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Decision Making in Financial Behavior: A Systematic Literature Review

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ABSTRACT

Digitalization is a major factor in the rapid dissemination of information, especially in the financial world. This has an impact on the emergence of various financial behaviors that can affect Investor Decision Making in investing. Financial behavior is a key factor that can affect the quality of Investor Decision Making, which is characterized by achieving optimal results and avoiding biased decisions. Effective financial behaviors are very important and should not be taken lightly. As an investor, adopting appropriate financial behaviors is key to overcoming behavioral biases associated with Investor Decision Making. The purpose of this study is to investigate the current state of behavioral finance research with a focus on the significant factors that influence Investor Decision Making. Driven by the need to create a comprehensive literature on peer pressure, this study used a bibliometric approach by identifying 92 studies using the term "behavioral finance" from the Scopus database. The most frequently reviewed articles were analyzed to highlight key contributions and provide general information about the field. All mentioned information covers several aspects, such as the relationship between investors, fund managers, the investment industry, and the significant influence of behavioral finance on Investor Decision Making. The practical implications of this study have the potential to be a valuable reference for researchers and practitioners, assisting in the development of clear and concise conclusions with relevant context. Investors should be encouraged to integrate their internal processes with the results of bibliometric analysis. This research emphasizes the importance of behavioral finance in Investor Decision Making, provides insight into the current state of research, and the role of researchers in developing a critical understanding of Investor Decision Making.

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1. INTRODUCTION

In the realm of fund management in the investment industry, investment activities are not just a financial transaction process, but also reflected through the complexity of investors' financial behavior [1]. Financial behavior is the main foundation that shapes individual preferences, tendencies, and conditions in Investor Sentiment. For example, a person's level of risk tolerance, ability to withstand market pressure, and tendency to follow market trends are elements of financial behavior that are influential in determining the type of investment chosen [2].

The importance of understanding behavioral finance has a significant impact on Investor Decision Making in the investment world [3]. Essentially, behavioral finance encompasses a number of psychological and emotional factors that influence how individuals assess, process financial information and ultimately make investment decisions. One striking example is an individual's level of risk tolerance, where some investors may be more inclined to take high risks for potentially greater returns, while others may opt for a more conservative approach.

In addition, behavioral finance also includes elements such as cognitive biases, where investors may be affected by the perception and interpretation of market information in an irrational manner. Decisions to buy or sell stocks are often influenced by emotional factors, such as fear or greed, which can trigger impulsive actions and are not always based on rational analysis.

In the context of behavioral finance to achieve optimal investment returns, proper Investor Decision Making has great significance. A bibliometric approach can be a useful tool in developing investor decisions as it can provide valuable insights into research trends, frequently discussed topics, and researchers' contributions in developing investor decisions [4]. This study aims to identify and follow the development of research on biased Investor Decision Making. Using a systematic literature review approach, this research aims to gain a more in-depth understanding of the current advances in Investor Decision Making studies and the factors that influence complex investor decisions.

With all the research that has been conducted, the issue that arises is how the trends in Investor Decision Making research in the context of investment have evolved over time. What are the main points of discussion that often appear in the literature review on Investor Decision Making in investment. Through mapping the literature on Investor Decision Making in investment, it is expected to provide a comprehensive overview of the direction of trends and developments in the study of Investor decision-making in investment. Moreover, it is hoped that a bibliometric approach can help recognize current research trends, frequently discussed topics, and the contributions of researchers in developing robust Investor Decision Making in investment studies.

2. LITERATURE REVIEW

2.1 Behaviour Finance

Behavior finance is a multidisciplinary field that examines the impact of human behavior on financial decision-making, financial education, counseling, and planning [5]. It encompasses various aspects of consumer finance, including credit risk measurement, financial education, and the influence of herding behavior on online buying. The literature on behavior finance is mainly grounded in economics and finance, with some studies also exploring the application of herding behavior in online buying [6].

2.2 Decision Making

Decision making is the process of selecting the best course of action from multiple alternatives [7]. It involves identifying the problem, gathering relevant information, evaluating the options, and choosing the most suitable solution. There are various models and theories of decision making, including rational, bounded rationality, and intuitive decision making. Rational decision making, as proposed by classical economists, assumes that individuals make decisions that maximize their utility [8]. Bounded rationality, on the other hand, acknowledges the limitations of human cognition and suggests that individuals make decisions that are rational within their cognitive constraints. Intuitive decision-making relies on hunches and instincts rather than an extensive analysis of the available information.

2.3 *Investment*

Investment decisions, also known as capital budgeting decisions, involve determining where and how much capital should be allocated to generate maximum returns for investors [9]. These decisions can include purchases of new equipment, investing in research and development, buying property, or expanding into new markets [10]. The investment decision is a well-planned action that allocates financial resources to obtain the highest possible return, based on investment objectives, risk appetites, and the nature of the investor.

3. METHODS

This literature review uses a systematic literature review approach, following the systematic review method.

Bibliometric Analysis

By utilizing the Scopus database, 92 journals related to "Behaviour Finance" were identified and analyzed bibliometrically. The journals were then downloaded in RIS (Research Information System) format. RIS files from each journal were imported into Mendeley Reference Manager. After importing, the RIS format of each journal was converted (exported) into a consolidated RIS format that included all journals. Next, the comprehensive RIS file was entered into Vosviewer software to produce a graphical representation of the bibliometric map.

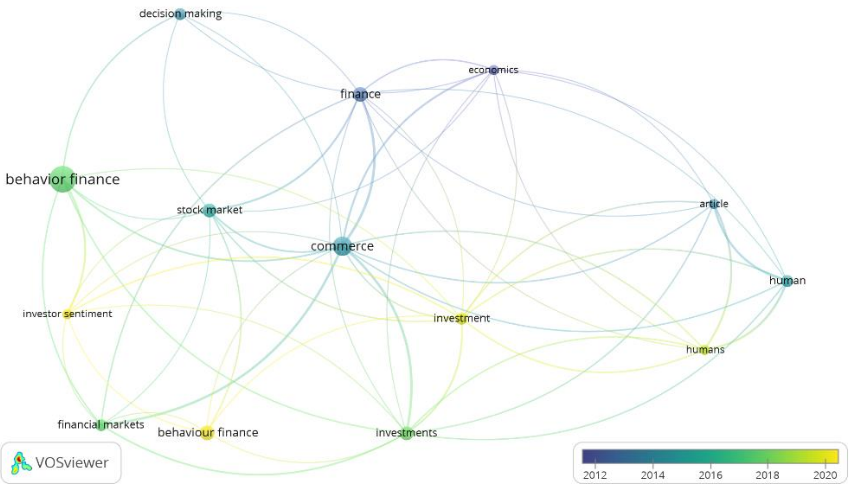

Figure 1. Overlay Visualization by VOS Viewer

The results of the analysis conducted using VOS Viewer on Financial Behavior provide significant insight into the structure and distribution of topics in that context. Some aspects that can be noted from the results of network analysis and visualization using VOS Viewer involve:

1. Identification of Key Keywords: Network visualization can help identify keywords that frequently appear in the context of investments in behavioural finance. These keywords reflect the main focus or crucial aspects related to Investor Decision Making.
2. Topic Clusters: VOS Viewer tends to form clusters or groups of keywords that are closely related to each other. These clusters form a picture of groups of topics or concepts that are interrelated in the context of investment in behavioral finance.

3. Relationship between Topics: Network visualization gives an idea of how closely related topics or keywords are to each other. The lines or relationships between elements on the graph show the extent to which two concepts are related. This helps in understanding how these concepts interact.
4. Center Nodes: Network analysis can also identify a central node or element that has strong connections to many other elements. This central node may reflect a concept or aspect that Investor Decision Making focuses on in behavioral finance.
5. Trends or Patterns: Through visual analysis, you can observe certain trends or patterns emerging in the topic distribution. This may include a greater focus on behavioral finance development, identification of Investor decision-making, or perhaps specific challenges faced by investors in investing.
6. Identification of Blank Spaces: The analysis may also uncover gaps or concepts that are underrepresented in the literature or documents related to behavioral biases in Investor Decision Making. This may provide opportunities for further research or development of new initiatives.

With these results, behavioral finance stakeholders, researchers, or practitioners can take concrete steps to improve the understanding and practice of behavioral finance investments. The visualized network results can serve as a foundation for formulating more targeted and effective policies, strategies, or training programs to support behavioral finance investment.

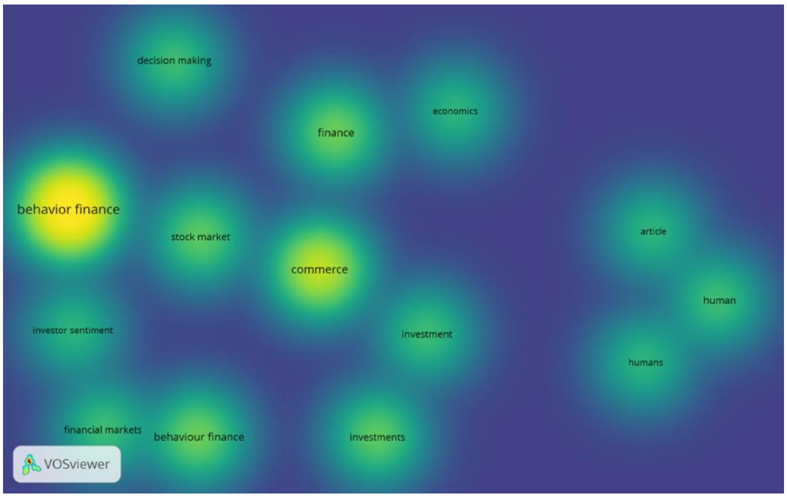

Figure 2. Density Visualization by VOS Viewer

Density visualization in behavioral finance has an important role as an effective tool in presenting information related to the concentration or distribution of various unexplored aspects. By using this method, we can more clearly see patterns or trends that might otherwise go undetected.

The importance of density visualization in the context of behavioral finance can also be seen in risk analysis. Seeing risk distribution in a visual form can help stakeholders understand the extent to which risk can be distributed across different investment areas. This allows companies to develop more targeted and effective risk management strategies.

Density visualization on behavioral finance is not only a useful analytical tool, but also a means to open up further research and development opportunities. Using this approach, we can dig deeper into various unexplored topics and gain deeper insights to support better decision-making in finance.

The following is an explanation of how density visualization results are presented. In a nutshell, density visualization results are able to provide different insights into financial behavior in the context of investor decision-making. This enables more informed decisions, supports targeted research efforts, and designs strategic interventions to understand behavioral biases in investor decision-making.

This research uses the PRISMA method (Preferred Reporting Items for Systematic Reviews and Meta-Analyses. Journals were sourced from Scopus and Taylor and Francis Group, using the keyword "behavioral finance", resulting in 92 journals. Further refinement was done by adding the keyword "decision making" so that the number became 56 journals. Furthermore, the 13 journals were filtered by country, especially Indonesia, resulting in 6 articles that will be examined through Systematic Literature Review.

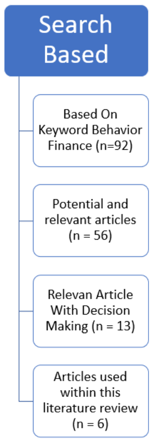

Figure 3. Research Flow Chart

4. RESULT AND DISCUSSION

Table 1. Articles to be Compared

Name	Title
[3]	Behavioral Finance Factors and Investment Decisions: A Mediating Role of Risk Perception
[11]	The Investment Decision of Millennial Generation: An Analysis Using Financial Literacy and Financial Behavior
[12]	Post – Covid – 19 Investor Psychology and Individual Investment Decision: A Moderating Role of Information Availability.
[13]	How Financial Literacy Moderate the Association Between Behaviour Biases and Investment Decision?
[14]	The Investigating the Psychological Factors that Affect Egyptian Investors Behaviour and Decisions Before and After the Pandemic
[15]	An Analysis of Behavioral Biases in Investment Decision Making

Based on the writings of Bashar Yaser Almansour, it can be explained that:

1. Behavioral financial factors have a significant impact on individual perceptions of risk and investor decision making.
2. Financial behavioral factors affect the way investors perceive the risks associated with investor decision making, which in turn affects investors' actual investment decisions.

3. Financial markets do not always operate efficiently, as Investor decision-making influenced by biases can lead to pricing errors and market inefficiencies.
4. Understanding the influence of behavioral biases on Investor decision-making is essential for investors, financial institutions, and policymakers to make the right decisions and promote market stability.

Based on Eko Usriyono's writing, it can be explained that:

1. Financial literacy can affect Investor decision making such as: overconfidence, herding, temper, and trait anxiety.
2. To improve financial literacy and overcome behavioral bias due to overconfidence, herding, and anger, it is necessary to hold training programs, workshops, and seminars that create awareness and ability to recognize behavioral finance and overcome behavioral bias.

Based on Naveed Jan's article, it can be explained that:

1. Investor bias behaviors such as overconfident, representative bias, and anchoring bias have a significant and positive influence on investor decision making in the post-Covid-19 pandemic period
2. Investor bias behaviors such as overconfident, representative bias, and anchoring bias have an insignificant and negative impact on investor decision making in the post-Covid-19 pandemic period.
3. Information availability has a significant moderating role in the relationship between psychological bias and investor decision making during the post-COVID-19 pandemic.

Based on Mohd Adil's writing, it can be explained that:

1. Investment decisions have a relationship with individual investor behavioral biases that affect financial literacy.
2. Financial literacy can cause a large gap between behavioral biases and Investor decision making.
3. Behavioral finance considers financial literacy as a precursor to investor decision making.

Based on the writing of Hassan M. Hafez, it can be explained that

1. Theory behavior finance on investment in emerging markets affects investor decision making in the period before the covid pandemic.
2. Theory behavior finance on investment in emerging markets has no effect on investor decision making in the period after the Covid pandemic.

Based on Geetika Madaan's writing, it can be explained that in investor decision making there are 4 behavioral biases, namely: overconfident, anchoring, disposition effect and herding. The result is that overconfident and herding have a strong influence on investor decision-making.

5. CONCLUSION

Behavioral finance is the study of how individuals behavior in making financial decisions. In the theory of financial behavior, the variables reviewed are the diversity of investor behavior such as cognitive bias, the level of overconfidence and the tendency to follow the herding behavior.

Furthermore, this study emphasizes the effect of cognitive bias which refers to the human tendency to make judgments or decisions based on perceptions that can be influenced by non-rational factors in decision-making because it is not always based on logic or rational information, but is also influenced by psychological, emotional and social factors.

One of the concepts of financial behavior in decision-making, involves cognitive biases that can affect the decision-making process itself. So that there needs to be in-depth research on what things can affect cognitive bias in decision-making, so that it can create investor financial behavior that can have a positive impact on the investment market.

The following is a summary of decision making in financial behavior:

1. Behavioral finance factors, such as overconfidence and herding, have significant implications for the way individuals understand risk and make investment decisions.
2. The existence of behavioral biases in financial markets can lead to imbalances in pricing and market operations, demonstrating the importance of understanding and managing such psychological impacts.
3. Financial literacy plays an important role in mitigating investor behavior. A high level of financial literacy can help overcome biases such as overconfidence, anchoring, and anxiety. Therefore, training and education programs are important in raising awareness and skills required in financial decision-making.
4. The influence of investor behavior in the post-Covid-19 pandemic period was found to be varied, with some biases having a positive impact and others hurting investment decisions.
5. The relationship between financial literacy, investment decisions, and investor behavioral biases is complex. Low levels of financial literacy can create a large gap between biased behavior and investor decision-making.

From some previous research, it is explained that, to improve the quality of the results of cognitive bias that affects investment decision-making in financial behavior is to apply financial literacy.

The concept of financial literacy not only provides knowledge but also forms wiser attitudes and behaviors related to financial behavior. Investors can make more informed decisions, consider risks more carefully and plan decisions more wisely without being distracted by other irrational conditions.

In addition to the benefits for individuals, the application of mature financial literacy can positively affect the sustainability of investment markets because the level of understanding and awareness can create a more stable and transparent investment environment.

In understanding the complexity of financial behavior, it is expected to provide understanding for investors, financial practitioners, and policymakers to develop strategies that are more effective and responsive to the complex dynamics in the financial world.

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