Financial Literacy and Investment Intention in Financial Assets: A systematic Literature Review Synthesis

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Abstract

The purpose of this study is to contribute through highlighting importance of financial literacy (FL) while investments in financial assets. In this study, we use systematic literature review approach to evaluate the impact of FL on investment intention in financial assets. This review has many conceptual and theoretical implication as it provides a deep understanding of impact of FL on investment intention, which could be very useful for finance practitioners. More specifically, the study aims to provide useful information to strategist in financial firms, advisors to state, investors who trade on the stock exchange, fund managers, financial analyst and strategist, investment bankers, traders/brokers at the stock exchange, policymakers, academics and market players to make effective decisions, as well as provide suggestions for potential future actions for the government to encourage investment by households by understanding the nature of their problems. This study contributed conceptually as one of the few and authentic SLRs which highlights the importance of FL influence on financial assets investment intentions by presenting the authentic and contemporary published literature on the specific subject.

Keywords. Financial Literacy, Financial Assets, Investment Intention, Theory of Planned Behavior, Attitude, Subjective Norms, Perceived Behavior Control, Systematic Literature Review

1. Introduction

When individuals investing in financial Assets, those who have possess financial knowledge have the ability to understand financial information to make effective decisions about investing in financial assets. (Raju et al., 1995). This financial knowledge is called as FL (Raut, 2020). The knowledge that makes an individual able to process diversification of risks, calculation of simple and compound interest and inflation rates can be regarding FL (Van Rooij et al. (2011) and Lusardi and Mitchell 2014). More studies such as Sivaramakrishnan et al., 2017; Thomas and Spataro, 2018 stated that FL is a good persuasion to invest in complex financial assets. According to Lusardi and Mitchell (2014) high FL makes an individual more competent and able to diversify risk and good at funds and savings management. Van Rooij et al. (2011) concluded that individuals feels reluctant in investing their savings in financial assets if they do not have FL. The surveys conducted in the domain of behavioral sciences showed that there is a very small share of investment from individual investors in financial assets in 140 countries all over the world (OECD, 2017). The surveys also showed that among those 140 countries only 49 % population answered only 70% of the questions related to FL. In G20 countries, only three countries including Canada, France and china reported good scores in measure of good financial knowledge. Most of the people who invested are financial literate but the major share of investment goes to credit card and mortgages and complex nature of assets still unoccupied like stocks, bonds, insurance and pension funds (Devlin, 2001). Due to COVID-19 Economic recession, investments are going down, in past recessions such as 2008 and 2009, financial experts and service providers and policy makers realized the need to understand the financial trends of investments and intentions and behavior of investors. It is highlighted that individual investors make financial mistake due to lack of financial knowledge. Also they are less inclined towards investments their savings especially in financial assets because of low FL and hence there is a need to improve their financial knowledge for the financial well-being of individuals as well as state. (Bruggen € et al., 2017). As the above mentioned studies shows, it seems FL is showing a high impact on investment intention and to properly find out the authentic relationship, In this study, we use systematic literature review approach to highlight the impact of FL on investment intention in financial assets. According to Marshal (2010), a systematic literature review (SLR) is defined as "a systematic method for identifying, evaluating and interpreting work produced by researchers, scholars and practitioners". Hart (1998) defined a review of the literature as "the use of ideas in the literature to justify the particular approach to the topic, the selection of methods, and demonstration that this research contributes something new". This study aims to contribute in contemporary literature by using SLR through highlighting importance of FL while investments in financial assets. Systematic literature review is a way to provide a sight of what has been done in current literature to researchers and practitioners in a structured (Shaffril et al., 2021a). Moreover, SLR reviews the past and recent studies e with a translucent searching procedure and also conducted quality assessments to evaluate the findings and achieve high authenticity. (Kraus et al., 2020).

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1.1. FL and Investment Intention

The financial well-being of an individual can be described as a person to achieve its desired standard of living and sustain it. (Bruggen € et al., 2017). To attain financial wellbeing, adequate investments should be done from the savings but FL is the key to secure investment. Because without financial knowledge individuals are reluctant to invest and if they inverst they make mistake so FL is main variable influencing financial intention and behaviour. It is suggested by Lusardi and Mitchell (2007) that there is a strong bond between FL and invest the savings for retirement. FL concept had been incorporated in many studies by various researchers. Also studies conducted by Lusardi and Mitchell (2011) and Van Rooij et al. (2012), stated that FL is a critical antecedent of retirement income plans. Also Mitchell and Mukherjee, (2017) and Grohmann (2018) highlighted the fact that in Thailand because lack of FL, people failed to invest and hence dependent on their children in old ages. Individuals and states economic growth can be achieved through better investments which is possible through enhance financial knowledge so the policy makers and practitioners are constantly working on to develop such framework to foster FL. Although, lot of empirical and conceptual studies has been done on financial investment intention and behavior and its antecedents, but the work is scattered across different countries as well as different disciplines such as finance, economic, psychology, behavioral sciences. The basic aim of the this systematical review to extensively out looking for empirical and conceptual work done on FL of general public and its impact on their investment intention and behavior and critically examine them.

1.2. Practical Implications of the Study

This review could be useful to overall all financial planners, practitioner and individual users as this review provides a deep understanding of impact of FL on financial assets investment intention. The study is helpful to strategist in financial firms, advisors to state, investors who trade on the stock exchange, fund managers, financial analyst, investment bankers, and stock exchange traders. But, perhaps most importantly, the term encompasses all those who manage corporate organizations and are liable for making their financial decisions. This review also aims to provide information to policymakers, academics and market players on cognitive heuristics and their consequences, as well as suggestions for potential future actions for the government to encourage investment by households by understanding the nature of their problems.

1.3. Objectives of the Study

The main objective of this synthetic literature review is to deliver the prevalent up to the mark research work done on FL and investment intention, with the following sub objectives to be achieved:

1: to present the authentic publication of recent times in FL and investment intentions and classify them according to the journals, year, authors, disciplines, and the type of study

2: to present the most influential researches of all time in this domain.

3: To understand the scholarly structure of FL and investment intention research so far.

4: to present the gaps and areas in this domain for future research?

1.4. Conceptual Contribution

Since this synthetic literature provides a synthesis and generalized findings from the primary articles, we hope that this synthetic literature will contribute to the researches related to FL and investment intentions. In addition, we hopefully, identified the accurate relationship of these two variable and detected some other factors and areas that may require further research. Thus, as per the consistent nature of the meta-analysis, this study intends to help managers to implement more assertive actions. This SLR identify the specific primary issues, identify research fields and current trends and a way for future research and basis for future theoretical contributions. The well designed research objectives provide quality research of all times which can provide answers to specified research. This study is useful to many concerns including individuals, policy makers, government regulators, and researchers as it makes IHF evolution comprehensive, hence this study have contributed conceptually and theoretically by providing high quality SLR.

2. Research Methodology for the Current Study

In synthetic literature review the first step is development and validation of review protocol. In this step the study first prepare a lists for reviews in order to present a quality SLR , which include less biased opinions and transparancy. (Shaffril et al., 2021a). Systematic evidence syntheses which can be called ROSES is used for reporting standards by this SLR.

2.1. The Review Protocol Review

Protocol for this kind of study is very important (Shaffril et al., 2021a). In order to make steps for this systematic review, we used ROSES review protocol developed by Gusenbauer and Haddaway's (2020). ROSES tend to be more authentic and comprehensive in social sciences while PRISMA is more useful in scientific disciplines (Haddaway, Macura, & Whaley,. 2018)
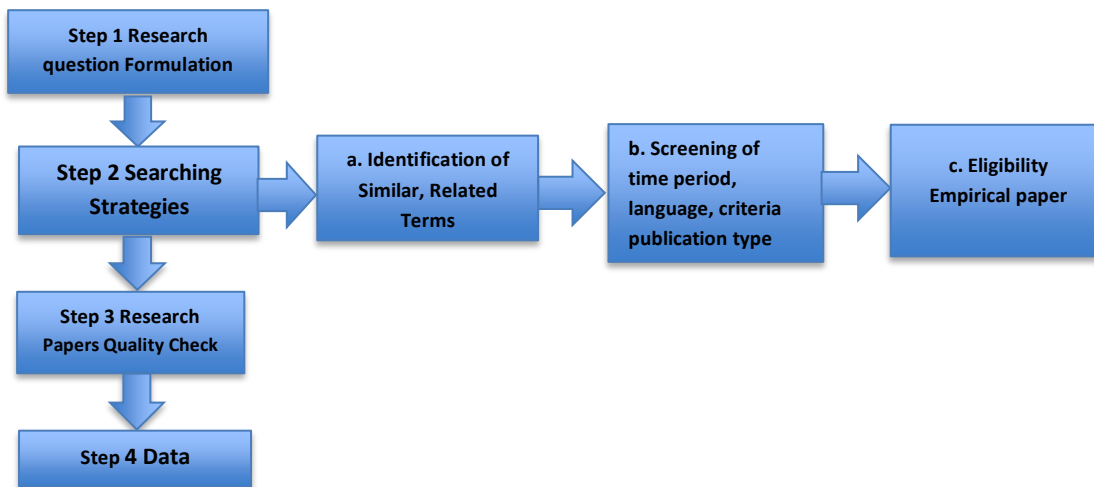
Figure 1. Review Steps (ROSES), Source. Gusenbauer and Haddaway (2020)

Figure 1 explicit the process with 4 main steps for the procedure. Step 1 consists of research questions formulation. Step 2 involves exploration of related literature which include research papers identification, screening and eligibility. While in Step 3, the quality of finalized literature in step 2 will be determined through experts. Finally, Step 4 is to data extraction which includes collection and classification of literature into multiple themes.

2.2. Formulation of Research Questions

Petticrew and Roberts (2006) stated in their study that the topic should be wider and not very specific because of the complex nature of SLR and also if the topic would be too specific it would be difficult to find authentic paper accordingly. Keeping in view the research objective the research question: "What are the impact of FL on financial assets investment intention?

2.3. Systematic Searching Strategies

This step includes three further sub steps .i.e. identification, screening and eligibility. IN SLR, according to Cooper et al., (2018), there should be at least 2 databases use to search the research articles, hence this study used three databases including Web of science, Scopus and Google scholar. Google Scholar used because most relevant articles found on this. Some other scholars also recommended Google scholar due to its wide range than other databases (Alexander, 2020;Haddaway et al., 2015).

2.3.1 Identification. 1st step is to find out the key terms for searching the relevant articles which included similar terms and synonyms. The terms "FL", "potential investors", "investment intention' and "Financial Assets" were included as keywords to search relevant articles. In Scopus and WoS, searching performed on truncation, Boolean operator, and wild card. In Google Scholar, by manual searching, we mixed few terms and search multiple times to retrieve the relevant articles. (Alexander, 2020; Cooper et al., 2018).

2.3.2 Screening. In this step, we collected 200 articles but many excluded because of our inclusion criteria, consisting time range of 2002 to 2022, because reviewing all time articles is not possible. Basedon Okoli (2015). Second criteria is primary data and in last the study only include research papers.(Shaffril et al., 2021b). More precisely, 52 articles were excluded because of criteria inclusion out of 113 collected from Google scholar. 41 were excluded collected from WoS and 27 excluded collected from Scopus. Only English-language articles are selected because of misinterpretation possibility because of the author familiarity of language (Shaffril et al., 2021a, 2021b).

2.3.3 Eligibility. This process is to ensure that the selected items focused towards the study main objective, the first thing is to read the title to predict the main objective of the study. Also sometimes read the abstract and in few cases the author had to read full paper to ascertain the main objective(Shaffril et al., 2021a).The —35-- articles excluded because they were not matched to our research objective and financial assets investment criteria for e.g. excluded articles focused on other investments like real estate and gold rather than financial assets. The criteria to only approve empirical papers also result in exclusion of some articles which is also second by exclusion quality appraisal technique, the Mixed-Method Appraisal Tool (MMAT) (Hong et al., 2018). Moreover, author has to exclude three articles because despite searching on different databases and emailing the authors could not found full paper but only abstract.

2.4. Quality Appraisal

In the fourth step, the articles to be rated by author, the technique MMAT use to evaluate design and methodology like qualitative, quantitative, randomized and non-randomized method studies (Hong et al.,2018). For quality appraisal the articles must pass five criterion questions like the research question match the research objectives. Author read every article and give it score. Papers with at least 3 scoring got selected. Finally 30 papers were selected for this SLR.

2.5. Data
The study selected 30 after conducting multiple steps during extraction process. Different types of studies including quantitative or qualitative methods were accepted. And a table also created to understands the variables of the studies. Theme and subtheme extracted to categorize articles depending on similarities. (Braun and Clarke, 2019).

3. Findings
3.1. Selected Articles Details
Among 30 articles study selected for SLR 15 articles from Google scholar, -8 from WoS and 7 from Scopus. A list has been given from the earliest to latest in Table 1. Also the tick marks in the table show the factors that are present in the studies or have any significant impact in the studies including in the SLR. A rise in the studies of the subject has observed since 2018, although previous work is also valuable. It is also observed that most studies conducted in Asian countries. According to Amin et al., 2019; ; Ajetunmobi et al., 2018; Bahari et al., 2019, many researchers used TPB to conduct their research. Moreover according to .Sayuti et al., (2020) and Shaikh and Noordin, (2020) many studies concluded that TPB constructs has a significant impact on investment intentions, but other factors such as religiosity, marketing and returns on investments also considered by some studies

3.2. Themes and Sub-themes
A synthetic analysis has done to categorize the selected literature into themes (Braun and Clarke, 2019). The study established three main themes including FL, investment intention and financial assets. The themes and sub themes are established to answer the research question. (Figure 2).
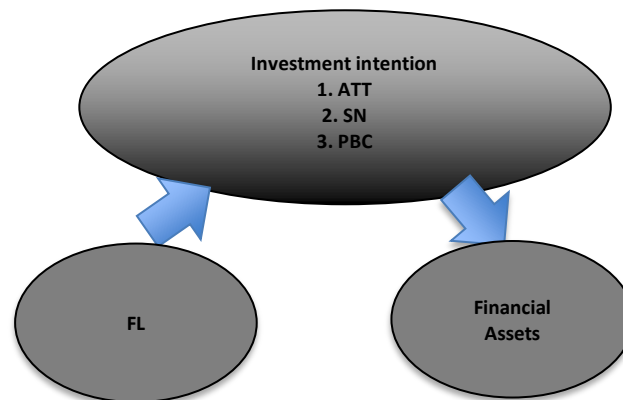

Figure2. Themes and Subthemes

3.2.1. Financial Literacy
It is observed that those with low FL, face poverty, frauds, bankruptcy, and fail to have reliable investment plans because of lack of financial .They are not able to have profitable investments because of less sophisticated financial knowledge (Lusardi & Mitchell, 2007). They take loans on high interest rates and poor at financial asset management (Van Rooij et al., 2007). Hence they act passively and because of low financial knowledge and perceived difficulty, refuse to invest (Moorthy et al. 2012). On the contrary, Raut (2020) and Fedorova et al. (2015) suggest that financially literate investors are more proactive in investments because of perceived high command over the subject. One more study conducted in India by Adil, M., Singh, Y. & Ansari, M. S. (2022) stated that indian stock market is performing low and trying to determine the factors that impact on the stock market through TPB, they took FL as moderator between TPB constructs and investment intention and found that strong FL has a positive impact on investment impact and also positively impact the relationship between PBC and ATT and investment intention. Another study by Sabir, S. A., Javed. T., Khan.S. A. & Javed. M. Z. (2021), examine FL as a moderating variable between investment intention in Pakistan stock market and TPB constructs. The study also explains the relationship between religiosity, and investments in stocks. The study based on questionnaire for data collection which was collected from 250 stock investors. This study found that social norms and religiosity along with FL influence investment intention of individual investors in stock market. Other than that, some other studies also tests the FL impact on investment intentions. Kourtidis et al. (2017) stated that the intention to investment in Greece is greatly affected by their FL. Sivaramakrishnan et al. (2017) also examined the relation between FL and investment intentions. The study employ the TPB to explain investor decision making in India. The TPB stated investors' FL as a part of PBC (Ajzen, 1991). The findings of the study are that investors' PBC significantly affected by FL. According to Raut (2020) FL positively influence ATT and PBC. This explains that FL makes investors confident about their

sophisticated financial decisions and make their ATT favorable towards investment intention and enhance PBC towards intention to invest in financial Assets.While many studies stated that FL have impact on investment intentions some have denied it, such as Cucinelli et al. (2016) examine impact of TPB construct along with FL on the investment intention in financial products. They found that TPB construct have predicting power to predict investment intention, but FL has no impact on it. Another study conducted by Mohd, A., Yogita, S., & Mohd, S.M. (2022) in India stated that FL has a moderating impact on the relationship between AT, PBC and Investment intention.

3.2.2. Investment Intentions

The study taken TPB's construct, ATT, subjective norm and PBC as the three sub themes.

3.3. TPB to predict Financial Assets Investment Intention

The TPB implied that ATT towards behavior, SN and PBC predicts the behavioral intention (Ajzen, 1985). In recent literature, TPB has become very authentic model in predicting human intentions and behaviors (Husin & Alrazi, 2017; Warsame & Ireri, 2016). In the matter of financial investment decisions, Gopi & Ramayah (2007) used TPB to properly predict and understand the intentions of Malaysian investors in online trade. Akhtar & Das (2018) also used TPB in order to predict the intentions of investor and found it has significantly strong predicting power. Kashif et al. (2017) also used TPB lens to look into the Ethical behavior of bank employees in Pakistan. Adam & Shauki (2014) also showed that socially responsible investors has a positive relation between ATT, SN, moral norms and the behavioural intention to invest. Moreover, Lee-Partridge & Ho (2003) explained in their study used TPB model to predict online tock investment intentions TPB and found ATT and social norms are important predictors of behavioural intention.

According to Ajzen (2002) investors are highly unique in nature, so investors from different countries may have different types of psychological and emotional biases which could influence their investment decision making and hundreds of studies supported this. East (1993) also conducted research on to measure the investment intention for a private British industry and found that SN and PBC which is taken as easy availability of funds had significant predicting power in their model. Some other studies, such as Ali et al. (2014) also used TPB to predict the investment intention of investors. But as the behavioral finance is relatively a new field and TPB model is to use to predict individual behavioral intention, it is not out of logic that its used in the literature is notably limited.

3.4. ATT towards Investment Intention

The ATT of an individual decides whether an action in question should be taken or not by taking into consideration its favorable or non-favorable consequences. Hence, behavioral intention can be predicted on the favorable or unfavorable ATT towards that behavior of the individual. Fünfgeld and Wang (2009) stated that ATT towards risk is linked to investment intention. In TPB, ATT is the most powerful antecedent of intention and intention is the most powerful determinant of behavior (Alleyne & Broome, 2011). Future behavior can be both negatively or positively affected by the ATT (Schmidt, 2010). O'Connor & White, (2010) stated that an individual's positive ATT towards a behaviour may be resulted in a high intention to perform that behaviour. Some more studies highlights the similar idea for the intention of individual investors to invest in the financial assets. I.e. if an individual has a favorable ATT towards investment, there will be positive chances of strong intention to participate in investment (East, 1993; Gopi & Ramayah, 2007; Ali, 2011). Similarly, Phan & Zhou, (2014) stated a significant impact of ATT on financial investment intention. Akhtar & Das (2018) observed when the ATT of the investors is known than the investors' behaviors are more predictable. Mandell & Klien (2007) have also stated that in between ATT and the investors' behavioural intention, there is a positive relationship exists. On the other hand few studies such as Mahastanti and Hariady (2014), while using TBP to predict investment intention, concluded that ATT towards investment has no significant impact on investment's intentions. Many studies has been done but no detail analysis has been in this context for Pakistan, so based on the findings and arguments, this study hypothesizes that:

3.5. SN and Investment Intention

One of the antecedents of intention is SN which can also be explained as the perceived social pressure by individuals to act or not to act the action in question (Ajzen, 1991). Cialdini & Trost (1998) explained SN as how individual think that they regarded by their affiliated social groups if they execute a certain behavior in question. The pressure of SN while making decision is the result of the normative expectations of relatives and friends (Cavazos, 2013). Some other studies has have calculated the influence of SN on financial investment decisions. They find out that SN has substantial influential effect on the investment decision making; and those investors who have less or no financial know how, often depend on the recommendations of relatives , and acquaintances while investment decisions making. They also proposed that investors are usually more involved in a particular investments when their relatives and friends are more participated in those investments (Kashif et al., 2017; Sharma & Gupta, 2011; Koropp et al., 2014). But contradictorily, Mahastanti and Hariady (2014), empirically tested and found that SN has no significant on investment's intention while using TPB model. Based on these arguments, this study hypothesizes that

3.6. PBC and Investment Intention

According to Ajzen (1991), the concept of PCB is, a person's own perception of difficulty or ease facing in performing the behaviour in question. In the framework of financial investments decisions, Mahastanti and Hariady (2014) recommended that PCB is the only predictor significantly impact on the investors' intention to invest. The researchers explained when an individual is competent and has the opportunity for investment, he would be more inclined to invest because he will feel more confident. Phan and Zhou (2014) explained in background of Vietnamese 'investors and declared that perceived behavior control is an important element in explaining their behavior. Moreover, they explained that past experiences, social norms plus the accessibility of means and resources, all can affect the perceived ease or difficulty to intention to invest. Akhtar and Das (2018) and Gopi and Ramayah (2007) conducted research to know the predictors of intention of investors to invest in India and Malaysia respectively. Their findings support the TPB, where the three variables .i.e. ATT, SN and PCB have strong predicting power of intention to trade stock. Based on the above mentioned argument, this study hypothesizes that:

3.7. Financial Assets

The financial assets includes those assets which are easily and directly convertible into cash. (Brigham, J. & Houston, E. 2018). Investment in financial assets have many advantages. You can get return with the ready cash equivalents whenever you want, therefore many huge businesses also invest in financial assets including Apple, Google, and Microsoft. (Du, J., Li,C.& Wang, Y. 2017). The impact of investing in financial assets shows in the emerging markets, such as Mexico, Brazil and Turkey (Huang et al., 2019). The ratio in financial assets holding in China is increased by 7.9 % to 20.4% in 2020 which has a good impact on the economy.(Opler et al., 1999). Speculations and rumors could be a reason behind firms holding financial assets worldwide to gain more profits in less time. (Becker and Ivashina, 2015). It is also approved by precautionary saving theory, that holding more financial assets is a source to enhance liquidity of the firms (Chen et al., 2013). Financial assets holding offers extensive liquidity power to firms because of its huge trading market. If the firms facing any cash shortages or any attractive investment opportunities, financial assets holding offers immediate liquidty (Ding et al., 2013). Because of the economic uncertainties and policy risk of recent times, firms are more attracted to financial assets investments to maintain their liquidity and gain returns on short terms investments for future opportunities (Huang et al., 2019).

Table 1

S. No.	Author	Year	FL	Investment Intention	Financial Assets
1	Adil & Ansari	2022	√	√	√
2	Akhtar, & Das, N.,	2018	√	√	√
3	Amin et al.	2019		√	√
4	Bahari et al.	2019	√	√	√
5	Bongomin et al.	2019	√		√
6	Cavazos.	2013	√		√
7	Cucinelli et al.	2016	√	√	√
8	Ding et al.	2013	√	√	√
9	Fedorova et al.	2015	√	√	√
10	Gopi & Ramayan	2009	√	√	√
11	Grohmann	2018	√		√
12	Huang et al.	2019	√		√
13	Kashif et al.	2017	√		√
14	Koropp et al.	2014	√	√	√
15	Kourtidis et al.	2017	√	√	√
16	Lusardi &Mitchell.	2007	√	√	√
17	Lusardi &Mitchell.	2011	√	√	√
18	Mahastanti, & Hariady	2014	√	√	√
19	Memon et al.	2019		√	√
20	Mitchell, & Mukherjee	2018	√	√	√
21	Mohd & Mohd.	2022	√	√	√
22	Opler et al.	1999	√		√
23	Phan & Zhou.	2014	√	√	√
24	Raut.	2020	√	√	√
25	Sabir et al.	2021	√	√	√

S. No.	Author	Year	FL	Investment Intention	Financial Assets
26	Sayuti et al.	2020		√	√
27	Shaikh & Nooruddin	2020		√	√
28	Sivaramakrishnan et al.	2017	√	√	√
29	Van Rooij et al.	2012	√	√	√
30	Zabri & Mohd	2018			√

4. Discussion

In thematic analysis, we developed 3 themes and 3 sub-themes. Lusardi & Mitchell, (2007). Mitchell and Mukherjee, (2017), Van Rooij et al., (2007). Raut (2020) and Fedorova et al. (2015) Adil, M., Singh, Y. & Ansari, M. S. (2022) found that strong FL has a positive impact on investment intention and also positively impact the relationship between PBC and ATT and investment intention. Another study by Sabir et al,. (2021), examine the factors that impacts investors' intention and FLas a moderator. Kourtidis et al. (2017) ,Sivaramakrishnan et al. (2017) FL makes investors confident about their sophisticated financial decisions While many studies stated that FL have impact on investment intentions, some have denied it, such as Cucinelli et al. (2016) examine impact of TPB construct along with FL on the investment intention in financial products. They found that TPB construct have predicting power to predict investment intention, but FL has no impact on it. It is observed that those with low FL, face poverty, frauds, bankruptcy, and fail to have reliable investment plans because of lack of financial .They are not able to have profitable investments because of less sophisticated financial knowledge (Lusardi & Mitchell, 2007). They take loans on high interest rates and poor at financial asset management (Van Rooij et al., 2007). Hence they act passively and because of low financial knowledge and perceived difficulty, refuse to invest (Moorthy et al. 2012). Raut (2020) and Fedorova et al. (2015) suggest that financially literate investors are more proactive in investments because of perceived high command over the subject. Other than that, some other studies also tests the FL impact on investment intentions. Kourtidis et al. (2017) stated that the intention to investment of Greek investors are influenced by their FL. Sivaramakrishnan et al. (2017) also examined the relation between FL and investment intentions. The study employ the TPB to explain investor decision making in India. The TPB stated investors' FL as a part of PBC (Ajzen, 1991). The findings of the study are that investors' PBC significantly affected by FL. According to Raut (2020) FL positively influence ATT and PBC. This explains that FL makes investors confident about their sophisticated financial decisions and make their ATT favorable towards investment intention and enhance PBC towards intention to invest in financial Assets.

5. Research gap for Further Studies

After conducted this SLR, the study find out that although TPB represent well-established intention theories, other conventional and behavioral sciences theories should be used to investigate the relationship between FL and investment intention in financial assets. As the individuals financial needs as well as and financial assets choices changes over time, policies and strategies must match the changes and for this perpetual researches required in future to be up to date Additionally, young investors are capable in digitally searching and assessing financial nformation. Also FL seems an important factor to determine financial assets intention but some other factors are also important such as some researcher like Memon et al (2019) highlights the effect of religiosity on investments intention and behavior which is also need to be focused in further studies.

6. Conclusion

The study is conducted to examine the FL influencing investment intention in financial assets. The current body of knowledge is contributed practically and theoretically by this SLR as the review could facilitate the stakeholders (financial practitioners including financial institution and researchers) to plan relevant financial product according to the need of investors. Also highlighted the importance of FL in investment decisions and its impact on the intentions of investors. Although most studies used TBP and TRA, some studies directly examine FL impact on investment intention. Value-added investment options must be presented to attract new investors. Contemporary advance research should be consider in future work to be done in that particular field and consider needs of the investors as well as other factors that affect their intentions and behavior. Also consider the world after the wake of the COVID-19 pandemic.

Table 2

Database -	Keyword search - 200 documents extracted
Web of Science	49searched, 8 selected
Scopus	38 searched, 7 selected
Google Scholar	113 searched 15 selected
	Research Documents selected for the study

References

Adil, M., Singh, Y. & Ansari, M. S. (2022). Does FL affect investor's planned behavior as a moderator?, *Managerial Finance*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/MF- 03-2021-0130

Ahmed, T., Kabir, S. and Aziz, A. (2021), "Exploring the prospects for Islamic home finance in the UK: evidence from the industry practitioners' perspective", International Journal of Business and Society, Vol. 21 No. 1, pp. 353-368.

Ajzen, I. and Fishbein, M. (1985). Understanding ATTs and Predicting Social Behavior, Prentice-Hall, Englewood Cliffs, NJ.

Ajzen, I. (1991). The TPB. Organizational Behavior and Human Decision Processes, 50(2), 179-211. http://dx.doi.org/10.1016/0749- 5978(91)90020-t

Akhtar, D., & Das, N., (2018). Predictors of investment intention in Indian stock markets, extending the TPB. International. *Journal of Bank Marketing.*

Alexander, P.A. (2020), "Methodological guidance paper: the art and science of quality systematic reviews", Review of Educational Research, Vol. 90 No. 1, pp. 6-23, doi: 10.3102/0034654319854352.

Amin, H. (2020a), "Critical success factors for the receptiveness of Islamic home financing inMalaysia", International Journal of Emerging Markets, Vol. 15 No. 5, pp. 849-873.

Amin, H. (2020b), "Examining the influence of factors critical for the consumer to accept the offered Islamic home financing", Journal of Islamic Accounting and Business Research, Vol. 11 No. 7,

pp. 1379-1402

Ajetunmobi, A.T., Ibrahim, N. and Hamid, S. (2018), "Using decomposed TPB to predict customers intention to adopt Islamic home financing", Emperor International Journal of

Finance and Management Research, Vol. 4 No. 4, pp. 83-92.

Bahari, Z., Hatizal, N. and Doktoralina, C.M. (2019), "Study of direct relationship determinants on the selection of musyarakah mutanaqisah products (MM)", International Journal of Innovation,

Creativity and Change, Vol. 6 No. 1, pp. 121-132

Becker, B., & Ivashina, V. (2015).Researching for yield in the bond market.Journal of Finance, 70 (5) (2015), pp. 1863-1902

Bongomin, GO. C., Munene, J. C., Ntayi, J. M., & Malinga, C. A. (2019). Nexus between FL and financial inclusion: Examining the moderating role of cognition from a developing country perspective. *International Journal of Bank Marketing, 36(7),* 1190-1212

Bruggen, E.C., Hogreve, J., Holmlund, M., Kabadayi, S. and L € €ofgren, M. (2017), "Financial well-being: a conceptualization and research agenda", Journal of Business Research, Vol. 79, pp. 228-237.

Braun, V. and Clarke, V. (2019), "Reflecting on reflexive thematic analysis", Qual Res Sport ExercHealth, Vol. 11 No. 4, pp. 589-597, doi: 10.1080/2159676X.2019.1628806.

Cavazos, A. (2013). FL and professional mission. *CFA Institute Magazine, 24(3), 13-13*. http://dx.doi.org/10.2469/cfm.v24.n3.5

Chen, X. & Wan, P. (2020). Social trust and corporate social responsibility: Evidence from China Corporate Social Responsibility and Environmental Management, 27 (2) (2020), pp. 485-500

Cucinelli, D., Gandolfi, G., & Soana, M. (2016). Customer and Advisor Financial Decisions: the TPB Perspective. *International Journal of Business and Social Science .7(12)*

Devlin, J.F. (2001), "Consumer evaluation and competitive advantage in retail financial services: a research agenda", European Journal of Marketing, Vol. 35 Nos 5/6, pp. 639-660.

Ding, S. A., Guariglia, J.B.& Knight. (2013). Negative investment in China: Financing constraints and restructuring versus growth. Journal of Banking & Finance, 37 (5), pp. 1490-1507

Du, J., Li,C.& Wang, Y. (2017). A comparative study of shadow banking activities of non-financial firms in transition economies. China Economic Review, 46 ,pp. S35-S49

Fedorova, E. A. e., Nekhaenko, V. V., & Dovzhenko, S. E. e. (2015). Impact of FL of the population of the Russian Federation on behavior on financial market: Empirical evaluation. Studies on Russian Economic Development, 26(4), 394-402.

Gopi, M., & Ramayah, T. (2009). Applicability of TPB in predicting intention to trade online: Some evidence from a developing country. *International Journal of Emerging Markets*, 2(4), 348-360. https:// doi.org/10.1108/17468800710824509.

Grohmann, A. (2018), "FL and financial behavior: evidence from the emerging Asian middle class", Pacific-Basin Finance Journal, Vol. 48, pp. 129-143.

Gusenbauer, M. and Haddaway, N.R. (2020), "Which academic search systems are suitable for systematic reviews or Meta-analyses? Evaluating retrieval qualities of google scholar PubMed
and 26 other resources", Research Synthesis Methods, Vol. 11 No. 2, pp. 181-217, doi: 10.1002/ jrsm.1378.

Haddaway, N.R., Collins, A.M., Coughlin, D. and Kirk, S. (2015), "The role of google scholar in evidence reviews and its applicability to grey literature searching", PLoS One, Vol. 10 No. 9, p. e0138237,
doi: 10.1371/journal.pone.0138237.

Haddaway, N.R., Macura, B. and Whaley, P. (2018), "RepOrting standards for sys- tematic evidence syntheses: pro forma, flow-diagram and descriptive summary of the plan and conduct of environmental systematic reviews and systematic maps", Environmental Evidence, Vol. 7 No. 1, doi: 10.1186/s13750-018-0121-7.

Hong, Q.N., Pluye, P., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P.,Griffiths, F., Nicolau, B., O'Cathain, A., Rousseau, M.-C. And Vedel, I. (2018), Mixed Methods
Appraisal Tool (MMAT), Canadian Intellectual Property Office, Industry Canada.

Huang, J.L., Luo, Y. & Peng, Y.C. (2019).Corporate financial asset holdings under economic policy uncertainty: Precautionary saving or speculating?International Review of Economics and Finance. 10.1016/j.iref.2019.11.018

Kashif, M., Zarkada, A., & Thurasamy, R. (2017). The moderating effect of religiosity on ethical behavioural intentions: an application of the extended TPB to Pakistani bank employees. *Personnel Review. 46 (2).*

Koropp, C., Kellermanns, F.W., Grichnik, D. & Stanley, L. (2014). Financial decision making in family firms: an adaptation of the TPB. *Family Business Review, 27(4)*, 307-327

Kourtidis, D., Chatzoglou, P., & Sevic, Z. (2017). The role of personality traits in investors trading behaviour: Empirical evidence from Greek. International Journal of Social Economics, 44(11), 1402-1420.

Lusardi, A. and Mitchell, O. (2007), "FL and retirement preparedness: evidence and implications for financial education", Business Economics, Vol. 42 No. 1, pp. 35-44.

Lusardi, A. and Mitchell, O. (2011), FL and Planning: Implications for Retirement Wellbeing, (NBER Working Paper No. W17078), National Bureau of Economic Research, Cambridge, MA

Mahastanti, L., & Hariady, E. (2014). Determining the factors which affect the stock investment decisions of potential female investors in Indonesia. *International Journal of Process Management and Benchmarking*

Mitchell, O. and Mukherjee, A. (2017), "Assessing the demand for micro pensions among India's poor", The Journal of the Economics of Ageing, Vol. 9, pp. 30-40.

Memon, y., Azhar, s., Haque, R., & Bhutto, N. (2019). Religiosity as a moderator between TPB and halal purchase intention. *Journal of Islamic Marketing. 1(11).*

Mohd, A., Yogita, S., & Mohd, S.M. (2022). Does FL affect investor's planned behavior as a moderator? Managerial Finance Vol. 48 No. 9/10, 2022 pp. 1372-1390 .

Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999).The determinants and implications of corporate cash holdings. Journal of Financial Economics, 52 (1), pp. 3-46

Organization for Economic Cooperation and Development (OECD) (2017), G20/OECD INFE Report on Adult FL in G20 Countries, OECD, Paris, available at: http://www.oecd.org/daf/ fin/financial-education/G20-OECDINFE-report-adult-financial-literacy-in-G20-countries.pdf.

Petticrew, M. and Roberts, H. (2006), Systematic Reviews in the Social Sciences: A Practical Guide, Oxford, Blackwell Publishing.

Phan, C.K., & Zhou, J. (2014). Vietnamese individual investors' behavior in the stock market: An exploratory study. *Research Journal of Social Science and Management, 3(12),* 46-54

Raut, R. K. (2020). Past behavior, FL and investment decision-making process of individual investors. *International journal of emerging market. 15(6).*

Sabir, S. A., Javed. T., Khan.S. A. & Javed. M. Z. (2021). Investment Behaviour of Individual Investors of Pakistan Stock Market with Moderating Role of FL.Journal of Contemporary Issues in Business and Government 27(2):2021

Sayuti, K.M., Amin, H., Razak, D.A. and Rizal, H. (2020), "Receptiveness of Islamic home financing among Malaysians: a revisit", International Journal of Business and Society, Vol. 21 No. 2,
pp. 784-802.

Shaffril, H.A.M., Samsuddin, S.F. and Abu Samah, A. (2021a), "The ABC of systematic literature review: the basic methodological guidance for beginners", Quality and Quantity, Vol. 4, doi:
10.1007/s11135-020-01059-6.

Shaffril, H.A.M., Samah, A.A. and Samsuddin, S.F. (2021b), "Guidelines for developing a systematic literature review for studies related to climate change adaptation", Environmental Science and
Pollution Research, Vol. 28 No. 18, pp. 22265-22277.

Shaikh, I.M. and Noordin, K. (2020), "Acceptance of islamic Equity-Based mortgage product: an extension of decomposed TPB", Journal of Islamic Monetary Economics

and Finance, Vol. 6 No. 2, pp. 403-418.

Sharma, M., & Gupta, S. (2011). Role of subjective norm in investment decision making of casual investors. *Indian Journal of Finance, 5(11),* 1-12

Sivaramakrishnan, S., Srivastava, M., & Rastogi, A. (2017). Attitudinal factors, FL, and stock market participation. *International Journal of Bank Marketing, 35(5),* 818-841

Van Rooij, M.C., Lusardi, A. and Alessie, R.J. (2012), "FL, retirement planning and household wealth", The Economic Journal, Vol. 122 No. 560, pp. 449-478.

Whittemore, R. and Knafl, K. (2005), "The integrative review: updated methodology", Journal of Advanced Nursing, Vol. 52 No. 5, pp. 546-553, doi: https://doi.org/10.1111/j.1365-2648.2005.

03621.x.

Zabri, M.Z.M. and Mohammed, M.O. (2018), "Examining the behavioral intention to participate in a cash Waqf-Financial Cooperative-Musharakah mutanaqisah home financing model",

Managerial Finance, Vol. 44 No. 6, pp. 809-829.