The Influence of Neural Behavior on Individuals' Financial Decisions

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ABSTRACT: To cope with the complexity of modern life, the need for better financial education is more crucial than ever. To make a good financial decision, a person needs to equip himself or herself with the knowledge and skills necessary to make an informed financial decision, manage debt effectively, plan for the future, and navigate a complex economic landscape. To exercise these complex economic decisions, the brain plays an important role in integrating information, assessing risk and reward, managing emotions, and executing strategies to achieve financial goals. As a result, an emerging field in the area of behavioral finance has emerged, which acts as a multidisciplinary field of study known as neurofinance. Neurofinance is a combination of fields of study like neurology, psychology, and finance and is an important tool for understanding an individual's behavior towards financial activity done through brain mapping. Thus, this paper constructs the concept of neurofinance in the life of an individual financial decision-maker. The present study demonstrates the available studies constructed by different researchers, authors, and organizations. After reviewing the existing literature, the researcher found a major gap in that there was not a single study conducted to determine the influence of neural behavior on financial decision-making among the private and government sector employees of a selected region. Therefore, it is imperative to know whether there is any association between neurofinance and the individual financial decision-making of the people in North-East India. Accordingly, it is anticipated that this review paper will facilitate forthcoming empirical research to examine individual financial decision-making in detail.

KEYWORDS: Neural Behavior, Behavioral Finance, Neurofinanace, Brain Mapping, Financial Decision

1. INTRODUCTION

In recent times, the study of brain have been highly appreciated to the extent that it has become one of the basic study like any of the normal subject in any course of studies. The study of brain and its functioning is normally known as 'neuroscience' which encompasses various subfields that examine different aspects of nervous system function of human body. Due to the development of the field of study, it has invariably attracted a huge crowd of researchers to do research in this field.Big countries have tended to make huge investments to explore the human brain through neural networks and model its structure and working mechanisms through the advanced technologies of computer science and artificial intelligence (Belabes, 2015).The curious minds, with an intention to explore the new field of research attracted researchers from various streams to try their luck to find something outstanding. With all the connection of interested parties coming from various field of study, neuroscience can now be called as an emerging interdisciplinary field of study.The neuroscience involves the study of brain parts, equally pointed out by Joshua & Michael that,"neural activity that represents immediate or remembered attributes of a sensory stimulus can be used as evidence" (Gold & Shadlen, 2007).Since the beginning of the twenty-first century, studies of the interaction between neuroscience and economics have developed remarkably (Belabes, 2015). The aim of the neuroeconomic enterprise is to integrate research from panoply of social and natural sciences: notably neurosciences, economics & finance, biology, cognitive and social psychology (Papa, 2018). Asabroader field of behavioral financial study, 'neurofinance' is an immerging field of study which collaborate multiple discipline came into existenceto study how the brain process the financial decision of individuals human. Neurofinance covers multidisciplinary fields like neurology, psychology and finance it is a tool for understanding an individual's behavior towards financial activity done through brain mapping(Singhraul & Batwe, 2022).Neurofinance emerged as a combined effort of Neurosciences and Finances in order to better understand the dynamics of decision making in normal times as well as crisis,

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seeking a type of knowledge that includes neural mechanisms involved is benefit and risk analysis (Rocha & Vieito, 2013).The main aim of Neurofinance is to gain better hold about financial markets and decision-making by distinguishing a few physiological traits distressing the investing manners and consequences to bracket together these personas with the buying outcomes, widening the methods, technology, training to advance the investing routines (G S. , 2017).Researchers in the fields of economics and finance are acknowledging the existence of neurosciences and this intersection has led to the emergence of neuroeconomics and neurofinance as exciting fields of research (Srivastava, Sharma, Srivastava, & Kumaran, 2020).

1.1. Research Questions

This review paper aims to investigate the neural behavioral in financial decision making. The focus is on how different parts of brain react in an individual while making finance decisions.Different parts of brain react to different stimuli. As a result it is imperative to study the brain parts with the help of modern technology which will give a precise answer how the brain behaves while an individual makes his own financial decision.Several factors/attributes influence neural behavior in financial decision-making; such asemotions attributes, cognitive biases, risk perception attributes, neurological factors, financial literacy and financial habits.To know and analyze the behavioral attributes it is imperative to conduct surveys, interviews or use various brain mapping techniques (fMRI, EEG, MEG, PET)with their voluntary participation for collecting neural information.Accordingly, this study aims to analyze the financial behavior of educated employees of India while making crucial financial decisions.

This study is aligned with the following research questions

1. How does neural activation of educated employees differ between individuals, when making risky financial decisions compared to safe financial decisions?
2. How do two different individual react to same kind of financial decision making?
3. How do age differences play an important role in financial decision-making abilities and risk preferences?
4. How do gender differences play an important role in financial decision-making abilities and risk preferences?
5.How does a neural response to financial gains differ from responses to losses, and how do these differences relate to future financial decision-making strategies?

2. REVIEW OF LITERATURE

2.1. Individual financial decision

Individual financial decision is a complex process of decision making as it contains the concept of money. According to Heff & Sonja, there is always an uncertainty related to any investment process and the difficulties in correctly assessing future developments trigger a feeling of excitement and tension(Dierks & Tiggelbeck, 2021).The financial decisions are a complex interplay of brain activity, emotions, cognitive biases, personal experiences, and social influences (Frydman & Camerer, 2016). Each factor equally contributes in making a good financial decision of an individual. Financial decision-making is based on maximizing profits and wealth, it is usually stems from the perceived expectation of goods and money and in contrast, biology and psychology argue that profit maximization is only one aspect of the goal (Yaghoubian, Moghaddam, Kashani, & Nasrolahi, 2024).The financial decision is a behavioral activity which in an interplay between brain behavior and finance. That´s why economists came along with the theory of behavioral finance (Wolters, 2017).

An individual belief system play a crucial role in deciding and triggering the initial point of any financial decision making process. Beliefs are mental state which forces to continue an optimistic expressive state by overlook that piece of information which contradicts with individuals' prior choices (Jinda & Bahl, 2016).An optimistic belief gives clarity in the mind of an individual to go for financial decision;as a result the neurons of the braincome into play and the study is known as neurofinance. Neurofinance is an emerging discipline in the area of behavioral finance (Singhraul & Batwe, 2022). The concept of neurofinance delves deeply into the decision how the brain processes information and evaluates risk and reward system while making a financial decision.The world give attention to neurofinance in 2005, when the first study was conducted by Kuhnen& Knutsonrelated to the neurotransmitters role in financial decision making of the individuals positions in the field of business, especially stock market business (Ahmad, 2018).

2.2.Neurofinance- the behavior of human neurons

Neurofinance is a subfield of behavioral finance that integrates insights from neuroscience to better understand how individual financial decision making are done. Behavioral finance itself studies the effects of psychological influences on investors' behaviors and market outcomes, criticizes the traditional assumption of financial decision-making.Behavioral finance defines the behavior of investment decision-makers, while neurofinance applies neuro-technology to know economic industry participants' behaviors (Khan & Mubarak, 2020).Behavioralfinance has evolved from the evaluation of rational market choices towards emotional and

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non-rational dimensions. Human beings are logical and autonomous agents, so their financial decisions are constructs of their rational and rational expectations (VanderPal & Brazie, 2022).

According to(Tseng, 2006) , neurofinance:

[…] analyzes financial markets by applying neurotechnology to observe and understand the trading behaviors of market participants. The major goals of neurofinance are to gain better understanding of financial markets by identifying some physiological traits affecting trading behavior and trading results, to associate these traits with trading results, and to develop methods, technology, and proper training to improve trading performance.

Neurofinance is a new approach to collect the neural data while making financial transaction.Thecollect and analyze the brain chemical reaction ofan individual while making an individual financial decision.The collection of financial information, especially sensitive neural informative data such as neurofinancial information, from individuals without their explicit consent is ethically and legally questionable. Neurofinancial information typically involves understanding an individual's financial decision-making processes through the analysis of neural or psychological factors.Guillaume Baechler and Laurent Germain(Baechler & Germain, 2018) has directly pointed out that the psychological processes as well as the neural processes are involved in financial decision.The topic of neurofinance aims to explore the neural mechanisms within which the choices regarding money, risk, and investments decisions are made. According to(Sahi, 2012), understanding of the functioning of the brain when faced with decision choices will help the individuals to see how emotions direct their decision choices.

Thus neurofinancial study is an interdisciplinary field of research where the blending of psychology, neurology and finance play an important role. Itaims at studying human decision-making, neuron activity that influences individual financial decision, understanding of the brain and the ability to decode options after logical analysis. In the words of (Ismail, Muhammad, Wan Husin, & Halim, 2020),"A study of the human brain as a processor of information that forms the basis of all decision making in finance called neurofinance".An individual while making any financial decision estimates and access the benefit and risk associated with it. A proper assessment of risk and reward optimization in financial decision making brings an emotional ease in the mind of the individual.

In line with it,(Rocha, Lima Filho, Xavier Costa, & Lima, 2013), says that,the influence of emotion on decision making has been used to explain deviation from optimization […].

2.3. Brain regions that influence individual financial decision-making

The brain region plays an important role in deciding the financial decision making. A good number of theories have been developed to study the neural affect on financial decision making. The disposition effect has attracted considerable attention because it has proven challenging to explain using simple rational models to study human behavior (Frydman, 2012). The use of various mapping techniques to study the different brain parts which secrets different emotions is the new development in the field of neurofinance. The researchers are exploring and taking up complex technological to measure the emotional behavior of individualon the basis of past as well as present scenario. According to Alessandro D'Onofrio, "One of the most important implications is that our emotions aren't triggered just by our actual situation, but previous experience of failure or good result can activate emotions that play a very important role in our process of choice (D'Onofrio, 2017).The development of recent studies of behavioral finance, discusses in detail how brain system's work that is associated with the behavior of economic agents in making economic decisions is referred to as neuroeconomics (Maharani, 2016).The researchers are using functional magnetic resonance imaging (fMRI) in a controlled experimental setting (Frydman C. , 2015). A study conducted by (POLAT, 2022), tried to provide a comprehensive overview of the relationship between finance and psychopathology. It focuses on describing violations in standard finance through factors related to individual psychology, leading to the emergence of behavioral and neurofinance. The studies in neurofinance include examining brain injuries, lesion studies, and neuro-pharmacological research, utilizing tools like PET, fMRI, EEG, and chemical analysis.The new technological advances achieved during the last decade allowed the scientific community to investigate and employ neurophysiological measures not only for research purposes but also for the study of human behavior in real and daily life situations (Shabir, Bishri, & Amin, 2020). According to Massimo Egidi and GiacomoSillari, neuroeconomics utilizes a variety of investigative models (for example, psychophysiology, electroencephalograms, and functional magnetic resonance imaging) to study neural and biological correlates of economic choices (Egidi & Sillari, 2017).

2.4. Can neural behavior be managed?

An individual act is a behavioral response to brain stimuli or situation. Behavior can be an innate in nature or is learned as an individual life progress. Different kind of activity activates different kind of neural parts in human body. The development of neural behavior is divided into simple and complex(Kumar, Narayan, Pareek, Kumari, Ghosh, & Faiq, 2020). Human reflexes are the simplest form behavior which is innate in nature, whereas, a complex behavior need a varying actions or responses adjusted to the need of the situation which involves more than one component of the brain and it is intricately regulated.A stimulus which is

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received at the sensory receptors is carried by the nerves to the sensory cortex which generates perception and further sends it to the cognitive and the effectors domains of the brain where complex neural processing constructs a behavior.(Kumar, Narayan, Pareek, Kumari, Ghosh, & Faiq, 2020).

The Prefrontalcortex (PFC) (anterior part of the frontal lobe) is the most important cortical part involved in the control of executive, social, emotional, or instinctivebehaviors. Distinctive parts of the prefrontal cortex are involved in specific aspects of the behavior, e.g., Dorso Lateral Prefrontal Cortex (DLPFC) isinvolved in executive behaviors (showing intelligence) likeplanning,thinking, making judgments, and problem-solving.(Kumar, Narayan, Pareek, Kumari, Ghosh, & Faiq, 2020).

The review of previous literaturegives a clear picture onthe use of technology in studyingthe brain; gives a conclusive idea about the different part of brain, and their involvement in different behavioral activities. The advancements in neuroscience provide the upcoming researchers with a guide to conduct future investigations.Therefore, it is imperative to know the different brain parts and their function in making individual financial decision making.

Table-1: Different brain regions that are influenced while making individual financial decision.

SL. No.	Brain Regions	Functions
1	**Ventral Striatum (Reward Center)**	This area is activated by the anticipation of rewards, including financial gains. It plays a role in motivating to seek rewards and can lead to impulsive decisions to chase quick profits.
2	**Prefrontal Cortex (Decision-Making Center)**	This region is responsible for higher-order thinking, planning, and impulse control. It helps in weighing risks and benefits to make sound financial choices.
3	**Amygdala (Fear Center)**	The amygdala is activated by threats and potential losses. It can trigger a fear response that leads to selling investments in a panic or avoiding financial decisions.
4	**Hippocampus (Memory Center)**	The hippocampus plays a role in learning and memory. It helps in remembering past financial experiences (positive and negative) which can influence future decisions.
5	**Nucleus Accumbens**	The nucleus accumbans is an important component of the brain in analyzing reward and risk taking.
6	**Anterior Cingulate**	The anterior-cingulate detectserror; assess risk and uncertainty in financial decision making.
7	**Striatum**	The striatum is part of the brain's reward system and is involved in processing rewards and reinforcing behavior.
8	**Prefrontal Cortex (PFC)**	The PFC is crucial for executive functions, such as planning, decision-making, and impulse control.
9	**Ventromedial Prefrontal Cortex (vmPFC)**	ventromedial Prefrontal Cortex (vmPFC), is an area of the brain that has been reliably shown to be involved in the computation of the capital gain or loss associated with selling a stock. According to the realization utility model, vmPFC activity at the time of a selling decision is particularly correlated with the potential capital gain or loss (2013).

Source: Compiled from(Raggetti, Ceravolo, Passamonti, & Weber, 2021)

The above table gives a clear picture about the parts of brain and their active involvement in financial decision making. All these parts of brain work together to influence the individual financialdecision. A healthy balance between reward-seeking, rational thinking and emotional regulation is crucial for making sound financial choices.

2.5. Brain mapping techniques to study brain while making individualfinancial decisions

To understand the complex brain activity, the use of single technology is enough to make a conclusive study. As a result, neuroscientists have a number of tools and techniques. Some of the techniques used to study the human brains are as follows:

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Table-1: Brain'smapping techniques and its role and functions in deciding individual financial decision-making:

SL. No.	Mapping techniques	Role and Functions
1	**Functional Magnetic Resonance Imaging (fMRI)**	fMRI measures brain activity by detecting changes in blood flow. When a brain region is more active, it receives more blood flow. Researchers use fMRI to identify the areas of the brain involved in specific financial decisions, such as evaluation of risk and reward. fMRI has a high spatial resolution in identifying the activated neural circuits (Vieito, Rocha, & Rocha, 2015).
2	**Electroencephalography (EEG)**	EEG records electrical activity in the brain using electrodes placed on the scalp. It measures brain waves and provides real-time data on neural activity. EEG is used to study the timing of brain processes involved in decision-making, such as how quickly the brain responds to financial stimuli. The process is non-invasive and allows us to study the dynamics of financial decision-making (Vieito, J., Rocha, & Rocha, 2015). EEG captures electric brain information in a continuum process which allows capturing information before, during and after each deciding moment (Vieito, Rocha, & Rocha, 2015).
3	**Magnetoencephalography (MEG)**	MEG measures magnetic fields produced by neural activity. It provides high temporal resolution, allowing precise tracking of brain activity over time. MEG helps researchers understand the dynamic processes of decision-making, including how different brain regions interact during financial choices.
4	**Positron Emission Tomography (PET)**	PET involves injecting a radioactive tracer into the bloodstream, which accumulates in active brain areas. The scanner detects the radiation emitted by the tracer. PET is used to study brain metabolism and the activity of neurotransmitters like dopamine, which play a role in reward processing and risk-taking.
5	**Functional Near-Infrared Spectroscopy (fNIRS)**	fNIRS measures changes in blood oxygenation using near-infrared light. It is less invasive and more portable than fMRI. fNIRS can be used in more naturalistic settings to study brain activity related to financial decisions, making it useful for experiments outside the laboratory.
6	**Transcranial Magnetic Stimulation (TMS)**	TMS uses magnetic fields to stimulate specific brain regions. It can temporarily enhance or inhibit neural activity. Researchers use TMS to investigate the causal role of particular brain areas in financial decision-making by observing changes in behavior when those areas are stimulated.
7	**Diffusion Tensor Imaging (DTI)**	DTI is a type of MRI that maps the diffusion of water molecules in brain tissue, allowing visualization of white matter tracts. DTI helps researchers understand the connectivity between brains regions involved in financial decision-making.

Sources: Compiled from(Financial Neurofinance: How to Study and Influence Financial Decision Making and Brain Activity, 2024).

2.6. Objective wise classicization of Earlier Research Works

Neurofinance is one of the fascinating combinations of neuroscience, psychology and one's own financial decision making. The study of neurofinance is still in the process of evolution and has improved with the rapid development of tools and techniques to study the same. Several research works were carried to highlight the growth and development of the various factors which are directly impacting the neurofinancial study in the world. Some of the earlier studies related to the topic are summarized below:

Table – 1: Neurofinance Research Focus by Objectives (World Level)

SL No.	Objective(s)	Author(s)
1	**To exploring the evolution of neurofinancial theories aiding decision making.**	(Rashid, Ahmad, & Tariq, august 2022), (Rocha, Vieito, & Rocha, 2018),(Singh & Sidharth, 2023),

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		(Vârtei, 2023)(Miendlarzewska, Kometer, & Preuschoff, 2019),(Vasile & Sebastian, 2010), (Patel & Chakraborty, 2021), (Sahi, 2012),(Abbas, 2024)
2	To explore how formal process and practices in neurofinance helps in understanding the brain activity related to financial decision making.	(Rocha & Vieito, 2013)(Singhraul & Batwe, 2022), (Singh & Sidharth, 2023), (Miendlarzewska, Kometer, & Preuschoff, 2019)(Kumar, Narayan, Pareek, Kumari, Ghosh, & Faiq, 2020),(Mat Razi, Othman, & Yaacob, 2016), (G & Janardhanam, 2017)
3	To conduct a systematic review on neurofinance.	(Ascher, Silva, Veiga, & Souza, 2016),(Sahi, 2012), (Bratis & Diacogiannis, 2010)
4	To integrates neuroscience techniques to understand the mechanisms behind risk and reward in financial decision-making.	(Shariff, Al-Khasawneh, & Al-Mutawa, 2012), (Vasile & Sebastian, 2010),(Peterson, 2010),
5	To explore the correlation between brain activity (neural) and financial variables,neuroeconomics, neurofinance, neuroscience, quantum physics and decision making process.	(Njegovanović, 2018), (Hsu & Marques, 2023), (Rocha, Vieito, & Rocha, 2018), (Peterson, 2010)

Sources: compiled from earlier research work

The above tabulation shows some of the existing literature and its contribution to the sector of neurofinance.The exploration of formal process and practices in neurofinance helps in understanding the brain activity related to financial decision making is the major objective of the literature, followed by exploring the evolution of neurofinancial theories aiding decision making. The advancement of technology and their use had lead to the development of understanding the brain in financial decision making. the researcher found out that one of the crucial way is tousefunctional magnetic resonance imaging (fMRI) to measure brain chemicals in financial decision making according to (Rocha & Vieito, 2013),(Singhraul & Batwe, 2022),(Singh & Sidharth, 2023), (Miendlarzewska, Kometer, & Preuschoff, 2019), (Kumar, Narayan, Pareek, Kumari, Ghosh, & Faiq, 2020), (G & Janardhanam, 2017), (Rocha, Vieito, & Rocha, 2018), (Mat Razi, Othman, & Yaacob, 2016), (Peterson, 2010).As the study of neurofinance is still in the budding stage, most of the researchers in this field are focused in the initial exploration of the topic on neurofinance. Their prime focus is on trying to correlate and find a relationship with other field of study like psychology, neurology and individual investment behavior to make logical conclusion from its findings. Steven G. Sapra and Paul J. Zak in their study havesaid that, "Recently behavioral economists have leveraged the findings from psychology and neurology, developing the burgeoning field of neuroeconomics" (Sapra & Zak, 2009). According to Rashid, Ahmad & Tariq, "Combining cognitive and emotional emotions may facilitate a deeper insight into decision-making behavior"(Rashid, Ahmad, & Tariq, august 2022). Therefore, an attractive and healthy financial environment requires proper collaboration form the necessary field of knowledge to make a good individual financial decision.

Table -2: Methodological Focus in Neurofinance Research (World Level)

SL No.	Methodological focus	Author(s)
1	Quantitative Research Based on Secondary Data & and Analysis.	(Singhraul & Batwe, 2022), (Singh & Sidharth, 2023), (Vârtei, 2023), (Shariff, Al-Khasawneh, & Al-Mutawa, 2012), (Patel & Chakraborty, 2021), (G & Janardhanam, 2017), (Abbas, 2024)
2	Quantitative Research Based on Primary Data & Analysis.	(Rocha, Vieito, & Rocha, 2018), (Shariff, Al-Khasawneh, & Al-Mutawa, 2012),

		(Miendlarzewska, Kometer, & Preuschoff, 2019), (Kumar, Narayan, Pareek, Kumari, Ghosh, & Faiq, 2020), (Sahi, 2012)
3	Review of Existing Literature.	(Rashid, Ahmad, & Tariq, august 2022), (Ascher, Silva, Veiga, & Souza, 2016), (Vasile & Sebastian, 2010),(Njegovanović, 2018), (Bratis & Diacogiannis, 2010)
4	Primary Data based on Causal and Correlation.	(Hsu & Marques, 2023), (Rocha, Vieito, & Rocha, 2018), (Mat Razi, Othman, & Yaacob, 2016), (Peterson, 2010)

Sources: compiled from earlier research work

The above table shows the nature of the methodology adopted by different writers to carry out research in the area of neurofinance. The table highlights that most of the studies are carried out with the help of primary data, i.e., in the form of direct collection or causal correlation studies. The use of the direct method (mapping techniques) is challenging as the researcher has to limit the study to a small sample size. The challenges faced by the researchers include limited temporal resolution, sample cooperation requirements, participant discomfort, and harmful radioactive emissions. As a result, the generalizability of the findings of the study is affected to a great extent. The researcher also critically analyzed the secondary data and reviewed existing published literature from multiple journals. The adaptations of various methodological statistical tools were used to analyze the collected data and give a proper meaning to the study. It can be concluded from the evidence put forward in the form of facts, figures, and findings that the subject is still being explored and emerging. The pointing out of major issues, factors, and necessary steps needs to be handled seriously by the upcoming researchers for the growth of neurofinancial studies in the field of behavioural finance.

It is inferable after going through the existing literature that the researchers were in favour of secondary methods of collection. The complexity and limitations of using brain mapping techniques encouraged most researchers to prefer the secondary method of data collection or the study of neurofinance. As a result, the novelty and depth of the study are usually affected. The use of articles, books, and a thesis to synthesize fundamental findings and trends in neurofinance is not an easy task when the work is to correlate two broad branches of knowledge.

Real-life financial decisions are complex and dynamic and can change according to the situation. The direct use of brain mapping techniques by the researchers to conclude real-life financial decisions is a challenging task. The release of brain chemicals while making any financial decision can only be measured with the complex techniques of fMRI, CT scan, EEG, MEG, PET, and NIRS (Singhraul & Batwe, 2022). The use of neuroscience techniques to map the brain during the process of financial decision-making is a highly promising area that can provide important advances in finance, which we hope will pave the way to understanding how emotions and neural behavior influence the theory of choice behavior under risk (Vieito, J., Rocha, & Rocha, 2015).

3. SUMMARY
The primary goal of the study was to ascertain the relationship between neurofinance and individual financial decision-making. The study's literature review segment looked closely at exploring the evolution of neurofinancial theories aiding individual decision-making. The formal process developed in the form of primary and secondary techniques to study neurofinance helps in understanding the brain activity related to financial decision-making. The methodology used in the literature analysis revealed a substantial use of technological features like brain mapping techniques and the related use of secondary data in the form of books, articles, conference proceedings, and research articles. A substantial correlation between neurofinance and other related fields of knowledge can be seen from the previous literature. A proper correlation of different branches of knowledge and their proper analysis make the study of neurofinance a multidisciplinary approach. However, a few evaluations also revealed an unclear association between factors like neural behaviour, psychology, and financial behaviour.

4. RESEARCH GAP & SCOPE FOR FUTURE RESEARCH
The current literature covers a wide range of studies conducted by professional institutions, eminent scholars, articles presented at international conferences, and book chapters written by professionals. Studies were also conducted on gender differences and stock exchange data of investors, university students, and injured patients to know their neural responses to financial decision-

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making in varied situations. However, the researcher could not find any research papers related to the financial decisions of the north-eastern state of India. Therefore, it is imperative to know whether there is any such association between neurofinance and individual financial decision-making with respect to the people in North-East India. No specific research has been conducted to determine the influence of neural behaviour on financial decisions among the private and government sector employees of a selected region. The aforementioned gap in the available literature provides ample opportunities for future researchers to conduct a comprehensive study on the association between neural behaviour and the financial decisions of individuals, with special reference to private and government sector employees.

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