# The effect of financial literacy on financial inclusion, social capital, and cognition on beginner and experienced investor

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#### ABSTRACT

This study examines how financial literacy affects financial inclusion, social capital, and cognition in stock investors. Prospective investors or investors can manage per-sonal finances in the future. This research involves many samples with cross-sectional data. JEL Classification: This research consists of the independent variables, financial literacy, and the dependent variables consist of financial inclusion, social capital, and cognition. The dependent variable of financial inclusion consists of access, quality, usage, and welfare; social capital consists of the dimensions of collective action, bonding, bridging and trust, and cognition. DOI: The independent variable of financial literacy consists of the dimensions of skill, behavior, knowledge, and attitude. The collected respondents were taken from 165 respondents, and they were analyzed using the structural equation modeling. After processing the data, it shows that the effect of financial literacy and cognition on financial inclusion is supported, and financial literacy on social capital cognition is supported. Meanwhile, social capital towards inclusion literacy needs to be supported. Based on the results, stock investors must be more careful in choosing investment products/institutions to avoid fraud.

#### ABSTRAK

Penelitian ini menguji bagaimana literasi keuangan mempengaruhi inklusi keuangan, modal sosial, dan kognisi pada investor saham. Calon investor atau investor dapat mengelola keuangan pribadi di masa depan. Penelitian ini melibatkan banyak sampel dengan data cross-sectional. Penelitian ini terdiri dari variabel independen yaitu literasi keuangan dan variabel dependen yaitu inklusi keuangan, modal sosial dan kognisi. Variabel dependen inklusi keuangan terdiri dari akses, kualitas, penggunaan, dan kesejahteraan; modal sosial terdiri dari dimensi tindakan kolektif, ikatan, menjembatani dan kepercayaan, dan kognisi. Variabel independen literasi keuangan terdiri dari dimensi keterampilan, perilaku, pengetahuan, dan sikap. Data responden yang terkumpul diambil dari sebanyak 165 responden, yang kemudian akan dianalisis dengan menggunakan structural equation modeling. Setelah dilakukan pengolahan, hasil penelitian menunjukkan bahwa pengaruh literasi dan kognisi keuangan terhadap inklusi keuangan didukung, dan literasi keuangan terhadap kognisi modal sosial didukung. Sementara itu, modal sosial terhadap literasi inklusi perlu didukung. Berdasarkan hasil penelitian, investor saham harus lebih berhati-hati dalam memilih produk/lembaga investasi agar Journal of terhindar dari penipuan.

#### Keywords:

Financial literacy, Financial inclusion, Social capital, Cognition.

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## Financial Literacy

#### 1. INTRODUCTION

The development of the investment sector has advanced very much and provided choices for everyone. However, only a few people understand the investment, and often they are tempted by false promises. When investing, investors will usually be faced with risk and return. They also usually use their funds to get high returns but they can face high risks directly.

Risk and return are considered when determining the investment, which is influenced by the customer's profile in making decisions on various investment options. According to the Indonesia Financial Services Authority survey in 2013, financial literacy is divided into four parts, namely well literate (21.84%), sufficient literate (75.69%), less literate (2.06%), and not literate (0.41%). Literacy is a person's knowledge and belief about financial institutions (benefits, risks, capabilities, and obligations). Sufficient literate is someone who knows and believes about financial institutions. Less literate is someone who only knows financial services institutions. Unliterate people need to gain knowledge and confidence about financial services institutions. The Indonesian population's literacy level during 2019 from the National Survey of Financial Literacy and Inclusion (SNLIK) data shows a literacy index of 38.03% and a financial inclusion index of 76.19%. They prove that Indonesian people need to understand the characteristics of financial services fully. Financial literacy provides welfare to individuals through consumer protection and increased financial inclusion.

In 2021-2025, the Indonesia Financial Services Authority (OJK) encouraged increasing the national financial literacy and inclusion index by realizing the pillars of the structural framework of the Indonesian financial services sector master plan It can be done by building a financial services ecosystem through expanding financial access and increasing public financial literacy. These pillars formulate strategic directions for increasing the financial literacy and inclusion index in the National Strategy for Indonesian Financial Literacy and Inclusion (SNLKI) 2021 - 2025 (Indonesia Financial Services Authority-OJK, 2021).

Financial Literacy in Indonesia could be higher, and therefore, it needs to increase public awareness of the importance of financial literacy. By doing so, financial literacy can engage in research among the public to avoid fraud due to a lack of education about financial literacy. Investors are social beings who interact with each other; someone with high literacy can influence individuals with low literacy (Goenadi et al., 2022). Thus, someone with low literacy will interact with someone with high literacy to gain knowledge in making investments and avoid choosing the wrong financial product or service.

Financial literacy helps them make wise financial decisions and choices before consuming complex financial services and products provided by formal financial institutions (Bongomin et al., 2018; Murhadi et al., 2023). Khairani et al. (2019) state that financial literacy is knowledge of basic economic and financial concepts and the skills to utilize their knowledge and other financial skills to manage independent financial resources for future financial well-being effectively. Financial literacy helps people directly apply product and service knowledge and provides knowledge of financial products and services in various types of financial

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products and services (Natalia et al., 2020). Financial literacy proves that the interaction between individuals regarding financial products or services provides additional knowledge and individual skills in managing and determining their investment products (Damayanti & Rokhim, 2023). This condition indicates that financial literacy is essential for potential investors because most potential investors in Indonesia need to realize the importance of managing personal finances in the future.

In this study, te researechers explore the effect of financial literacy on social capital. Research by Goenadi et al. (2022), Khairani et al. (2019), and Natalia et al. (2020) shows that there is a positive effect of financial literacy on social capital because by having a knowledge of financial literacy, the investors have attitudes and affect the surrounding environment. Financial literacy positively influences the level of individual social capital in the knowledge of financial matters and investment dangers. In addition, social capital is one of the resources that have a role in making investments between individuals so that individual interactions are reflected in behavior in making decisions.

This study also investigates the effect of financial literacy on financial inclusion. Financial literacy helps individuals make financial decisions and choices before using financial products or services (Goenadi et al., 2022; Bongomin et al., 2018; Khairian et al., 2019). In addition, the higher the level of individual financial literacy, the higher the level of financial inclusion so that they can easily access funding sources. However, this result contradicts the research conducted by Natalia et al. (2020), which states that financial literacy is insignificant because someone who knows will have more confidence in the information conveyed by people around him. This insignificant is supported by research by Goenadi et al. (2022), which shows the questionnaire results that most respondents agree that financial literacy educates people to gain an understanding and evaluate financial products and services to make informed decisions. Financial learning can improve individual financial decisions, choices, attitudes, and behavior (Bongomi et al., 2016); Goenadi et al., 2022).

Research by Goenadi et al. (2022), Khairani et al. (2019), and Natalia et al. (2020) state that social capital on financial inclusion has a positive effect because it provides information about facilities, transactions, and access to services to prevent problems. Social capital encourages individuals to grow in financial inclusion to learn from each other, influence each other between individuals, and provide information about financial products that can be accessed according to the needs of each individual. In addition, financial inclusion positively influences the surrounding environment through interactions with financial institutions. This positive is supported by Goenadi et al.'s research (2022), which shows that the results of the questionnaire show that most respondents agree that social capital positively impacts the group and increases individual knowledge and skills in managing finances.

In the research by Bongomin et al. (2018), there are different variables, one of them is cognition. The results of cognition research on financial inclusion have a positive effect because cognition influences individual culture, which can develop habits and skills in accessing financial services. According to Bongomin et al. (2018), most underprivileged households

depend in part on their ability to use several dimensions of their memory and cognitive skills to make better financial decisions.

Cognition determines individual financial inclusiveness through access and use provided by financial institutions based on shared understandings and meanings combined by culture. The results of a research by Bongomin et al. (2018) show that community cognition can determine individual financial inclusion through access to and use of financial services provided by financial institutions. According to Hall and Soskice (2001) and Bongomin et al. (2018), cognition helps underprivileged people access and use financial services based on shared understanding and ordinary meaning through language united with culture. Research by Bongomin et al. (2018) found that financial literacy on cognition has a positive effect because cognition provides development to individuals to grow with the times.

Based on the above argument, the use of logic and individual abilities can follow the rules and make financially sound decisions. Iindividual abilities can be obtained through education and experience. In addition, children for example can imitate adult behavior in financial matters. In making financial decisions, it is necessary to harmonize individual knowledge and skills to avoid misunderstandings about the financial services provided. This condition is supported by research by Bongomin et al. (2018), showing that financial literacy and cognition are positively and significantly related. In addition, it is said that variations in cognition can lead to changes in financial literacy.

Based on the problem identification previously described, the research problem is formulated as follows: (1) Does financial literacy positively influence social capital in novice and experienced stock investors in Indonesia? (2) Does financial literacy positively influence financial inclusion among Indonesia's novice and experienced stock investors? (3) Does social capital positively influence financial inclusion in Indonesia's novice and experienced stock investors? (4) Does cognition positively influence financial inclusion in novice and experienced stock investors in Indonesia? (5) Does financial literacy positively influence cognition in novice and experienced stock investors in Indonesia?

#### 2. THEORETICAL FRAMEWORK AND HYPOTHESIS

Behavioral finance studies how investors make judgments and choices in financial markets by including psychological elements to explain investor preferences and behavior (Goenadi et al., 2022). *Behavioral finance* is a discipline in which the interaction of various disciplines is inherent and continuously integrated so that the discussion is not carried out in isolation (Beatrice et al., 2021). Meanwhile, Pradikasari and Isbanah (2018) state that behavioral finance is related to an investor's behavior, which is explained in several financial phenomena that are usually understood using several models where several investors make various investment decisions based on risk and return considerations.

The social capital, for instance, is a source of knowledge and identity brought into community interactions individually and collectively, and it is an available source of social capital (Goenadi et al., 2022). *Social capital* is a resource that has a purpose in every interaction between individuals to build individual knowledge and skills. Natalia et al. (2020) found that

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there is an influence of social networks that have strength on financial education with the financial literacy they have. Therefore, individuals' knowledge can increase their understanding of financial matters, increase awareness of the risks, and influence decision-making. A person with high financial literacy will be more confident in social interactions. Individuals can interact and build trust to be more confident in the information conveyed by people around or closest to them in making decisions. Based on the explanation above, there is a relationship between financial literacy and social capital. Therefore, the higher the level of individual interaction, the greater the influence caused in determining investment decisions. For that reason, this research formulates the following hypothesis:

H1: Financial literacy has a positive influence on social capital

Financial literacy can help improve the efficiency and quality of financial services (Goenadi et al., 2022). Financial literacy encourages people to access financial services and helps people to set up bank accounts to avoid fraud. Bongomin et al. (2018) explain that financial literacy is relevant for underprivileged communities that operate at the margin and are vulnerable to persistent downward financial pressures. Meanwhile, Natalia et al. (2020) also found that financial literacy has a positive influence on financial inclusion. Using model results, it shows that the positive changes in the level of skills, knowledge, and understanding, as well as basic financial concepts regarding financial services are associated with increased financial inclusion in terms of access, use, and quality among individuals. Thus, financial literacy can educate the public to understand and evaluate financial products and services in making the right decisions to maximize utility. Some studies also prvoded that the higher the knowledge of financial literacy, the higher the level of knowledge about financial inclusion. Therefore, people with a high level of financial literacy will more easily access better funding sources (Goenadi et al., 2022; Tambun & Nurwanti, 2023; Murhadi et al., 2024). Based on the explanation above, there is a relationship between financial literacy and financial inclusion. So, the higher the level of financial inclusion knowledge, the higher the financial literacy. So, this study formulates the following hypothesis:

H2: Financial literacy has a positive influence on financial inclusion.

The social capital of low-income people tells us that trusts and networks are a substitute for the lack of physical collateral that allows access to financial services (Goenadi et al., 2022). In addition, social capital facilitates financial education in knowledge and skills through network interactions, crucial to increasing financial inclusion. Social capital also has a relationship between social intermediation and access to financial services to some extent. In general, financial literacy has a vital role in improving resources, including knowledge and skills possessed by individuals. The environment can influence a person's level of financial literacy, so a neighborhood with high interaction will increase the level of interaction with financial institutions. Based on the explanation above, there is a relationship between social capital and financial literacy. So, the higher the level of interaction, the more significant the effect. So, this research formulates the following hypothesis:

H3: Social capital has a positive influence on financial inclusion.

Bongomin et al. (2018) agreed that people need ability to record incoming financial information and direct it to various financial services. Therefore, individuals depend on using several dimensions to remember and use cognition skills to make better decisions. Christelis et al. (2006) stated that cognition skills use math, verbal, and recall tests for investment power in the stock market. Le et al. (2019) state that financial inclusion describes how adult members of society are given access to various appropriate financial services designed based on their needs and provided at an affordable cost. Financial inclusion is a term that refers to a situation where all working-age adults have adequate access to financial services provided by formal financial institutions in the form of credit, savings (including current accounts), payments, and insurance (Goenadi et al., 2022). Based on the explanation above, there is a relationship between cognition and financial inclusion. Thus, the higher the cognition, the more it will affect the access provided by financial institutions. Terefore, this study formulates the following hypothesis:

H4: Cognition has a positive influence on financial inclusion

Financial literacy can be defined as the process by which financial consumers or investors improve their understanding of financial products and concepts through information, instruction, and objective advice. It can develop the skills and confidence to become more aware of financial risks and opportunities to take other practical actions to improve their financial well-being (Bongomi et al., 2018). Financial literacy provides the right choices and actions in making financial choices. Willis (2009) states that increasing experience in financial matters as individuals mature helps to increase financial knowledge. Therefore, most individuals indirectly depend on the ability level of cognition. Financial literacy may not affect individual financial decisions but can affect financial decision-making through personality traits based on cognition (Bongomin et al., 2018).

When making decisions, people perceive and interpret, they will be guided by culture to find a way out of a problem and use knowledge to evaluate. According to Piaget's theory, the four stages of development show that cognition abilities become more sophisticated at each stage as individuals grow. Fort that reason, in the third stage, logic and the ability to follow rules are critical capacities for making financially sound decisions that emerge.

Indeed, an individual's ability to plan by considering all possibilities can provide an advantage in financial decision-making (Murhadi et al., 2024). Hence, the ability to cognition step by step. Therefore, cognition theory highlights the importance of stage-appropriate financial literacy, and financial literacy primarily does not affect individual financial decisions. However, it can be influenced by their personality through cognition. Based on the explanation above, there is a relationship between financial literacy and cognition. So, financial literacy does not significantly influence individual personality through cognition. So, this study formulates the following hypothesis:

H5: Financial literacy has a positive influence on cognition

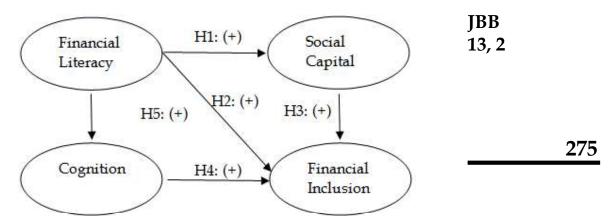


Figure 1 Research Chart

#### 3. RESEARCH METHODS

The type of research used in this research is basic research and causal research because it explains the effect of the independent variable (financial literacy) on the dependent variable (financial inclusion, social capital, and cognition). The dependent variable of financial inclusion consists of access, quality, usage, and welfare; social capital consists of the dimensions of collective action, bonding, bridging and trust, and cognition. The independent variable of financial literacy consists of the dimensions of skill, behavior, knowledge, and attitude.

Financial inclusion has four dimensions, access, quality, usage, and welfare, adapted to measure financial inclusion in the study. This access has two indicators used as measuring instruments for financial inclusion variables: Access to transaction services provided by financial institutions is safe to use, and the administrative costs charged are affordable. Quality has two indicators that are used as measuring instruments for financial inclusion variables: Investment products provided by financial institutions are relatively safe to use, and the cost of traveling from my location to the location of the financial institution is low.

Usage has two indicators used as a measuring tool for financial inclusion variables: Investment products provided by financial institutions suit my needs, and the transaction terms provided by financial institutions are favorable. Welfare has four indicators that are used as a measuring tool for financial inclusion variables, namely: Products/services provided by securities companies can increase the income; Products/services provided by securities companies have increased the access to utilities; Products/services provided by securities companies have increased my access to convenient facilities; and Investment products provided by securities companies suit the needs (Camara & Tuesta, 2014).

Social capital has dimensions, namely collective action, bonding, Bridging, and trust, adapted to measure social capital in research. Collective action has three indicators used to measure social capital variables: I am constantly involved in charity to serve the community, I always share information with other community members, and I always want to give something valuable to the community.

Bonding has three indicators used as a measuring tool for social capital variables: I am always honest in my community, have a high sense of trust, and treat others as equals. Bridging has three indicators that are used as a measuring tool for social capital variables: I always share plans with others, I always share ideas and thoughts with others, and I always share the ability of what I do with others. Trust has three indicators that are used as measuring instruments for social capital variables, namely: Most people who live in my community can be trusted; I generally trust others when it comes to borrowing and lending money in the community; and I am always polite among my community (Babaei et al., 2012; Parthasarathy & Chopde, 2000).

Cognition is the acquisition, structuring, and use of knowledge, a person's behavior that is not solely influenced by rewards and reinforcement (Rosyid & Baroroh, 2019). In this cognition, three indicators are used to measure cognition variables: I can make decisions about daily financial problems, handle daily financial problems, and make financial predictions.

Financial literacy is knowledge of basic economic and financial concepts to effectively utilize their knowledge and other financial skills to manage independent financial resources for future financial wellbeing (Khairani et al., 2019, Murhadi et al., 2024). According to Kholilah and Iramani (2013), behavior is a person's ability to manage (planning, budgeting, controlling, searching, and storing) daily financial funds. This behavior has three indicators used as measuring instruments for financial literacy variables: I always set aside investment money regularly and use money according to the budget I set. Attitude is an evaluative, pleasant, and unpleasant demand towards individuals and events (Utami, 2021). This attitude has two indicators that are used as measuring instruments for financial literacy variables, namely: I am always interested in financial news, and I feel very interested in dealing with financial institutions. Knowledge is understanding, analyzing, and managing finances to make the right financial decisions to avoid financial problems (Goenadi et al., 2022). This knowledge has three indicators used to measure financial literacy variables: I can prepare a personal budget; I am financially capable of making good use of financial products/services; and I compare prices before making transactions on financial products/services. Skill describes financial skills as a way of making decisions in personal financial management (Utami, 2021). This skill has two indicators that are used as measuring instruments for financial literacy variables; namely, I can accurately determine the benefits of financial transactions, and I can accurately determine the costs of financial transactions.

This study uses quantitative data by distributing questionnaires to responses to obtain data. The research used the SEM-PLS (Structural Equation Modelling - Partial Least Square) analysis method with the help of smart PLS software in data processing. The measurement level used in this study is the interval level using a four-point Likert scale. This study takes the target population, namely potential investors in Indonesia. Criteria in determining the sample are as follows: Investors who live in Indonesia and as Indonesian citizens (WNI) who invest in stocks listed on the IDX; Investors are at least 17 years old; Novice stock investors and already have experience (at least one year) or investment knowledge.

In this study, questionnaires were distributed to 179 respondents; of the 179 respondents obtained, 165 could be used. The total sample of 165 respondents has the criteria that respondents are Indonesian citizens, investors over 17 years old, and novice stock investors who already have experience (at least one year) or investment knowledge.

Of the 165 respondents, 129 (79.3%) were in the age range of 17-24 vears, while 36 respondent (20.7%) were in the age above 24 years old. Regarding gender, 65 people (39.7%) were male, and 100 respondents (60.3%) were female. Regarding domicile, 112 respondents (68.7%) came from Surabaya City, while 53 people (31.3%) came from outside Surabaya. For education, 94 people (41.9%) have the latest high school education, diploma/bachelor's degree reached 66 people (55.3%), postgraduate as many as five people (2.8%). Regarding job categories, 27 people (15.6%) work related to financial institutions, and 138 people (84.4%) are in jobs unrelated to financial institutions. Regarding investment experience, 146 (94.4%) people have 1-3 years of investment experience, and 19 people (5.6%) have more than three years of experience. In terms of income, 111 people (68.7%) earn less than Rp. 5 million/month, 49 people (27.9%) earn 5-10 million, and five people (3.4%) earn more than 10 million. Furthermore, Appendix 1 contains the results of validity and Appendix 2 for reliability tests. The validity test for each variable indicator is valid if the significant value is  $\leq 0.05$  and the Pearson correlation value is  $\geq 0.3$ . The reliability test is measured using Cronbach's alpha. The variable can be reliable if the Cronbach's alpha value is > 0.6.

Knowledge is understanding, analyzing, and managing finances to make the right financial decisions to avoid financial problems (Goenadi et al., 2022). This knowledge has three indicators used to measure financial literacy variables: I can prepare a personal budget; I am financially capable of making good use of financial products/services; and I compare prices before making transactions on financial products/services. Skill describes financial skills as a way of making decisions in personal financial management (Utami, 2021). This skill has two indicators that are used as measuring instruments for financial literacy variables; namely, I can accurately determine the benefits of financial transactions, and I can accurately determine the costs of financial transactions.

This study used quantitative data by distributing questionnaires to the respondents. The research used the SEM (Structural Equation Modelling) analysis method with the help of smart PLS software in data

> Table 1 **Hypothesis Testing Results**

Hypotesis	Path	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values	
H1 (+)	FL → SC	0,037	22,243	0,000	
H2 (+)	$FL \rightarrow FI$	0,108	5,672	0,000	
H3 (+)	SC → FI	0,100	1,009	0,313	
H4 (+)	$C \rightarrow FI$	0,071	2,262	0,024	
H5 (+)	$FL \rightarrow C$	0,031	25,664	0,000	

Source: Data Processed

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processing. The measurement level used in this study is the interval level using a four-point Likert scale. This study got the target population, namely potential investors in Indonesia. Criteria in determining the sample are as follows: Investors who live in Indonesia and as Indonesian citizens (WNI) who invest in stocks listed on the IDX; Investors are at least 17 years old; Novice stock investors and already have experience (at least one year) or investment knowledge.

#### The Effect of Financial Literacy on Social Capital

The first hypothesis found a relationship between financial literacy and social capital, where a relationship between financial literacy and social capital is accepted. H1 has a t-statistics value of 22.243, higher than the t-table, and a p-value of 0.000, less than the 0.05 significance level. This significance proves that H1 is in line with the research results by Goenadi et al. (2020), which state that financial literacy has a positive and significant effect on social capital. From the questionnaire, most of the respondents have the latest education, namely Diploma Strata 1. This condition proves that having a high financial literacy knowledge (knowledge and skills) also influences high social capital (trust and collective action).

Investors who know about financial literacy will be able to determine their best decisions before determining their investment products. In addition, investors can determine the benefits and financial decisions that provide financial benefits. Investors in a group will be involved and share information and knowledge related to financial institutions. In a group, investors can exchange ideas with other people in the same group to determine the best decision to make. The findings are in line with previous studies that discuss the importance of financial literacy and social capital (Goenandi et al., 2022; Khairani et al., 2019; Natalia et al., 2020), proving that financial literacy can help the community in terms of creating social capital to create a community that has financial knowledge that can help improve a highly knowledgeable environment related to finance.

Current conditions show that investors in Indonesia have a relatively high level of financial literacy in determining financial decisions. When viewed from the educational background of respondents, on average, have a Strata 1 (S1) education, every decision to be made by respondents can be influenced by the level of social capital where respondents have a high enough level of education to choose in determining each of their decisions to get the financial management knowledge needed by respondents.

#### The Effect of Financial Literacy on Financial Inclusion

The second hypothesis found a relationship between financial literacy and financial inclusion, where a relationship between financial literacy and financial inclusion is accepted. H2 has a C.R. value greater than 1.96, which is 5,672, and has a p-value of 0.000. This result proves that H2 is in line with the research results by Goenadi et al. (2020), which state that financial literacy has a positive and significant effect on social capital variables. The results obtained from the questionnaire state that most respondents agree that the accuracy of the data provided by financial institutions will influence a person in determining the benefits that can be received when making transactions and influencing respondents to determine the product or service to be received. Currently, access to financial services that are easy to achieve makes access to financial

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inclusion in Indonesia have a high impact on the knowledge and skills of investors in Indonesia. This high level of financial inclusion results in financial literacy significantly affecting financial inclusion. The findings align with previous studies that discuss financial literacy as having a significant effect on financial inclusion (Goenandi et al., 2022; Khairani et al., 2019; Bongomin et al., 2018; Natalia et al., 2020) because investors in Indonesia can maximize financial literacy and the high efforts made by financial institutions to increase education on financial service products.

The high level of investment education and knowledge of financial services, especially investments, in Indonesia can also be used properly. As well as financial institutions in Indonesia that can provide education on the use of features in financial services, thus causing investors to quickly understand the benefits of using existing financial services. In addition, the ability of each investor to use financial services can provide more understanding, for financial literacy is high enough to affect financial inclusion. In the current condition, the results of my questionnaire show that the age level of respondents is 17-24 years old, which has a relatively high level of financial literacy. Financial inclusion is high because the education of Indonesian respondents regarding the ways and rules of using financial services is well received. This fact is also due to investors in Indonesia who can receive financial literacy knowledge towards financial inclusion. As a result, investors easily understand how to use each of the existing investment products. Adequate education on financial service products will benefit respondents, and efficient product usage procedures can provide full-value benefits to respondents.

#### The Effect of Social Capital on Financial Inclusion

The third hypothesis found a relationship between social capital and financial inclusion, whereas there is a relationship between financial literacy and financial inclusion is rejected. H3 has a t-statistics value of 1,009, more significant than the t-table, and a p-value of 0.313, more significant than the 0.05 significance level. This insignificant proves that hypothesis 3 is rejected and is not in line with the research of Irman (2022), which states that social capital has a negative and significant effect on financial inclusion. The results of the questionnaire data show that the ability to have an opinion, help, trust, make plans, share information, express, and be active in the community does not necessarily affect a person in determining the use of respondents' financial service products for daily life. This condition happens because the financial service products provided by financial institutions have yet to fulfill the needs, convenience, quality, and flexibility of the services provided to respondents. Therefore, the inability of financial institutions to meet respondents' demand for financial services results in the influence of social capital on financial inclusion being rejected. This result is supported by Irman (2022), who states that social capital hurts financial inclusion because poor social capital will have a decreasing impact on financial inclusion.

Investors need more confidence in the financial services available at financial institutions, and there needs to be more investor confidence in the quality of the security provided by financial institutions. Sich a condition has an impact that social capital does not affect financial inclusion. In addition, novice investors who do not have extensive

experience in investing and only follow trends with the invitation to get much profit provide a separate problem. This is due to the fact that there is no influence from social capital on financial inclusion. With this happening, investors are expected to expand the net, can change their mindset and understanding of investment in order to avoid investments that only provide false promises and the need to increase good social capital between investors so that they are in an environment that has sufficient investment information (bridging) so that investors are not easily fooled and do not only rely on trust between fellow individuals in the surrounding environment without finding out first about the investment products offered. The results of this study do not follow previous research, which shows that social capital affects financial inclusion (Goenandi et al., 2022; Khairani et al., 2019; Natalia et al., 2020).

#### The Effect of Cognition on Financial Inclusion

The fourth hypothesis found a relationship between cognition and financial inclusion, where a relationship between cognition and financial inclusion is rejected. H4 has a t-statistics value of 2,262, higher than than the t-table, and the p-value of 0.024 is smaller than the 0.05 significance level. This significance proves that hypothesis 4 is in line with the research of Bongomin et al. (2018), which states that cognition has a positive and significant effect on financial inclusion. From the results obtained from the questionnaire, most respondents agreed that the ability to predict, make decisions, and handle daily financial problems can affect the use of financial transaction service products. This result is because financial service products provided by financial institutions can meet the needs, convenience, and security and provide profitable costs for respondents quickly and accurately. So, the ability of financial institutions to meet respondents' satisfaction results in the influence of cognition on financial inclusion being accepted.

The condition above shows that respondents consider predicting, making decisions, and handling daily financial problems that can affect the use of financial services. This fact is because existing financial services can provide benefits to respondents well. This result is also supported by the results obtained in this study, which is where the age of respondents' ranges from 17-24 years. Thus, at this age, respondents will tend to minimize time well to make money and maximize financial to increase financial assets.

Financial inclusion is an effort to provide accessible and affordable access to finance for people who do not have access to the formal financial system. Meanwhile, cognition is a person's ability to process information and make decisions. Cognition can play a role in financial inclusion, but it is not the only factor that can influence every decision related to financial inclusion. In increasing the influence of financial inclusion through cognition, it can be built in the development of access that suits the needs of respondents. This causes cognition to influence a person's decision in managing their finances. This result proves that cognition is always correlated with financial inclusion but is supported by other factors such as access to appropriate financial products, adequate infrastructure, and supportive regulations in achieving financial inclusion (Bongomin et al., 2018).

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#### The Effect of Financial Literacy on Cognition

The fifth hypothesis found a relationship between financial literacy and cognition, where a relationship between financial literacy and cognition is accepted. H5 has a t-statistics value of 25,664 higher than than the t-table, and the p-value of 0.000 is smaller than the 0.05 significance level. This significance proves that hypothesis 5 is accepted and is in line with the research of Bongomin et al. (2018), which states that financial literacy has a positive and significant effect on cognition. From the results obtained from the questionnaire, it can be seen that most of the respondents have the latest education, namely Diploma / Master's degree. This result proves that if someone has knowledge and skills, it can prove that someone can make sound financial decisions to avoid investment-related fraud.

Besides thhe above, the respondents can handle daily financial problems and predict finances (cognition), which affects the use of knowledge and one's behaviour. This is not solely influenced by rewards and reinforcement so that a person can make decisions about their daily financial problems where a person's mind also has an influence on behavior and emotions which can also be different every day. The findings align with previous studies that discuss the importance of financial literacy and cognition (Bongomin et al., 2018), proving that financial literacy helps a person create good cognition. For that reason, someone who has knowledge and skills related to finance is, of course, able to make daily financial decisions.

Under current conditions, it shows that financial literacy on cognition has a positive effect. This positive is because investors with a high level of financial literacy will quickly understand the knowledge provided and can determine the financial products chosen and needed by respondents. This result is also supported by the results of the average age range of respondents aged 17-24 with an income below 5 million per month; it will be easier to determine their financial decisions because they will make more use of existing financial service products to manage and store the respondents' financial assets.

# 5. CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

The results show that financial literacy positively affects social capital, which means the first hypothesis is accepted. Financial literacy can help the community create social capital, and creating a community with financial knowledge can help improve a highly knowledgeable environment related to finance. Financial literacy significantly affects financial inclusion. Therefore, the second hypothesis is accepted. For investors in Indonesia, they have been able to maximize financial literacy. Besides that, the high efforts made by financial institutions to increase education on financial service products. Social capital has an insignificant effect on financial inclusion, which means the third hypothesis is rejected. Social capital that has less impact on financial inclusion will result in a decreased risk of financial inclusion. In addition, investors who need a sense of trust in existing financial services and the quality and security provided by financial institutions cannot guarantee investors' trust. Financial cognition has a significant positive effect on financial inclusion, meaning the fourth hypothesis is accepted. The ability of financial institutions to meet respondents' satisfaction results in the influence of cognition on financial inclusion. Financial literacy has a significant positive effect on cognition, which means that the fifth hypothesis is accepted. Financial literacy can help the community create social capital, so creating a community with financial knowledge can help improve a highly knowledgeable environment related to finance.

The research implications: The results showed that financial literacy significantly and positively affects social capital. Investors who know about financial literacy will be able to determine their best decisions before determining their investment products. The group will exchange ideas with others in determining the best decision. The results showed that financial literacy has a positive and significant effect on financial inclusion because existing financial services provide easy access, impacting the knowledge and skills of investors in Indonesia. So that this high level of financial inclusion results in the influence of financial literacy.

The above results showed that social capital negatively and significantly affects financial inclusion. It can be concluded that investors who need more investment information (bridging) are easily deceived and only rely on trust between fellow individuals in the surrounding environment without looking for years about the investment products offered. The results showed that cognition has a negative and insignificant effect on financial inclusion. Investors with cognitive skills will find it easier to predict, make decisions, and handle daily financial problems using financial services. The results showed that financial literacy positively and significantly affects cognition. Investors with knowledge and finance skills can undoubtedly make daily financial decisions.

This study adds insight, understanding, and knowledge about the effect of financial literacy (behavior, attitude, skill, knowledge) on financial inclusion (welfare, usage, quality, and access), social capital (collective action, bonding, bridging, and trust) and cognitive in novice and experienced stock investors in Indonesia.

This study has limitations in distributing questionnaires, which were only carried out through social media. For that reasin, some questions may need more understanding. Future researchers are expected to look for the respondents with a more varied age range to minimize the data variances. Then, tey can add journals articles as references for more precise explanations regarding the questions. By doing so, the respondents find it easier to understand the questions given to them.

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Statements	Pearson Correlation	Sig.	Note	13, 2	
Financial Inclusion					
Access to the use of transaction services provided by financial institutions is safe for me to use	0,773**	,000	Valid		
The administration fee charged to me is affordable	0,801**	,000	Valid	28	
Investment products provided by financial institutions are relatively safe for me to use	0,704**	,000	Valid		
The cost of traveling from my location to the location of the financial institution is low	0,833**	,000	Valid		
Investment products provided by financial institutions are suitable with my needs	0,675**	,000	Valid		
The transaction terms provided by the financial institution favorable for me	0,736**	,000	Valid		
Products/services provided by securities companies can increase my income	0,618**	,000	Valid		
The products/services provided by the securities company can increase my income to utility	0,766**	,000	Valid		
The products/services provided by the securities company have increased my access to convenient facilities	0,710**	,000	Valid		
The investment products provided by the securities company meet my my needs	0,534**	,000	Valid		
Social Capital I am always involved in charity to serve in the community	0,656**	,000,	Valid		
I always share information with other members in the community	0,626**	,000	Valid		
I always want to give something useful in the community in the community	0,697**	,000	Valid		
I am always honest in my community	0,834**	,000	Valid		
I always have a high sense of trust among my own community	0,593**	,000	Valid		
I always treat others as equals within my community	0,790**	,000	Valid		
I always share my plans with others	0,860**	,000	Valid		
I always share ideas and thoughts with others	0,882**	,000	Valid		

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Statements	Pearson Correlation	Sig.	Note
I always share my skills about what I do with others	0,841**	,000	Valid
Most people who living in my community are trustworthy	0,722**	,000	Valid
I generally trust others when it comes to borrowing and lending money within the community	0,795**	,000	Valid
I am always polite among my own community	0,442**	,000	Valid
Cognition			
I can make decisions regarding daily financial matters	0,72**	,000	Valid
I can solve daily financial problems	0,819**	,000	Valid
I can make financial predictions	0,739**	,000	Valid
Financial Literacy			
I always set aside investment money regularly	0,651**	,000	Valid
I always use money according to the budget I set	0,685**	,000	Valid
I am always interested in financial news	0,734**	,000	Valid
I feel very interested in dealing with financial institutions	0,721**	,000	Valid
I have the ability to prepare a personal budget	0,657**	,000	Valid
I am financially capable of making good use of financial products/services	0,661**	,000	Valid
I compare prices before making transactions on financial products/ services	0,610**	,000	Valid
I have the ability to accurately determine the benefits of financial transactions	0,589**	,000	Valid
I have the ability to accurately determine the costs of financial transactions	0,817**	,000	Valid

Source: Data Processed

# Appendix 2. Reliability Test Result

No.	Variable	Cronbach'slpha	Note
1.	Financial Literacy	0,854	Reliable
2.	Financial Inclusion	0,811	Reliable
3.	Social Capital	0,885	Reliable
4.	Cognition	0,836	Reliable

Source: Data Processed