DETERMINING THE FINANCIAL PERSONALITY AND THE OVER-INDEBTEDNESS FACTORS AMONG INDONESIANS

Melza Horiza Sastradiredja, S.E., MBA[1]
Dr. Raden Aswin Rahadi, S.T., MBA[2]

[1]School of Business and Management, Institut Teknologi Bandung (ITB), Indonesia
(Email: melza-horiza@sbm-itb.ac.id)
[2]School of Business and Management, Institut Teknologi Bandung (ITB), Indonesia
(Email: aswin.rahadi@sbm-itb.ac.id)

_____

Abstract: *This paper aims to determine the financial personality among Indonesians. The approach used is by analysing 20 papers related to financial personality or money attitude, making synthesis from the collected papers and producing critical views for each related paper. The objective of this paper is to find the conceptual model for financial personality among Indonesians. This study found that financial personality scale by Klontz et al. (2011) and Alexandra et al. (2017) could be combined to construct a new financial personality model among other common financial personality that already exists. Thus, this study would like to combine personality model into future empirical research. The limitation of this research is that this research only studies about money attitude or financial personality scale. In the future, the quantitative research process can be conducted in Indonesia to testify and improve the conceptual model found in this paper.*

Keywords: *Financial Personality, Financial Attitude, Financial Over-Indebtedness, Financial Literacy*

_____

Introduction

The Importance of Financial Literacy during Crisis

According to the official website (2020), World Health Organization (WHO), defined COVID-19 as the infectious diseases that caused by the most recently discovered coronavirus, 19 itself describes as the outbreak began in Wuhan, China in December 2019. As the virus spread worldwide, each individual should implement self-isolation, self-quarantine and physical distancing based on WHO suggestions, therefore, some countries conduct lockdowns, travel restrictions and other closures of schools and non-essential businesses. The COVID-19 spread prevention policies affect almost every business sector that lead into uncertain global economy situation.

Indonesia, as one of EMDEs, is also economically affected from this global crisis. The Global Economic Prospects June 2020 projected real GDP annual growth of Indonesia in 2020 will shrink into 5.1 percent contraction based on the percentage point differences from January 2020 projections. Compared to the economic condition post-crisis of 1998, the current annual growth projection will be the lowest after past 20 years (World Bank, 2020).

The founder of Global Financial Literacy Excellence Center, Annamaria Lusardi, argued that financial literacy is similar to health, prevention is better than the cure. The COVID-19 pandemic has put difficult situation for most of people, it is important to practice prevention with saving and budgeting in order to deal with the uncertain economic times (Lasevoli, 2020). Otoritas Jasa Keuangan (2019), published National Survey of Financial Literacy in Indonesia, mentioned about the financial literacy level index for Indonesia is still 38,03% on 2019. However, only 13 provinces indicate level above the national average rate. DKI Jakarta as the principal city of Indonesia rated the highest of 59,16% its financial literacy index. It is concluded that Indonesia still have low financial literacy level.

Financial Over-Indebtedness in Indonesia

Gathergood (2011), found that financial illiteracy was positive associated with self-reported excessive financial burdens of debt (over-indebtedness). The financial literacy linked into financial resilience, financial fragility and the capacity to handle unexpected shocks. Furthermore, reducing risk on taking too much debt also corelated with the greater financial literacy level. Findings about debt literacy on adults shown that the higher level, the more they are likely to pay full for the credit cards and less likely to be over-indebted (Klapper & Lusardi, 2019).

In macro level, over-indebtedness could be anticipated by examining the level of consumer loans towards GDP, for instance, the over-indebtedness in Indonesia could be indicated later in the increasing level of consumer loan by 2005 - 2018 from 5 percent to 10 percent. One of factors that improve this percentage are the more varied financial products related to loan, for instance the online peer-to-peer lending that could lead into over- indebtedness (Responsi Bank, 2019).

Number of issued credit cards in Indonesia are increasing from 12,25 million to 17,48 million by 2009 until 2019 (Otoritas Jasa Keuangan, 2020a). Meanwhile, peer-to-peer lending are growing significantly as the number of lenders are increasing by 192,01% *ytd* with the amount

of 605 thousands and the growth of borrowers by 325,95% *ytd* as the amount of 18,56 million in 2019 (Otoritas Jasa Keuangan, 2020b). Over-indebtedness situation will impact households to be more fragile in the midst of COVID-19 pandemic. The loss of jobs and declining economic activities are becoming factors that increases the difficulty to pay off their debts (Responsi Bank, 2020).

Financial Attitude

Otoritas Jasa Keuangan (2017), states that to create a prosperous society is marked by the implementation of good financial management by the community which is influenced by several factors, one of them is financial attitudes. Financial attitudes are defined as a combination of concepts, information and emotions about learning, which results in a readiness to react favorably (Shockey (2002), as cited in Potrich et al. (2015). The study of financial attitudes could help financial institutions to create customer segmentations by characterizing their behavior and find the product offering that suits to them Alexandra et al. (2017). Furthermore, there are still few researches that considering financial attitude with examining the types of financial personality in Indonesia.

The objective of the study

This study aims to determine the financial personality among Indonesians by analyzing 20 papers related to financial personality or money attitude, making synthesis from the collected papers and producing critical views for each related paper that generates a conceptual model for financial personality among Indonesians.

Literature Review

The review of the literature is divided into three major sections and provides them with definition and further explanation for the study. A conceptual framework mapping will be available to indicate the research position of this study.

Financial Literacy

Financial literacy has various dimensions when it comes to the definition, larger than knowledge about money. It is the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing (Fernando, 2020). OECD (2011), defined financial literacy as follows "a combination of awareness, knowledge, skill, attitude and behavior necessary to make sound financial decisions and ultimately achieve individual financial wellbeing". Otoritas Jasa Keuangan (2017), declared that someone could be considered to be "well literate" if he has knowledge and belief about financial institutions, products and services, as well as skills in knowing the features, benefits, risks, rights and obligations of these financial products and services. Zait & Bertea (2014), summarized that there are five dimensions from financial literacy considering the differences among its definitions; Financial Knowledge; Financial Communication; Financial Ability; Financial Behavior; and Financial Confidence. Therefore, financial literacy consists of broad knowledge, attitude and behavior towards money.

OECD (2006), stated that our life expectancy is increasing, many financial products are available in various types. If individuals are not financially literate, they will not be able to choose the right savings or investment products that may cause them at risk of fraud. Shen et al. (2018), found that improving the financial literacy of residents and popularizing the Internet

usage can promote the use of digital financial products and achieve the goal of advancing financial inclusion. In this era of 4.0 industry, many various digital financial products are available as financial technology (fintech) are growing, financial literacy is becoming more important in order to minimize the number of issues by illegal financial product, particularly in online peer-to-peer lending.

Financial Over-Indebtedness

Merriam Webster Dictionary, simply defined over-indebtedness as the condition of having too much debt. Idris et al. (2018), defined debt as the sum of money that someone owes or the situation of owing money especially when ones cannot pay meanwhile, over- indebtedness could be occurred when there is overuse of credit and poor money management skills of individuals, moreover, most of borrowers do not aware that they are in a condition of over-indebtedness. D'Alessio & Iezzi (2013), defined over-indebtedness as the condition when a household's existing and expected resources are insufficient to meet its financial commitments without lowering its standard of living, which might mean reducing it below what is regarded as the minimum acceptable in the country concerned, which in turn might have both social and policy implications.

Responsi Bank (2019), affirmed that the risk of over-indebtedness is not associated with income and education level, but primarily driven by lack of financial literacy. In addition, Gathergood (2011), found that self-control and financial illiteracy have positively associated with self-reported excessive financial burdens of debt, while self-control has a stronger role than financial illiteracy in explaining consumer over-indebtedness.

Financial Attitude

As we know that financial attitude is one of variable that influence financial literacy. Marsh (2006), stated that financial attitude is based on how individuals feel about their personal finance, that indicated by their responses towards statements or opinions. Pankow (2003), defined financial attitude as the condition of mind, opinion and assessment about finance. Parrotta & Johnson (1998), considered financial attitude as the tendency of psychological expression due evaluating financial management practices that is recommended, with some degrees of agreement or disagreement. Financial attitude also defined by Rajna & Anthony (2011), as the application of financial principles in order to create and maintain value through decision making with proper resource management.

Hayhoe et al. (1999), reported that there is relationship between financial attitude and the level of financial problems. Mien & Thao (2015), stated in their research, located in Vietnam, about financial attitude and financial knowledge have positively significant impact toward the financial management behaviour. Atkinson & Messy (2012), also claimed about the relationship between financial attitude and behaviour that individual who shows positive attitude towards money in a long term, tends to have a well-managed financial management behaviour rather than people who maintains their attitude in a short-term. Social expectations, demographic factors, economic circumstances and the educational system are indicated to have influences towards individual's financial attitude, as it is a function of their personality.

Methodology

This study is conducted using literature synthesis (the result can be seen in Appendix A). Works of literature that are used in this study are kinds of research that are correlated with this study, about financial personality and the factors of financial over-indebtedness among Indonesians. The total literature review are twenty papers from various background of researcher.

Conclusion

According to the analysis based on literature synthesis, we could summarize that Money Beliefs and Behaviour Scale (MBBS), Money in the Past and Future Scale (MPFS), Money Ethic Scale (MES), and Money Attitude Scale (MAS) are commonly used in many researches about money attitude and financial personality. Therefore, there are some financial personality scales that could be used in future research namely Klontz et al. (2011) and Alexandra et al. (2017), as constructed in conceptual model Figure 1.
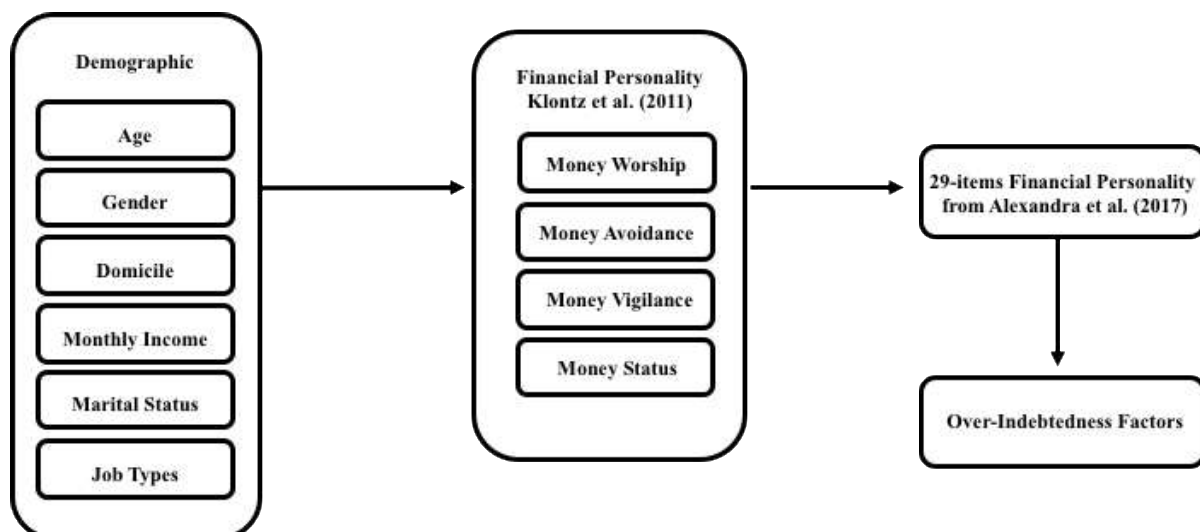

Figure 1 Conceptual Framework
Source: Author's Analysis

Future Research

In the future research, it is suggested to apply quantitative approach in analysing the financial personality based on the conceptual framework into future empirical research. Cluster analysis and decision tree analysis could be applied as the methods of research.

References

Alexandra, L., Erzsébet, N., & Boglárka, Z. (2017). Financial Personality Types and Attitudes that Affect Financial Indebtedness. *International Journal of Social Science and Economic Research*.

Atkinson, A., & Messy, F.-A. (2012). *Measuring Financial Literacy: Results of the OECD / International Network on Financial Education (INFE) Pilot Study* (No. 15). https://doi.org/10.1111/j.1745-6606.2010.01170.x

BAILEY, W. C., & LOWN, J. M. (1993). A cross-cultural examination of the aetiology of attitudes towards money. *Journal of Consumer Studies & Home Economics*. https://doi.org/10.1111/j.1470-6431.1993.tb00181.x

Burgess, S. M. (2005). The importance and motivational content of money attitudes: South Africans with living standards similar to those in industrialised Western countries. *South African Journal of Psychology*. https://doi.org/10.1177/008124630503500107

Chatterjee, D., Keswani, T., & Gupta, S. (2020). Money Attitudes of Indian Adults: An Exploratory Study. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3683299

D'Alessio, G., & Iezzi, S. (2013). Household Over-Indebtedness: Definition and Measurement with Italian Data. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2243578

Engelberg, E., & Sjöberg, L. (2006). Money attitudes and emotional intelligence. *Journal of Applied Social Psychology*. https://doi.org/10.1111/j.0021-9029.2006.00092.x

Fernando, J. (2020). *Financial Literacy*. Investopedia.

Furnham, A. (1984). Many sides of the coin: The psychology of money usage. *Personality and Individual Differences*. https://doi.org/10.1016/0191-8869(84)90025-4

Gathergood, J. (2011). Self-control, financial literacy and consumer over-indebtedness. *Journal of Economic Psychology*.

Hanley, A., & Wilhelm, M. S. (1992). Compulsive buying: An exploration into self-esteem and money attitudes. *Journal of Economic Psychology*. https://doi.org/10.1016/0167-4870(92)90049-D

Hayhoe, C. R., Leach, L., Turner, P. R., & Mo. (1999). Discriminating the number of credit cards held by college students using credit and money attitudes *. *Journal of Economic Psychology*. https://doi.org/10.1016/S0167-4870(99)00028-8

Idris, N. H., Wee, M. F., Ismail, S., & Samad, K. A. (2018). Financial knowledge, debt literacy and over-indebtedness. *The Journal of Social Sciences Research*, *3*, 22–29.

Jhang, F. H. (2018). The Five Dimensions of Money Attitudes and Their Link to Changes in Life Satisfaction Among Taiwanese Adolescents in Poverty. *Applied Research in Quality of Life*. https://doi.org/10.1007/s11482-017-9531-x

Klapper, L., & Lusardi, A. (2019). Financial literacy and financial resilience: Evidence from around the world. *Wiley Financial Management*.

Klontz, B., Britt, S. L., Mentzer, J., & Klontz, T. (2011). Money Beliefs and Financial Behaviors: Development of the Klontz Money Script Inventory. *Journal of Financial Therapy*. https://doi.org/10.4148/jft.v2i1.451

Lasevoli, B. (2020). *How to Teach Financial Literacy to Kids in Uncertain Economic Times*. https://www.hmhco.com/blog/how-to-teach-financial-literacy-to-kids-in-uncertain-economic-times?utm_source=twitter&utm_medium=organic_social&utm_content=leadandlearn202004133275142242&utm_campaign=2019math+_2019

Lay, A., & Furnham, A. (2019). A new money attitudes questionnaire. *European Journal of Psychological Assessment*. https://doi.org/10.1027/1015-5759/a000474

Lejoyeux, M., Richoux-Benhaim, C., Betizeau, A., Lequen, V., & Lohnhardt, H. (2011). Money attitude, self-esteem, and compulsive buying in a population of medical students. *Frontiers in Psychiatry*. https://doi.org/10.3389/fpsyt.2011.00013

Lim, V. K. G., & Teo, T. S. H. (1997). Sex, money and financial hardship: An empirical study of attitudes towards money among undergraduates in Singapore. *Journal of Economic Psychology*. https://doi.org/10.1016/S0167-4870(97)00013-5

Marsh, B. A. (2006). *Examining The Personal FInance Attitudes, Behaviors and Knowledge Levels of First-Year and Senior Students at Baptist Universities in The State of Texas* (Issue August) [Bowling Green State University]. https://doi.org/10.1080/15363750701331562

Masuo, D. M., Lakshmi Malroutu, Y., Hanashiro, R., & Kim, J. H. (2004). College students' money beliefs and behaviors: An Asian perspective. *Journal of Family and Economic Issues*. https://doi.org/10.1007/s10834-004-5491-z

Mien, N. T. N., & Thao, T. P. (2015). Factors Affecting Personal Financial Management Behaviors: Evidence from Vietnam. *Economics, Finance and Social Sciences*, 978–1.

Németh, E., Béres, D., Huzdik, K., & Zsótér, B. (2016). Financial personality types in Hungary - research methods and results. *Financial and Economic Review*, *15*(2), 153–172.

OECD. (2006). *The Importance of Financial Education*.

OECD. (2011). *Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy*.

Otoritas Jasa Keuangan. (2017). *Strategi Nasional Literasi Keuangan Indonesia* (Revisit 2017).

Otoritas Jasa Keuangan. (2020a). *Payment System Statistics*.

Otoritas Jasa Keuangan. (2020b). *Statistik Fintech Lending Periode Desember 2019*.

Özgen, Ö., & Bayoğlu, A. S. (2005). Turkish college students' attitudes towards money. *International Journal of Consumer Studies*. https://doi.org/10.1111/j.1470-6431.2005.00417.x

Pankow, D. (2003). Financial Values, Attitudes and Goals. *North Dakota State University Fargo, North Dakota 58105*.

Parrotta, J. L., & Johnson, P. J. (1998). The impact of financial attitudes and knowledge on financial management and satisfaction of recently married individuals. *Journal of Financial Counseling and Planning*.

Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2015). *Development of a Financial Literacy Model for University Students* (Vol. 39, Issue 3). https://doi.org/10.1108/MRR-06-2014-0143

Rajna, A., & Anthony, P. R. (2011). *Knowledge, Attitude, Practice and Satisfaction on Personal Financial Management Among The Medical Practitioners in the Public and Private Medical Services in Malaysia*. Universiti Kebangsaan Malaysia.

Responsi Bank. (2019). *Studi Terhadap Profil dan Risiko Konsumen Kartu Kredit dan Pinjaman Online*.

Rousseau, G. G., & Venter, D. J. L. (1999). Measuring consumer attitudes toward money. *South African Journal of Economic and Management Sciences*. https://doi.org/10.4102/sajems.v2i3.2588

Shen, Y., Hu, W., & Hueng, C. J. (2018). The Effects of Financial Literacy, Digital Financial Product Usage and Internet Usage on Financial Inclusion in China. *MATEC Web of Conferences*.

Tang, T. L. P., & Gilbert, P. R. (1995). Attitudes toward money as related to intrinsic and extrinsic job satisfaction, stress and work-related attitudes. *Personality and Individual Differences*. https://doi.org/10.1016/0191-8869(95)00057-D

Tatarko, A., & Schmidt, P. (2012). Social Capital and Attitudes Towards Money. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2011044

von Stumm, S., Fenton O'Creevy, M., & Furnham, A. (2013). Financial capability, money attitudes and socioeconomic status: Risks for experiencing adverse financial events. *Personality and Individual Differences*. https://doi.org/10.1016/j.paid.2012.09.019

World Bank. (2020). *Global Economic Prospects* (June 2020).

World Health Organization. (2020). *Coronavirus disease (COVID-19) pandemic*. https://www.who.int/emergencies/diseases/novel-coronavirus-2019

Yamauchi, K. T., & Templer, D. I. (1982). The Development of a Money Attitude Scale. *Journal of Personality Assessment*. https://doi.org/10.1207/s15327752jpa4605_14

Zait, A., & Bertea, P. E. (2014). Financial Literacy – Conceptual Definition and Proposed Approach for a Measurement Instrument. *Journal of Accounting and Management*, *4*(3).

Appendix A: Literature Synthesis (Author's Analysis)

No	Author	Objective	Conclusion	Personality Types	Critical Review
1	(Yamauchi & Templer, 1982).	This research aims to develop scale of money attitude based on past clinical and theoretical literature.	The research revealed that 29-items Money Attitude Scale (MAS) was developed with factor analysis on the basis of five factors; Power-Prestige, Retention-Time, Distrust, Quality and Anxiety.	Money Attitude Scale (MAS) 1. Power-prestige 2. Retention-time 3. Distrust 4. Quality 5. Anxiety.	The result of this study has possibility to be applicable in real practice that correlated with problematic attitudes and behaviors with money.
2	(Furnham, 1984)	This research aims to examine the relationship among various demographic and social belief variables toward individual's attitudes and habits of money usage.	The research revealed findings in six clearly interpretable factors using factor analysis. Analysis of variance (ANOVA) found that Age, Education and Protestant Work Ethic beliefs most differentiated samples' attitudes to money. It was also founded few differences of how individual manage their money in the past and in the future.	- Money Beliefs and Behavior Scale (MBBS) 1. Obsession 2. Power/Spending 3. Retention 4. Security/Conservative 5. Inadequacy 6. Effort/Ability - Money in the Past and Future Scale (MPFS)	This research has possibility to be applied in other various work ethic beliefs, also possible to explore how individual's attitudes and behaviour change over a lifetime.
3	(Hanley & Wilhelm, 1992)	This research aims to determine differences between a group of self-reported compulsive spenders and a group of 'normal' consumers towards their self-esteem and money attitudes.	The research revealed that compulsive spenders have relatively lower self-esteem compared to normal consumers. It was also founded that compulsive spenders views money as the symbolic ability to enhance their self-esteem, they are also likely to spend money in purpose of reflective of status and power, as they have a great likelihood to see money as a solution to problems. Compulsive spenders were also reported to have tendency to feel a sense of conflict over the spending of money. These findings were supported the previous literatures.	Money Beliefs and Behavior Scale (MBBS) 1. Obsession 2. Power/Spending 3. Retention 4. Security/Conservative 5. Inadequacy 6. Effort/Ability	This research has possibility to be developed in various group of individuals' behavior related to money.

4	(BAILEY & LOWN, 1993)	This research aims to determine the differences of money attitudes in Great Britain and the U.S.A, in terms of purposing to replicate Furnham (1984) to provide cross-cultural comparison.	The research revealed that differences were founded between the two countries. The origin of these differences in money attitudes could be attributed to cultural differences that begin in the context of the family and are reinforced by society. There are also few differences namely, age and changes of personal finances in Britain that do not apply to USA. Age is one of important determinant in USA when it comes to the worries of about money, particularly younger age group.	Money in the Past and Future Scale (MPFS)	This research has possibility to be replicated in other nations. In this study indicates that different economic conditions might affect the results, thus it suggests in the future research with different economic conditions comparison.
5	(Tang & Gilbert, 1995)	This research aims to determine the relationship of money attitude towards intrinsic and extrinsic job satisfaction, stress and work-related attitudes in a sample of mental health workers.	The result revealed that intrinsic job satisfaction is positively associated with the attitude that money is freedom/power, whereas extrinsic job satisfaction is related to the notion that money is not evil. Workers with low organizational stress tend to see that money is good. People who claims that they budget their money carefully tend to have high self-esteem as they are hard-driving and competitive people. Those who endorse Protestant Work Ethic tend to think that money represents their achievement and money is good. Male workers are tend to have positive money atittudes compared to female workers.	Money Ethic Scale (MES) 1. Good 2. Evil 3. Achievement 4. Respect 5. Freedom/Power 6. Behavioural: Budget	In this study, mentioned about the relationship of money ethic scale and prediction of employee's turnover in a company. Therefore, further research is suggested.
6	(Lim & Teo, 1997)	This study aims to determine the effects of gender and previous financial hardship experience toward money attitude in Singapore.	The research revealed that some gender differences, the tendency of males who often view money as a means of comparison and evaluation. In addition, the 'hardship' group was more likely to use money as a form of evaluation, to have financial anxiety, and to be more generous to the less fortunate compared to the 'no hardship' group.	Modified Money Beliefs and Behavior Scale (MBBS) 1. Obsession 2. Power 3. Budget 4. Achievement 5. Evaluation 6. Anxiety 7. Retention 8. Non-generous	The sample of this study is student, various background of sample is suggested in the future research. Longitudinal study also recommended to provide evidence in the later life experienes affects money attitude.

7	(Rousseau & Venter, 1999)	This study aims to make comparisons of money attitudes among English, Afrikaans and Xhosa-speaking consumers in the Eastern Cape.	The results showed significant differences between the various groups for three of the four dimensions of the scale. The research also revealed that income is significantly related to all the factors in money attitude scale. Xhosa speaking respondents in the low income bracket experienced more anxiety and distrust when spending money, whereas, Afrikaans speaking respondents in the middle to upper income bracket worry least about money.	Modified Money Attitude Scale (MAS) 1. Power-prestige 2. Retention-time 3. Distrust & Anxiety 4. Quality	Larger sample size and various nations are suggested in the future research.
8	(Masuo et al., 2004)	This study aims to investigate the multidimensionality of money attitude among 290 college students from Korea, Japan and the United States.	The results revealed few unique attitudes toward Asian that differs from Asian Americans in how they view and use money. Three money attitudes were constructed: (1) Power, (2) Security, and (3) Financial Modesty have been identified for Asian and Asian American subjects.	Modified Money Beliefs and Behavior Scale (MBBS)	The respondents are college students in this study, thus, it suggests diverse age and cultural background in the future research.
9	(Burgess, 2005)	This study aims to determine money attitudes of 221 urban South Africans whose standards of living are similar to those in industrialized Western countries.	The results of this study, suggests that money attitudes and value priorities have predictable and theoretically meaningful relations and provide evidence supporting the nomological validity of the revised Money Attitude Scale (MAS).	Modified Money Attitude Scale (MAS) 1. Power-prestige 2. Retention-time 3. Distrust 4. Anxiety 5. Quality	Larger sample size and various nations are suggested in the future research. Three proposed new money attitudes in this study should be examined further (stimulation, spirituality and autonomy).
10	(Özgen & Bayoğlu, 2005)	This research aims to determine money attitudes among 300 Turkish college students in Ankara.	The findings in this study indicated that college students' money attitudes relating to the past and future were linked to selected demographics, especially gender and age variables.	Money in the Past and Future Scale (MPFS)	Extended sample size is suggested in the future research, the study of interrelationships between personality, motivational and behavioural variables are also encouraged. Whereas, different economic conditions could also be one of determinants, longitudinal study is also suggested.

11	(Engelberg & Sjöberg, 2006)	The purpose of this study was to determine the extent to which money attitudes relate to Emotional Intelligence (EI).	Results suggested that high levels of emotional intelligence imply a less pronounced orientation toward money and a greater sense of economic self-efficacy. A relaxed and more confident money attitude seems related to a broader social integration, presumably because of a more acute ability to perceive and process emotional information. Furthermore, money orientation seemed to be related to worse adjustment of work versus family/leisure time. Money-oriented people tend to prioritize work over social engagements, because to these individuals it is money, and not a social network, that represents a buffer, support, or a sense of security.	Money Attitude Scale (MAS) 1. Power-prestige 2. Retention-time 3. Distrust 4. Quality 5. Anxiety.	In the future research, various and larger sample size also other behavioral variable that related to money attitude could be applied.
12	(Klontz et al., 2011)	This study aimed to construct the money belief patterns towards 422 individuals.	The result of this study was identifying four money attitudes. Three of these belief systems were significantly correlated with income and net worth. Demographic features associated with the four money belief scales are provided.	1. Money Worship 2. Money Avoidance 3. Money Vigilance 4. Money Status	Diverse ethnicity background is recommended for further research. This study only determine the beliefs, additional behavioral variables are suggested. Mixing with other money attitude scale also suggested to find the relations with.
13	(Lejoyeux et al., 2011)	This study aims to determine the prevalence of compulsive buying (CB) and to identify among compulsive buyers a specific relation to money, a different buying style, and a lowered level of self-esteem.	The result of the study shown that compulsive buyers had higher scores of distress (tendency to be hesitant, suspicious, and doubtful attitude toward situations involving money) and bargain missing (fear of missing a good opportunity to buy an item). They have a stronger tendency to buy self-gifts, items they use less than expected and choose goods increasing their self-esteem.	Money Attitude Scale (MAS) 1. Power-prestige 2. Retention-time 3. Distrust 4. Quality 5. Anxiety.	In the future research, various and larger sample size also other behavioral variable that related to money attitude could be applied.

| 14 | (Tatarko & Schmidt, 2012) | This research aims to assess the mechanism through which the individual level components of social capital, that is, individuals' levels of trust, tolerance and civic identity affect their economic behavior | The result of this study was higher levels of individual social capital were associated with adverse monetary attitudes. Another finding in this research has been that the component of social capital that correlated most frequently and strongly with monetary attitudes, was civic identity. Generally, based on the findings it is proposed that the negative association between monetary attitudes and individual level social capital suggests that, when social capital decreases, people try to compensate by accumulating financial capital. | Modified Money Beliefs and Behavior Scale (MBBS) 1. Inadequacy 2. Power 3. Retention 4. Security | In terms of replicating this research, could be imply with various other nations background for the respondents. |
| 15 | (von Stumm et al., 2013) | This study aims to determine the risks associated with financial capabilities, money attitudes, and socio-economic status for suffering negative financial outcomes. | The results of this study showed that (1) socio-economic status is associated with financial capabilities but not with money attitudes; (2) money attitudes and financial capabilities are largely independent; (3) money attitudes and financial capabilities each contribute independently to the risk of experiencing adverse financial outcomes, even after adjusting for socio-economic status; and (4) financial capabilities are greater risk factors of adverse financial outcomes than money attitudes; the latter, however, are likely to be promising targets for interventions. | 1. Power oriented money attitude 2. A security focused attitude 3. Love or generosity by money attitude 4. An autonomy worshipping attitude | It is mentioned that there is no previous research that correlates with this study, thus, in the future it is suggested to conduct replicate in order to examine and support the reliability of this research. |

16	(Németh et al., 2016)	This study aims to determine the characteristic features among individual from the aspect of their financial culture.	The result of this study found that among dimensions of pre-defined tests, awareness and diligence are positive preliminary indications of the level of the person's financial culture. The high level of saving and price-sensitivity did not correlate with good results achieved in other personality dimensions. It is constructed nine factors by factor analysis.	1. Economizers with little money 2. Money-devourers 3. Order creates value 4. The Price-Sensitive 5. Collectors 6. Planners 7. Ups and Downs 8. Diligent 9. Cannot Control Finances	Various nations and background are suggested in the future research. The addition of other variables that related to financial behavior is suggested.
17	(Alexandra et al., 2017)	This study aims to examine and to characterize these profiles in terms of financial habits and attributes. Moreover, the personality traits and behavioral patterns of individuals' indebtedness are equally identified using a decision tree-based model.	The result in this study shows that characterization of the seven categories reveals that the combinations of the various dimensions of financial attributes have a complex effect on financial behavior, and, for instance, seemingly contradictory financial personality traits, such as overspending and making economies can go hand in hand with each other. Based on the results, making savings is primordial in the avoidance of indebtedness, while trusting one's luck and not being able to control one's own finances are risk factors.	1. Economizer 2. Diligent 3. Binger 4. Orderly 5. Cannot Control Finance 6. Planner 7. Ups and Downs	In terms of replicating this research, could be imply with various other nations background for the respondents.
18	(Jhang, 2018)	This study aimed to examine money attitudes and their relationship to change in life satisfaction among taiwanese adolescents in poverty.	The study revealed that the relationship between changes in power/prestige and life satisfaction was negative, whereas, the association between changes in quality and life satisfaction was positive. The results also showed that changes in retention/time did not relate to changes in life satisfaction.	Money Attitude Scale (MAS) 1. Power-prestige 2. Retention-time 3. Distrust 4. Quality 5. Anxiety.	In the future research, various and larger sample size also other behavioral variable that related to money attitude, diverse ethnicity background and different social-economics could be applied.

19	(Chatterjee et al., 2020)	This study aims to develop a scale for money attitudes and financial behavioural traits prevalent among Indians.	The research revealed there are six factors for the exploratory factor analysis; Financial Prudence, Extravagance, Financial Knowledge, Financial Anxiety, Importance attached to Money and Financial Support Network. Individuals who have similar financial attitudes are segmented into six clusters described based on their demographic characteristics.	1. Prudent Strivers 2. Young and Carefree 3. Financial Achievers 4. Money Neutral 5. Living for Today 6. Financially Inactive	This study should be developed in the future with analysis that correlates to other variable of financial behaviors.
20	(Lay & Furnham, 2019)	This study reports on the development and validation of a new questionnaire to measure money attitudes and beliefs.	The result of this study showed that demography (sex, age, and education), ideology (politics and religious practices), and self-rated happiness, success, and adjustment were related to all five factors. Worries about Financial Literacy is an important and neglected factor in money attitudes research, which has implications for consumer well-being and protection.	1. Achievement and Success 2. Power and Status 3. Mindful and Responsible 4. Savings Concerns 5. Financial Literacy Worries	The future research would be desirable to have more details about responded actual money affairs and related to financial literacy level.