DOI: 10.20472/IAC.2016.025.033

#### ARUS KONGRUNGCHOK

Suratthani Rajabhat University, Thailand

# THE EFFECTIVENESS OF PERSONAL FINANCIAL PLANNING OF RUBBER FARMERS IN THAILAND: CASE STUDY OF SURATTHANI PROVINCE

#### Abstract:

The primary objective of this study was to investigate factors that have left to personal financial weakness of Thai rubber farmers who have currently had defective financial position. Questionnaires (Cronbach's alpha = 0.914) were used for collecting data from 391 Thai rubber farmers in Suratthani province while 17 volunteered interviewees were interviewed through semi-structured interviews. Statistical techniques were employed to analyze the questionnaires while interview transcripts were analyzed through content analysis technique by using a phenomenological research approach. As a result of this study discovered that Thai rubber farmers have not concentrated on budget allocation of incomes to expenses in a same period while a private accounting has not been prepared to recognize cash inflow, cash outflow and cash balance, these situations have always left to ineffective personal financial planning in terms of a lack of savings for spending on emergency incidents; revenues' cessation from discontinuous rubber harvests; a lack of clear life target in the future; a lack of systemic investment; and an inappropriate planning of debt management. Furthermore, the results revealed that the budget allocation of revenues to expenditures, the preparation of private accounting, the savings for spending on emergency incidents, the systemic investment, the clarity of life target planning in the future, the revenues' cessation from discontinuous rubber harvests, and the systemically debt management have positively had the direct relationships to and influenced the effectiveness of personal financial planning of Thai rubber farmers at significant level of 0.01. The results of this study should be sent to Thai government and related parties with solving the fundamental poverty of Thai farmers especially Thai rubber farmers and could be then applied to other farmers if it has been possible. By the way, the knowledge and training (the workshop) should basically be given to those farmers by Thai government in terms of the basic personal financial knowledge as well.

#### **Keywords:**

Effectiveness; Personal Finance; Financial Planning; Thai Rubber Farmers.

### Introduction

As people's poverty has always been the significantly primary cause and unavoidably generated the lack of well-being of people (Konicz et al., 2015), this situation has mostly appeared in developing countries especially in the agricultural sector (Alhenawi and Elkhal, 2013). Farmers around the world have normally had their income from selling their agricultural products as not much as other sectors as well as their income whether high or low exactly depends on market price of those products while their expenditures are at the same time occurred for investing their cultivations and related other expenses (Konicz et al., 2015; National Statistical Office of Thailand <NSOT>, 2013; Office of the National Economics and Social Development Board <ONESDB>, 2013). Nevertheless, there has been the significant problem as Thai rubber farmers' income has not covered their expenditures; this situation is leading to their poor-being although those Thai rubber farmers were wealthy from obtaining the very high income from highest rubber market price in the past (Office of Agricultural Economics <OAE>, 2016). Those effects aforementioned have certainly impacted Thai rubber farmers who have lacked the assessment of their financial position including the lacks of household and private accounting preparation, savings, debt management, and planning for investment and then leading to their working hard in their life forever (Bank of Thailand <BOT>, 2013).

According to Kaewpichai (2016) discovered that Thai rubber farmers have been confronting their insufficient incomes to pay emerged expenditures due to the depressing price of all rubber products nowadays including their many debts from borrowing financial institutes for agricultural investments and payment of extravagant convenient things, those incidents have always left to their poor-being and poverty eventually because of the failure of their personal financial planning. This research is finding why do Thai rubber farmers fail to plan their personal finance and household. Generally, if personal finance has been suitably planned in each individual and their household which would eventually lead to their well-being and wealth, Thai rubber farmers in Suratthani are in current facing with having their many debts. Therefore, this research needs to ascertain the crucial causes of Thai rubber farmers' weakness for their personal financial planning.

The obtained results will be suggested to Thai government and related parties for improving more effective personal financial planning of Thai rubber farmers with their well-being in the future. Therefore, the financial literacy should be promoted through giving the correct knowledge and training for more effectiveness of Thai rubber farmer's personal financial planning by Thai government and related parties appropriately as well. As 128,539 rubber farmer's households (Office of Agricultural Economics <OAE>, 2016) are population of this research which will be used to seek the answers by following the objectives of this research consisting of (1) to investigate the practical levels of rubber farmers' personal financial planning; and (2) to examine on relationships and influences between rubber farmer's individual status as well as (3) to guideline for rubber farmers' more effective personal financial planning.

The personal financial planning had been recurred to systematically castrate the poverty of rubber farmers and appropriately improve the quality of their life in terms of having sufficient revenues for paying their expenditures and accumulated savings for spending in their senility (ONESDB, 2013). The personal finance should then be suitably planned to obtain well-being themselves whereas people need to have their sufficient competency and understanding which would lead to their well-being and wealth in the future (Arrondel, Debbich and Savingnac, 2013). A needed individual competency of personal financial planning must hence be comprised of knowledge, skills and experience to appropriately manage their cash inflow, cash outflow and cash balance through the related activities of personal finance (Scheresberg, 2013). The activities concerning with the personal financial planning in this research consist of the revenues allocation to occurred expenditures; the household and private accounting preparation, the savings for spending on emergency incidents, the systemic investment, the clarity of life target planning in the future, and the systemic debt management (Prawitz, Kalkowski and Cohart, 2013). Those activities can be completely and correctly performed by those individuals specifically Thai rubber farmers who could also receive their financial accomplishments in terms of the sufficient income covering occurred expenditures; the savings for spending on emergency incidents; the savings for spending on senility (ageing); and the savings for investment with productivity and the further planting (BOT, 2013), personal financial achievement of Thai rubber farmers in Suratthani will be improved for their well-being and getting possible wealth when the exact causes of their personal financial failure are being disclosed by this research as investigating related factors aforementioned impacting the effectiveness of Thai rubber farmers' personal financial planning in Suratthani province.

# Literature Reviews and Theory

In order to expound the financial problem of rubber farmers specifically their household debt and savings for spending senility, the personal financial planning hence has thoughtfully been a way which can lead to the recurrence of their well-being in the future when rubber farmers can properly plan and strictly control their personal finance. By the theory of personal finance, factors concerning with personal financial planning have always comprised of (1) revenues allocation to expenditures, (2) household and private accounting preparation, (3) life target determination, (4) savings, (5) investment, and (6) debt management as the details expounded further.

### The Concept of Revenues Allocation to Occurred Expenditures

Most revenues (about 80%) of people around the world have usually come from monthly salaries including some wages and welfare. Nevertheless, there has been the different revenue in each individual depending on individual's specific qualification in terms of educational degree, competency and experiences including age, sex and other demographics (Durband, Britt and Grable, 2010) as Kaewpichai, Kongrungchok and Churintr (2016) explained youths have mostly had not much revenue when compared with middle ages due to less experiences and competencies. Their revenues should

been normally allocated to spend their occurred expenditures by all their objectives whether sufficient or insufficient but this method could lead to effective personal financial planning (Ansong, 2011; Attintas, 2011; Volp, Chen and Liu, 2006) if each individual has suitably had enough income to pay their occurred expenditures and then their money left could be kept for their savings (Yates and Ward, 2011). With the educational degree was also used for determining a number of salaries as high education would get more salaries than low education (Huston, 2010).

#### The Concept of Household and Private Accounting Preparation

A note-taking, which has always been a crucial instrument used for reminding and reviewing significant stories in the past, was applied to collect business data in particular recording financial and accounting transactions for all enterprises so that the result of accounting and financial data collection would has been basically employed to predict and plan those businesses' operation in the future (Disney and Gathergood, 2013; Hanna, Waller and Finke, 2008). Similarly, those principles could be also applied to record the household and private transactions of people for planning and controlling cash inflow, cash outflow and cash balance in each individual and their household, this incident might also be able to identify the performance of their life in the past as well as to determine both increasing and decreasing on the activities of their lifestyle in the present and the future for their well-being especially the poor around the world (Lusardi and Mitchell, 2013; Gathergood, 2012). This concept must be tested in this research for considering the rubber farmers' actual practice as a crucial part of effective personal financial planning.

#### The Concept of Life Target Determination

An achievement of lifestyle in each individual has always depended on their goals set and then well known as "Life Compass", this has been differently determined in each period of human lifestyle whether childhood, teenager, adult age or ageing (Arrondel, Debbich and Savingnac, 2013; Scheresberg, 2013). In the long time, all people would like to get their life stability as passed into the duration of ageing, thus the determination of their life target must be unavoidably needed to achieve their well-being in elderly period (Kaewpichai, Kongrungchok and Churintr, 2016; Prawitz, Kalkowski and Cohart, 2013), this situation has always been concerned with their personal financial planning which should be together planned by those persons with their family. The well attainment of financial target determination, therefore, people should consider the crucial aspect were the actually possible practice, the accordance with those situations of each individual, the clarity of objectives and money value, and the certain scope of duration (Prawitz, Kalkowski and Cohart, 2013; Hanna, Waller and Finke, 2008).

#### The Concept of Savings

Savings is the value of money left from the whole revenues after already deducting the entire occurred expenditures of each individual including their household while the value of savings, whether large or small, would be depended on a number of revenues and

expenditures occurring in each individual (Alhenawi and Elkhal, 2013; Goetz et al., 2011). As budgeting preparation is an important instrument used for planning and controlling into personal cash with having savings by focusing on their explicit goals and objectives, for example, the savings for spending on emergency incidents; the savings for spending on senility (ageing); and the savings for investment (Kaewpichai, Kongrungchok and Churintr, 2016; Cole, Paulson and Shastry, 2013).

#### The Concept of Investment

In order to add the value of savings left, investment is a choice that most investors have carefully been considering to generate much cash inflow in the future than those original savings or funding (Kaewpichai, Kongrungchok and Churintr, 2016; Jappelli and Padula, 2013). With the pattern of investment would be depended on those owners such as investing on financial derivative instruments through money and capital markets, investing for expansion growth, and investing in terms of take over and merger other businesses (Prawitz, Kalkowski and Cohart, 2013; Peng et al., 2007), this concept is being applied to personal financial planning with testing here the investing behavior of Thai rubber farmers.

#### The Concept of Debt Management

Debts are an obligation that must be unavoidably paid by debtors whereas some debtors might not be able to manage their debts due to their excessively luxurious expenditures without their sufficient revenues, hence this incident has always left to their planning in order to incur the new debt to payback the old debt, this circle could not effectively disentangle from their debts although people at there have been looking for well-being (Kaewpichai, Kongrungchok and Churintr, 2016; Gathergood, 2012). Therefore, the best practice of financial debt management has always needed to be carefully planned and appropriately managed to payback on time to their creditors, this practice could be used correctly which would eventually lead to people's well-being in the future when everyone could divisibly understand and apply the concept of sufficient economics to their lifestyle (Kaewpichai, Kongrungchok and Churintr, 2016; Lusardi and Mitchell, 2013). For this reason, the behavior of Thai rubber farmers relating to debt management must be examined on this research for considering the impact to their effective personal financial planning.

The whole factors (see Figure 1) as aforementioned were being used for testing the effectiveness of personal financial planning of Thai rubber farmers in Suratthani province whether those factors would relate to and influence much or less with the dependent variable. The details used to measure the effectiveness of personal financial planning of Thai rubber farmers consisted of having the savings for spending on senility; having sufficient revenues to pay the occurred expenditures and savings; and the savings for spending on emergency incidents as conceptual framework of study shown following.

#### Figure 1: The Conceptual Framework of Study



### Methodology

There were two stages to the research about an anonymous survey and interviews with Thai rubber farmers in Suratthani province. A questionnaire survey, which was created and already checked reliability and validity before performing the actual data collection, was used to investigate why Thai rubber farmers failed to plan their personal finance and eventually lead to their weak financial position. 391 respondents were actually collected the data from 400 questionnaires sent. 17 respondents volunteered and were independently interviewed through the researchers with using a semi-structured interview. The objective of the interviews was to examine Thai rubber farmer's attitudes that were concerning much or less with the execution of personal financial planning guideline. Questionnaire Data were coded and checked for accuracy by an independent researcher and then analyzed using SPSS both basic and inferential statistics in terms of descriptive, Pearson correlation coefficient at the significance level of 0.01 and multiple regression analysis while interview data were managed in terms of transcripts that were thematically analyzed through content analysis and further expounded using a phenomenological research approach to describe a situation as perceived by the individuals in that situation. This approach abstracts out the themes and key issues.

# Findings

From the surveying data, 391 (97.75%) Thai rubber farmers in Suratthani province responded the questionnaires sent and 17 volunteered interviewees were interviewed through semi-structured interviews. As a result of this study discovered that Thai rubber farmers in Suratthani province were during 35 – 55 years old (72.40%) and their marriage status was mostly married (91.30%) including wifes have mostly been head of the family (86.70%) while a number of their member per a family was about 3 – 4 persons (81.60%). Furthermore, Thai rubber farmer's education was on the average lower high school or vocational certificate (84.65%) and then their average revenues at this province were

lower 20,000 baht (73.40%) while their debt per a rubber farmer's household was during 100,000 baht – 500,000 baht (62.80%), this situation will lead to their borrowing from community funds (36.40%) and financial institutes (52.80%) as well as their investment has mostly focused on buying the land increasing (31.20%), extending the planting (25.10%), spending private expenditures (8.10%) and investing other luxuries (35.60%).

The Aspects of Personal Financial Planning	Mean	Standard Deviation	Levels of Actual Practice
Revenues Allocation to Occurred Expenditures	1.58	0.7073	LEAST
Household and Private Accounting Preparation	1.66	0.6171	LEAST
Life Target Determination	1.74	0.6550	LEAST
Savings	2.02	0.5824	LESS
Investment	2.26	0.6586	LESS
Debt Management	1.52	0.7418	LEAST
OVERALL	1.80		LEAST

Table 1: Mean and Standard Deviation of the Actual Practice Levels onthe Personal Financial Planning Guideline of Thai Rubber Farmers

In general the guideline of personal finance was used for planning and controlling the personal budget, however this research clearly revealed the use of those concepts through the attitudes of Thai rubber farmers in Suratthani province concerning with the level of actual practice on the personal financial planning in each aspect (see Table 1) that overall of Thai rubber farmer's actual practice was least (1.80), that means of Thai rubber farmers have given least importance to follow the guideline of personal financial planning especially debt management (1.52), revenues allocation to pay occurred expenditures (1.58), household and private accounting preparation (1.66), and life target determination (1.74), respectively although some Thai rubber farmers have performed in parts of investment (2.26) and savings (2.02) which have been considered to actually practice a few (less).

From interviewing data, Thai rubber farmers in Suratthani provinces discussed that "…In the past five years ago … my lifestyle has normally been simple and luxurously spent everything if I want to have it such as car, land, house and other assets because I could obtain rubber products from rubber tree everyday and … selling it at trading places as well as I got much money as the market price of rubber product was very high at that time, this was reason that I thought the principles of personal finance was not important so that I was not interested in planning and controlling my expenditure. … Unfortunately, market price of rubber product has severely declined and very low since middle year of 2013 until now, this crisis has continually impacted in my life and family as I have never planned and controlled my personal finance, thus I have certainly lacked of my

competency and understanding whether debt management, the allocation of revenues to manage occurred expenditures, the preparation of household and private accounting, and the determination of life target, the accumulation of savings or the planning of investment. ... As I already told you when I got money then I also spent it playfully but I never looked for my future. I am now having more debts and I also need to sell some my assets with caring for my life and family. ... I accept...this is the crucial effect that I have never been interesting for my personal financial planning specifically not allocating the received revenues to manage occurred expenses and not preparing household and private accounting. ..."

As the qualitative results supported to the quantitative results, aforementioned, the meaning was Thai rubber farmers in Suratthani province have really been interested in the guideline of personal financial planning or they have not been important significantly. By the way, those farmers have obviously lack their competency and understanding for planning and controlling their personal finance as a lack of their concentration to those as well. Therefore, this weak situation has exactly impacted their well-being in the future in terms of insufficient revenues to manage their occurred expenditures including a lack of accumulated savings for caring their life in the senility and their emergency events, eventually as the details of effectiveness of personal financial planning of Thai rubber farmers in Suratthani province shown in below (see Table 2).

The Aspects of Effectiveness of Personal Financial Planning	Mean	Standard Deviation	Levels of Importance
Savings for Spending on Senility	2.36	0.6431	LESS
Savings for Spending on Emergency Incidents	2.44	0.5908	LESS
Sufficient Revenues to Pay Betided Expenditures	2.78	0.5529	MODERATE
OVERALL	2.53		LESS

Table 2: Mean and Standard Deviation of the Levels of importance onthe Effectiveness of Personal Financial Planning of Thai Rubber Farmers

As three aspects measured the effectiveness of personal financial planning in this research were a savings for spending on senility (ageing), a savings for spending on emergency incidents, and a sufficient revenues to pay betided expenditures, from surveying data, the results (see Table 2) demonstrated that Thai rubber farmers on the whole concentration were less (2.53) particularly the aspects of savings accumulation for spending on senility (2.36) and emergency incidents (2.44), but the sufficiency of revenues to occurred expenditures (2.78) has still been concentrated in the moderate level. The meaning of these results was Thai rubber farmers have not been interested in their future when their senility arrived and emergency incidents betided immediately as they did not accumulated their money for some poor situations while those farmers worried about the sufficiency of their revenues with managing their occurred expenditures

in order to still take caring for themselves and their family. At the same time, Thai rubber farmers discussed on their interviewing that "... I did not know how the personal financial planning is important why I must do I would just only like to have my life in each day, so if I had sufficient money to pay my expenditures, it was enough for me. With having savings accumulation, I have well known it has much been important but I have never done because I have thought if I could manage my life and family in all the days, I have also been able to control all situations as I have not needed to reserve some savings for something ...Therefore, personal financial management in my family have depended on my decision-making, nevertheless I have been safe with our family for depositing some money at financial institutes but not much ..."

Despite the fact that it sometimes seemed Thai rubber farms in Suratthani province have given the less importance of effective personal financial planning, their well-being in each day has been carefully concentrated and involuntarily done although their smaller action might not be able to reduce the weakness of their financial position in the future as the meaning was ineffective personal financial planning, unavoidably.

In part of research hypothesis was tested and found that revenues allocation to occurred expenditures ( $X_1$ , 0.716<sup>\*\*</sup>), household and private accounting preparation ( $X_2$ , 0.642<sup>\*\*</sup>), life target determination ( $X_3$ , 0.382<sup>\*\*</sup>), savings ( $X_4$ , 0.254<sup>\*\*</sup>), investment ( $X_5$ , 0.218<sup>\*\*</sup>) and debt management ( $X_6$ , 0.425<sup>\*\*</sup>) have exactly influenced and positively had direct relationships to the effectiveness of personal financial planning of Thai rubber farmers in Suratthani province (Y) at significance level of 0.01 as the equation of multi regression analysis found and demonstrated as following including this equation was able to be used for predicting the effectiveness of personal financial planning was equal to 76.48% (R-Square = 0.7648)

 $Y = 0.27X_1 + 0.25X_2 + 0.15X_3 + 0.11X_4 + 0.06X_5 + 0.16X_6$ 

# **Discussion and Conclusion**

As Thai rubber farmers in Suratthani province have mostly had the huge family and lower education while their average revenues per month per family were now very low and their debt per a rubber farmer's household was not less as aforementioned, this crisis will certainly impacted their well-being unavoidably and this has been a starting point of having their debts by their borrowing from all financial institutes (Kaewpichai, Kongrungchok and Churintr, 2016; Durband, Britt and Grable, 2010). Furthermore, Thai rubber farmers have not concentrated on their incomes allocation to mange their occurred expenditures while household and private accounting has not been prepared to recognize cash inflow, cash outflow and cash balance, these situations have always left to the failure of their revenues allocation to pay occurred expenditures and their debt management including household and private accounting preparation, life target determination, savings, and investment until impacting ineffective personal financial planning in terms of a lack of savings for spending on emergency incidents; revenues' cessation from discontinuous rubber harvests; a lack of clear life target planning in the future; a lack of systemic investment; and an inappropriate planning of debt management (Kaewpichai, Kongrungchok and Churintr, 2016; Konicz et al., 2015). Due to their actual practice was very low which has been neglected by Thai rubber farmers because of lacks of their competency and understanding (Kaewpichai, Kongrungchok and Churintr, 2016; Alhenawi and Elkhal, 2013). Therefore, the effectiveness of personal financial planning has not appeared when Thai rubber farmers have not truly accepted the benefits of personal finance guideline as well as their actual practice has not continually taken action. The results of this study should be sent to Thai government and related parties with solving the fundamental poverty of Thai farmers especially Thai rubber farmers and could be then applied to other farmers if it has been possible. By the way, the knowledge and training (the workshop) should basically be given to those farmers by Thai government in terms of the basic personal financial knowledge as well.

### References

- Alhenawi, Y. & Elkhal, K. (2013). Financial Literacy of U.S. Households: Knowledge VS. Long-Term Financial Planning. *Financial Services Review*, 22, pp. 211-244.
- Ansong, A. (2011). Level of Knowledge in Personal Finance by University Freshmen Business Students. *African Journal of Business Management*, *5*(22), pp. 8933-8940.
- Arrondel, L., Debbich, M. & Savingnac, F. (2013). Financial Literacy and Financial Planning in France. Scholar Commons: *Numeracy Advancing Education in Quantitative Literacy*, *6*(2), pp. 1-17.
- Attintas, K. M. (2011). The Dynamics of Financial Literacy within the Framework of Personal Finance: An Analysis among Turkish University Students. *African Journal of Business Management*, *5*(26), pp. 10483-10491.
- Bank of Thailand <BOT>. (2013). The Assessment of Financial Position. [online] Retrieved 1 June 2016 from http://www.bot.or.th/Thai/Pages/default.aspx.
- Cole, S., Paulson, A. & Shastry, G. K. (2013). High School and Financial Outcomes: The Impact of Mandated Personal Finance and Mathematics Courses. Harvard Business School, pp. 1-41.
- Disney, R. & Gathergood, J. (2013). Financial Literacy and Consumer Credit Portfolios. ELSEVIER: *Journal* of Banking & Finance, 37, pp. 2246-2254.
- Durband, D. B., Britt, S. L. & Grable, J. E. (2010). Personal and Family Finance in the Marriage and Family Therapy Domain. *Journal of Financial Therapy*, *1*(1), pp. 7-22.
- Gathergood, J. (2012). Self-Control, Financial Literacy and Consumer Over-Indebtedness. ELSEVIER: Journal of Economic Psychology, 33, pp. 590-602.
- Goetz, J., Cude, B. J., Nielsen, R. B., Chatterjee, S. & Mimura, Y. (2011). College-Based Personal Finance Education: student Interest in Three Delivery Methods. *Journal of Financial Counseling and Planning*, 22(1), pp. 27-42.
- Hanna, S. D., Waller, W. & Finke, M. (2008). The Concept of Risk Tolerance in Personal Financial Planning. *Journal of Personal Finance*, 7(1), pp. 96-108.
- Huston, S. J. (2010). Measuring Financial Literacy. The Journal of Consumer Affairs, 44(2), pp. 296-316.

- Jappelli, T. & Padula, M. (2013). Investment in Financial Literacy and Saving Decisions. ELSEVIER: Journal of Banking & Finance, 37, pp. 2779-2792.
- Kaewpichai, P., Kongrungchok, A., & Churintr, P. (2016). The Success of Financial Planning of Household of Rubber Plantation Agriculturists in Phanom District, Suratthani. *Proceeding: WMS Management Research National Conference #5*, Thailand, 27 May 2016.
- Konicz, A. K., Pisinger, D., Rasmussen, K. M. & Steffensen, M. (2015). A Combined Stochastic Programming and Optimal Control Approach to Personal Finance and Pensions. Springer: OR Spectrum, 37, pp. 583-616.
- Lusardi, A. & Mitchell, O. S. (2013). The Economic Importance of Financial Literacy Theory and Evidence. National Bureau of Economic Research, pp. 1-63.
- National Statistical Office of Thailand <NSOT>. (2013). Household Economics and Society. [online] Retrieved 25 May 2016 from http://www.nso.go.th/.
- Office of Agricultural Economics <OAE>. (2016). Rubber Tree: Rubber Latex, Product and Product per Rai During 2014 – 2016. [online] Retrieved 25 May 2016 from http://www.oae.go.th/download/prca1.
- Office of the National Economics and Social Development Board <ONESDB>. (2013). Economics Crisis. [online] Retrieved 20 May 2016 from http://www.nesdb.go.th/.
- Peng, T. C. M., Bartholomae, S., Fox, J. J. & Cravener, G. (2007). The Impact of Personal Finance Education Delivered in High School and College Courses. Springer: Journal of Family and Economic Issues, 28, pp. 265-284.
- Prawitz, A. D., Kalkowski, J. C. & Cohart, J. (2013). Responses to Economic Pressure by Low-Income Families: Financial Distress and Hopefulness. Springer: *Journal of Family and Economic Issues*, 34, pp. 29-40.
- Scheresberg, C. deBassa. (2013). Financial Literacy and Financial Behavior among Young Adults: Evidence and Implications. Scholar Commons: *Numeracy Advancing Education in Quantitative Literacy*, 6(2), pp. 1-21.
- Volpe, R. P., Chen, H. & Liu, S. (2006). An Analysis of the Importance of Personal Finance Topics and the Level of Knowledge Possessed by Working Adults. ABI/INFORM: *Financial Services Review*, 15(1), pp. 81-98.
- Yates, D. & Ward, C. (2011). Financial Literacy: Examining the Knowledge Transfer of Personal Finance From High School to College to Adulthood. ABI/INFORM: American *Journal of Business Education*, 4(1), pp. 65-78.