INVESTOR COGNITION AND NEUROPLASTICITY AMONG NEPALESE INVESTORS

BY

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RECOMMENDATION

CERTIFICATION

DECLARATION OF AUTHENTICITY

I, Asim Pokhrel, declare that this GRP is my own original work and that it had fully and specifically acknowledged wherever adapted from other sources. I also understand that if at any time it is shown that I have significantly misinterpreted material presented to SOMTU, any credits awarded to me on the basis of that material may be revoked.

Signature

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ABBREVIATIONS

CC:	Cold Cognition
HC:	Hot Cognition
MC:	Meta Cognition
SC:	Social Cognition
IC:	Investor Cognition
RI:	Recurrence of Investment
RSA:	Risk Seeking Attitude
SIP:	Strategic Investment Planner
RT:	Risk Tolerance
RA:	Risk Absorption
NP:	Neuroplasticity
SCT	Social Cognition Theory
AVE:	Average Variance Extracted
CR:	Composite Reliability
VIF:	Variance Inflation Factor
PLS SEM:	Partial Least Square Structured Equation Modelling

EXECUTIVE SUMMARY

This study explores the impact of investor cognition and neuroplasticity on financial decision-making. Investor cognition is the ability to understand and interpret financial information, while neuroplasticity is the capacity of the brain to form new connections and adapt to new situations.

This research is based on primary data collection. Questionnaire were distributed on printed form as well as through emails, and social media. Moreover, PLS-SEM has been used as they model consist of the formative indicators. SMART PLS is used to test the significant impact of Investor Cognition on Neuroplasticity and to test the significant mediating impact of Risk Absorption on Investor Cognition and Neuroplasticity of Nepalese Investors.

This study argues that investor cognition and neuroplasticity interact to influence investors' financial decision-making. The findings of this study suggest that investors with higher levels of investor cognition and neuroplasticity are more likely to make better investment decisions. Moreover, investors who possess higher levels of investor cognition and neuroplasticity are more likely to exhibit greater financial risk-taking behavior. The implications of this research suggest that investors should strive to improve their investor cognition and neuroplasticity in order to make better financial decisions.

Furthermore, investors should be aware of the potential risks associated with taking on too much financial risk. This thesis provides a valuable insight into the effects of investor cognition and neuroplasticity on financial decision-making, and provides important implications for investors.

CHAPTER 1
INTRODUCTION

1.1 Background

Tidwell et al (2000) asserts that cognition is the process through which humans learn, gather knowledge, analyze it, and apply it to certain tasks. The mental process of thinking, knowing, remembering, reviewing, and problem-solving is also known as cognition (Cherry, 2019).

Uddin (2013) asserts that improved financial decision-making encourages higher financial literacy and competence, which improves the management and planning of life events including retirement, property ownership, and education.

Policymakers in the economies of the globe are becoming more and more conscious of the value of financial education. Younger generations are going to encounter ever-more sophisticated financial goods and services; thus, it is crucial to assist them in understanding their financial concerns. Additionally, they are more likely than their parents to face greater financial risks as adults, particularly when it comes to saving, retirement planning, and meeting their healthcare demands (OECD, 2011)

The liberalization of the financial markets has increased the importance of financial literacy due to easier access to credit, credit cards, and the dramatic growth in the marketing of financial instruments. Nations have been dramatically creating and executing national financial literacy plans to raise the level of financial literacy and inclusion among their citizens, frequently with an emphasis on younger generations. (Grifoni & Messy, 2012)

The findings by Oli (2020) demonstrate that individual financial planning attitudes and levels of financial awareness have an impact on personal financial planning and decision-making. Compared to contemporary financial assets, broad ultimate financial investment options are preferred in Nepal. Individual understanding of insurance, investments, cash management, and retirement plans for future financial stability is rising, but not to the necessary extent.

Behera et al. (2021) asserts that investor with Risk Absorption capacity (RA) possess four different characteristics. The characteristics are risk seeking attitude of the investor, strategic investment planning behavior, recurrence of investment and risk tolerance capacity.

Naiwen et al. (2021) asserts that households with greater financial literacy are more willing to take risks and are more inclined to invest. Men and those with higher levels of literacy engage in riskier investments and have greater levels of risk tolerance.

Naiwen et al. (2021) also found that risk tolerance is influenced by financial literacy. The study added that risk is associated with commercial items, and it might be challenging to identify the risk. The associated risk and return with the financial products requires at least understanding of a basic level of financial literacy. The study also found that tolerance and financial literacy are strongly positively correlated. It suggests that households with greater financial literacy also tend to be riskier since risk tolerance rises as financial literacy does.

Risk tolerance has a major impact on risky decision in many financial/investment scenarios. Risk-averse households are more likely to have a lower percentage of their assets invested in risky assets, whereas risk-tolerant people prefer to invest less in risk-free assets. This indicates that risk tolerance may have an indirect impact on the choice to allocate assets based on financial literacy (Nguyen, Gallery & Newton, 2016).

Sahi (2012) describes "neuroplasticity" as neuron's propensity to modify both its structure and its operation in response to environmental pressures. The main takeaway from neuroplasticity is that it is possible to change the structure and function of the brain with guided training, regular practice, and self-discipline.

The sustained flow of capital into the stock market depends on motivating prospective investors who have been emotionally damaged by prior losses and market experiences. The traumatic and severe pain can be lessen by strengthening the cognition domain which can be achieved by developing a knowledge creating mechanism by exploring different domain of cognition. The cognition can be further strength by increasing the risk bearing capacity of the individual. As a result, The investor emotionally damaged by past losses investors will be better able to use their cognitive skills and enhanced capacity for accepting risk to make additional investments in the market in the near future (Behera, Nanda, Sahoo, & Sahoo, 2022).

This study examines how risk-absorption attitudes in investors affect the link between cognition and neuroplasticity. The current study focuses on the variables that affect investment decisions and the effects of bad experiences on future decision-making. After obtaining information, investors may evaluate the reasons behind their earlier investment

errors and think about the crucial actions to do moving forward in order to avoid losses and make the intended profit.

1.2 Statement of Problem

Wengrzyn (2020) asserted that human decisions about the acquisition of any good or service depend on psychological traits, which can be influenced by a variety of factors including the cognitive, conative, and emotional components. The Author concluded that belief, emotional attachment to the product, and behaviors taken in reaction to stimuli caused by the product's characteristics all have an impact on the choice to purchase the product. Also in other hand, Nepal exhibits the low level of the financial literacy. (Kumar Thapa & Kc, 2020) asserts that the degree of basic and advanced financial literacy among investors is not adequate. Diversification of risk and understanding of investment alternatives (stock, bond, or mutual fund) are crucial for investors, but regrettably, Nepalese investors have a relatively poor degree of awareness in these areas. Even many of them are unaware of the primary functions of stock markets.

1.3 Research Question

The statement of problem arises the following research questions:

- What is the impact of investor cognition on neuroplasticity in Nepalese investors?
- Is there any mediation effect of risk absorption in relation between investor cognition and Neuroplasticity in investor?

1.4 Research objectives

The general objective of this study was to examine the relationship of investor cognition with neuroplasticity in investor of Nepal.

Specifically, the main objectives of this study were to:

- To examine the impact of Investors' Cognition on Neuroplasticity in investors
- To examine the mediation effect of Risk Absorption on Investor cognition and Neuroplasticity in investor

1.5 Hypothesis

Niznikiewicz (2013) found that the cognition has various dimension which can be categorized as Hot cognition, cold cognition, meta cognition and social cognition. Cold cognition is the mental process of using data from trustworthy sources and analyzing it to

make financial judgments (Bhusan, 2014). Hot cognition prefers to gather information from friends and professionals and then evaluate it to get to a decision (Bechara, 2004). Moueed, Hunjra, Asghar, & Raza (2015) contends that psychological and social elements have an effect on a person's decision-making process when they are choosing investments, and that investors are more conscious of the circumstances and aspects that may affect their capacity for making judgments. Antonietti et al. (2016) regards Meta cognition as a critical component of a successful financial education program. Meta cognition encourages the capacity to recognize the pertinent tactics to use in a certain circumstance and to self-regulate behavior accordingly. Behera et al.(2022) assert that there is a significant and direct impact or relationship of investor cognition with neuroplasticity of investors.

Thus, the above literatures help in formation of the hypothesis created below:

H1: There is significant association between Investor Cognition and Neuroplasticity in investor.

H2: There is significant association between Investor Cognition and Risk Absorption in investor.

H3: There is significant association between Risk Absorption and Neuroplasticity in investor.

Neuroplasticity can benefit from risk adherence in addition to the cognitive process in the long run by the way of regular practice, self-discipline and guided training (Rustichini 2005). The risk-tolerance attitude may be improved to the point of investing repeatedly for longer periods of time in the presence of knowledge and with the right information processing (Bezzina et al. 2014; Sheedy & Lubojanski 2018).

H4: There is mediating effect of risk absorption on the relationship between investor cognition and neuroplasticity in investor.

1.6 Scope and relevance

The study's findings are expected to be useful in developing policy for companies that are involved in the trading of equity-related financial products like share, debentures, Mutual funds etc., including as brokers, mutual funds, depository participants, and SIP institutions. They are also expected to help potential investors get over the psychological pain caused by previous losses and overcome hesitations to keep participating in the stock market. The theory of neuroplasticity, in which multiple cognitive dimensions are employed, may be used

to repair the investors' bad psychological health, which formed as a result of past loss experiences. This will also encourage risk taking in new investors.

1.7 Limitations

The limitations of the study are as follows:

a. The study was conducted with the sample size of 316 respondents of Nepal. More respondents from various South Asian regions may have provided better findings and allowed for the creation of more trustworthy conclusions. The examination of data from the subcontinent may give a clearer picture of how investors feel about prior losses and the extent of psychological harm.
b. The cognitive characteristics were the main emphasis of the current investigation. For in-depth analysis, conative, affective, and psychometric variables pertaining to attitude development might be employed. Additional sentiment analysis of data can provide more pertinent information about the investment decisions made by investors.
c. The study was only carried out with the quantitative approach. The implementation of Triangularization approach (both quantitative and qualitative approach) could provide better validity and reliability of the results.
d. The study was carried out with the close ended questionnaire. So, the respondent's opinion and detailed review cannot be measured.

1.8 Organization of the study

The thesis is organized in five chapters. The details of the chapter are as follows:

- The First chapter includes the background of the study, statement of the problem, objectives of the study, hypothesis created, scope and relevance of the study and the limitation of the study along with the organization or structure of the study.
- The second chapter contains theoretical review, empirical review of various literature regarding investor cognition and its dimension, risk absorption and Neuroplasticity in investors. Also, it includes research gap and further explanation of the theoretical framework for the study.
- The Third chapter covers the research design,, population and sample of the study, nature and source of data, instrumentation, data management and analysis tool, common method bias assessment and ethical consideration used in data analysis.

- The chapter includes the demographic profile of the respondents, descriptive statistics of the variables, Normality test, and assessment of the first and second order model and evaluation of the structural model of the data.
- Lastly, the fifth chapter covers discussions, conclusions and implications of the study.

CHAPTER 2
RELATED LITERATURE AND THEORITICAL FRAMEWORK

2.1 Theoretical review

2.1.1 Classical Finance Theory

The foundation of traditional finance is the idea that investors are rational and seek the best options to increase their well-being. People have been assumed to base their financial decisions on the role of human self-interest. Adam Smith's initial work, “An Inquiry into the Nature and Causes of the Wealth of Nations”, 1776, encapsulated this conventional political economic viewpoint. According to Smith, self-seeking is a natural desire, predisposition for individual success, and benefit. This self-interest results from the individual's labor, the advantages of commerce, and their innate desire to work with others for mutual benefit (Werhane, 2019).

The emerging issue in classical finance is how the classical models of the finance are built and how they define the value. Although they are briefly examined, these presumptions and definitions are outside the purview of this investigation. The fundamental presumptions that underlie traditional financial theories such as “Modern Portfolio Theory (MPT)” by Harry Markowitz (2008), “Efficient Market Hypothesis (EMH)” by Eugene Fama (1970), and “Capital Asset Pricing Model (CAPM)” by Jack Treynor and William Sharpe (1964) are that investors are rational and risk-averse and that they are aware of the risk-reward tradeoff when determining value (Jensen, 2003)

Fama (1970) claimed that capital markets are efficient, and that in order for market prices to be effective, they must accurately represent all available knowledge about the market prices. Early mathematicians, physicists, and businesspeople in the 16th and 17th centuries were the first to think and write about efficient market. Recent literature has demonstrated that an efficient market does not describe stock prices, despite empirical data supporting EMH. Strong evidence indicates that both mature and emerging markets can display lucrative arbitrage possibilities and tactics to take advantage of market inefficiencies (Lee et al., 2010). Verma and Soydemir (2009) investigated the relationship between the corporate and individual investors and their emotions and its impact on the marker price of the risk

Verma and Soydemir (2009) discovered that when irrational optimism is prevalent, sensible investors can profit from certain arbitrage possibilities. The anticipated utility theory was

refuted by Kahneman and Tversky (1979), when they showed that a number of dilemmas defy conventional wisdom on utility 47 maximizing. Recent meta-studies support and lend validity to Kahneman and Tversky's results by validating breaches of the utility theory. Although recent research has supported predicted utility theory breaches, other studies have found less evidence of prospect theory's applicability; the topic of how many emotional reactions and behavioral biases influence sophisticated and more consequential financial decisions is still under dispute.

Today, most financial advisers frequently employ traditional methods to ascertain investor risk tolerance and specify the investing goals of their clients (Grable, 2020). Research on investors' reliance on the anticipated utility function with chance and decision-making challenges continues to support and be consistent with many conventional financial theories (Livanas, 2011).

2.1.2 Behavioral Finance Theory

Behavioral finance is the study of economic decision making that includes psychology, sociology, and classical economics. Human decisions are often affected by emotional circumstances when humans are under emotional distress, and stressful stimuli can impair rational judgments. The predictable errors in judgments and the deviations from rationality in the decision process is the basis for behavioral economics. Although behavioral finance has been thought of as a more recent discipline, the psychological role in decision making has been debated in the economic literature for centuries dating back to Adam Smith's (1759) explanations on human behavior and the economy. Smith described, "In all countries men seem at last to have been determined by irresistible reasons to give preferences". These irresistible tendencies are the behavior of men's desire, and when under risk can shape irrational judgments. The behavior of man is influenced by the connection of knowledge morality, and economics in shaping human values and is embedded in decision making of all humans (Hühn, 2019).

Behavioral finance seeks to understand certain commonalities that systematically influence decision making (Baker & Ricciardi, 2015). Understanding human psychology can help identify certain behavioral tendencies, as they apply to specific rationale, of emotional behavior that can help investors and financial professionals avoid certain negative decision biases (Baker et al., 2017). Biological evidence of financial advice rendered by economic experts in times of uncertainty has been associated with an "offloading" effect when measuring participant financial decisions under MRI brain scanning (Englemann et al.,

2009). These biological findings show both humans and monkeys demonstrating certain behavioral tendencies by measuring the posterior parietal cortex's lateral intraparietal (LIP) area.

2.1.3 Social Cognition Theory

In 1986, Bandura introduced a social learning to emphasize on the role of cognition. Bandura expanded the Social Learning Theory" also known as "Social Cognitive Theory". Social Cognitive theory (SCT) by Bandura (1999) explains the cognition as a special way that people learn and keep their behaviors, taking into account the social context in which they are habituated. The theory by Bandura is based how individuals observes the behavior of other and how they imitate that behavior to gain rewards related to the observed behavior. The theory takes consideration of the individual past experiences, which causes the behavior of the individuals (Muro & Jeffrey, 2008). The theory by Bandura provide a proper foundation and model for understanding, predicting and changing the human behavior (Nabavi, 2012).

According to the social cognitive theory, planning plays a significant role in regulating human motivation and behavior. This idea describes several elements that affect people's behavior. Perceived self-efficacy, outcome expectations, goals, and facilitators are the contributing elements (socio- structural factors) whereas perceived self-efficacy focuses on people's perceptions of their ability to exert control over demanding situations and their own functioning. Self-efficacy increases motivation in people and has a direct impact on their behavior. Self-efficacy beliefs can be enhanced with personal accomplishment, vicarious experience and verbal persuasion (Conner & Norman, 2015). Outcome expectancy explains the anticipated consequences of the individual behavior. This theory further explains that change in the environment automatically leads to change in behavior. SCT mainly focuses on the process of learning which influence their behavior regardless of their past experience and goal expectations (Kihlstrom & Harackiewicz, 1990).

Hence, SCT theory typically focuses on how people think about their social experiences and how these thoughts affect their behavior and development. STC has been widely utilized because it addresses individual behavior modification..

2.1.4 Information Processing Theory

George E. Miller has created the concept of information processing theory, which was based on how computers process information. The Author stated ", like a computer, the human

mind processes information, executes operations, stores and finds information, and produces output. According to Miller's theory, humans process information by acquiring and representing (encoding), storing it (retention), and retrieving it when necessary (Salkind, 2005). It explains how people perform mental operations on information they have retrieved. This theory tries how human tend to think.

Information processing focuses on three major stores that are involved in cognitive process: ‘sensory memory’, ‘short-term memory’ and ‘long-term memory’. Through sensory organs, the information we receive from the environment are initially stored in sensory memory. Then, with the help of attention and perception, the raw information in this area is transported to short term memory (Çeliköz et al., 2019). So, this theory explains how individual deals with the information provided as their advantage in organizational level.

2.1.5 Schema Theory

Schema theory by Axelrod (1973) addresses the situation in which a group of cognitive items (people, nations, etc.) exist and are related to one another (such as liking or dominance). The new information takes the form of a message regarding the values of certain pairs of objects' associations (Axelrod, 1977). Where, schema can be defined when new information becomes available, a person may apply a pattern that they had previously used to understand the information. Further, the author discussed how a human will process such information in the following phases.

- The type of relationship (together with any preceding information) is used to define the sort of pattern, or schema, into which the information is anticipated to fit.
- The available data is fitted to the chosen schema to determine which instance of the schema provides the greatest match to the available data.
- The information about each individual relationship is then processed using the selected instance of the stated schema. When the original information differs from the selected instance of the indicated schema, cognitive processes are used to resolve the mismatch.

Hereby schema theory explains people seek logical consistency of the new information and how to fit it into our past information.

2.2 Empirical review

Any human being's attitude is primarily influenced by learning, which is influenced by three fundamental components: the cognitive component, the affective component, and the psychomotor component (Hoque, 2016; Bloom, 1956). Bloom(1956) asserts that objectives in the cognitive domain include those that deal with information recall or recognition as well as the growth of intellectual capacities and skills. The second section of the taxonomy, the affective domain, contains goals that cover shifts in values, attitudes, and interests as well as the growth of appreciations and appropriate adjustment. The third section of taxonomy, psychomotor domain or the manipulative or motor skill area, third domain as physical movement, coordination, and the application of motor skills.

2.2.1 Investor cognition

Tidwell et al (2000) opine that cognition is the process through which humans learn, gather knowledge, analyze it, and apply it to certain tasks.The study by Willis (2011) discovered that people with high cognitive needs actively seek out knowledge to equip themselves to deal with occurrences in their environment. The results of correlational studies revealed that cognitive aptitude and knowledge, as well as the participants' desire for cognition scores, were somewhat but positively connected. Cognitive Investing is what results when you use your reflective brains to ask and answer a series of fundamental questions about investing process (Willis, 2011).

Frijns & Indriawan (2016) asserts that an individual's consciousness, perception, judgment, and reasoning are all influenced by cognition, which in turn depends on their information sources and information processing skills. In this regard, Niznikiewicz (2013) advocated about the four different types of cognition: social cognition (current social environment), Meta cognition (learning process), cold cognition (non-emotional) and hot cognition (emotional),.

Niznikiewicz (2018) also advocated that financial decision-making is a system that necessitates a rational selection of alternatives while taking into account new technologies, such as financial information processing (brain), which manifests itself as a network and eliminates old ways to financial decision-making.

2.2.1.1 Hot cognition

Being socially driven, Investors are impacted by their emotional environment. Their actions and choices are a reflection of the emotional climate around them. The emotional mode of psychological processing is called "hot cognition." It grows as a result of emotional processing, emotional semantics, and emotional prosody, conversing about one's own objectives, and comprehending emotions and empathizing. (Niznikiewicz, 2013).

Blackwell et al. (2011) establishes hot cognition as emotional based cognition through emotional stability, and social interaction. The research propounds that fatigue negatively affects the immune system, emotional stability, and social interactions and also effect and influences the decision-making speed and accuracy of the people.

Many investors look for information or follow the advice of connected individuals or sources that they have an emotional connection or attachment. Redlawask (2002) holds the fact that decision-making is influenced by hot cognition, which transmits an emotional sense of belonging and influences the decision's degree of potency. Upon acquiring new evidence that was previously negatively appraised, the motivated reasons may actually boost their support for a candidate. The study by Redlawask also came to the conclusion that emotive biases directly contradict the idea of individuals.

The purpose and choice to purchase are influenced by the emotional support of the family, friends, and peer group. With particular reference to the purchase of automobiles in India, The study by Kshetri and Jha (2016) attempts to investigate the link between social media communication and its impact on purchase intention and, more specifically, the impact on young buyers. The study comes to the conclusion that emotional support from family and friends affects one's desire to buy. (Kshetri & Jha, 2016)

2.2.1.2 Cold Cognition

The mental process of thinking, knowing, remembering, reviewing, and problem-solving is known as cognition (Cherry, 2019). Both non-emotional and emotional sources of knowledge may be used in this knowing process. Cold cognition is the mental process through which a person learns information on a certain subject (Sahakian, 2017). Cold Cognition involves the use of ‘memories’, ‘working memory’, ‘attention span’, ‘sensory processing’, ‘phonology’, and ‘non-emotional semantics’. Additionally, knowledge on investments improves investors' understanding through ongoing, deliberate education, which aids in decision-making (Bhusan, 2014; Dhingra et al. 2017).

Bhusan (2014) argues that due to the lack of financial literacy, the investors who are engaged in other professions are no able to grab the advantage of higher returns offered over lesser return. The study concluded that current educational program and investment behavior must be known to design effective financial educational program.

The study by Dhingra et al.(2017) advise investor to continuously work on raising their level of understanding of behavioural finance by educating themselves on it. Learning about one's biases and thinking back on one's choices might help one better comprehend the degree and mode in which one is affected by emotions while making risky financial decisions. The rationality of investment decisions and decision-making processes are expected to improve with awareness of biases, leading to greater market efficiency.

Jagongo and Mutswenje (2014) also advocated regarding the significant determinants of individual investment decisions: the firm's standing in the industry, expected corporate earnings, profit, and condition of statement, past stock performance of the firm, price per share, investor expectations, and perceptions of the economy. The study results contribute the understanding of the investor to make various choices of investor based on the current circumstances and the likely results of each choice. The study contributes the company to identify the factors that will have the biggest impact on investors' behavior in the future, which will affect future policies and strategies.

2.2.1.3 Meta Cognition

Metacognition is a type of thought that develops through one's own learning. It fosters the development of self-directed learning. It begins with the individual's desire to ascertain and assess the strengths and shortcomings, to plan tactics, and to gain knowledge through experience (Spencer 2018). It is cognition that has been formed via experience and self-directed goals. The decision that was made with the future in mind was shaped by metacognition.

Bennet et al. (2012) has defined the term "investors' sentiment" as "investors' attitude and opinion about investing in the stocks." The impact of market-specific factors on investors' sentiment was also examined in the research by Bennett. Rumors, intuition, investor herd behavior, and media coverage of the stock can all affect an investor's attitude toward investing. Lee et al. (2012) looked at the students' attitudes on problem-solving skills and metacognition, as well as the connections between these two. The study by Lee et al.(2012)

has discovered the modest association between the students' metacognition and their problem-solving skills as well as considerable predictive capacity.

Hence, A person's education, experience, or self-analysis may help them explore various circumstances and change their viewpoint so they may make better judgments (Bennet et al,2012; Lee et al., 2012).

Guo (2012), Sukanya and Thimmarayappa (2015) also found that when learners are self-aware of their own mental processing abilities, they can reflect, assess their own conduct, and govern their own cognitive processes which enables them to come up with clever solutions and may aid in their decision-making.

2.2.1.4 Social Cognition

Social Cognition can defined as a mental process by which one person notices, considers, and pays attention to another person in the social context (Cherry 2019). Social interaction aids a person or influences decision-making, and social contact is controlled by social cognition.

Fiske (1993) argued that individuals may effectively behave when they establish the meaning of their social circumstances. Fiske (1993) assert that people can utilize expectations and data to their advantage, when people are aware of contradictory and harmful information. Fiske (1993) add on that people utilize a wide range of personality qualities along five dimensions because they think these features accurately reflect and anticipate other people's aims and behavior, which helps them achieve their own goals.

Fiske (1993) and Yuksel (2016) has discovered that society or a friend can lead investors to an overall understanding or consensus. This demonstrates how knowledge of facts and familiarity with people leads to social cognition, which aids in making reasonably affirmative decisions. Ferreira et al. (2014) and Ickes et al. (1990) also stated social environment will be able to embrace the new idea and vision, if the social cognition and colleague intensity are increased (Sahoo et al. 2020; Bounkhong 2017).

2.2.2 Risk Absorption

Investment risk varies across various investment paths, and individual investors have varied capacities for absorbing this type of risk (Anantharajan & Sachithanantham, 2016). Based on the risk-tolerating capacity, investors are generally classified as risk takers, risk neutral and risk averters. Diaz & Esparcia (2019) entails that although the risk taker is risk tolerant

investor, the risk tolerance is determined by the time frame of the investment with respect to macroeconomic and financial variables.

Behera et al. (2022) asserts that investor with higher risk absorption possesses four different characteristics. The characteristics are risk seeking attitude of the investors, strategic investment planning behavior, recurrence of investment and risk tolerating capacity of the investors.

Behera, Nanda, Sahoo, & Sahoo (2021) asserts that the risk-absorption capacity (RA) of investors reveals their level of risk tolerance; this includes individuals who make repeated investments over longer periods of time, recommend joint investment strategies, and wait for the market to increase rather than sell while it is down. This aptitude for absorbing risk encourages the investor to take calculated risks with their assets.

Behera, Sahoo, & Pati, (2018) has differentiated risk absorption from the risk tolerance. Risk tolerance refers to an investor's ability to tolerate taking financial risks with respect to a certain financial instrument over a specified time frame, whereas the risk-taking mindset known as "risk absorption" allows people to take comparably larger risks over longer periods of time. Investment satisfaction in any financial product is higher for someone with risk absorption capability than for someone with tolerance capacity.

2.2.3 Neuroplasticity

Sahi (2012) describes "neuroplasticity" as neuron's propensity to modify both its structure and its operation in response to environmental pressures. The main takeaway from neuroplasticity is that it is possible to change the structure and function of the brain with guided training, regular practice, and self-discipline.

Frydman and Camerer (2016) advocated that financial literacy is developed by prior education of the past knowledge. Financial literacy fosters neuroplasticity by enabling one to comprehend why a previous action led to a loss and by assisting in the development of appropriate solutions for the future.

Erkut et al.(2018) defines Neuroplasticity has the ability to reorganize its structure in response to external stimuli and the synaptic networks that are generated to support memory formation.

Erkut et al.(2018) advocates that neuronal plasticity will aid in memory improvement as well as a better grasp of financial decision-making. The study add on the idea that plasticity may

be applied in the financial markets to educate the brain for improved investing decision-making since the synaptic networks of plasticity can remodel themselves when faced with a new external stimulus. Making decisions involves choosing the best course of action from among a variety of possibilities accessible to a person.

The remarkable capacity of neurons to change their structural configuration in response to environmental stimuli, cognitive demand, and behavioral experience is known as neuroplasticity. The mechanism of memory formation is also influenced by plasticity (Bermudez-Rattoni, 2007).

As observed in the prefrontal cortex function (PFC) route (Miller and Cohen, 2001), neuroplasticity is bestowed as the method of reinforcing a specific pathway on its recurrent usage, and the reaction becomes more automatic as a result of this strengthening process. Recent studies have demonstrated that the mechanisms underlying learning and memory are based on plasticity.

According to Willis (2007), long-term memory is formed when neural circuits are repeatedly stimulated with the same information. Therefore, one benefit of neuroplasticity is thought to be improved memory function. The recollection of a prior event that led to a reward during choice selection is thought to have an impact on the plasticity.

An investor's ultimate purpose is to maximize his reward or to profit as much as possible from his investment. The capacity of the brain's neuroplasticity may be used in the decision-making process for finances in order to maximize profits.

Under a certain set of circumstances that might result in the construction of new neural networks, the neural plasticity notion can be used to teach the brain. By giving an external stimulus and learning via trial and error, neuroplasticity can assist in getting the appropriate reaction from an investor. The behavior may vary in the beginning, but as it becomes established through the repeating trial approach, it may lead to the so-called desired reaction or the right investment decision.

2.2.4 Investor Cognition and Neuroplasticity

Information has always been the solution to all issues, and knowledge obtained from cognitive processes has the power to heal all psychological disturbances brought on by unpleasant experiences (Njegovanovi, 2018). Market collapses frequently cause investors' dread to turn to panic, but cognitive process enables comprehension of the importance of

information and aids in coping with self-hurt behavior brought on by previous losses (Erkut et al. 2018). Financial literacy is developed by good education of the past knowledge. Financial literacy fosters neuroplasticity by enabling one to comprehend why a previous action led to a loss and by assisting in the development of appropriate solutions for the future (Frydman & Camerer, 2016).

2.2.5 Risk absorption and Neuroplasticity

The behavior based factors that trigger the risk absorption attitude are said to be the repeated behavior of investing in similar investments for a longer period of time and the risk-seeking behavior that prompts investors to invest in riskier avenues, regardless of speculation and strategic planning after processing the necessary information. This demonstrates that adopting an interest in an investment by putting past losses behind you requires a conduct that is strategic in nature (Behera et al., 2018). Investors that have risk-absorption tendencies repeatedly decide to buy a comparable product. This conduct demonstrates their propensity for repeat investments (Kannadhasan, 2015).

The choice to buy and repurchase is more likely when psychological risks to an investor are given more weight. By avoiding investment risks through strategic planning, more calculated risks may be taken in the future, demonstrating the neuroplasticity nature of the brain (Tang et al., 2008).

2.2.6 Investor Cognition and Risk absorption

Cognitively generated knowledge has influenced people to take certain calculated risks (Kusev et al., 2017). The ability to develop pertinent knowledge from appropriate cognitive sources that are available to investors allows them to take on greater risk and yet come out ahead. Investors' cognitive skills can help in the development of a risk-tolerance attitude, which aids in decision-making. The cognitive processes that underlie information gathering and processing in investors can have an impact on their capacity for risk-taking, which has an impact on their stock trading behavior (Tauni et al.,2017)..

2.3 Summary of literature

Table 1

Summary of Literatures

Authors	Variables	Findings
(Behera et al., 2022)	Investor Cognition, Neuroplasticity and Risk Absorption	This study discovered that there is a significant and direct effect of cognitive dimensions on neuroplasticity and a partial mediating effect through risk absorption.
(Behera et al., 2021)	Investor Cognition, level of interest in investment, and Risk Absorption	In order to raise domestic investor interest in investing in the domestic capital market, financial product marketers must exploit the dimensions and sources of cognition. Additionally, it was shown that the levels of interest in investments are significantly influenced by the domains of cognition (hot, cold, social, and meta). Additionally, it has been discovered that risk-absorption traits are crucial in moderating the relationship between investors' cognition and level of interest in investing. Therefore, it is crucial to improve risk-absorption capacity through various cognitive and informational sources, which can lead to a better comprehension of market and investing circumstances.
(Behera, Sahoo, & Sahoo, 2020)	Investor Cognition, level of interest in investment, situational biases and Risk Absorption	The investor may come to more dependable decisions by using their cognitive abilities, which include cold cognition, hot cognition, social cognition, and meta-cognition. The investor may be able to invest for a longer period of time and choose riskier platforms with the use of this cognitive skill. In the end, it increases the investor's interest in investing while addressing investment-related problems and situational biases that influence the decision-making process. The

		research came to the conclusion that before developing any marketing strategy for financial goods like SIP and mutual funds, the marketers of financial products must take the driving forces into account.
Tooranloo, H. S., Azizi, P., & Sayyahpoor, A. (2019)	Financial, Economic, Pyschological, political indicator and Investment decision Making	The study discovered that the Tehran Stock Exchange purchase decisions of individual investors were influenced by 20 sub-indicators and the primary four indicators (political, financial, economic, and psychological). The investigation shows that when deciding which indicators to prioritize, financial professionals gave financial indexes a higher value than economic, political, and psychological market indicators. It is clear from the study that Iranian investors pay close attention to changes in the economy and politics, as well as to news about politics and international business.
Tidwell et al (2000)	Need for cognition, knowledge and verbal ability	The study discovered that those with a high requirement for cognition actively seek out knowledge to better equip themselves to handle occurrences in their environment. The results of correlational studies revealed that linguistic aptitude and knowledge, as well as the participants' desire for cognition scores, were somewhat but positively connected.
(Njegovanovi´c 2018).	Cognition and its types	Financial decision-making is a system that necessitates a rational selection of alternatives while taking into account new technologies, such as financial information processing (brain), which manifests itself as a network and eliminates old ways to financial decision-making (making changes difficult with challenges coming from all directions).

(Mushinada 2020)	Investor reaction and adaptive behavior	During the pre-crash phase, investors overreact to private information while underreacting to public information. They also grow overconfident and add to the excessive volatility. During the post-crash phase, they under-react to both private and public information, lose confidence, and also adhere to the adaptive market hypothesis (AMH).
(Bhushan,2014)	Awareness regarding financial product, Investment preference	The investor is not able to take the advantage of higher returns offered by the financial product due to lack of financial awareness. The study concluded that current educational program and investment behavior must be known to design effective financial educational program.
Dhingra et al. 2017)	Investment Behaviour	The study advise investor to continuously work on raising their level of understanding of behavioural finance by educating themselves on it. Learning about one's biases and thinking back on one's choices might help one better comprehend the degree and mode in which one is affected by emotions while making risky financial decisions. The rationality of investment decisions and decision-making processes are expected to improve with awareness of biases, leading to greater market efficiency.
(Jagongo & Mutswenje, 2014)	Accounting Information, Self-image, Advocate recomendation, personal financial needs, neutral information	Jagongo and Mutswenje (2014) advocated that the following factors were the most significant determinants of individual investment decisions: the firm's standing in the industry, expected corporate earnings, profit, and condition of statement, past stock performance of the firm, price per share, investor expectations, and perceptions of the economy. The study results contribute the understanding of the investor to make various choices of investor based on the current circumstances and the likely results of each choice. It will also help the company identify the

		factors that will have the biggest impact on investors' behavior in the future, which will affect future policies and strategies.
Niznikiewicz(2013)	Review Article	Being social creatures, investors are impacted by their emotional surroundings. Their actions and choices are a reflection of the emotional climate around them. According to Niznikiewicz (2013), the emotional mode of psychological processing is called "hot cognition." It grows as a result of emotional processing, emotional semantics, and emotional prosody, chatting about one's own objectives, and comprehending emotions and empathizing.
Blackwell et al.(2011)	Excessive Call volume and Cogntive fatigue	Blackwell et al. (2011) establishes hot cognition as emotional based cognition through emotional stability, and social interaction. The research propound that fatigue negatively affects the immune system, emotional stability, and social interactions and also effect and influences the decision-making speed and accuracy of the people.
(Redlawsk (2012)	Hot Cognition and Decision Making	Decision-making is influenced by hot cognition, which transmits an emotional sense of belonging and influences the decision's degree of potency. Upon acquiring new evidence that was previously negatively appraised, the motivated reasoners may actually boost their support for a candidate. The study also came to the conclusion that emotive biases directly contradict the idea of individuals.
(Kshetri and Jha, 2016)	Brand Equity, Brand Attitude, Purchase Intention, Firm created communication,	This study makes an attempt to analyze the relationship between the communication on social networks and its influence on purchase intention and more especially the impact on young customers with special reference to the automobile purchase in India. The study comes to the

	user generated communication	conclusion that emotional support from family and friends affects one's desire to buy.
Cherry (2013)	Social Cognition	Social psychology's subfield of social cognition examines how individuals gather, organize, and use knowledge about others and social contexts. It focuses on how cognitive processes affect how we interact with others. The way we view other people has a big impact on how we feel, act, and perceive the world.
(Currás Pérez et al. 2013)	Attitude, Satisfaction and loyalty toward social networking sites and perceived risk	According to the research, attitude has a significant role in boosting users' contentment and loyalty with social networking platforms. The primary factors influencing user attitudes toward social networking sites are sociability, entertainment gratifications, and perceived hazards (psychological, time loss, and social). It implies that a person's mental processes have an impact on their capacity for social interaction, thought, and perception.
(Fiske 1993)	Social Cognition and Social perception	The study discovered that society or a friend can direct investors toward a broad understanding or consensus. This demonstrates how knowledge of facts and familiarity with people leads to social cognition, which aids in making reasonably affirmative decisions. It advocates that, characteristics are just one of the numerous framework's humans employ to understand others. There is various factor human employee to understand others.
Spencer(2018)		Metacognition is a type of thought that develops through one's own learning. It fosters the development of self-directed learning. It begins with the individual's desire to ascertain and assess the strengths and shortcomings, to plan tactics, and to gain knowledge through experience

Bennet(2012)	students' meta-cognition, their attitude toward problem solving ability	Bennet (2012) stated that a person's knowledge, experience, or self-analysis may help them examine potential scenarios and alter their perspective so they can make better decisions.
Sukanya and Thimmarayappa (2015)		Sukanya and Thimmarayappa found that learners who are self-aware of their own mental processing ability to reflect, assess their own conduct, and govern their own cognitive processes are more likely to come up with clever solutions and make wiser judgments.
(Anantharajan & Sachithanantham, 2016).	Investor perception and Risk tolerance	Investment risk varies across different investment avenues, and different types of hazards are amenable to different levels of absorption by different types of investors. Investors are typically divided into three groups based on their ability to tolerate risk: risk takers, risk neutral investors, and risk averters.
Diaz and Esparcia (2019)	Risk tolerance and Investment behavior	According to Diaz and Esparcia, even if a risk-taker is a risk-tolerant investor, the risk-tolerance level depends on the investment's time horizon in relation to macroeconomic and financial variables.
(Behera et al., 2021)	Investor Cognition, level of interest in investment, and Risk Absorption	Asserts that the risk-absorption capacity (RA) of investors reveals their level of risk tolerance; this includes individuals who make repeated investments over longer periods of time, recommend joint investment strategies, and wait for the market to increase rather than sell while it is down. This aptitude for absorbing risk encourages the investor to take calculated risks with their assets.
Behera, Sahoo, and Pati (2018)	Investor Cognition, level of interest in investment, situational	The study has differentiated risk absorption from the risk tolerance. Risk tolerance refers to an investor's ability to tolerate taking financial risks with respect to a certain financial instrument over a specified time frame, whereas the risk-taking mindset known as "risk

	biases and Risk Absorption	absorption" allows people to take comparably larger risks over longer periods of time. Investment satisfaction in any financial product is higher for someone with risk absorption capability than for someone with tolerance capacity.
Sahi(2012)	Investment Behavior and Neuron-finance	Describes a neuron's propensity to modify both its structure and its operation in response to environmental pressures. The main takeaway from neuroplasticity is that it is possible to change the structure and function of the brain with guided training, regular practice, and self-discipline.
(Frydman & Camerer 2016).	Financial Literacy and Neuroplasticity	Financial literacy is developed by good education of the past knowledge. Financial literacy fosters neuroplasticity by enabling one to comprehend why a previous action led to a loss and by assisting in the development of appropriate solutions for the future.

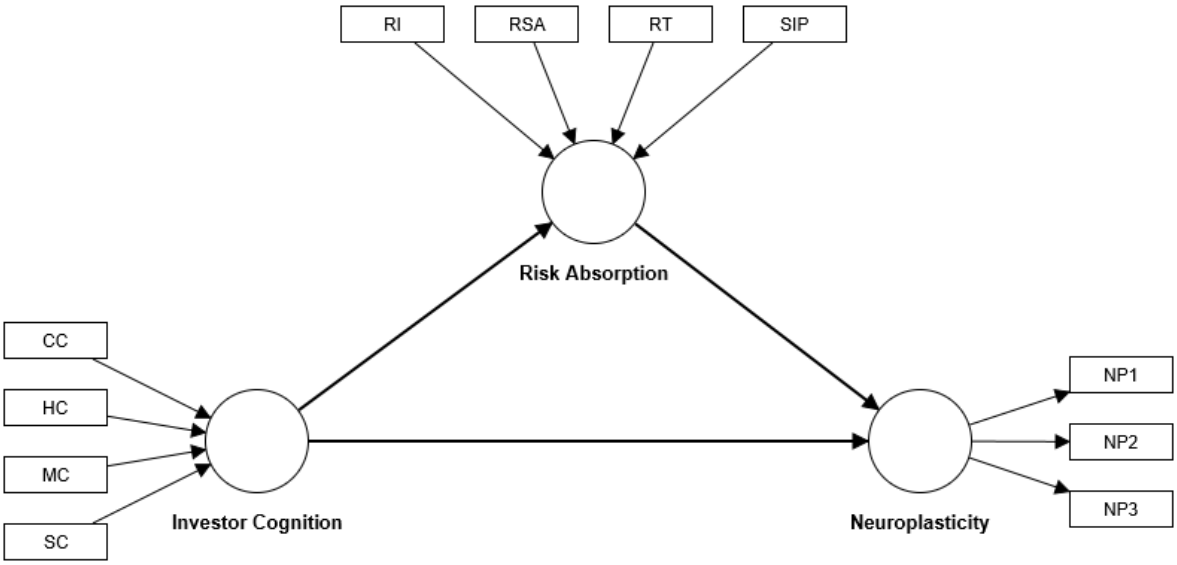
2.4 Research Gap

Few studies have examined the empirical relationship between investor cognition and Neuroplasticity. Behera et al. (2022) has examined the relationship between the Investor Cognition and Neuroplasticity of Investor in the Indian context. Also, Behera et. al. (2021) has examined the relationship between investor cognition and interest in investment in the Indian context. There is gap of literature in the Nepalese context. Adequate studies haven't examined the relationship between the cognition and neuroplasticity. Few researches by Walls (2005) and Hermansson and Jonsson (2021) has examined the relationship between financial interest, literacy and investment decision making. Thus, the study aims to fulfil the gap by examining the relationship between investor cognition and neuroplasticity by the way of mediation by risk absorption.

2.5 Theoretical framework

Figure 1

Theoretical Framework of the study



Adapted from: (Behera, Nanda, Sahoo, & Sahoo, 2022)

2.6 Operational definition of the variables

The variable under study are defined as follows:

- **Investor Cognition** : Tidwell et al (2000) opine that cognition is the process through which humans learn, gather knowledge, analyze it, and apply it to certain tasks. The mental process of thinking, knowing, remembering, reviewing, and problem-solving is known as cognition (Cherry, 2019).

- **Hot Cognition**: Being social creatures, investors are impacted by their emotional environment. Their actions and choices are a reflection of the emotional climate around them. The emotional mode of psychological processing is called "hot cognition". Blackwell et al. (2011) establishes hot cognition as emotional based cognition through emotional stability, and social interaction.
- **Cold Cognition:** Cold cognition is the mental process through which a person learns information on a certain subject (Sahakian, 2017). Cold Cognition involves the use of memories, working memory, attention span, sensory processing, phonology, and the non-emotional semantics (Bhusan, 2014; Dhingra et al. 2017).
- **Meta Cognition:** Metacognition is a type of thought that develops through one's own learning. It fosters the development of self-directed learning. It begins with the individual's desire to ascertain and assess the strengths and shortcomings, to plan tactics, and to gain knowledge through experience (Spencer 2018).
- **Social Cognition**: The mental process by which one person notices, considers, and pays attention to another person in our social context is known as social cognition (Cherry 2019). Social interaction aids a person or influences decision-making, and social contact is controlled by social cognition.
- **Risk Absorption:** Behera et al.(2021) asserts that investor having risk absorption possesses four characteristics, which are risk seeking attitude of the investor, strategic investment planning behavior, recurrence of investment, risk tolerance capacity.
- **Neuroplasticity**: Sahi (2012) describes "neuroplasticity" as neuron's propensity to modify both its structure and its operation in response to environmental pressures. The main takeaway from neuroplasticity is that it is possible to change the structure and function of the brain with guided training, regular practice, and self-discipline.

CHAPTER 3 RESEARCH METHODOLOGY

This chapter primarily focuses on the methods used to gather data and evaluate that data in order to meet the study's objectives. In essence, it covers the study's design, demographic, sample size considerations, data collecting instruments, sources, and methodologies, as well as specifics on data analysis tools and processes.

3.1 Research design

The study used the causal or causative research design to find the impact of independent variable (Investor Cognition) directly on the dependent variable (Neuroplasticity of Investors) and indirectly through a mediating variable (Risk Absorption).

In a causal comparative design, data is collected and analyzed from several cases at a single point in time. After then, the patent of association is analyzed utilizing the quantitative or measurable data that has been acquired (Saunders et al., 2009).

Descriptive research design is used to systematically acquire or describe information relating to the situation or population. The descriptive research design helps to describe the respondent profile and describe the descriptive statistics of different dimension of Investor cognition (Cold Cognition, Hot Cognition, Meta Cognition and Social Cognition) and Risk absorption (Recurrence of Investment, Strategic Investment Planner, Risk tolerance and Risk Seeking Attitude) and Neuroplasticity in Investors.

3.2 Population and sample

The population of the study are the investors, who once invested in the stock market by the way of Initial Public Offering or who have bought share from secondary Market.

The official website of Central Depository System and Clearing (CDSC) Limited reports that there are 53, 00,931 Demat accounts in the nation as a whole. Additionally, 4,401,057 of them utilize Mero share, a CDSC web platform that offers information on share transactions with Demat accounts (Khabarhub, 2022).

Since, the people who have Demat accounts are known but the number of investors who have Demat accounts and have invested in the share are unknown. The population is unknown. Hence, the formula by Cochran (1997) yields the sample Size of 384.

$$n = \frac{Z^2 * p * (1 - p)}{e^2}$$

$$n = \frac{1.96^2 * 0.5 * (1 - 0.5)}{0.05^2}$$

$$n = 384.16 \approx 385$$

$$where, e = Margin\ of\ error$$

$$p = population\ proportion\ assumed\ to\ be\ 0.5$$

$$z = Z - value\ extracted\ from\ z\ table$$

Hence, 405 sample are collected but only 316 valid samples are taken for the study. The invalid samples are dropped from the study by the way of calculation of Mahalonabis distance.

The formula by Green (1991) can also be used to test hypothesis by the way of regression analysis. The formula by Green (1991) computes samples as

$$n \geq 50 + 8m$$

$$Where, m = number\ of\ predictor$$

We have 8 independent variables as evident in the first order model. Hence, the number of samples is

$$n \geq 50 + 8 * 8$$

$$or, n \geq 114$$

Hence, the sample Size is 316 which is more than the sample size as required by the Green(1991) formula of 114 sample size.

The sample size is also justified by the GPower 3analysis software by Faul et al.(2007) which was designed as stand-alone power analysis program for the statistical test to be performed in social and behavioural science. The medium effect size $f^2$of 0.15 with 95% confidence and with the 8 predictors as evident in the first order model gives the sample size of 160. The collect sample is of 316 which is justified by the GPower software sample size evaluation.

3.3 Nature and sources of data

In this study, primary sources of information were employed. We administered a structured questionnaire to the 405 samples. The survey was created using Google Forms as well as printed form. 248 forms out of 400 that were issued online received responses, or 62% of respondents. 200 printed questionnaires were given out to respondents; however, only 152 of them received a response, or 76% of the total. This demonstrates the high response rate for printed questionnaires. Excel was used to arrange the data, SPSS was used to analyze the respondents' profiles, and Smart PLS was used to assess the link between the independent and dependent variables.

3.4 Instrumentation

There are two main portions to the questionnaire. The demographic information and investing habits are covered in the first segment, while the likert scale questions are covered in the second. With 20 questions on cognition, 10 questions about risk taking, and 3 questions about neuroplasticity, the likert scale questionnaire is derived from Behera et al. (2022). The questionnaire's 33 items are all scored on a 7-point likert scale.

3.5 Data management and analysis tools

Social science research software, SPSS will be used for descriptive statistics. Hair et al. (2019) asserts that the formative constructs should be analyse using the PLS SEM. Hence, Smart PLS software will be used for inferential statistics for measuring convergent, discriminant validity, and path coefficient and mediation effect by Bootstrapping

3.6 Common Method Bias Assessment

A Harman single-factor analysis was carried out to ensure that the variation in the data is not caused or explain by the single factor (Podsakoff & Organ, 1986). The outcome showed that 40.22%, or less than 50% of the total variation in the data, was the maximum variance that could be explained by the first component (Babin, Griffin, & Hair, 2016). Despite just using one source for the data collection, common method bias remained unaffected, hence the data did not introduce any distortion.

3.7 Ethical Consideration

Research ethics are critical concerns while preparing the GRP. Honesty and fairness are values that should not be subject to negotiation in the research investigation. In research,

ethics is acting morally and avoiding unethical behavior. Both when conducting the survey and when drafting the report, ethics and standards are upheld.

No unethical acts were performed throughout the survey or report-writing process, and the rules and regulations were followed in accordance with the standards established by the institution. The creation of damage can be prevented by following the correct moral guidelines. There are certain ethical implications to data gathering and the criteria used to select research procedures. The current inquiry is subject to a variety of ethical principles and significant ethical difficulties. Responses determined whether participation was deemed acceptable. The respondents were fully informed of the objectives of the study project for academic purposes and just for this particular research. Along with the questionnaire, the participant also received instructions about the confidentiality of the replies.

The guarantee that participation in the study is optional and that participants are free to revoke at any time for any reason is given to the respondents. The individuals were not subjected to any abuse or harm, either physical or psychological, while they were participating in the study. The researcher, on the other hand, made an effort to create and maintain a flexible, comfortable, and collaborative workplace. Respondents were guaranteed of the confidentiality of the information they provided to the researcher, and they were advised that no information would be released to a third party. They also received an assurance that the data they provided would only be utilized for academic purposes.

CHAPTER 4
ANALYSIS AND RESULTS

The descriptive and inferential statistical data presentation analysis and interpretation are covered in this chapter. The socio-demographic profile of the respondents is examined in the first section to provide a comprehensive view of the sample that was surveyed. The second section looks at the latent variable's descriptive statistics. Following that, the structural model, first and second order measurement models, and hypothesis are evaluated and examined.

4.1 Demographic Profile of respondents

Table 2 exhibits the demographic profile of the respondents who took part in this survey. Respondents have been divided into six main categories. They are Gender, Marital Status, Age group, Occupational, Education and Income. Total of 405 data are collected, out of which 316 valid samples are taken out. Out of 316 respondents, 203 (64.2%) are male and 113 (35.8%) are female. This shows the sample has the majority of male respondents over female.

According to the responses, the number of unmarried respondents is higher than married ones. As, the highest numbers of respondents are below the age of 35. As investing in stock market has become a way of creating small amount of income for peoples, though investing in stock market is a way of generating income for all income groups, here the high number of respondents are of lower income range. The responses clearly show the increasing number of active participation of people from different gender, age groups, income level, educational background, marital status and occupation.

Majority of the respondents are the students(39.2%), and Private job holders(38.3%). The respondent profile consists of the people from the wider background. The respondent profile consists of the Government officers (13.9%), Business person(4.7%), and from NGOs/INGOs and Retired persons.

The respondents also consist of the people from wider academic levels. Majority of the respondents has been graduated with master’s degree (43.4%) where 37% respondents has been graduated with the Bachelor’s degree. 16.1% respondents have done Intermediate as highest degree of education where 3.4% of respondents has completed M-Phill and above.

As the Per capita Income of Nepal is USD 1362 (Onlinekhabar, 2022). The majority of the respondents (48.7%) has the income level below twenty-five thousand where 30.1% of respondents has income level in between fifty thousand to twenty-five thousand. 12.3% respondents have income level in between fifty thousand to seventy-five thousand where 8.9% of respondents has income more than seventy-five thousand.

Table 2

Demographic Profile of Respondents

Demographic Profile		Frequency	Percent
Gender	Male	203	64.2
	Female	113	35.8
Marital Status	Married	84	26.6
	Unmarried	232	73.4
Age Group	Less than 25	119	37.7
	25-35	156	49.4
	35-45	27	8.5
	45-55	12	3.8
	More than 55	2	.6
Occupation	Private Job Holder	121	38.3
	Government Job Holder	44	13.9
	NGOs/INGOs	5	1.6
	Business/Enterprises	15	4.7
	Retired Person	2	.6
	Student	124	39.2
	Others	5	1.6
Education	Up to Intermediate	51	16.1
	Bachelor Degree	117	37.0
	Master Degree	137	43.4
	M-Phil	8	2.5
	PHD	3	.9
Income	Less than 25000	154	48.7
	25000-50000	95	30.1
	50000-75000	39	12.3
	75000+	28	8.9

Table 3 shows the classification of respondents on the basis of their investment behavior, which they exhibit while participating in stock market. The responses were collected from 405 sample, among them only 316, were involved in the stock market. From these 316 respondents, 66.1 percent invest in stock market upon interest, they mostly wait for that market to create a new momentum and wait for the perfect opportunity. 8.2% of the respondents, involve in day-to-day transactions, mostly they are the traders.

During COVID-19 pandemic, the huge number of investors entered the stock market. Here from the responses. Highest number of respondents 46.8 percent has the experience of less than 2 years. More than 50% of the respondents has the portfolio of less than 5 lakhs, as mostly the respondents are from the low-income range peoples. Whereas, 45.6% of the respondent's family are not financially dependent on them.

Table 3

Investment Profile of Respondents

Investment Profile		Frequency	Percent
Involvement	Yes	316	78.1
	No	89	21.9
Frequency	Daily (In Transaction Day)	26	8.2
	Once a Month	49	15.5
	Once a Week	32	10.1
	Upon Interest	209	66.1
Experience	Less than 2	148	46.8
	2-5	126	39.9
	5-8	26	8.2
	8 and above	16	5.1
Value of portfolio	Less than 50000	101	32.0
	50,000-5,00,000	131	41.5
	5,00,000-20,00,000	62	19.6
	20,00,000-50,00,000	18	5.7
	50,00,000 and above	4	1.3
Dependency	Fully	39	12.3
	Partially	133	42.1
	No	144	45.6

4.2 Descriptive Statistics

Table 4

Descriptive Statistics of Cold Cognition

Cold Cognition	Mean	Standard Deviation
Investment in the stock Market needs knowledge relating to it.	6.025	1.4517
I read the information on the company website before investing.	5.367	1.5049
I read newspaper articles related to investment avenues from time to time.	4.772	1.7160
I collect and read past and expected returns before making and investment	5.228	1.5732
Financial literacy is a must for making investments.	5.987	1.4074
Transparency of investment information presents me with more reasons to invest.	5.725	1.3130

Table 4 exhibits the descriptive statistics of Cold Cognition. The typical respondents are leaning toward the agree side of the statement about Cold Cognition, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in CC1 6.025 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement CC3 i.e., 4.772. Likewise, the highest standard deviation is 1.7160 from the CC3 statement, indicating the maximum deviation of responses. Whereas, 1.3130 is the lowest standard deviation from CC6 ,indicating minimum deviation of responses.

Table 5

Descriptive Statistics of Hot Cognition

Statement	Mean	Standard Deviation
I prefer views from experts' stock market investors	4.918	1.5633
I consult my family members before making and investment decision	4.123	1.9842
People around me also gives me suggestion to invest.	5.025	1.5304
Friends and relatives help me to make better stock market investment decisions	4.547	1.8015

Table 5 exhibits the descriptive statistics of Hot Cognition. The fact that the mean value of every item is greater than 4 indicates that the average respondents are leaning toward the agree side of the statement about Hot Cognition. Responses range from strongly disagree to strongly agree for each of the issues. In contrast to HC2, where respondents gave a lesser degree of agreement, HC3's highest mean, 5.025, indicates the highest level of agreement for the statement by typical respondents. The greatest standard deviation of the replies is 1.9842 from the HC2 statement, which is also the largest standard deviation. The lowest standard deviation from HC3 is 1.5304, which indicates the least amount of variation in the replies.

Table 6

Descriptive Statistics of Meta Cognition

Meta Cognition	Mean	Standard Deviation
I compare similar investment avenues before making a purchase decision	5.212	1.4241
I will invest more, if I will receive depth investment training.	5.627	1.3961
I prefer an in-depth analysis of consecutive profit before making an investment.	5.285	1.4034
I usually study scholarly articles about stock market investment to obtain greater knowledge.	4.642	1.7040
I try to analyze the reason for the fall and rise of a stock market index.	5.104	1.5952
I can make more investments if I have confirmed analytical news.	5.573	1.3631

Table 6 exhibits the descriptive statistics of Meta Cognition. The typical respondents are leaning toward the agree side of the statement about Meta Cognition, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in MC2 i.e. 5.627 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement MC4 i.e., 4.642. Likewise, the highest standard deviation is 1.7040 from the MC4 statement, indicating the maximum deviation of responses. Whereas, 1.3631 is the lowest standard deviation from MC6 ,indicating minimum deviation of responses.

Table 7

Descriptive Statistics of Social Cognition

Social Cognition	Mean	Standard Deviation
I prefer watching morning news on media relating to the same day investment.	4.481	1.7807
I prefer to observe the twitter handles and Facebook pages of big stock market investors.	4.747	1.6731
Invest mobile apps help me to make better investment decisions.	4.854	1.7028
The financial advisor in our society helps me to make investments.	4.291	1.8355

Table 7 exhibits the descriptive statistics of Social Cognition. The typical respondents are leaning toward the agree side of the statement about Social Cognition, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in SC3 i.e. 4.854 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement SC4 i.e., 4.291. Likewise, the highest standard deviation is 1.8355 from the SC4 statement, indicating the maximum deviation of responses. Whereas, 1.673 is the lowest standard deviation from SC2 ,indicating minimum deviation of responses.

Table 8

Descriptive Statistics of Recurrence of Investment

Recurrence	Mean	Standard Deviation
I have been an active investor in the stock market.	4.361	1.6397
I will repeat a similar investment in the future.	4.671	1.6112
If my income rises, I will make more investment.	5.582	1.5684

Table 8exhibits the descriptive statistics of the variable, Recurrence of Investment. The typical respondents are leaning toward the agree side of the statement about Recurring the

Investment, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in RI3 i.e. 5.582 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement RI1 i.e., 4.361. Likewise, the highest standard deviation is 1.6397 from the RI1 statement, indicating the maximum deviation of responses. Whereas, 1.5684 is the lowest standard deviation from RI3 ,indicating minimum deviation of responses.

Table 9

Descriptive statistics of Risk Seeking Attitudes

Statements	Mean	Standard Deviation
Investing in stock Market resolve my greater finance	4.598	1.5450
Stock Market investment gives me more income than FD.	4.978	1.6338
I want to invest more in comparatively risky share	4.472	1.6929
Past investment experiences help me to make more investments	5.380	1.5941

Table 9 exhibits the descriptive statistics of the variable Risk Seeking Attitude. The typical respondents are leaning toward the agree side of the statement about Risk Seeking Attitude, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in RSA4 i.e. 5.380 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement RSA3 i.e., 4.472. Likewise, the highest standard deviation is 1.6929 from the RSA3 statement, indicating the maximum deviation of responses. Whereas, 1.5450 is the lowest standard deviation from RSA1 ,indicating minimum deviation of responses.

Table 10

Descriptive statistics of Strategic Investment Planner

Statements	Mean	Standard Deviation
I will continue with the same investment, even if the prices are currently low, if analyzed properly.	4.756	1.6448
I am not emotional, but rather rationally choose my investments.	5.203	1.4552
Past losses don't stop me from investing.	5.063	1.6910

Table 10 exhibits the descriptive statistics of the variable, Strategic Investment Planner. The typical respondents are leaning toward the agree side of the statement about Strategic Investment Planning, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in SIP2 i.e. 5.203 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement SIP1 i.e., 4.756. Likewise, the highest standard deviation is 1.6910 from the SIP3 statement, indicating the maximum deviation of responses. Whereas, 1.4552 is the lowest standard deviation from SIP2 ,indicating minimum deviation of responses.

Table 11

Descriptive Statistics of Risk Tolerance

Statement	Mean	Standard Deviation
I have patience with the present investment even if the present profits are not good.	5.171	1.5294
I am optimistic regarding growth of my investment.	5.405	1.4411
I gradually take more and more risk while investing.	4.627	1.5995
I prefer more return with more risk over less return with less risk.	5.019	1.6675

Table 11 exhibits the descriptive statistics of the variable, Risk Tolerance. The typical respondents are leaning toward the agree side of the statement about Risk Tolerance, as seen

by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in RT2 i.e. 5.405 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement RT3 i.e., 4.627. Likewise, the highest standard deviation is 1.6675 from the RT4 statement, indicating the maximum deviation of responses. Whereas, 1.4411 is the lowest standard deviation from RT2 ,indicating minimum deviation of responses.

Table 12

Descriptive Statistics of Neuroplasticity of Investors

Statements	Mean	Standard Deviation
In the future, I can make a better investment decision.	5.563	1.4450
I am mentally prepared to handle investment securities in the future,	5.497	1.4789
I will soon make more investments as my ability has improved.	5.715	1.3851

Table 12 exhibits the descriptive statistics of the variable, Neuroplasticity of Investor. The typical respondents are leaning toward the agree side of the statement about Neuroplasticity of Investors, as seen by the fact that the mean value of every item is higher than 4. All the items have responses ranging from strongly disagree to strongly agree. The highest mean is recorded in NP3 i.e. 5.715 indicating highest level of agreement for the statement by average respondents where respondents give lower level of agreement on the statement NP2 i.e., 5.497. Likewise, the highest standard deviation is 1.4789 from the NP2 statement, indicating the maximum deviation of responses. Whereas, 1.3851 is the lowest standard deviation from NP3 ,indicating minimum deviation of responses.

Table 13

Descriptive statistics of Variables

Variables	Mean	Standard Deviation
Cold Cognition	5.5174	1.08263
Hot Cognition	4.6535	1.31618
Meta Cognition	5.2405	1.05401
Social Cognition	4.5934	1.29926
Recurrence of Investment	4.8713	1.30619
Risk Seeking Attitude	4.8568	1.28802
Strategic Investment Planner	5.0074	1.30672
Risk Tolerance	5.0554	1.27464
Neuroplasticity	5.5918	1.29863

Table 13 depicts the descriptive statistics of the latent variables of the study. The typical respondents are leaning toward the agree side of the variables, as seen by the fact that the mean value of every item is higher than 4. The highest mean is recorded in the variable Neuroplasticity i.e. 5.918 indicating highest level of agreement for the variable by average respondents where respondents give lower level of agreement for the variable Social Cognition i.e., 4.5934. Likewise, the highest standard deviation is 1.31618 from the Hot Cognition, indicating the maximum deviation of responses. Whereas, 1.05401 is the lowest standard deviation from Meta Cognition ,indicating minimum deviation of responses.

The mean value of Cold cognition is 5.5174 which implies that respondent are leaning toward the agreement of the fact that they working memory, attention, sensory processing helps them to learn about the investment avenues. The mean value of Hot Cognition is 4.6535 which implies that investor are leaning toward the fact that investor are learning about the new investment opportunities and getting help to drag out themselves from past losses by the help of their emotional state. The mean value of Meta Cognition is 5.2405 which implies that investor agree on the fact that they are self-directed toward learning. The mean value of Social Cognition is 4.5934. The mean value of Recurrence of Investment is 4.8713.

It implies that investors are leaning toward the agreement of the fact that they are going to continue their same investment avenues. The mean value of Risk Seeking Attitude is 1.28802. It entails that investor are leaning toward the fact that investors are seeking the risky assets for increasing return. The mean value of Strategic Investment Planner is 5.0074. It entails that investor lean toward the fact that they are making their investment choices strategically not solely based on intuition. The mean value of Risk Tolerance is 5.0554. It entails that investor lean toward the fact that they have quite good risk tolerance capacity. The mean value of Neuroplasticity in Investor is 5.5918. It implies that investor agree on the fact that by the way of experience, investors are likely to return back to the investment activity and the trauma created by the past losses has been positively healed.

4.3 Normality Test

Table 14 exhibits the Kolmogorov-Smirnov and Shapiro-Wilk test for examining the significance of the normality assumption. The null hypothesis of this test exhibits that the variable follows a normal distribution. From the table we can observe the p-value of all the variables are less than 0.005, Therefore we have sufficient evidence to reject the null hypothesis that variable follows a normal distribution. So, here the parametric tests are not possible, so validating our choice Partial Least Square, a non-parametric test is used for testing our hypothesis.

Table 14

Normality test of variables

Variables	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
CC	.147	316	.000	.885	316	.000
HC	.102	316	.000	.961	316	.000
MC	.128	316	.000	.928	316	.000
SC	.117	316	.000	.966	316	.000
RI	.156	316	.000	.938	316	.000
RSA	.117	316	.000	.927	316	.000
SIP	.149	316	.000	.923	316	.000
RT	.130	316	.000	.935	316	.000
NP	.206	316	.000	.842	316	.000

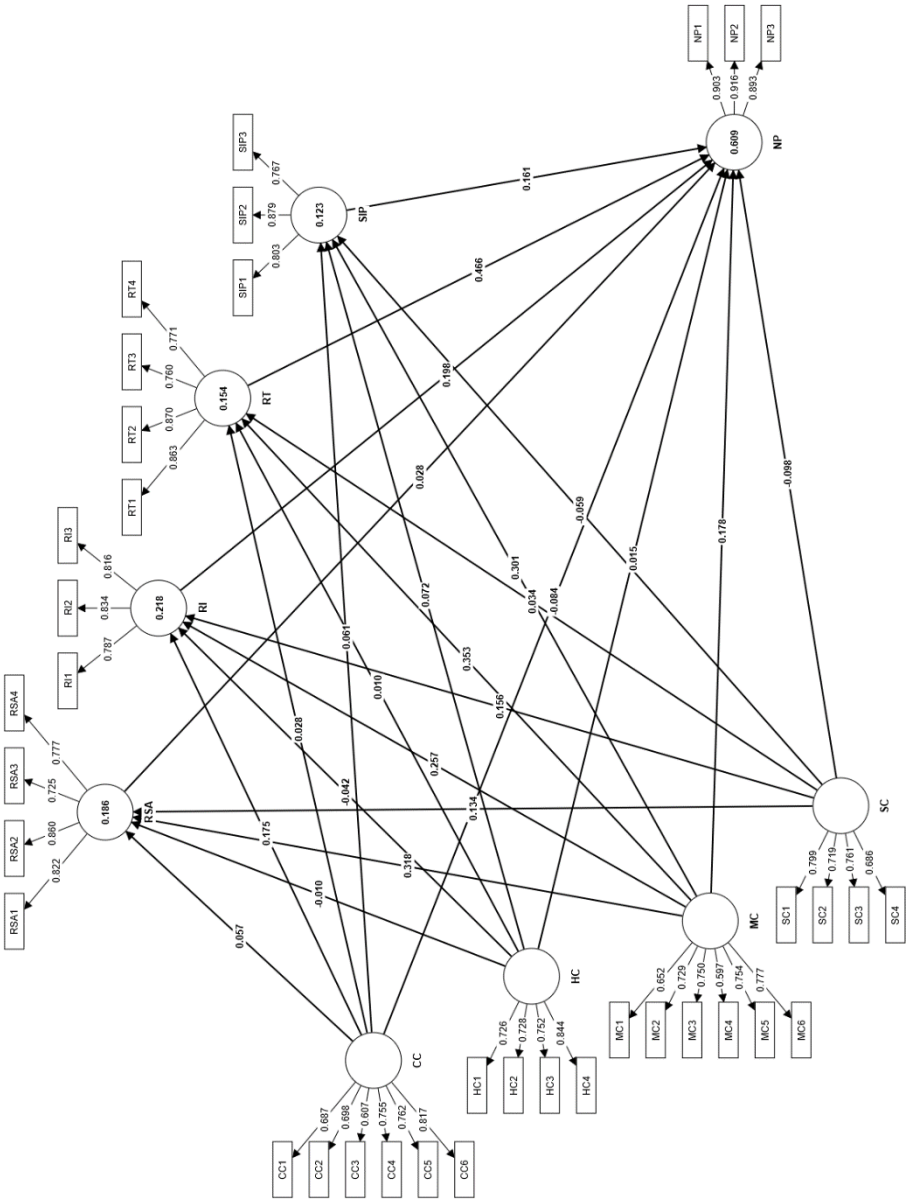
4.4 Assessment of the Measurement Model

The assessment of the measurement models includes the evaluation of reliability of the measures. It assesses the reliability on both indicator level (indicator reliability and also on construct level (internal consistency reliability). The Average Variance Extracted(AVE) is used to determine the convergent validity of each measure. Additionally, the Heterotrait-Monotrait (HTMT) ratio of correlations enables evaluation of the discriminant validity of reflective measurement model construct in contrast to other construct measures in the same model.

4.4.1 First Order Model

Figure 2

First Order Measurement Model



4.4.1.1 Convergent Reliability and validity

Table 15

Construct Reliability and Validity

Items	Factor	Loadings	CA	CR (rho_a)	CR (rho_c)	AVE
Cold Cognition	CC1	0.687	0.82	0.85	0.868	0.524
	CC2	0.698				
	CC3	0.607				
	CC4	0.755				
	CC5	0.762				
	CC6	0.817				
Hot Cognition	HC1	0.726	0.763	0.774	0.848	0.584
	HC2	0.728				
	HC3	0.752				
	HC4	0.844				
Meta Cognition	MC1	0.652	0.806	0.817	0.86	0.508
	MC2	0.729				
	MC3	0.75				
	MC4	0.597				
	MC5	0.754				
	MC6	0.777				
Social Cognition	SC1	0.799	0.73	0.745	0.83	0.551
	SC2	0.719				
	SC3	0.761				
	SC4	0.686				
Recurrence of Investment	RI1	0.787	0.744	0.747	0.854	0.66
	RI2	0.834				
	RI3	0.816				
Risk Seeking Attitude	RSA1	0.822	0.809	0.819	0.874	0.636
	RSA2	0.86				
	RSA3	0.725				
	RSA4	0.777				
Risk tolerance	RT1	0.863	0.835	0.854	0.889	0.668
	RT2	0.87				
	RT3	0.76				
	RT4	0.771				
Strategic Investment Planner	SIP1	0.803	0.754	0.789	0.858	0.669
	SIP2	0.879				
	SIP3	0.767				
Neuroplasticity	NP1	0.903	0.888	0.888	0.93	0.817
	NP2	0.916				
	NP3	0.893				

The first step in assessment of the reflective measurement model includes the examination of the factor loadings. It examines whether the indicator variance is whether explained by its construct or not, which indicates the indicator reliability. Hulland (1999) asserts that the researchers frequently obtain weaker indicator loadings (< 0.708) for their measurement models in social science studies. The study by Hulland (1999) suggest that the indicators with loadings (<0.708) should be carefully examine and should be dropped only, if it increases in the internal consistency reliability or convergent validity. The study by Sarstedt et al.(2017) suggested that the outer loadings value (<0.5) can be retained. All the values of the Outer loadings are within the acceptable range for this study.

As per the Hair et. al(2021) the second step involves the assessment of the constructs' internal consistency reliability using Jöreskog's (1971) composite reliability. For the composite reliability criterion, higher values indicate higher levels of reliability. The value between 0.60 and 0.70 as acceptable in exploratory research, whereas results between 0.70 and 0.95 represent satisfactory to good reliability levels (Hair et al. 2022). All the values of the composite reliability are between the 0.7 and 0.95, which is the acceptable range for this study.

Another measure of the internal consistency reliability is Cronbach's alpha. All the items consist of the acceptable range of Cronbach alpha. Hermosilla and Alvarado (2016) asserts about the major limitation of Cronbach's alpha as it assumes that the indicators loadings are as same as like in the population which is also referred as tau-equivalence. However, studies have demonstrated that Cronbach's alpha is a reliable lower-bound estimate of the genuine internal consistency reliability even in the absence of tau-equivalence (Hermosilla & Alvarado, 2016). In PLS-SEM Cronbach's alpha is considered as the lower bound, while Composite reliability (rho_c)defines the upper bound of internal consistency reliability when estimating reflective measurement models. Hence, the actual reliability of a construct likely falls between Cronbach's alpha and the composite reliability (rho_c).

As an alternative and building on Dijkstra (2010), various researcher has proposed the exact (or consistent) method of assessing the reliability coefficient (rho_a) (Dijkstra, 2014; Dijkstra & Henseler, 2015). The reliability coeffcient should actually fall between 0.7 and 0.95 to measures the reliability of the model (Hair et.al., 2021).

The third step to assess the convergent validity of each construct is to compute whether the construct do converge in order to explain the indicator variances or not. The metric used to

evaluate is Average Variance Extracted (AVE). The minimal acceptable criteria for the AVE s 0.5. It entails that the construct should explain 50% in minimum or more of the variance of the indicators.(Hair et al., 2022). All the AVE are within the acceptable range for the study. So the measurement model establishes the convergent validity and reliability.

4.4.1.2 Discriminant Validity

Discriminant validity assesses how different a construct is from other constructs in the structural model experimentally. For the assessment of discriminant validity, three different metrics, Fornell and Larcker criterion, Heterotrait and Monotrait ratio and cross loadings should be evaluated (Hair et. al., 2021).

As proposed by Chin (1998), the discriminant validity can be assessed with the help of the cross loadings. The outer loadings on each item of the associated construct should be greater than the loading of item in the other construct. Table 18 exhibits the cross loadings of the items of the construct and there are no any issues as exhibited by the chin (1998).

Table 16

Fornell-Larcker Criterion

	CC	HC	MC	NP	RI	RSA	RT	SC	SIP
CC	**0.724**								
HC	0.221	**0.764**							
MC	0.66	0.371	**0.713**						
NP	0.259	0.157	0.417	**0.904**					
RI	0.386	0.166	0.427	0.571	**0.813**				
RSA	0.309	0.184	0.412	0.541	0.603	**0.797**			
RT	0.275	0.163	0.391	0.727	0.536	0.603	**0.817**		
SC	0.325	0.474	0.451	0.149	0.308	0.291	0.207	**0.742**	
SIP	0.256	0.169	0.341	0.635	0.563	0.566	0.681	0.13	**0.818**

The traditional metric Fornell and Larcker criterion was proposed by Fornell and Larcker (1981), who suggested that each construct's AVE (squared variance within) should be compared with the squared value of inter construct correlation (as a measure of shared variance between constructs) of that same construct and all other reflectively measured constructs in the structural model. The shared variance between all model constructs shouldn't be greater than their AVEs (Hair et al., 2021). Table 16 the square roots of the

AVE located on the diagonal of this table which are greater than the correlation between that construct and the rest of the constructs in the model. Hence, the model justifies the Discriminant validity. (Fornell & Larcker, 1981; Henseler, Ringle &Sarstedt, 2015).

However, recent research by Henseler, Ringle, and Sarstedt (2015) and (Radomir & Moisescu, 2019) show that the Fornell-Larcker criteria is ineffective, especially when the indicator loadings on a construct are marginally different. As a result, the Fornell-Larcker criteria frequently fails to accurately identify discriminant validity problems in practical applications. The Heterotrait-Monotrait ratio (HTMT) of correlations can be utilized as an alternate method to evaluate the discriminant validity. (Henseler et al., 2015; Hair et. al,2021).

Henseler et al. (2015) advocates regarding the threshold limit of 0.9 for the conceptually similar construct and 0.85 for the conceptually different construct in the structural model. Table 17 exhibits the all the pair of values which are less than 0.85. Hence, the model exhibit the discriminant validity by the criterion of HTMT ratio of correlations (Henseler et al., 2015; Hair et. al,2021).

Table 17

Heterotrait-Monotrait Ratio (HTMT)

	CC	HC	MC	NP	RI	RSA	RT	SC	SIP
CC									
HC	0.286								
MC	0.807	0.48							
NP	0.287	0.193	0.472						
RI	0.485	0.217	0.554	0.692					
RSA	0.368	0.226	0.505	0.631	0.772				
RT	0.309	0.207	0.459	0.829	0.669	0.74			
SC	0.432	0.656	0.586	0.184	0.411	0.381	0.28		
SIP	0.297	0.205	0.423	0.758	0.75	0.72	0.837	0.175	

Table 18

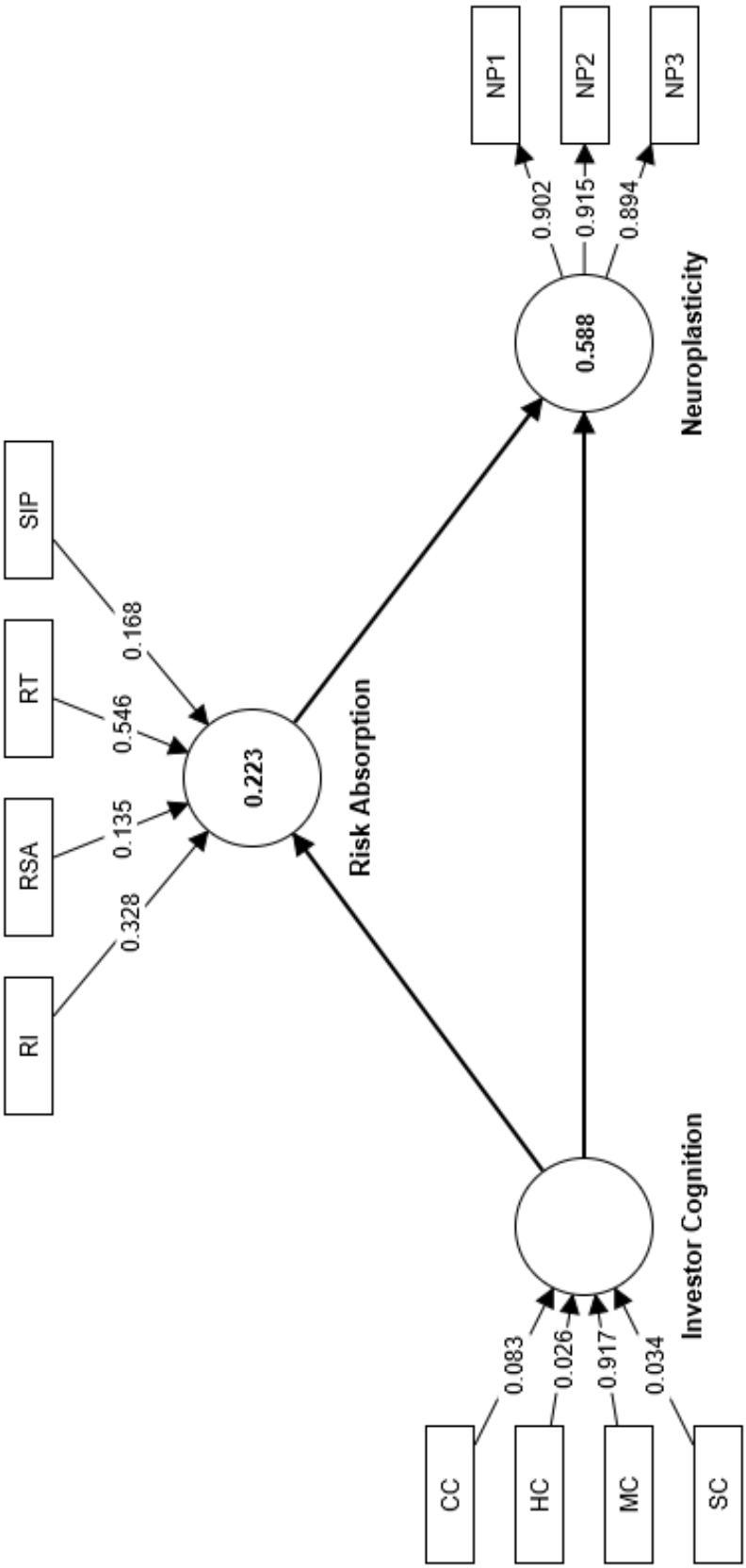
Cross Loadings

	CC	HC	MC	NP	RI	RSA	RT	SC	SIP
CC1	**0.687**	0.113	0.422	0.23	0.162	0.125	0.159	0.1	0.131
CC2	**0.698**	0.135	0.446	0.091	0.293	0.203	0.116	0.287	0.099
CC3	**0.607**	0.185	0.441	0.082	0.258	0.19	0.116	0.415	0.077
CC4	**0.755**	0.168	0.552	0.132	0.334	0.298	0.194	0.329	0.179
CC5	**0.762**	0.172	0.426	0.242	0.279	0.201	0.242	0.144	0.229
CC6	**0.817**	0.185	0.564	0.29	0.321	0.28	0.295	0.2	0.305
HC1	0.267	**0.726**	0.303	0.149	0.133	0.145	0.145	0.394	0.092
HC2	0.047	**0.728**	0.211	0.107	0.082	0.159	0.115	0.339	0.156
HC3	0.181	**0.752**	0.346	0.129	0.101	0.073	0.097	0.396	0.092
HC4	0.179	**0.844**	0.288	0.101	0.176	0.166	0.134	0.335	0.165
MC1	0.477	0.231	**0.652**	0.251	0.334	0.277	0.225	0.321	0.193
MC2	0.39	0.382	**0.729**	0.426	0.314	0.286	0.33	0.334	0.264
MC3	0.542	0.193	**0.75**	0.35	0.331	0.309	0.319	0.233	0.263
MC4	0.402	0.252	**0.597**	0.112	0.282	0.241	0.127	0.371	0.15
MC5	0.567	0.217	**0.754**	0.254	0.312	0.359	0.292	0.36	0.278
MC6	0.448	0.311	**0.777**	0.314	0.26	0.283	0.322	0.348	0.277
NP1	0.241	0.131	0.396	**0.903**	0.483	0.452	0.655	0.133	0.541
NP2	0.23	0.113	0.361	**0.916**	0.545	0.48	0.656	0.102	0.556
NP3	0.232	0.181	0.373	**0.893**	0.52	0.535	0.66	0.167	0.623
RI1	0.338	0.146	0.39	0.378	**0.787**	0.532	0.435	0.388	0.433
RI2	0.302	0.161	0.315	0.411	**0.834**	0.446	0.383	0.262	0.454
RI3	0.301	0.103	0.333	0.584	**0.816**	0.489	0.477	0.118	0.482
RSA1	0.333	0.212	0.401	0.426	0.494	**0.822**	0.457	0.311	0.426
RSA2	0.259	0.14	0.308	0.485	0.466	**0.86**	0.508	0.17	0.514
RSA3	0.121	0.145	0.277	0.319	0.4	**0.725**	0.476	0.279	0.366
RSA4	0.242	0.088	0.318	0.478	0.552	**0.777**	0.488	0.179	0.488
RT1	0.269	0.14	0.385	0.657	0.496	0.491	**0.863**	0.153	0.671
RT2	0.221	0.091	0.311	0.706	0.463	0.521	**0.87**	0.081	0.642
RT3	0.208	0.129	0.296	0.461	0.391	0.483	**0.76**	0.232	0.42
RT4	0.194	0.189	0.278	0.512	0.388	0.483	**0.771**	0.253	0.446
SC1	0.346	0.302	0.429	0.094	0.32	0.249	0.173	**0.799**	0.115
SC2	0.22	0.343	0.283	0.163	0.232	0.209	0.149	**0.719**	0.046
SC3	0.218	0.38	0.369	0.109	0.194	0.181	0.155	**0.761**	0.119
SC4	0.143	0.415	0.227	0.075	0.133	0.222	0.133	**0.686**	0.108
SIP1	0.255	0.162	0.334	0.428	0.424	0.421	0.498	0.165	**0.803**
SIP2	0.222	0.196	0.305	0.638	0.489	0.498	0.606	0.105	**0.879**
SIP3	0.149	0.032	0.189	0.46	0.472	0.473	0.566	0.048	**0.767**

4.4.2 Assessment of Measurement Model of Second Order Model

Figure 3

Second Order Measurement Model



PLS-SEM is the preferred approach when formatively specified constructs are included in the PLS path model (Hair, Risher, Sarstedt, & Ringle, 2019).

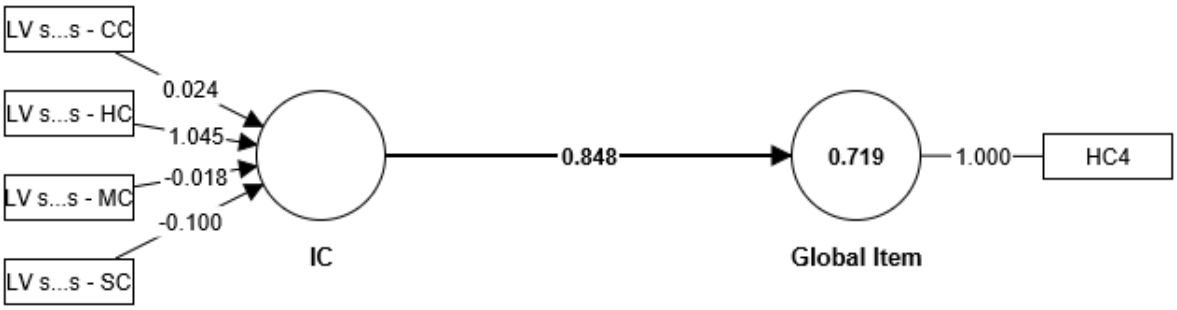
Hair et. al (2021) has discussed about three key steps for the evaluation of formative measurement models. The relevant criteria include the assessment of convergent validity, indicator collinearity, and statistical significance and relevance of the indicator weights.

4.4.2.1 Assessment of Convergent validity

Convergent validity in formative measurement model assessment refers to how well the formatively specified construct corresponds with a different reflectively measured variable (or variables) of the same concept. Chin (1998) used the term redundancy analysis to describe the process of correlation of formatively specified construct with alternative reflective measured variable.

Figure 4

Redundancy Analysis of Investor Cognition



Hair et al. (2021) advocates that the correlation between the formatively measured construct and reflectively measured construct should be 0.708 or higher which implies that the construct should at least explain 50% of its alternative reflective measurement construct.

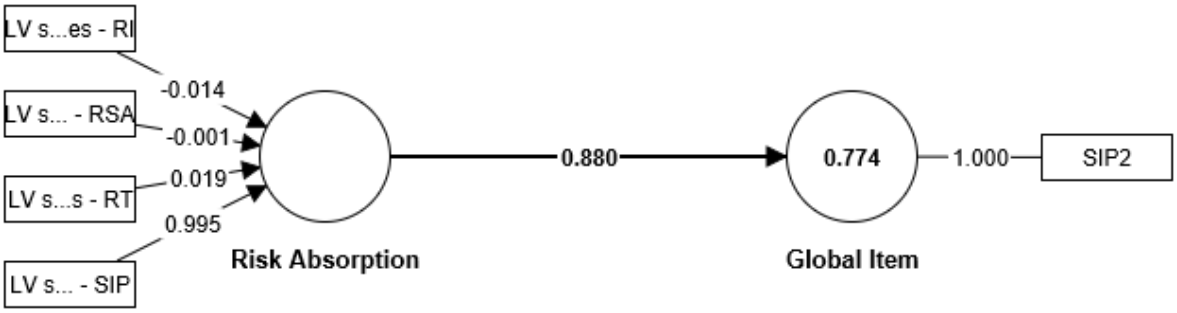
The item with the highest loading of Investor Cognition is HC4. Hence, The item HC4 is taken as a global item for the assessment of convergent validity of formative construct Investor Cognition (IC). Figure Exhibit the correlation between the Investor Cognition (IC) and global item of IC is 0.848 which entails that the model justifies the requirement for the convergent validity of the formative measured construct.

The item with the highest loading of Risk Absorption(RA) is SIP2. Hence, the item SIP2 is taken as a global item for the assessment of convergent validity of formative construct Risk Absorption. Figure Exhibit the correlation between the Risk Absorption (RA) and global

item of RA is 0.880 which entails that the model justifies the requirement for the convergent validity of the formative measured construct.

Figure 5

Redundancy Analysis of Risk Absorption



4.4.2.2 VIF Analysis

Table 19

Collinearity Statistics

Indicators	Variance Inflation Factor (VIF)
Cold Cognition (CC)	1.781
Hot Cognition (HC)	1.348
Meta Cognition (MC)	2.068
Social Cognition (SC)	1.459
Recurrence of Investment (RI)	1.8
Risk Seeking Attitude (RSA)	1.946
Risk Tolerance (RT)	2.173
Strategic Investment Planning (SIP)	2.131

The second step in the Evaluation of the formative measurement model is assessment of the indicator collinearity of the formatively measured construct. Hair et al. (2021) entails about the indicator collinearity exist if the VIF values are more than or equal to 5. However, Collinearity can occur even if the VIF values are more than or equal to 3. (Becker, Ringle, Sarstedt, & Völckner, 2015; Mason & Perreault, 1991) The formative model of the Investor Cognition and Risk Absorption justifies that the indicator doesn't have collinearity among them as all the VIF values of the indicators are less than 3.

4.4.2.3 Outer Weight Analysis

Table 20

Outer weights of first order constructs

Revise with Confidence Interval	Original sample (O)	Bias	2.5%	97.5%	P values
CC -> Investor Cognition	**0.083**	**0.002**	**-0.248**	**0.420**	**0.626**
HC -> Investor Cognition	**0.026**	**0.002**	**-0.241**	**0.282**	**0.843**
MC -> Investor Cognition	0.917	-0.024	0.625	1.158	0.000
SC -> Investor Cognition	**0.034**	**0.001**	**-0.237**	**0.283**	**0.798**
RI -> Risk Absorption	0.328	-0.002	0.166	0.494	0.000
RSA -> Risk Absorption	**0.135**	**0.000**	**-0.041**	**0.303**	**0.122**
RT -> Risk Absorption	0.546	-0.004	0.384	0.698	0.000
SIP -> Risk Absorption	0.168	0.001	-0.002	0.322	0.039
NP1 <- Neuroplasticity	0.358	0.001	0.336	0.382	0.000
NP2 <- Neuroplasticity	0.371	0.001	0.349	0.398	0.000
NP3 <- Neuroplasticity	0.378	0.000	0.356	0.408	0.000

The third step of assessing the measurement model of formative model is evaluation of statistical significance and relevance of the indicators weight. The indicator weights are produced by regressing the formatively measured construct on the indicators associated with it as it represents the relative importance for the formation of the construct. The significance testing is relied with the bootstrapping procedure with 10000 sub samples (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014).

Hair et al. (2021) advocated about the confidence interval as an alternative way to examine the significance of the indicator weights. The indicator weights should be statistically significant. The findings by Aguirre-Urreta and Rönkkö (2018) indicate that percentile method of bootstrapping is preferable because it outperform others methods of bootstrapping in terms of coverage, balance and produce comparably narrow confidence interval. The indicator weight thus calculated with percentile bootstrapping of HC, CC, SC of Investor Cognition and RSA of Risk Absorption are not statistically significant as the confidence interval include 0 between them.

However, even if the indicator weight is not significant, it should not be misinterpreted as poor measurement model. Cenfetelli and Bassellier (2009) recommend to consider the absolute contribution of the formative indicator to the construct. The absolute contribution

of the formative indicators to the construct should be determined by the formative indicator's loadings. Hair et al. (2021) asserts that the indicators should not be dropped if the indicators absolute contribution or outer loadings is greater than 0.5. All the loadings of the formative construct are greater than 0.5. So, the formative mode constructs signify the statistical significance of the formative model assessment.

Table 21

Outer loadings of first order constructs

	Original sample (O)	T statistics	P values
CC -> Investor Cognition	0.705	6.419	0
HC -> Investor Cognition	0.522	3.517	0
MC -> Investor Cognition	0.997	49.729	0
NP1 <- Neuroplasticity	0.902	51.884	0
NP2 <- Neuroplasticity	0.915	62.612	0
NP3 <- Neuroplasticity	0.894	46.522	0
RI -> Risk Absorption	0.797	16.48	0
RSA -> Risk Absorption	0.757	13.375	0
RT -> Risk Absorption	0.918	33.176	0
SC -> Investor Cognition	0.587	4.812	0
SIP -> Risk Absorption	0.802	17.247	0

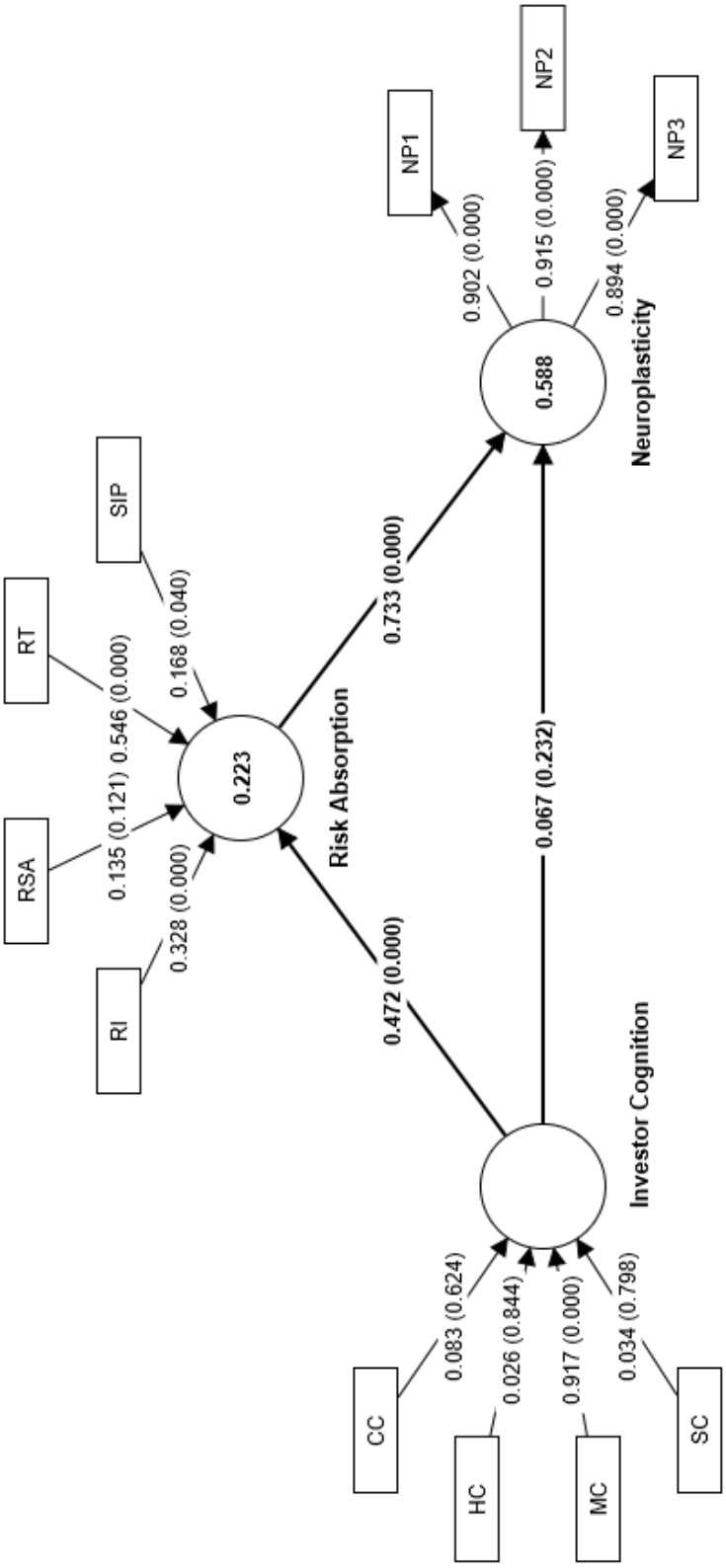
In terms of assessing the relevance of the formative model, The indicators weight closer to +1 and -1 are said to be have strong positive relationship where indicators close to 0 are said to be have weaker relationship. The meta cognition has comparatively stronger relationship where the Hot Cognition, Social Cognition and Meta Cognition seems to have weaker relationship.

The Risk Tolerance and Recurrence of Investment seems to have moderate positive relationship where the Strategic Investment planner and Risk Seeking Attitude has weaker relationship.

4.5 Assessment of the Structural Model

Figure 6

Structural Model



4.5.1 Assessment of the Collinearity issues of the structural model

The relationship between the construct by the way of structural model coefficients are derived by estimating the series of regression equation. The collinearity issues should be assessed to examine the biases of the standard errors and point estimates (Sarstedt & Mooi, 2019; Chap. 7).

Hair et al. (2021) entails about the indicator collinearity exist if the VIF values are more than or equal to 5. However, Collinearity can occur even if the VIF values are more than or equal to 3 (Becker, Ringle, Sarstedt, & Völckner, 2015; Mason & Perreault, 1991). All the indicator VIF values are less than 3. So, the table justifies that the indicator doesn't have collinearity among the explanatory variables.

4.5.2 Assessment of the model fit

Standardized Root Mean Square Residual (SRMR) is the most common and appropriate criterion used in PLS-SEM path modelling to determine data and model fit (Henseler et al., 2015). A good model fit is indicated as the SRMR from saturated model's is 0.043 and estimated model is 0.043. SRMR value 0 indicates a perfect model fit, while under 0.08 implies a good fit (Henseler et al., 2015). Hence, The study has justifies for the model fit criteria.

4.5.3 Significance and relevance of Structural model relationship

Table 22

SEM Path Analysis

	Beta	Bias	2.5%	97.5%	T Statistics	P-Values
Investor Cognition -> Neuroplasticity	0.067	-0.001	-0.047	0.169	1.203	0.229
Investor Cognition -> Risk Absorption	0.472	0.011	0.337	0.572	8.076	0.000
Risk Absorption -> Neuroplasticity	0.733	0.001	0.643	0.804	18.037	0.000

Hair et al. (2021) asserts that the path is significant only of the confidence interval doesn't contain 0 between them. In terms of significance, the relationship between investor cognition and Neuroplasticity is not significant but the relationship between Investor Cognition and Risk Absorption, Risk absorption and Neuroplasticity is significant. In terms of relevance, the path coefficient between Investor Cognition and Risk Absorption seem to have moderate

positive relationship where the relationship between Risk Absorption and Neuroplasticity seems to have strong positive relationship.

- H1 Seems to evaluate whether there is significant relationship between the Investor cognition and Neuroplasticity of the Investor. There is insignificant positive relationship between Investor Cognition and Neuroplasticity ($\beta = 0.067$, $t = 1.203$, $p>0.05$). As also the Bias corrected confidence interval includes 0 in between them. Hence, H1 is rejected
- H2 Seems to evaluate whether there is significant relationship between the Investor cognition and Risk Absorption of the Investor. There is significant positive relationship between Investor Cognition and Risk Absorption ($\beta = 0.472$, $t = 8.076$, $p < 0.05$). As also the Bias corrected confidence interval doesn't include 0 in between them. Hence, H2 is Accepted.
- H3 Seems to evaluate whether there is significant relationship between the Risk Absorption and Neuroplasticity of the Investor. There is significant positive relationship between Risk Absorption and Neuroplasticity ($\beta = 0.733$, $t = 18.037$, $p < 0.05$). As also the Bias corrected confidence interval doesn't include 0 in between them. Hence, H3 is Accepted
- H4 seems to evaluate whether there is mediating effect of risk absorption on the relationship between investor cognition and neuroplasticity in investor or not. Since VAF (Indirect Effect/Total Effect) is 0.833. So, the risk absorption does full mediation between the Investor Cognition and Neuroplasticity of Investor.

Table 23

Mediation Analysis

Effect	Path	Beta	Bias	2.5%	97.5%	P values
Indirect Effect	IC-> RA -> NP	0.346	0.008	0.245	0.427	0.000
Total Effect	IC -> NP	0.413	0.007	0.268	0.524	0.000

The indirect effect (IC->RA->NP) ($\beta = 0.346$, $t = 7.534$, $p< 0.05$) is significant but the direct effect (path coefficient between the IC and NP) is insignificant ($\beta = 0.067$, $t = 1.203$, $p>0.05$) which entails that there is full mediation of Risk Absorption between Investor Cognition and Neuroplasticity (Zhao et al., 2010).

4.5.4 Assessment of model Explanatory power

The next step in assessing the structural model includes the assessment of the model explanatory power by the way of calculation of coefficient of determination (R^2) (Hair et al., 2021).

Table 24

Coefficient of determination of structural model

	Beta	Bias	2.5%	97.5%	P values
Neuroplasticity	0.588	0.005	0.463	0.676	0.000
Risk Absorption	0.223	0.014	0.113	0.327	0.000

The model explains that 58.8% of the variation in Neuroplasticity are explained by the change in investor cognition or said to be have moderate relationship where only 22.3% of variation in Risk Absorption are explained by the change in Investor Cognition or said to be have weaker relationship (Hair, Ringle, & Sarstedt, 2011).

4.5.5 Assessment of model Predictive power

Table 25

Assessment of Model Predictive Power

	Q^2predict	**PLS-SEM_MAE**	**LM_MAE**
NP1	0.129	0.975	0.979
NP2	0.102	1.054	1.06
NP3	0.112	0.969	0.976
RI	0.172	0.696	0.673
RSA	0.156	0.696	0.686
RT	0.13	0.734	0.735
SIP	0.094	0.722	0.729

R^2 however, explain about the model explanatory power but it should not be misinterpreted with the model predictive power. R^2 only explain in sample explanatory power (Chin et al., 2020; Hair & Sarstedt, 2021).

Shmueli, Ray, Estrada, and Chatla (2016) introduced PLSpredict which indicates a model's ability to predict new or future observations. The distribution of the prediction error are highly nonsymmetric as evident in the Appendix. Hence, MAE is the more appropriate prediction statistic. (Danks & Ray, 2018; Shmueli et al., 2019).

The table exhibit the Q^2 predict value are in excess of zero (0) so all the construct so predictive power. These findings suggest commitment is a predictive construct that has predictive power in the evaluation of internal models of this study (Hair et al., 2021; Sarstedt et al., 2014; Shmueli et al., 2019).

4.6 Major Findings

The major findings of the study are as follows:

- Both males (64.2%) and females (35.8%) has been active in the Nepalese stock market.
- A large number of young adult retail investors of age less than 35 (87.1%) are actively involved in the Nepalese stock market.
- Majority of the respondents are from the Private job holder(38.3%) and Students(39.2%).
- Academically sound, educated, and literate investors (46.9% have a Master's degree or more) are present, allowing them to intelligently respond to questions
- All Four dimensions of Investor Cognition and all four dimension of risk absorption had a mean value above the neutral point of 4, indicating the lean to the agreeableness of Investor Cognition and Risk Absorption behavior.
- Majority of the respondent(66.1%) trade in Nepalese Stock Market base upon on their interest where 15.5% of respondent trade in Nepalese Stock Market trade monthly. This shows the active participation in the Nepalese stock Market apart from them being as professionally being involved in Trading of Equity and Debt Instruments.
- Majority of the respondents has the portfolio value of between fifty thousand to five lakhs where significant investor (32%) has portfolio value of less than fifty thousand. This shows that Majority of respondents has portfolio value of less than fifty thousand.
- The Investor Cognition has significant impact on Risk Absorption. The path coefficient of 0.472 implies that if the Investor cognition increases by one standard deviation from its mean, Risk Absorption would be expected to increase by 0.472 its own standard deviations from its own mean while holding all other relevant connections constant.
- The Risk Absorption has significant impact on Neuroplasticity in Investors. The path coefficient of 0.733 implies that if the Risk Absorption increases by one standard

deviation from its mean, Risk Absorption would be expected to increase by 0.733 its own standard deviations from its own mean while holding all other relevant connections constant.

- The Investor Cognition doesn't have significant impact on Neuroplasticity in Investors as the P-values >0.05. The investor cognition seems to impact the Neuroplasticity through a mediator, Risk Absorption. There exists a full mediation between the Investor Cognition and Neuroplasticity of Investor by Risk Absorption.
- Around 58.8% of variation in the Neuroplasticity in Investor is explained by the change in Investor Cognition where only 22.3% of variation in Risk Absorption is explained by the change in Investor Cognition
- The model predicts a good predictive power as all the Q^2values are excess to 0.

CHAPTER 5
DISCUSSION, CONCLUSION AND IMPLICATIONS

5.1 Discussion

The most significant insight of this study is the identification of the indirect impact of cognitive dimensions on the neuroplasticity of investors by the way of Risk Absorption, who have experienced psychological harm as a result of financial losses in the past. Few studies have concentrated on the cognition that aids in the neuroplasticity of investors, despite the fact that many earlier studies have examined cognition and decision-making as well as cognition and risk tolerance.(Schwarz, 2000; Klaaren, Hodges & Wilson, 1994).

Schwarz (2000) found that social cognition significantly impacted the decision making. Also, in contrast to the findings by Behera et al.(2022), The study found that there is no any direct relationship between the Investor Cognition and Neuroplasticity of Investor. The variation in the findings may be caused due to the cultural and geographical variation. As per the study by Trijya and Kafle (2020), the financial literacy in Nepal has increased the risk level of the investors across various risk spectrum. Hence, the investor cognition may have directly impacted the Risk Absorption Capacity first.

The other objective was to ascertain how investor cognition affected risk-absorbing investors. The study also supports the same cause as the Investor Cognition helps in aiding investor in decision making and healing the traumatic disorder due to past losses. Behera et al.(2022) also found that Investor cognition has significant impact on the risk absorption. The study by Bannier and Neubert (2016) also support the notion that the financial literacy has significant impact on the risk tolerance. Hence, the study is aligned with the fact that Investor Cognition significantly impact the risk absorption behavior of the investors.

The study by Hermansson and Jonsson (2021) asserts that higher risk tolerance is related to both financial interest and literacy. The study also demonstrate that the influence of financial interest is greater than the influence of financial knowledge. The findings of the study align with the findings of the author of this study which implies that Investor cognition significantly impact the Risk Absorption of the Nepalese Investors.

The study has found substantial, moderate and significant relationship between the Investor cognition and Neuroplasticity of the Investor. The study outlines the fact that the Increment in risk absorption capacity of the investor will positively contribute to make better

investment decision. The study by Walls (2005) enhances the fact that financial risk and an irrevocable commitment of substantial sums of money are typically characteristics of strategic investment choices. The study then builds the fact that investment decision is heavily influenced by the firm's willingness to incur financial risks. A measurement of the firm's tolerance for financial risk is necessary for a thorough economic decision analysis to assess strategic investment decisions.

The study depicts the significant indirect effect or full mediation effect of Investor Cognition on Neuroplasticity of Investor via Risk Absorption as mediating Variable. Behera et al. (2022) has also found the partial effect of mediation by Risk Absorption on the relationship between Investor Cognition and Neuroplasticity. The possible caused of the mediation can be caused due to the risk-taking behavior of Nepalese People.

The aforementioned discussion shows that the various cognitive dimensions—cold cognition, hot cognition, social cognition, and metacognition—can aid investors in identifying the relevance of their investment knowledge and avenue choice, allowing them to address and resolve issues with their investment decisions. In addition, According to Behera et al. (2022), the four dimensions of cognition can assist with reasoning and understanding related to risk, return, speculation, fundamental information, and opinions when making investment decisions and psychologically enabled decisions in the future. They can also aid in letting go of or forgetting previous loss experiences.

The present study also shows how a person's cognitive characteristics may cause them to adhere to risk beyond what they are comfortable with, which can result in increased risk bearing in investments. The second objective of the current study was to examine the impact of risk-absorption behavior on neuroplasticity. According to Wang and Deng, this activity can help one's perspective on possible investment possibilities and mend psychological scars from the past brought on by devastating losses and market instability (2018).

5.2 Conclusion

The failure of previous investments and the national economic crisis brought on by the collapse of the international economy have scared domestic investors away from making capital market investments. The involvement of domestic investors is crucial for obtaining stable money to meet the country's financial needs.

Understanding, educating, empowering, and persuading today's investors has never been more crucial for this reason than it is in the digital age. In order for people with risk-

absorption ability to digest this information, create sound investment plans, and increase their level of interest in investments, better techniques must be developed to help people become aware of and grasp all the information relevant to investments.

The various aspects of cognition may be used by strategy makers to learn about the information sources that investors rely on and to utilize those sources to influence and shape investors' attitudes about investing. The many aspects of cognition may be used by marketers of financial goods like systematic investment plans (SIPs) and mutual funds as distinct sources encouraging the investor according to their degree of information processing, and they can develop tactics appropriately.

Technology has made it relatively simple to share knowledge through a new channel, which might increase risk-absorption capacity and lead to a more solid conclusion. The study has shown to be more significant in the eyes of marketers because it can make use of both cognitive dimensions and risk-taking characteristics to give investors access to systematic information for a better understanding of the investment scenario and to take greater risks in investments, which can address the issue of a lack of domestic investment from domestic investors. The initiatives taken to develop cognitive abilities and enhancing risk absorption capacity also assist the country in finding stronger, reliable, and consistent sources of funding for long-term economic growth.

Not only must experienced investors be encouraged to join in the equity market in order to properly address the issues faced by potential participants who are afraid to do so due to previous losses. According to this point of view, strategies can be created with the help of financial product marketers (associated with stock market investments) by carefully examining the findings of the current study. For making strategies that can boost the confidence of previous investors, various dimensions and sources for the cognitive processing of information must be taken into consideration.

The financial market places may also help investors improve their cognitive abilities by showing them where their past investments went wrong and how to fix it in the future. These cognitive characteristics can aid in erasing the memory of previous losses and fostering a risk-absorption mindset for future investments in financial equities market assets. This sustained investment from a range of investor generations may give the impression that the Nepalese capital market is more reliable and expanding.

5.3 Implications

5.3.1 Managerial Implications

The results of this study have been meaningful as there is a significant impact of the independent variable, that is, Investor Cognition on the dependent variable, that is, Neuroplasticity of Investor through a mediating variable Risk absorption. With respect to past studies, some findings have been similar while some are refuting.

The first implication could be that since Investor Cognition has significant impact on Risk Absorption. The Investment companies should be focused on increasing the literacy level of the Investor which in turn will increase the risk absorption level of the investors.

The second implication could be that since Risk Absorption has significant impact on Investors. The investor company should be focused on policy and strategies to increase the risk absorption capacity of the investors as it will help to increase the neuroplasticity in investors implying the fact that the study helps to better understand how investors feel about prior losses and the extent of psychological harm.

5.3.2 Implications for future research

The cognitive characteristics were the main emphasis of the current investigation. For in-depth analysis, conative, affective, and psychometric variables pertaining to attitude formation might be used. Additional sentiment analysis of data can provide more pertinent information about the investment decisions made by investors.

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APPENDIX A: QUESTIONAIRE

"Investor cognition and Neuroplasticity Among Nepalese Investor"

Dear Respondent,

I am Asim Pokhrel, Research Scholar, conducting a Graduate Research Project entitled "Investor cognition and Neuroplasticity" as partial fulfillment of the requirements for the Masters in Business Administration (MBA) at School of Management, Tribhuvan University. The core objective of study is to examine the effect of different dimension of investor cognition on Neuroplasticity in Investor.

It's a humble request you to spare your valuable 5-10 minutes to participate in the survey. I would like to kindly request all the participants to co-operate by filling up the questionnaire honestly as the response will add academic value and would like to assure you that data will be used for research purpose only.

Regards

Asim Pokhrel

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PART A: PERSONAL AND DEMOGRAPHIC INFORMATION

1. **Gender**
   - Male
   - Female
   - Prefer not to say
   - Others

2. **Age Group**
   - >25
   - 25-35
   - 35-45
   - 45-55
   - 55<=

3. **Marital Status**
   - Married
   - Unmarried
   - Others _____

4. **Highest level of Educational Qualification**
   - Up to Intermediate
   - Bachelor Degree
   - Master Degree
   - M-Phill
   - PHD

5. **Occupation**
    - Private Job holder
    - Government Job holder
    - NGOs/INGOs
    - Business/Enterprise
    - Retired Person
    - Student
    - Others_____

6. **Are you involved in Investment or Trading of Share in NEPSE?**
    - Yes
    - No

7. **Investment Experience in Years**
    - Less than 2
    - 2- 5
    - 5-8
    - 8 and Above

8. **Average level of previous Month income (In Rs)**
    - Less than 25000
    - 25,0000- 50,000
    - 50,000- 75,000
    - 75,000+

9. **Are your family financially dependent on you?**
    - Fully
    - Partially
    - No

10. Amount of Investment in NEPSE

- Less than 50,000
- 50,000 – 5,00,000
- 5,00,000 – 20,00,000
- 20,00,000 – 50,00,000
- 50,00,000 and Above

11. Rank in order of your Investment Value (Amount of Capitalization, High to Low from 1-6)

- Banks and Financial Institutions……..
- Insurance Companies……...
- Hotel and Tourism…….....
- Manufacturing and Products…….....
- Hydropower……..
- Others……

Part B: Questionnaire related to Research variables

(Please read each question carefully and select your level of agreement for the following statement which fits you from strongly disagree to strongly agree.)

Strongly Disagree-1, Disagree-2, Somewhat Disagree-3, Neutral-4, Somewhat Agree-5, Agree-6, Strongly Agree-7							
Cold Cognition	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Investment in the stock Market needs knowledge relating to it.							
I read the information on the company website before investing.							
I read newspaper articles related to investment avenues from time to time.							
I collect and read past and expected returns before making and investment							
Financial literacy is a must for making investments.							
Transparency of investment information presents me with more reasons to invest.							
Meta Cognition	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I compare similar investment avenues before making a purchase decision							
I will invest more, if I will receive depth investment training.							
I prefer an in-depth analysis of consecutive profit before making an investment.							

I usually study scholarly articles about stock market investment to obtain greater knowledge.							
I try to analyze the reason for the fall and rise of a stock market index.							
I can make more investments if I have confirmed analytical news.							
Hot Cognition	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I prefer views from experts' stock market investors							
I consult my family members before making and investment decision							
People around me also gives me suggestion to invest.							
Friends and relatives help me to make better stock market investment decisions							
Social Cognition	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I prefer watching morning news on media relating to the same day investment.							
I prefer to observe the twitter handles and Facebook pages of big stock market investors.							
Invest mobile apps help me to make better investment decisions.							
The financial advisor in our society helps me to make investments.							
Strongly Disagree-1, Disagree-2, Somewhat Disagree-3, Neutral-4, Somewhat Agree-5,Agree-6, Strongly Agree-7							
Recurrence of Investment	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I have been an active investor in the stock market.							
I will repeat a similar investment in the future.							
If my income rises, I will make more investment.							
Risk Seeking Attitude	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Investing in stock Market resolve my greater finance							
Stock Market investment gives me more income than FD.							
I want to invest more in comparatively risky share							
Past investment experiences help me to make more investments							
Strategic Investment Planner	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I will continue with the same investment, even if the prices are currently low, if analyzed properly.							
I am not emotional, but rather rationally choose my investments.							

Past losses don’t stop me from investing.							
Risk Tolerance	**1**	**2**	**3**	**4**	**5**	**6**	**7**
I have patience with the present investment even if the present profits are not good.							
I am optimistic regarding growth of my investment.							
I gradually take more and more risk while investing.							
I prefer more return with more risk over less return with less risk.							
Neuroplasticity	**1**	**2**	**3**	**4**	**5**	**6**	**7**
In the future, I can make a better investment decision.							
I am mentally prepared to handle investment securities in the future,							
I will soon make more investments as my ability has improved.							

Thank you for your response. Your cooperation is expected to add academic value. The information provided will be kept confidential and will be used only for academic purposes.