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Behavioral Biases and Trust in Social Trading: A Mixed-Method Approach

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Abstract

This research was conducted to extend the study of social trading using the behavioral finance perspective, the role of trust, and a mixed-method approach from followers on social trading platforms. This research uses a mixedmethod approach. In the first stage, semi-structured interviews were conducted with 11 follower traders by snowball sampling to find out the factors that influence traders' investment and trading behavior through social trading platforms. The second stage will quantitatively test the model using SmartPLS with 342 follower traders. Respondents in the second stage are followers of traders with real accounts on social trading platforms. Data was collected by accidental sampling using an online questionnaire distributed through forums and trader communities. The behavioral finance perspective is the basis of this research because empirical psychology can provide a good explanation when people are faced with uncertainty, which in this case is the uncertainty of trading results. Until now, research on social trading has mostly discussed behavioral biases from the perspective of top leaders, not followers. Why people trust and mimic the behavior of traders through social trading platforms is an interesting question. Trust plays a vital role in the world of finance and technology, but very little research has addressed the role of trust in social trading. This research closes that gap by discussing the role of trust in social trading from a behavioral finance perspective. The results of this study conclude that Optimism, Herding, Stereotype bias, Confirmation bias, and Hot hand fallacy have a positive effect on trading decisions. Trust in trader leaders also strengthens the influence of optimism and stereotype bias on trading decisions.

Keywords—Behavioral Biases and Decision Making; Behavioral Finance

Abstrak

Penelitian ini dilakukan untuk memperluas studi tentang perdagangan sosial dengan menggunakan perspektif keuangan keperilakuan, peran kepercayaan dan pendekatan metode campuran dari para pengikut di platform perdagangan sosial. Penelitian ini menggunakan pendekatan metode campuran. Pada tahap pertama, wawancara semi terstruktur dilakukan terhadap 11 trader follower secara snowball sampling untuk mengetahui faktor-faktor yang mempengaruhi perilaku investasi dan perdagangan trader melalui platform social trading. Tahap kedua akan dilakukan pengujian model secara kuantitatif dengan menggunakan SmartPLS dengan 342 follower trader. Responden pada tahap kedua merupakan follower dari trader yang memiliki akun riil di platform social trading. Data dikumpulkan secara accidental sampling dengan menggunakan kuesioner online yang didistribusikan melalui forum dan komunitas trader. Perspektif behavioral finance menjadi dasar penelitian ini karena psikologi empiris dapat memberikan penjelasan yang baik ketika seseorang dihadapkan pada ketidakpastian, dalam hal ini adalah ketidakpastian hasil trading. Hingga saat ini, penelitian mengenai trading sosial sebagian besar membahas tentang bias perilaku dari sudut pandang pemimpin puncak, bukan pengikut. Mengapa orang mempercayai dan meniru perilaku pedagang melalui platform perdagangan sosial adalah pertanyaan yang menarik. Kepercayaan memainkan peran penting dalam dunia keuangan dan teknologi, tetapi sangat sedikit penelitian yang membahas peran kepercayaan dalam perdagangan sosial. Penelitian ini menutup kesenjangan tersebut dengan membahas peran kepercayaan dalam perdagangan sosial dari perspektif keuangan perilaku. Hasil penelitian ini menyimpulkan bahwa Optimisme, Herding, Bias stereotip, Bias konfirmasi, dan Hot hand fallacy berpengaruh positif terhadap keputusan trading. Kepercayaan terhadap pemimpin trader juga memperkuat pengaruh optimisme dan bias stereotip terhadap keputusan trading.

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Kata kunci- Bias Perilaku dan Pengambilan Keputusan; Keuangan Keperilakuan

I. INTRODUCTION

Financial technology has led to many innovations in financial products and services that allow people to access and conduct financial transactions globally without the constraints of place and time. Apart from crowd-investing and robo-advice, social trading is one of the platforms that mark the rapid digitalization of finance and change the way people traditionally invest (Oehler and Wendt, 2018). Social trading is a platform where traders can automatically, simultaneously, and unconditionally copy or follow the investment strategies of other traders they trust (Wohlgemuth, Berger, and Wenzel 2016).

Participants in social trading platforms are divided into two groups: "leader traders" or "signal providers," and "copy traders," "copiers" or "followers" (Erdős, Papp, and Vörös 2022); or "trade leaders" and "copiers" (Gemayel and Preda 2018). The first group is traders who make investment decisions independently, and the second group is traders who copy or follow the activities of the first group.

Social trading platforms are social investment networks that bridge professional traders with novice traders who are just starting out or do not have enough knowledge and experience. Those who feel they lack insight, knowledge, and skills can join the trading that such platforms provide by following the transactions of other investors. Copy traders have many options to choose leader traders who are considered reputable and have trading experience.

Armed with trading capital, copy traders can benefit (and lose) from the leader's trading activities. Finding expert traders with excellent performance and consistent profits is the main challenge of social trading (Lee and Ma, 2018), but not all traders are successful, and followers may lose money. Oehler et al. (2016), who analyzed the returns of 1084 Wikifolio certificates from 2012 to November 2013, showed that, on average, Wikifolio did not outperform the market. Dorfleitner et al. (2018) also found that investing in traders who had high return performance led to large losses.

When copy trading, the copier simply follows the activities of the leader without having to analyze the securities and the market. This condition has an impact on traders who are not ready or confident enough to make their own transactions.

Social trading can change investors' behavior as they tend to value advice from friends before making financial decisions. Copy trading platforms influence behavior in both direct and indirect ways (Apesteguia, Oechssler, and Weidenholzer, 2020). Direct influence is through copying the leader's trades, and indirect influence is through providing information about others' portfolios and successes that users emulate.

Jin, Zhu, and Huang (2019), who looked at social trading in China, showed that social trading networks influence behavior by promoting increasingly risky trading styles and higher volatility over time. Traders who attract attention on social trading platforms tend to trade more (Breitmayer, Mensmann, and Pelster, 2018). Information about one's success makes others willing to take excessive risks (Apesteguia et al., 2020; Stein, Staudt, and Greif-Winzrieth, 2022).

Ammann and Schaub (2021) and Röder and Walter (2019), who observe trader behavior, find strong evidence that followers will replicate portfolios after traders post comments. According to Jin and Yu (2022), followers will trade more often if their leader posts a comment in the previous week. Han, Hirshleifer, and Walden (2022) also find a similar conclusion that social trading will increase risky trading styles. Conservative traders (rarely trading) will gradually turn active after observing active traders who are able to generate high returns in the short term

Why people trust and copy the behavior of traders through social trading platforms is an interesting question. However, to our knowledge, there is very little research that addresses social trading with a trust approach. In fact, trust plays a vital role in finance (Jalan et al., 2023) and technology (Völter, Urbach, and Padget, 2023). After the 2008 financial crisis, the industry experienced a concerning decline in trust (Doering, Neumann, and Paul, 2015), and reduced trust is one of the barriers to online trading (Shankar, Urban, and Sultan, 2002).

Trust is important because users need to trust intermediaries or financial service partners (Oehler and Wendt, 2018). In social trading platforms, people do not know each other, but copiers are willing to rely on signals from other traders (Pan, Altshuler, and Pentland, 2012; Erdős et al., 2022) and risk their money.

This trust-based investment decision is interesting to explore. This research was conducted to extend the study of social trading by using a behavioral finance perspective and a mixed-method approach from followers in social trading. To date, research on social trading has mostly discussed behavioral biases from the perspective of top leaders, not followers. The behavioral finance perspective is the basis of this research because empirical psychology can provide good explanations when people are faced with uncertainty (Pressman, 1998), which in this case is the uncertainty of trading outcomes. Behavioral finance also assumes that humans are creatures that are not always rational in making decisions.

This research is important because there is a need for research on social finance (Hirshleifer, 2015), and studies on social trading are scarce (Röder and Walter, 2019). The novelty of this research is to discuss the role of trust in social trading using a behavioral finance perspective.

II. LITERATURE REVIEW

A. Social Trading

The concept of social and copy trading has taken off in recent years with the advent of new technologies and the growing popularity of online trading platforms and social media. Social trading is a new way to participate in financial markets that combine platforms, social networking, and internet trading with relatively low barriers to entry.

According to Shiller and Pound (1989), investing in speculative assets is a social activity because investors spend most of their free time discussing investments, reading about investments, or gossiping about others' success or failure in investing. These social interactions influence the investment decisions of both individuals and money managers (Shiller, 2017). Social media has come to the forefront of trading as platform content can move markets and predict the volatility and returns of securities (Renault, 2017).

Social trading is a "prosumer" concept that combines producer and consumer (Ritzer, Dean, and Jurgenson, 2012). Traders can easily observe and copy the trading strategies of others without the help of professional brokers (Pelster and Hofmann, 2018). In traditional trading, investors receive recommendations from fund managers after joining an investment company (Welch, 2000). On social trading platforms, users can replicate the trades of top traders at no additional cost (Chmura, Le, and Nguyen, 2022). This has a significant impact on the market as opinion leaders' investment decisions are adopted by others, which can trigger volatility in security returns (Pelster, 2017) and increase herding behavior (Gemayel and Preda, 2018).

The first generation of social trading platforms emerged in the mid-2000s, offering basic functionality such as the ability to copy trades from other traders. Despite similar functionality, each platform has different features (Röder and Walter, 2019), such as the option to copy trades from one, several, or all traders (Doering et al., 2015).

Over time, these platforms evolved to include more features and tools, such as risk management, analytical methods, and social networks that allow traders to interact with each other. Today, there are many social trading platforms with an array of features and tools to help traders achieve their investment goals. Some of the places that provide such platforms include *eToro*, *Spiking*, *Covesting*, *TradingView*, and *FollowMe*.

The advantage of social trading is the ability to utilize the experience and expertise of successful traders and reduce the learning curve for novice traders. These platforms also provide greater transparency and accountability as traders can view the track records of traders they follow and make informed decisions based on that information. In addition to transparency, social trading platforms also eliminate information asymmetry (Doering et al. 2015). Social trading also has some limitations. Some of the disadvantages of social trading include potential losses due to copying failed traders, dependence on other parties, lack of control, and misaligned strategies.

B. Behavioral Finance

Behavioral finance has become one of the main streams in economics along with conventional economics. Unlike conventional finance, which assumes that humans are rational, behavioral finance reveals the irrational side.

Behavioral finance is a combination of economics and psychology that explains why and how people make irrational decisions toward money (Belsky and Gilovich, 2010). According to Baker and Nofsinger (2002), behavioral finance aims to reveal the irrational side and human error in the market.

Behavioral finance is divided into macro behavioral finance, which discusses behavioral distortions in inefficient markets, and micro behavioral finance, which discusses individual behavioral biases (Pompian, 2006). In behavioral finance, humans are normal irrational creatures (Statman, 2014), i.e., creatures affected by cognitive and emotional biases (Statman, 2005; Pompian, 2006; Hirshleifer, 2015).

Table 1. Classification of Bias According to Pompian

Emotional Bias	Cognitive Bias		
Endowment Bias, Self-Control Bias, Optimism, Loss	Overconfidence, Representativeness, Anchoring and		
Aversion Bias, Regret Aversion Bias, Status Quo Bias	Adjustment, Cognitive Dissonance, Availability Bias, Self- Attribution Bias, Illusion of Control, Conservatism, Ambiguity Aversion, Mental Accounting, Confirmation Bias, Hindsight Bias, Recency Bias, Framing Bias.		

Source: M. M. Pompian (2006)

Pompian (2006) divides bias into two groups, namely emotional bias and cognitive bias. In emotional bias there are Endowment Bias, Self-Control Bias, Optimism, Loss Aversion Bias, Regret Aversion Bias, Status Quo Bias. In cognitive bias, there are Overconfidence, Representativeness, Anchoring and Adjustment, Cognitive Dissonance, Availability Bias, Self-Attribution Bias, Illusion of Control, Conservatism, Ambiguity Aversion, Mental Accounting, Confirmation Bias, Hindsight Bias, Recency Bias, Framing Bias.

Cognitive bias is decision-making using rules of thumb, and emotional bias is decision-making based on feelings or emotions. Cognitive bias is a condition caused by systematic errors in thinking, processing, and interpreting information, which then affects the way humans judge and make decisions. These distortions are often caused by the brain trying to simplify the information received.

Emotional bias describes errors in decision-making that result from ignoring information or facts. Using emotions as a basis for decision-making indicates error or bias because it ignores information or facts that should be treated correctly and objectively.

In the context of social trading, the practice of sharing information, strategies, and trading signals between investors and traders through social platforms has become a subject of much interest in behavioral finance. The search for behavioral finance research related to social trading can be classified into investor behavior, social media use, and risk and emotion management. Investor behavior in the context of social trading shows that investor behavior can be influenced by social and psychological factors. According to Barber and Odean (2001), herding in investment decision-making is a common phenomenon in financial markets. In social trading, this phenomenon can be even more pronounced as investors tend to imitate or follow the steps of other traders, especially if they are perceived as experts or have a good reputation in the social network. In addition, research by Bikhchandani and Sharma (2001) shows that trust in information signals from others can influence investment decisions. Trust in other traders and the trading signals they share can play an important role in shaping one's investment decisions.

Social media is also a platform that influences social trading practices. Antweiler and Frank (2004) show that sentiments expressed on social media can influence the price of financial assets. This suggests that information shared and discussions on social media platforms can influence perceptions and investment decisions. In addition, Bollen et al. (2011) found that social media-based sentiment analysis can be used to predict financial market movements. The implication is that investors in social trading may tend to follow the dominant sentiment on social media platforms, which may influence their investment strategies. Risk and emotion management means that investors are vulnerable to emotional influences from other traders or market volatility triggered by sentiment on social media. Studies by Barber and Odean (2000) show that investors tend to make decisions driven by emotions such as greed and fear, which can lead to irrational behavior in trading. In social trading, this risk can be magnified by social pressure and interactions between investors on the platform.

III. RESEARCH METHODOLOGY

Humans do not always act rationally because there are psychological factors that influence and are manifested through cognitive and emotional biases (Statman, 2014). Both biases can influence a person in making decisions (Kahneman and Riepe 1998), including in investment decisions (Hidajat et al. 2020; Zahera and Bansal 2018). Silva et al. (2023), Otuteye and Siddiquee (2015), and Kumar and Goyal (2015) are researchers who prove the influence between cognitive bias and investment decisions, while Bracha and Brown (2012), Kinari (2016), and Hidajat (2019) show the influence of emotional bias on investment decisions.

In this research, cognitive and emotional biases that are hypothesized to affect trading decisions in social trading platforms are optimism, herding, stereotype bias, confirmation bias, and hot hand fallacy.

Optimism bias is the tendency to view things with higher expectations than reality and underestimate risk. This bias makes people tend to view themselves as having greater ability or luck than others and underestimate risk. Individuals with an optimism bias tend to overestimate good things and underestimate unpleasant events (Pompian, 2006). On a social trading platform, optimism can arise from seeing others succeed in making profits. Optimism bias occurs when a person is optimistic that good things (gains) will happen and underestimates bad things (losses). They are optimistic that top leaders are great people and think they will experience the same.

Another behavioral bias that affects trading decisions is herding. Herding, which is taken from the concept of animal spirits, is the tendency of a person to behave or make decisions by following or imitating others (Baddeley et al. 2012). This behavior is a shortcut in making decisions because it imitates the behavior of others. According to Satish Kumar and Nisha Goyal (2015), herding is a bias that affects decision-making. Some research that proves the role of copying behavior in decision-making in social trading includes Chmura et al. (2022) and Gemayel and Preda (2018).

Stereotype bias is a person's tendency to make judgments or assumptions based on certain stereotypes, characteristics, or attributes (Yong, 2013). For example, Bailey, Kumar, and Ng (2011), who observed bias in mutual fund transactions, stated that manager characteristics that bias investors are gambler, smart, overconfident, narrow framer, and mature. On social trading platforms, this bias can arise by, for example, assuming that traders with an occupational background in finance have better trading skills than others.

Confirmation bias is a person's tendency to seek or use information that supports their opinion or ignore information that does not support their opinion (Pompian, 2006). Confirmation bias impacts not only how people search for information but also how they interpret and remember information to their liking. On social trading platforms, confirmation bias occurs when investors ignore risk by maintaining positions despite information that conditions have reversed.

The hot hand fallacy is the belief that past events will continue in the future (positive recency effect). This bias was first described by Gilovich, Vallone, and Tversky (1985) and affects trading behavior in financial markets (Bleaney, Bougheas, and Li, 2017), cryptocurrencies (Hidajat, 2019), and so on. The term hot hand fallacy mostly refers to sporting events and gambling. It's when people believe that a basketball player who dunks the ball multiple times or a gambler who successfully guesses the numbers and wins consecutively is considered to have a 'hot hand' and will continue to do so. In social trading platforms, a leader who makes consecutive profits can be considered to have a 'hot hand' and influence the trader's followers to join the trade.

In the relationship between psychological factors and investment decisions, trust has a role that affects both relationships. Trust plays an important role in social trading (Oehler and Wendt, 2018; Wohlgemuth et al., 2016) as it determines the level of trust and credibility towards the platform and traders.

Trust is a concept that can be explored from various perspectives, such as one's trust in individuals or groups (interpersonal) and institutions. Interpersonal trust relates to empathy or feelings, while institution-based trust relates to safety factors (Cheng et al., 2019).

In the context of social trading, trust in individuals is trust in professional traders, and trust in institutions is trust in platform security. Trust is important because individuals are faced with uncertainty, vulnerability, and dependence when interacting with technology (Söllner 2015). Hancock et al. (2011), who studied human interactions with trading robots, found that human and system characteristics have an impact on trust in robots. Völter, Urbach, and Padget (2023), discussing blockchain technology, also found that trust in the technology itself is important. In other words, the reliability of the platform and the performance of the trader influence the decisions of the trader's followers.

According to Dorfleitner and Scheckenbach (2022), the number of followers of leader traders and platform-specific features influence follower behavior. In social trading, traders make investment decisions based on their trust in the actions of other traders, such as copying trades, following investment strategies, or receiving signals.

On this basis, the hypotheses of this study are as follows:

- i. Optimism has a positive effect on trading decisions.
- ii. Herding has a positive effect on trading decisions.
- iii. Stereotype bias has a positive effect on trading decisions.
- iv. Confirmation bias has a positive effect on trading decisions.
- v. Hot hand fallacy has a positive effect on trading decisions.

vi. Trust in Trader Leader strengthens the influence of Optimism, Herding, Stereotype bias, confirmation bias, and hot hand fallacy on trading decisions.

Methodology

This research uses a mixed-method approach. In the initial stage, semi-structured interviews were conducted with 11 follower traders by snowball sampling to find out the factors that influence traders to invest in social trading platforms from October 2023.

The criteria for traders who act as informants are to have a real account and use the account on the eToro social trading platform. Interviews with 11 informants regarding the factors that influence them to use social trading platforms resulted in frequently mentioned keywords, which are summarized in Table 2.

Table 2. Keyword Frequency in Interviews

Keyword	Frequency	Keyword	Frequency
Professional	9	Platform	13
Experience	7	Following	9
No confidence	8	Trader profile	7
Profit	6	Loss	4
Believe	8	Optimistic	9
Seeking information	5	Expertise	4
Performance	10	Portfolio	4
Inexperienced	8	Newcomer	6
Luck	5	Ignoring warnings	7
Recovering losses	3	Easy	8
Learning	5	Risk	10

From this list, keywords relevant to behavioral bias were grouped (Table 3). The keywords related to behavioral biases that were mentioned the most during the interviews became the independent variables that were tested for their influence on the decision to invest in social trading platforms.

Table 3. Grouping Keywords in Behavioral Bias

Keyword	Bias	Keyword	Bias
Optimistic	Optimism	Luck, Believe, Performance	Hot hand fallacy
Following	Herding	Ignoring warnings, Seeking information	Confirmation bias
Trader profile, Expertise, Professional Experience	Stereotype bias		

The second stage tested the model quantitatively using SmartPLS. Respondents in the second stage were 342 followers of traders with real accounts on social trading platforms. Data was collected by accidental sampling using an online questionnaire distributed through forums and trader communities.

IV. RESULTS/FINDING

A. Statistical Test

The test results show that the AVE value is greater than 0.5, and Cronbach's Alpha and CR values are greater than 0.6. All variables and items are valid and reliable.

Table 4. Validity and Reliability Test

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Confirmation Bias (X4)	0.796	0.797	0.907	0.831
Herding (X2)	0.802	0.802	0.910	0.834
Hot Hand Fallacy (X5)	0.775	0.840	0.896	0.812
Optimism (X1)	0.939	0.942	0.970	0.942
Stereotype Bias (X3)	0.789	0.792	0.905	0.826
Trading Decision (Y)	0.929	0.932	0.966	0.934
Trust (Z)	0.832	0.841	0.922	0.856

The Goodness of Fit test produces Standardized Root Mean Square Residual (SRMR) and Normed Fit Index (NFI) values that meet the assessment criteria, namely SRMS < 0.08 and NFI > 0.90. The calculation results show

the SRMS value of 0.045 and NFI of 0.701, which indicates that the model meets the fit criteria and can be used to describe the relationship between variables.

Table 5. Goodness of Fit Test

	Saturated model	Estimated model	
SRMR	0.045	0.045	
d_ULS	0.212	0.213	
d_G	0.348	0.349	
Chi-square	808.397	813.115	
NFI	0.701	0.700	

Hypothesis testing uses t-statistic criteria> 1.96 with a significance level of p-value 0.05 (5%). The results of this test indicate that optimism, herding, stereotype bias, confirmation bias, and hot hand fallacy have a positive effect on trading decisions. Trust in leader traders also strengthens the effect of optimism on trading decisions.

Table 6. Hypothesis Test Results

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics	P values
Confirmation Bias (X4) -> Trading Decision (Y)	.091	.094	.041	2.196	.028
Herding (X2) -> Trading Decision (Y)	.195	.196	.047	4.163	.000
Hot Hand Fallacy (X5) -> Trading Decision (Y)	.108	.108	.042	2.548	.011
Optimism (X1) -> Trading Decision (Y)	.210	.210	.050	4.195	.000
Stereotype Bias (X3) -> Trading Decision (Y)	.239	.239	.047	5.093	.000
Trust (Z) x Stereotype Bias (X3) -> Trading Decision (Y) Trust (Z) x Confirmation Bias (X4) -> Trading	.125	.122	.054	2.308	.021
Decision (Y) Trust (Z) x Hot Hand Fallacy (X5) -> Trading Decision (Y)	016	017	.055	.293	.770
	006	007	.050	.114	.909
Trust (Z) x Optimism (X1) -> Trading Decision (Y) Trust (Z) x Herding (X2) -> Trading Decision	.117	.117	.054	2.144	.032
(Y)	017	018	.052	.318	.751

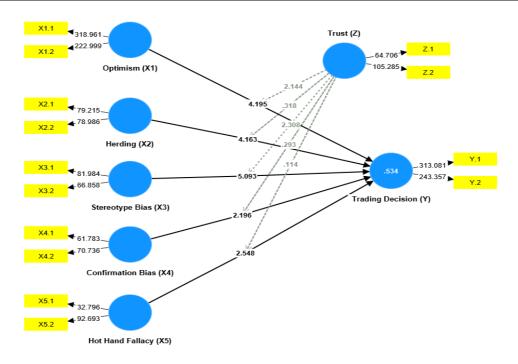


Figure 1. T Statistics

V. DISCUSSION

From a conventional economic perspective, humans are rational beings who seek to maximize profits and minimize losses. However, people do not always behave rationally including in making decisions (Kahneman and Riepe, 1998), because there are psychological factors that influence through behavioral bias. According to Kahneman (2011), humans are not fully logical and can make right or wrong decisions at any time. The results of this study reinforce the opinion that decision-making in investing in social trading platforms is influenced by several behavioral biases, namely optimism, herding, stereotype bias, confirmation bias, and hot hand fallacy.

Optimism and Trading Decision

Several studies, such as Bracha and Brown (2012) and Elgebeily, Guermat, and Vendrame (2021), show the relationship between optimism and investment decisions. The results of this study conclude the same thing that optimism affects investment decisions in social trading. Traders are optimistic that they can make a profit and do not care about the risks of social trading.

This optimism arises after seeing the performance of top traders. According to Heaton (2002), optimistic people tend to overestimate returns and underestimate risks. In social trading, the positive performance of top traders influences traders' followers' emotions in the form of optimism that they will also get the same results. Traders also underestimate the potential losses from copying.

Optimism can result from self-control bias, which is the tendency for a person to plan or decide on actions that require self-control but ultimately fail due to a lack of willpower or ability to control emotions.

In the context of social trading, this bias can occur when a person initially wants to save money but then decides to invest through social trading due to the desire for quick money and self-control difficulties. Self-control bias makes people focus on short-term goals and ignore long-term goals by spending a lot of money on social trading platforms and taking risks to make short-term gains.

In addition to self-control bias, optimism can also arise due to the illusion of control, which is a situation where traders feel that they have control or can control outcomes that cannot actually be controlled (Baker and Ricciardi, 2014). Illusion of control encourages people to take unrealistic risks (Jacobs and Schain, 2011) because they see traders making profits. They feel they can control profits and risks because they can choose leader traders who have good performance.

Herding and Trading Decisions

The results of this research show that herding affects investment decisions in social trading. Traders often consider other users' trading activities before making their own trading decisions and tend to buy or sell certain assets when they see other users doing the same. Due to the bandwagon effect, follower traders follow top traders because they follow what others are doing (follow the crowds). Herd mentality makes traders not want to be left behind (fear of missing out) with other traders who join social trading. Being part of the social trading community makes traders feel comfortable (wisdom of the crowds).

This behavior is risky because follower traders take risks by choosing portfolios that they do not understand. Traders even continue to follow top leaders when there is no more information about their performance (Chmura et al., 2022). Herding on social trading platforms is prevalent because systems publish traders' performance (Chmura et al. 2022), and information on social networks influences herding behavior (Cipriani and Guarino, 2005).

For beginners with no experience, social trading is the entry point into the world of trading. They tap into the expertise of top traders by copying trades and hope to make a profit without having to analyze much. Chevalier and Ellison (1999), who observed copying behavior in mutual funds, found that young fund managers with little experience tend to engage in herding behavior. In contrast, fund managers who take high risks and are overconfident tend not to herd (Menkhoff, Schmidt, and Brozynski, 2006).

Stereotype bias and Trading Decisions

Stereotype bias can occur in various contexts, including social trading. These biases can affect various aspects of decision-making. Consistent with Carr and Steele (2010), the results of this research show that individual decision-making is influenced by stereotype bias. When facing new experiences and making decisions, humans will use attributes in their brains.

Investors tend to associate certain types of investments with different levels of risk based on existing stereotypes about the industries or companies involved. In addition, stereotype bias also affects investment

choices, where investors may tend to favor assets or strategies that are consistent with their stereotypes about a particular gender, age, or ethnicity.

Leader traders with a certain background and a large following become a rule of thumb that the trader is worth following. This can lead to unhealthy investment decisions, as trading ability is essentially independent of one's gender or ethnicity.

Confirmation bias and Trading Decisions

Confirmation bias occurs when people tend to seek favorable information or ignore information that does not favor their opinions or actions. The results of this research show that confirmation bias has a positive effect on investment decisions on social trading platforms. The more often traders seek information that supports investment decisions, the more often they trade.

Follower traders continue to follow traders, even if the trading results are not as expected. They also ignore news or information that does not support investment decisions. However, on a platform where investors can interact with each other and share their views, confirmation bias can make them trapped in information that reinforces their own beliefs without considering other information that should be taken into account in making investment decisions. According to Dreman (1979), the impact of confirmation bias is irrational risk-taking and undiversified investment decisions.

Hot hand fallacy and Trading Decision

The results of this research show that the hot hand fallacy has a positive effect on investment decisions on social trading platforms. Follower traders believe that leader traders who can make profits within a certain period of time will continue to make profits, and leader traders with many profits are considered to have luck that other traders do not have. The leader trader's performance in a short period of time becomes a predictor of good performance. Future results are predicted through a few samples of previous trading results.

The hot hand fallacy causes traders to make irrational decisions based on past performance. Follower traders see the success of leader traders and believe that they have a 'hot hand.' They believe that multiple winning streaks signify more winning leaders.

As a result of the representative heuristic, follower traders believe that past events (profits) will continue. The (false) belief of seeing consecutive profits makes follower traders continue to follow leaders because they think they will continue to make profits.

The Role of Trust in Trading Decisions

The role of trust is important in social trading because this platform is an investment practice where investors or traders use social networks to share ideas and information with community members. When investors participate in social trading, they must have trust in other investors, especially the lead traders. They must trust that the players have enough knowledge and experience in trading and the same motivation to make profits.

When there is trust among investors in a social trading community, it is easier for them to share information and investment ideas. They will also be more open to receiving feedback and suggestions from other investors. With trust between investors, social trading can become an effective and mutually beneficial investment community for all its members.

The statistical test results of this study show that trust strengthens the influence of stereotype bias and optimism on trading decisions but does not strengthen the influence of confirmation bias, hot hand fallacy, and herding on trading decisions.

Against stereotype bias, trust makes follower traders more convinced that leader traders with a certain background and many followers have better trading skills. As a result of the trust heuristic, investors tend to trust those who are widely known. According to McKnight, Cummings & Chervany (1998), if someone has a good reputation, people will quickly develop trust in that individual.

Jacobs and Hillert (2016) found that information about securities on the top list received more attention. Röder and Walter (2019) investigated investment flows in over 5,300 social trading portfolios and found that investment flows are influenced by past performance. Investors are more trusting of traders with favorable portfolios, higher visibility on web pages, and active communication through public comments. Reith et al. (2020) also proved that performance aspects are the dominant determinant of behavioral intention for experienced users.

In addition to reinforcing stereotype bias, trust makes follower traders more optimistic that their investment decisions on social trading platforms are correct. When follower traders feel that the leader trader is a trustworthy source, their trust in the investment decisions shared by the trader increases. This creates a feeling of optimism that the investment decisions made on the social trading platform are correct. Although it can have a positive impact, trust can also have a bad effect because individuals who are too trusting of others will easily be trapped in improper investments (Deason et al., 2015).

VI. CONCLUSION

This study provides a conclusion that emotional bias and cognitive bias affect trading decisions on social trading platforms. Optimism, Herding, Stereotype bias, Confirmation bias, and Hot hand fallacy influence the trading decisions of follower traders.

Follower traders are optimistic that they can make profits and do not care about the risks of social trading. They look at other traders' activities and tend to buy or sell assets when they see other traders doing so. Follower traders consider leader traders with a certain background and a large following to be worth following. They also ignore news or information that does not support investment decisions. Leader traders with a lot of profits are also considered to have luck that other traders do not have.

Trust in leader traders strengthens the influence of optimism and stereotype bias on trading decisions. Trust makes follower traders more optimistic that their investment decisions on social trading platforms are correct. When a trader's followers feel that the leader trader is a trustworthy source, their confidence in the investment decisions shared by the trader increases. Trust also further increases trading decisions due to the belief that leader traders with a certain background and many followers have better trading skills.

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