/or objective advice, develop the skills and confidence to

become more aware of financial risks and opportunities, to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.

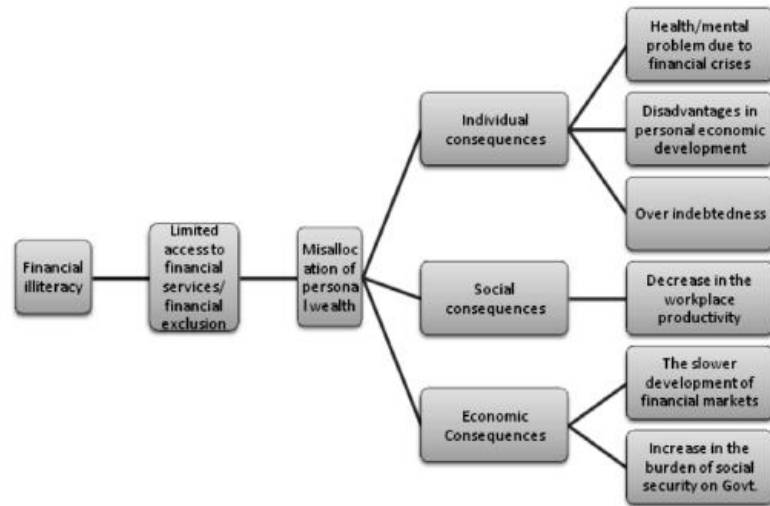
Financial literacy always associated with lifetime planning and saving for retirement. Lifecycle economic theories are based on the assumption that individuals have an adequate knowledge of important financial issues such as understanding compounding of interest, the impact of inflation on real income, risk and return characteristics of various assets, and the importance of diversification. This is become more important because incorrect knowledge can lead to suboptimal decisions such as excessive consumption early in life and having too little income in retirement or not investing enough in human capital because future returns are not correctly measured in comparison to costs that are borne today (Clark, Matsukura, Ogawa).

From broad definitions suggested, Widdowson and Hailwood (2007) summarize that financial literacy has a number of elements, including basic numeracy skills, such as the ability to calculate rates of return on investments, the interest rate on debt, and basic arithmetic ability; an understanding of the benefits and risks associated with particular financial decisions, including spending, borrowing, leverage and investing; the ability to understand basic financial concepts, including the tradeoff between risk and return, the main attributes of different types of investments and other financial products, the benefits of diversification, and the time value of money; and the capacity to know when to seek professional advice and what to ask, and the ability to understand the advice given by professional advisers.

Moreover, Oseifuah (2010) mentioned that there are some of the key elements of financial literacy skills and knowledge often cited in the literature. The first is mathematical literacy and standard literacy such as basic numeracy and comprehension skills. Then, financial understanding about the nature and forms of money, how it is used, and the consequences of consumer decisions. The third is financial competence, such as the understanding of the main features of basic financial services, attitudes to spending money and saving, understanding financial records and appreciating the importance of reading and maintaining them, an awareness of the risks associated with financial products, and an appreciation of the relationship between risk and return. And the last is financial responsibility - the ability to make appropriate personal life choices about financial issues, understanding consumer rights and responsibilities, the ability, and confidence to seek assistance when things go wrong.

According to Kotzè & Smit, (2008) the consequences of financial illiteracy could be spending more than their income; the lack of, or insufficient, record keeping; not planning and implementing a regular investment program; and making incorrect financial decisions. Furthermore, consequences of financial illiteracy can be summarized in the form of the following figure (Sane, 2014):

Figure 1  
Consequences of financial illiteracy



One way to increase financial literacy is through education. An increase in financial literacy, resulting from financial education, should lead to more informed and effective financial decisions (Altman, 2012). Very few studies have been conducted to measure the effectiveness of financial literacy programs. The challenge facing all organizations offering such programs is the need to show the extent to which the programs have changed attitudes and investment behavior. The extent to which financial education programs provide lasting effects in changing behavior was found to be inconclusive. On the other hand, a body of research indicates that delivering financial literacy programs within the workforce is particularly effective (Kerry, Clayton, and Olynyk, 2007). The paper of Appleyard and Rowlingson (2013) concludes that there appears to be a groundswell of momentum behind making financial education a compulsory part of the National Curriculum, but, even if this happens, there will be challenges in delivering such education in practice. In the workplace, Vitt et al. (2000) conclude that the greatest advantage of financial literacy education is reducing employees' financial problems and encouraging them to be responsible for their own financing and both will help increasing the efficiency of the organization (Taft et al., 2014)

Financial education in schools is increasingly viewed as important by policy makers and the public for two key reasons: firstly, financial education is seen as important for children and young people 'as consumers, workers, business people or investors' (Gunter and Furnham, 1998: 95), and, secondly, it is seen as helping children to have greater understanding of effective economic decision making now and in the future. The increasingly complex financial world we live in, at a time of global financial crisis and retrenchment of state welfare, make such education increasingly important. However, financial education cannot be viewed as a panacea for creating financial citizenship or combating financial exclusion. Government, regulators and financial institutions all play a part in creating a responsible and transparent financial system for individuals to access appropriate and affordable financial products and services. Putting financial education into the National Curriculum is only a small, first step, however. Just as important is consideration of the content, style and delivery of financial education. Sherraden *et al.* (2011) have argued that young children increase financial capability when they have access to financial education and it is accompanied by participation in meaningful financial services. They found that, using a quasi-experimental design, elementary school children who participated in the *I Can Save* initiative (a school savings scheme to help children save for higher education) scored significantly higher on a financial literacy test taken in fourth grade than comparison. Alongside issues of content and style there is also the issue of delivery. The children we spoke to found our sessions particularly memorable because we were outsiders. The use of specialists within schools should therefore be considered alongside training teachers to take on this area of education.

## **Method**

This research study investigated the financial literacy differences based on gender and course concentration. Sampling technique used is accidental sampling. Of 160 questionnaires distributed, only 118 were returned so that its response rate of 73%, and only 113 were filled out completely to further analysis. The survey data included questions that explored the student's knowledge about general personal finance, saving and loans, insurance, and investment. For each category, provided five (5) a statement that must be answered to answer T (True) or F (False). The level of financial literacy can then be measured by counting how many correct answers of all statements submitted. The more the number of correct answers, the higher the level of financial literacy. To find out the financial literacy differences, data is analyzed by Two Ways Anova.



## Result and Discussion

Table 1 illustrates the descriptive statistics of respondents in this study. It can be seen that the sample consisted of 51 male and 62 female. The mean score for male is 13.3922 compare to lower score of female 12.6129. The mean score differences between course concentration is higher than between gender, 13.7571 for finance compare to 11.6744 for marketing students.

Tabel 1  
Descriptive Statistics

Dependent Variable: Financial Literacy

Gender	Course	Mean	Std. Deviation	N
Male	Finance	13,8667	1,97804	30
	Marketing	12,7143	2,88345	21
	Total	13,3922	2,43375	51
Female	Finance	13,6750	1,60747	40
	Marketing	10,6818	3,64347	22
	Total	12,6129	2,88214	62
Total	Finance	13,7571	1,76468	70
	Marketing	11,6744	3,41370	43
	Total	12,9646	2,70558	113

Table 2 further provides number of correct answers of the financial literacy question. Based on the data in Table 2, it can be seen that most of the students can answered correctly by 14 statement or by 40 people (35%), while there were 4 people or 4% of students who answer only 4 statement correctly

Tabel 2  
Number of Correct Answer to Financial Literacy Statement

No	Correct Answer	Frequencies	Percentage
1	17	3	2,654867
2	16	5	4,424779
3	15	21	18,58407
4	14	40	35,39823
5	13	9	7,964602
6	12	10	8,849558
7	11	11	9,734513
8	10	3	2,654867

9	9	3	2,654867
10	8	2	1,769912
11	7	1	0,884956
12	5	1	0,884956
13	4	4	3,539823
Total		113	100

This study also wants to discover the differences between gender and course on the level of financial literacy. Two ways ANOVA is used to test this difference. Based on the Levene's Test of Equality of Error Variances in Table 3, we may conclude that there is variance difference where the F value is 6.842 and it is statistically significant at 0.05.

Table 3  
Levene's Test of Equality of Error  
Variances<sup>a</sup>  
Dependent Variable: Financial Literacy

F	df1	df2	Sig.
6,842	3	109	,000

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Gender + Course  
+ Gender \* Course

Furthermore, Tests of Between-Subjects Effects in Table 4 describe that F value of students' course is 18.766 and it is significant at 0.00. This result means there is differences between Financial Management and Marketing Management course in the level of financial literacy. Gender give F value of 5.402 and is also significant at 0.05 which means there is differences between male and female in their level of financial literacy

Table 4  
**Tests of Between-Subjects Effects**

Dependent Variable: Financial Literacy

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	160,558 <sup>a</sup>	3	53,519	8,848	,000
Intercept	17136,973	1	17136,973	2833,202	,000

Gender	32,672	1	32,672	5,402	,022
Course	113,507	1	113,507	18,766	,000
Gender *	22,380	1	22,380	3,700	,057
Course					
Error	659,300	109	6,049		
Total	19813,000	113			
Corrected Total	819,858	112			

a. R Squared = ,196 (Adjusted R Squared = ,174)

The result of the interaction between course and gender give F value of 3.700 is not significant at 0.05. it can be said that there is no joint effect between the course and gender on the level of financial literacy. Adjusted R Squared 17% means the variability of financial literacy that can be explained by the course, gender, and the interaction between gender and the course only 17%.

Analysis of the full model Beal and Delpachitra (2003) study showed that students with higher financial literacy scores were more likely to be male, have greater work experience, have a higher income and have a lower aggregate risk preference. While the study showed that students with higher general financial knowledge and skills were more likely to be studying business, be male, work in a more highly skilled occupation and have more work experience, the researchers reached the overall conclusion that university students were not skilled, nor knowledgeable in financial matters and that this would tend to impact negatively on their future lives through incompetent financial management.

The similar result is found in this study. Male tend to be more literate than female and both in Financial and Marketing Management concentration, even they are come from the same Economic Faculty. Thats because students in Financial Management concentration learn about finance much more than their counterpart. Massimo dan Ornella (2012) consistently with the aim of their paper, paid particular attention to the last group of variables, expecting to find a positive and significant relationship between the financial experience and the attained level of financial literacy. The idea that people learn financial skills through the daily use of financial products and services or more course specific in finance, will be much more financial literate

Anthes and Most (2000) resume financial portrait of women which identified several key issues that makes women more illiterate: women are more intimidated about financial issues than men; women earn less money than men; women are less prepared for retirement; women receive

smaller retirement benefits; women live longer than man; women are poorer in retirement than men; women are more conservative investor than men. Another results showed that men are better than women in financial literacy but the existence of relationship between gender and financial literacy as well as financial concerns is rejected.

## **Conclusion**

Based on the average value of the respondents in this study, it is known that the student has sufficient financial literacy. The results of this study also reinforces the evidence that there are differences in literacy levels between male and female where male are more likely higher than female in their financial literacy. This phenomenon requires special attention from policy makers on how to improve financial literacy for female, because at this time the female is also very active in supporting family economies. The results also prove that although students come from the same faculty that the faculty of economics, different concentrations of course also make financial literacy differences. This difference of course will be even greater compared to others who did not study economics. Therefore, policymakers should begin to consider how the public can get a chance to improve their financial literacy through both formal and informal institutions. In addition, also required the cooperation of the financial institutions for getting closer to the community through programs, activities, products and services, which is easily accessible by the public.

## **References**

- Aghion, P., Howitt, P. and Mayer-Foulkes, D. 2005. The effect of financial development on convergence: theory and evidence, *Quarterly Journal of Economics*, Vol. 120, pp. 173-222.
- Altman, M. (2012). Implications of behavioural economics for financial literacy and public policy. *The Journal of Socio-Economics*, 41(5), 677–690.
- Anthes, W.L., & Most, B.W. 2000. Frozen In The Headlights: The Dynamics Of Women And Money, *Journal Of Financial Planning*, Vol.13, No. 9, Pp. 130-142
- Appleyard, L., & Rowlingson, K. 2013. Children and Financial Education: Challenges for Developing Financial Capability in the Classroom, *Social Policy & Society (2013) 12:4*, 507–520
- Beck, T., Demirguc-Kunt, A. and Levine, R. (2007), “Reaching out: access to and use of banking services across countries”, *Journal of Financial Economics*, Vol. 85, pp. 234-66.



- Berkowitz, D., Hoekstra, M., & Schoors, K. 2012. Does finance cause growth? Evidence from the origins of banking in Russia, BOFIT Discussion Papers 10
- Clark, R., Matsukura, R., & Ogawa, N. Low fertility, human capital, and economic growth: The importance of financial education and job retraining, *Demographic Research*: Volume 29, <http://www.demographic-research.org>, 865-884
- Demirgüç-Kunt, A. and Maksimovic, V. 1998. Law, finance and firm growth, *Journal of Finance*, Vol. 53, pp. 2107-37.
- Kerry, M., Clayton, B., & Olynyk, M. 2007. Evaluating the Impact of Financial Literacy Programs on the Retirement Savings of Superannuation Fund Members, *International Review of Business Research Papers* Vol.3 No.1. 73- 88
- Kotzé, L., & Smit, A. (2008). Personal financial literacy and personal debt management: the potential relationships with new venture creation. *South African Journal of Entrepreneurship and Small Business Management*, 1(1), 35–50.
- Levine, R. and Zervos, S. 1998, Stock markets, banks, and economic growth, *American Economic Review*, Vol. 88, pp. 537-58.
- Lusardi, A. and Mitchell, O. 2011. Financial literacy around the world: An overview. *Journal of Pension Economics and Finance* 10(4): 497-508. doi:10.1017/ S1474747211000448.
- Massimo, C., & Ornella. 2011. The Relationship between Everyday Practices and Financial Literacy. An Empirical Analysis, *Proceedings of ASBBS* Volume 19 Number 1, 115-129
- Noctor M., Stoney S., & Stradling S. (1992) (1992) Financial Literacy: A Discussion of Concepts And Competences Of Financial Literacy And Opportunities For Its Introduction Into Young Peoples Learning: National Foundation For Educational Research Commissioned By Natwest.
- OECD (2005) Improving Financial Literacy: Analysis Of Issues And Policies, Organization For Economic Co-Operation And Development, Paris: OECD Publications.
- Oseifuah, E. K. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies*, 1(2), 164–182. <http://dx.doi.org/10.1108/20400701011073473>
- Rajan, R.G. and Zingales, L. 1998, Financial dependence and growth, *American Economic Review*, Vol. 88, pp. 559-86.
- Sherraden, M., Johnson, L., Guo, B. and Elliott III, W. (2011) ‘Financial capability in children: effects of participation in a school-based financial education and savings program’, *Journal of Family Economic Issues*, 32, 3, 385–99.

Wise, S. 2013. The Impact of Financial Literacy on New Venture Survival, International Journal of Business and Management; Vol. 8, No. 23, 30-39