

# **Examining the Impact of Future Time Orientation on Financial Wellbeing Among Retail Investors: The Mediating Role of Overconfidence**

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## **Abstract**

The study examines future time orientation (FTO) influence on financial wellbeing (FWB) of individual retail investor and mediation of overconfidence (OC). Based on Self-Determination Theory, this study suggests that future time orientation influences financial wellbeing through a psychological pathway in which overconfidence plays a complementary mediating role. The study collected valid responses of 436 individual investors in Pakistan and using cross-section questionnaires distributed online through convenience sampling. The validated measurement scales of six-item FTO from Kiani et al. (2020), seven-item OC from Budiman et al. (2025) and

CFPB financial wellbeing scale of ten-items adopted from Lee et al. (2020) were used in this study. The hypothesized relationships were supported by the results of the bootstrapping analysis. Individuals with higher future time orientation perform better when it comes to finances and have greater financial resilience. However, some of those positive effects are diverted by overconfidence, which leads to greater financial risk-taking of investors. The reason behind is that these individual investors determination take a risk. The findings are a useful addition to the growing literature in the field of behavioural finance. These results have practical important implications for practitioners, such as financial advisors, policy makers, individual investors and educators. These actors may seek to promote long-term financial wellbeing through improvements in future orientation and reductions in cognitive biases.

**Keywords:** Future time orientation, Overconfidence, Financial wellbeing, Mediation, Retail investors, Pakistan

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## Introduction

Individual investors play an increasingly vital role in financial markets, where their investment decisions are shaped not only by the pursuit of wealth maximization but also by the broader goal of achieving long-term financial wellbeing (Nga & Kesumo, 2025). Traditional models of finance assumed solely left-brain use and emphasized rational decision-making by individual investors in order to maximize returns and minimize risks (Krishnamurthy, 2024). Earlier studies Gerald et al. (2026) suggestion that financial wellbeing is more than the accumulation of money, which consists of both objective financial security and subjective satisfaction and security. According to Van Raaij et al. (2023) the ability of an individual to meet their present and future financial obligations and to maintain financial wellness has become main concern for individual investors. Individual investors make long-term financial planning to attain constructed goals and secure their assets in order to enhance their financial wellbeing (Sharma et al., 2026; Sehrawat et al., 2021).

In the present scenario, the financial markets are more sophisticated and complicated than the assumption of rationality did not work properly (Singh et al., 2026). In recent years, a significant association between psychological factors and financial wellbeing has developed an emerging theme in research on behaviour of individual investors (Chaudhary et al., 2026; Kumar & Ahuja, 2024). In the current study, a key psychological element impacting financial wellbeing

is future time orientation. Future time orientation is the degree to which individuals place more value on long term outcomes than on immediate rewards (Coscioni et al., 2024). Individual investors with a high future time orientation often adopt conservative investment strategies, focusing on long-term wealth accumulation and financial stability (She et al., 2024). On the other hand, Individuals with a lower future time orientation may value short-term gains, which may lead to risky investment behaviour and financial instability (Hitsuwari & Kumagai, 2025).

The impact of future time orientation on financial wellbeing is apparent since forward-thinking investors better handle market fluctuations and economic uncertainty (Lučić et al., 2026; Kaur & Singh, 2024). Investment decisions are generally made with future outcomes in mind. Investors who hold longer-term perspective will be less influenced by feelings of regret. However, the association among future time orientation and overconfidence remains complex for individual investors. Individual investors with a high future time orientation expected to enthuse rational financial planning and risk management, while overconfidence may twist the process. For instance, an investor may be overconfident in their ability to predict that the market will go up (Ullah et al., 2026). So, these investors take on too much risk, believing that they can call the market and identify profitable opportunities better than others. This situation may cause conflict between individual investor long term objectives and actual behaviour, which may ultimately undermine their financial wellbeing (Nijanandi et al., 2026). Overconfidence is one of the behavioural factors that is influencing this problem, defined as an investor's tendency to overestimate the accuracy of his knowledge, judgments and predictions concerning market trends. This bias can lead to insufficient investment choices, increased financial risk, and adverse impacts on financial health when it is too pronounced (Li, 2024).

The self-determination theory focuses on psychological mechanisms that influence individual behaviour and financial health. In terms of investment decision making, the future time orientation and overconfidence become important factors influencing the investment process of individual investors and their long-term investment results (Rahmah et al., 2026). This perspective highlights that investor behavior is influenced not single by financial considerations but also by psychological factors that shape decision-making processes (Padmavathy, 2024). Investors who are conscious of their own cognitive biases such as overconfidence and who develop a strong future orientation are likely to be able to achieve long-term financial wellbeing.

As the financial landscape changes, these insights remain important for investors as they navigate the unique qualities of modern markets (Malik et al., 2026)

The psychological variables play an increasingly accepted role in the decision-making processes of financial organizations (Modica et al., 2026; Hemrajani et al., 2024). Nevertheless, how they interact to impact individual investors financial wellbeing is still not well understood. The association between future time orientation and financial wellbeing has not been discovered by the overconfidence. According to Dhandapani et al. (2026) the impact of overconfidence on the benefits of a strong future time orientation can go two ways. First, if such overconfidence leads to certain behavior, it can benefit a lot. Second, overconfidence can also eliminate benefits if people take excessive risks just because they are overconfident.

Future time orientation has been shown to have a positive impact on financial wellbeing, despite its increasing evidence that the overconfidence effect affects investor decision making, few studies have focused on this aspect. These variables are interrelated and linked to a common explanation. Existing studies have the latter two factors; future time orientation and financial wellbeing were investigated rather together. The psychological mechanism that connects these constructs is not well understood. In particular, little attention has been given to whether overconfidence serves as a pathway through Which future time orientation affects retail investors' financial wellbeing. This gap is particularly in emerging market settings, where investor practices are influenced by higher levels of Uncertainty and lack of information in the market.

Charkhestani et al. (2026) finds that the two-sidedness of overconfidence generates complexity that traditional finance models are unequipped to handle. In this regard, the current study attempts to assess the influence of future time orientation on financial wellbeing. The purpose of the study is to analyze overconfidence as mediator variable between future time orientation and financial wellbeing. Therefore, there is a clear need to better understand the interaction between future time orientation, overconfidence, and financial wellbeing. This research study aims by examining to fill this gap whether overconfidence mediates the connection between future time orientation and financial wellbeing among individual investors. An improved understanding of this relationship may offer valuable insights for financial

advisors, individuals in developing strategies, policymakers and policies to promote sustainable financial wellbeing.

## **Literature Review**

### **Theoretical Foundation: Self-Determination Theory (SDT)**

The Self-Determination Theory (Deci & Ryan, 2012) states that it will be possible to understand the investor motivation and overall financial wellbeing by showing the three core psychological need satisfaction, which are autoregulatory, competence, and relatedness (Sabia et al., 2025). Autonomy is illustrated in the financial decision-making literature when future-oriented investors take control of their financial decisions, set goals for the long term, and stick to plans. This has important linkages with enhanced confidence and wellbeing (Garg et al., 2024). In the same manner, favorable perceptions of competence that result from future time orientation lead to acquiring financial skills and planning. But, the perception of competence is distorted due to overconfidence leading to poor decision-making despite having higher motivation (Tummarakoti et al., 2025). Moreover, relatedness which refers to the need to have connections with others, plays a very important role. Social influence such as peer advice and community norms can enhance prudent investing and lessen overconfidence harm (Nahidi et al., 2026). Together, self-determination theory explains how future time orientation promotes psychological needs and investor behavior while overconfidence mediates the association between future time orientation and financial outcomes to influence investor wellbeing (Chaudhary et al., 2026). The main constructs of the study are future time orientation, overconfidence and financial wellbeing which plays pivotal to the study. Based on self-determination theory, this research study noted how motivational and cognitive orientations affect one's financial outcomes and overconfidence as a potential mediating factor. Theoretical and empirical evidence informed the formation of hypotheses which resulted in a clear conceptual model.

### **Future Time Orientation and Financial Wellbeing**

Financial wellbeing is a multidimensional concept which includes both objective and subjective aspects of an individual's financial life (Gerald et al., 2026). Objective side deals with the capacity to cover costs, deal with obligations, save and invest, and buffer financial

shocks. Subjective side is the perception of current and future financial conditions that one feels secure, confident and in control of (Netemeyer et al., 2018; Brüggen et al., 2017). Netemeyer et al. (2018) further explain that perceived financial wellbeing consists of two important dimensions which are current money management stress and probable future financial security. Recent research also underpins this view, taking a psychological and behavioural approach that acknowledges financial wellbeing as a product of financial knowledge, financial behaviour, self-control and future expectations (Zhang et al., 2026; Garg et al., 2024). Therefore, Financial wellbeing is not just about having more money. It also involves personal finance management, risk assessment and financial long-term viability.

Financial wellbeing is even more significant for individual investors since the value of an investment is uncertain, risky and the results are not immediate. Investors' goals are not limited to quick financial gains. Their goal is also to safeguard funds, construct future security, and keep self-confidence in times of market skepticism. But market volatility can lead to stress, regret and uncertainty when investors are not able to plan or control their behaviour. Previous research indicates that financial wellbeing is related to responsible financial behaviour, perceived control, saving discipline, and confidence in financial security in the future (Riitsalu & van Raaij, 2020; Brüggen et al., 2017). So, in the case of individual investors on the Pakistan Stock Exchange, financial wellbeing should be considered as a synergy of financial capacity, behavioural discipline and psychological security. Future time orientation is the degree to which the person considers future consequences and values long-term consequences in current decisions (Law et al., 2026). It is related to future time perspective, and consideration of future consequences. Individual investors who are more likely to be future-oriented tend to delay gratification, plan ahead, control impulsive behaviour and make decisions that work for their long-term goals (Liou et al., 2026). According to Rahmah et al. (2026), future time orientation is a crucial factor in financial decision making as it requires that money be saved, invested, planned for retirement, diversified, and managed for risk, all for the benefit of future.

Future oriented individuals are more likely to establish clear financial aims, keep track of their financial behaviour, and consider investment options based on long-term results. This helps to promote good financial self-control and limit short-term rash decisions. The perceived financial wellbeing was strongly related to future time perspective and self-control, according to

Riitsalu and van Raaij (2020). Likewise, van Raaij et al. (2023) established that future time perspective can have a direct and indirect influence on financial wellbeing via financial behaviour. Another recent study also found that financial wellbeing benefits from future orientation - enhanced by clarity about financial goals and responsible financial behaviour. She et al. (2023) identified that subjective financial knowledge, financial goal clarity and responsible financial behaviour were pathways for future time perspective to enhance financial wellbeing. That's because future time-oriented people are more likely to think about future security, and they are more likely to actually make financial moves to support that.

In a subsequent study, She et al. (2024) revealed that future orientation was a moderating effect on the link between financial behaviour and financial wellbeing, meaning that responsible financial behaviour is more influential when individuals have a stronger future orientation. Investors in the stock market may find that a future time orientation decreases the negative short-term behaviour. Those with a longer time horizon are more likely to continue investing for long-term growth and less likely to make hasty short-term decisions based on market fluctuations. Investors who are more in the mindset of investing for the future are more likely to be able to focus on the long-term than to be impulsively influenced by short-term market fluctuations (Naisby et al., 2026). They are also less prone to over-trade and changing their portfolios and less prone to panic investing in times of uncertainty. However, this behaviour can have a positive impact on the objective financial results, and on a sense of financial security. By comparison, more investors with low FTO will be more concerned with immediate gains, short-term market signals, or emotional reactions (Martin et al., 2016). This behavior can lead to financial problem and financial non-welfare. In general, literature indicates that future time orientation has been described as an important psychological resource for financial wellbeing. So, individual investors who have higher future time orientations are predicted to have higher financial wellbeing as they are more likely to plan carefully, manage risk wisely, and stick to the long-term investment outcomes (Misra et al., 2026).

***H1: Future time orientation has a significant and positive effect on individual investors' financial wellbeing.***

### **Mediating Role of Overconfidence**

The overconfidence bias is one of the major cognitive biases in behavioral finance (Reddy et al., 2025; Costa et al., 2017). It arises when investors feel they know more knowledge, possess more skills, have more information or a better ability to forecast market results than is realistically the case. This bias induces the difference between perceived and actual ability, which can affect investors' evaluation of risk and financial decision making (Ahmad & Shah, 2022). In the stock market, overconfidence is an important factor since investors can make decisions in environments of uncertainty, lack of information and changing market conditions (Fatima et al., 2026; Glaser & Weber, 2007; Barber & Odean, 2001; Odean, 1998). There is empirical evidence that overconfidence is associated with investment behaviour to a large extent. Overconfident investors are more likely to be self-reliant, underestimate risk, be more active in trading, and less concerned with diversification. Odean (1998) has argued that overconfident investors have higher expectations of the precision of their private information, raising the trading volume and possibly lowering the expected utility. Likewise, Barber and Odean, (2001) reported that too much trading is negatively correlated with investment returns, indicating that overconfidence can impair rational financial behavior. Adopting a more positive self-image of competence, as Glaser and Weber (2007) did, leads to greater frequency of trading. These results demonstrate that investors can become overconfident to behave in a disciplined and long-term financial behaviour.

Future time orientation is typically considered a beneficial psychological characteristic, since it helps individuals think about the implications of their current actions. Future oriented individuals tend to plan and save to invest and plan for security in financial situations. The influence of future time orientation on financial wellbeing. However, is not necessarily direct. It can work on a behavioural and psychological basis that influences investors' decision-making processes when it comes to their investment goals. One of these is overconfidence, as one might become more confident in one's ability to manage financial outcomes in the future (Du Plessis et al., 2024). Future time-oriented investors are likely to have financial objectives and invest in a planned manner. These behaviors can lead to a boost in self-confidence and sense of control. If this overconfidence is grounded in reality, it can contribute to financial wellbeing in several ways including better financial discipline, less financial uncertainty, and greater commitment to

financial objectives. But when confidence is too strong it can lead to an over-extension of judgment.

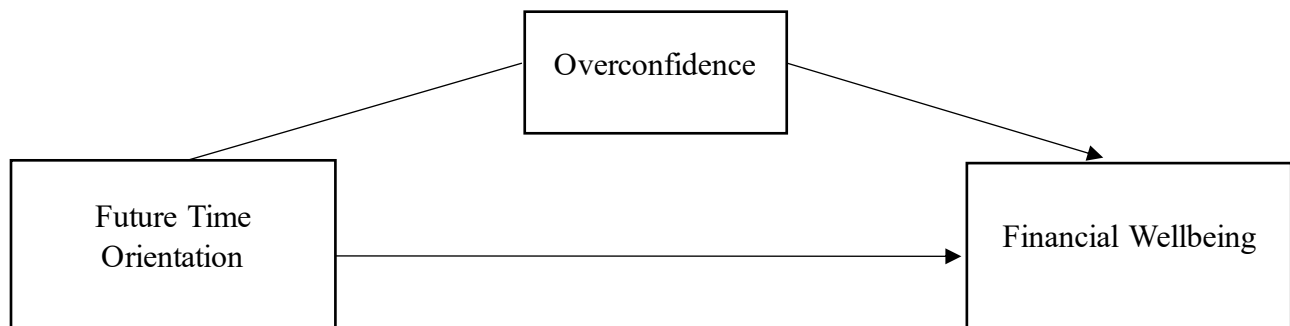
According to Gervais and Odean (2001), Overconfidence is a problem for investors who believe that they have performed well because of their intelligence rather than chance or the market conditions. In this manner, future-oriented planning can become a source of overconfidence by causing investors to become overconfident in their forecasting capacity or in the knowledge of the markets. There is some empirical evidence for the negative behavioural effects of overconfidence. Gagnon et al. (2026) discovered that financial overconfidence is related to trading intensity, risk-taking, and portfolio decisions. Abdin et al. (2022) also demonstrated that overconfidence bias influences investment performance by risk propensity, suggesting that investors' risk perception and tolerance may be changed by overconfidence bias. In emerging markets, however, where retail investors are frequently denied access to information, markets are volatile, and financial literacy is low, overconfidence has also proved to be a significant issue, as revealed by recent behavioural finance papers, such as (Bouteska, 2023; Mahmood et al., 2024). These factors accentuate the need for overconfidence in the case of individual investors participating in the Pakistan Stock Exchange.

This study suggests that future time orientation has a direct effect on financial wellbeing, with overconfidence serving as a mediating variable. A better outlook into the future can help investors think and act in a way that could enhance their financial well-being by fostering longer-term financial planning, saving and investing, and risk management. Meanwhile, this future thinking approach can make investors feel more in control of financial results. If such perceived control becomes excessive, investors may overtrade, underestimate risk, or ignore diversification. This behaviour can have negative impacts on investment outcomes as well as financial stress, which impacts financial wellbeing. So, it may be fair to say that overconfidence is a contributing factor in why some future investors may not be as successful in achieving financial wellbeing. The literature on the topic generally indicates that an optimistic future time orientation may lead to financial wellbeing via overconfidence. Future orientation forms the basis for a long-term financial planning, and overconfidence is what makes it turn into disciplined or biased investment behaviour. Therefore, the study of overconfidence as a

mediating variable offers a more comprehensive picture of the mediating role of future-oriented thinking in financial wellbeing among individual investors.

**H2:** *Overconfidence mediates the relationship between future time orientation and financial wellbeing of individual investors.*

Theoretical research model has proposed by this study. In the present study, the independent variable is future time orientation which is retail investors' tendency to think about and plan for the future, considering the long-term consequences of their actions, and the dependent variable is financial wellbeing. The state of being in terms of financial stability can be defined as financial health, security, and the ability to meet current or future financial obligation. In the present study, the overconfidence variable, which will be tested as a mediating variable, is the cognitive bias where an individual Investor overestimates their abilities, knowledge or control over a given situation and the future outcomes. The summary model will explain the influence of future time orientation on financial wellbeing when overconfidence is a mediation variable.



**Figure 1:** *Conceptual Model of the Study*

## Research Methodology

This study employed a quantitative, cross-sectional research design to examine the relationship between future time orientation and financial wellbeing among individual retail investors, with overconfidence tested as a mediating variable. The current study has a positivist paradigmatic foundation and is applied in a deductive manner with the ambition of empirically testing deductively derived hypotheses on a set of structured quantitative formats. Positivism is

commonly used in quantitative business and social science research where the aim is to test theory-driven hypotheses using structured data (Tuluma et al., 2026). This research study used cross-sectional questionnaires distributed online through convenience sampling to data collection and robust statistical analysis that assures the reliability, validity and replicability.

The study is based on the principles of positivism, which posits that reality is objective and exists independently of the researcher, thus enabling knowledge to be acquired from observable and quantifiable phenomena. A deductive approach was followed starting with the theoretical premises based on Self-Determination Theory (SDT) and then hypotheses were drawn and tested empirically (Luo et al., 2026). In doing so, the research remains centered on theory and thus can make a major contribution to the financial behavior and investor psychology literature. The data were gathered from individual retail investors who independently decide on investment choices in the financial markets such as shares, mutual funds, and other investment instruments.

Data gathering was directed towards the individual investor, which was the unit of analysis. This study adopted a non-probability sampling method, convenience sampling, aided by questionnaires distributed online. Sampling has far-reaching applications today, especially in research where the researcher has a vast target population and a complete sampling frame is not feasible (Saunders et al., 2023).

The primary data were collected through a structured self-administrated questionnaire distributed online to maximizing coverage and response. For all variables: five-point Likert scale was used. The scale was: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree for all constructs. Future time orientation was monitored for the independent variable and consisted of 6 items adopted from Kiani et al. (2020), originally derived from Janeiro et al. (2017). These items measure the extent to which individuals' investors plan, organize, and orient their actions toward long-term objectives. The mediating variable, overconfidence, was measured using seven items adopted from Budiman et al. (2025) regarding their perception of knowledge, skills, and investment performance compared to other investors. The dependent variable financial wellbeing was measured with the ten items of the CFPB scale (2017) adopted in Lee et al. (2020). Items that showed negative financial consequences were reverse coded for consistency of scoring.

**Table 1:** A summary of the measurement instruments is provided

|    | <b>Construct</b> | <b>No. of<br/>Items</b> | <b>Scale</b>                                                     | <b>Source</b>                                             |
|----|------------------|-------------------------|------------------------------------------------------------------|-----------------------------------------------------------|
| IV | FTO              | 6                       | 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree) | Kiani et al., 2020<br>(adapted from Janeiro et al., 2017) |
| MV | OC               | 7                       | 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree) | (Budiman et al., 2025)                                    |
| DV | FWB              | 10                      | 5-point Likert scale (1 = Strongly Disagree; 5 = Strongly Agree) | (CFPB, 2017; Lee et al., 2020)                            |

The data analysis went through multiple stages. The reliability and construct validity were assessed by Cronbach's alpha, composite reliability and measurement assessment, respectively, and the demographic characteristics were summarized using descriptive statistics (Izah et al., 2023). Regression-based mediation analysis (Hayes PROCESS) was used to test the hypothesis for relationship including overconfidence mediator and bootstrapping was used to test significance of indirect effect. This approach gives a good support to the theorized model by simultaneously testing both the direct and indirect paths. All ethical considerations were adhered to. It was conducted in a voluntary and informed manner and anonymity was preserved. No identification was gathered and the institutional research ethics guidelines were fully satisfied. Finally, it is a positive and deductive approach combined with a cross-sectional quantitative design and the convenience sampling. Further, it uses measurement instruments that have been

validated plus statistical analysis that is rigorous. All variables are on the same scale (five-point Likert scale) for comparison and analysis. The present study is able to reliably and validly assess this relationship between future time orientation, overconfidence and financial wellbeing among Individual investors.

## Data Analysis and Results

The analysis used three methods. Initially, this study investigated descriptive statistics and correlations in order to investigate the relationships among pivotal constructs. The evaluation of reliability and convergent validity was placed. The researchers used advanced statistical analysis to confirm the hypothesis. The final sample consisted of 436 valid retail investors.

### Descriptive Statistics and Correlations

In table 2, descriptive statistics and zero-order correlation are presented. The mean values of future time orientation (FTO) ( $M = 2.99$ ,  $SD = 1.00$ ), overconfidence (OC) ( $M = 2.99$ ,  $SD = 0.95$ ) and financial wellbeing (FWB) ( $M = 3.00$ ,  $SD = 0.93$ ) are moderate. There were positive and significant correlations between all variables. The FTO has a positive correlation with OC ( $r = 0.58$ ,  $p < 0.01$ ) and FWB ( $r = 0.44$ ,  $p < 0.01$ ). There was a positive association between OC and FWB ( $r = 0.54$ ,  $p < .01$ ). These associations provide primary support for the proposed mediation framework.

**Table 2.** Descriptive Statistics and Correlations

| Variable      | Mean | SD   | 1      | 2      |
|---------------|------|------|--------|--------|
| <b>1. FTO</b> | 2.99 | 1.00 | 1      |        |
| <b>2. OC</b>  | 2.99 | 0.95 | 0.58** | 1      |
| <b>3. FWB</b> | 3.00 | 0.93 | 0.44** | 0.54** |

Note: \*\* $p < .01$  (two-tailed).

### Measurement Reliability and Convergent Validity

The reliability and convergent validity of the constructs were measured using composite reliability (CR), average variance extracted (AVE), Cronbach's alpha ( $\alpha$ ) and standardized factor loadings. Table 3 indicates that all of the constructs are well-consistent. The scales for FTO ( $\alpha = 0.89$ ,  $CR = 0.88$ ,  $AVE = 0.62$ ) and FWB ( $\alpha = 0.84$ ,  $CR = 0.85$ ,  $AVE = 0.58$ ) exceeded the

recommended thresholds. OC showed excellent and strong reliability ( $\alpha = 0.82$ , CR = 0.83). The AVE for OC is 0.61 and the CR is upwards of 0.80 which confirm the acceptable convergent validity.

**Table 3.** Reliability and Convergent Validity

| Construct  | Cronbach's $\alpha$ | CR   | AVE  |
|------------|---------------------|------|------|
| <b>FTO</b> | 0.89                | 0.88 | 0.62 |
| <b>OC</b>  | 0.82                | 0.83 | 0.61 |
| <b>FWB</b> | 0.84                | 0.85 | 0.58 |

The results indicate that the measurement scales used in this study are both reliable and valid. The satisfactory levels of internal consistency suggest that the items within each construct measure the same underlying concept consistently. Furthermore, the evidence of convergent validity indicates that the items adequately represent their respective constructs. Therefore, the measurement model demonstrates acceptable psychometric properties, providing confidence that future time orientation, overconfidence, and financial wellbeing were measured appropriately. This supports the use of these constructs for subsequent mediation and hypothesis testing analyses.

### Mediation Analysis

The mediation model under investigation was evaluated employing Hayes' PROCESS macro with 5,000 bootstrap resamples and 95% bias-corrected confidence intervals (Model 4). The utilization of this approach for the indirect effect estimation is valid as it does not rely on normality of sampling distribution. The direct impact of FTO on FWB was found to be strong and significant ( $c' = 0.18$ ,  $SE = 0.04$ ,  $t = 3.99$ ,  $p < .001$ ; 95% CI [0.09, 0.27]). In support of Hypothesis 1, those who scored higher in future orientation had higher financial wellbeing. The data shows that the a-path (FTO  $\rightarrow$  OC) was statistically significant ( $b = 0.56$ ,  $SE = 0.03$ ,  $t = 15.17$ ,  $p < .001$ ; 95% CI [0.49, 0.63]), indicating future-oriented investors report greater investing confidence. The b-path (OC  $\rightarrow$  FWB controlling for FTO) was also significant,  $b = 0.42$ ,  $SE = 0.04$ ,  $t = 8.83$ ,  $p < .001$ .

**Table 4.** Mediation Analysis Results (PROCESS Model 4)

| Path                  | B    | SE   | t-value | P     |
|-----------------------|------|------|---------|-------|
| <b>FTO → FWB (c')</b> | 0.18 | 0.04 | 3.99    | <.001 |
| <b>FTO → OC (a)</b>   | 0.56 | 0.03 | 15.17   | <.001 |
| <b>OC → FWB (b)</b>   | 0.42 | 0.04 | 8.83    | <.001 |

**Table 5.** Indirect effect(s) of X on Y:

|           | Effect | BootSE | BootLLCI | BootULCI |
|-----------|--------|--------|----------|----------|
| <b>OC</b> | 0.23   | 0.03   | 0.1796   | 0.2980   |

The table 5 results revealed that bootstrapped indirect effect  $ab=0.23$ ;  $BootSE=0.03$ ; 95% BootCI [0.1796, 0.2980]; does not include zero. Hence, mediation is statistically significant. Because both direct and indirect impacts were positive and significant, the pattern reflects complementary (partial) mediation. As such, it appears that overconfidence transmits some of the consequence of future time orientation on financial wellbeing. Overall, the findings offer substantial support for the proposed mediation framework empirically. According to the study findings, thinking about the future time orientation directly enhances financial wellbeing and indirectly through higher investing overconfidence in a complementary mediation model.

Results are consistent with previous studies which have shown that future time orientation is an important psychological factor in financial wellbeing. Van Raaij et al. (2023) identified that future time perspective has direct and indirect impacts on financial wellbeing, such as reinforcing one's future financial security. Similarly, She et al. (2024) found an association between future orientations and behaviors conducive to financial wellbeing and future financial stability. The present study's finding that a positive relationship between future time orientation and financial wellbeing is consistent with the growing literature in this field that has placed emphasis on the importance of future oriented thinking in financial decision making. Moreover, the substantial mediating role of overconfidence is generally in line with the Self-

Determination Theory (SDT) proposing that perceived competence can boost wellbeing outcomes. While some traditional behavioral finance papers link overconfidence with increased trading activity and risk-taking (Merkle, 2017), recent research indicates that overconfidence based on perceived financial abilities can increase perceptions of financial control and security. In this regard, this study's complementary mediation aligns with the idea that future-oriented investors are able to improve their financial wellbeing not only through investing for a long time but also through their confidence in their investing skills.

### **Implications of the study**

Theoretically, these findings complement integrated financial wellbeing frameworks and reveal that future time orientation could be a significant predictor of wellbeing in investors. Psychological processes around self-confidence could be responsible for the relationship between future time orientation and financial wellbeing, lending support to the recommendation to integrate psychological factors and cognitive framing into financial wellbeing models (Mathew et al., 2024). Moreover, the complementary placement in the study offers a more detailed insight into behavioral finance, indicating that cognitive biases may impact performance and wellbeing in different ways. In real life, the results suggest the potential for future-oriented goal framing and confidence calibration in financial education and investor development efforts.

The findings also indicate positive correlations between financial literacy, financial behavior and financial wellbeing; while these effects are relatively small. Hwang et al. (2023) propose that financial knowledge is not the only psychological factor to be ignored. Structured goal setting, long-horizon budgeting and scenario planning can potentially improve investors' planning horizon, thereby improving their sense of financial security. Meanwhile, programmes should support the investing confidence by developing competence and decision frameworks, and discourage excessive trading and over-leveraging (Inghelbrecht & Tedde, 2024). Lastly, the study raises policy implications for financial inclusion policies with the expectation of stable financial wellbeing outcomes, including the role of psychological resources like future time orientation and perceived competence (Garg et al., 2024).

## Limitations and Future Research

However, this study has a number of limitations. First, the cross-sectional design hampers causal inferences. There is a strong argument for the direction of change in terms of future time orientation to overconfidence and financial wellbeing and the use of a longitudinal or experimental design would strengthen the establishment of the temporal sequence. Secondly, self-reported survey instruments were used to assess all constructs. The validated scales and good reliability indices were employed, but common method variance and perceptual bias may be present. Objective measures of financial performance, portfolio diversification or trading frequency could also be added to future studies as behavioural measures which could generate triangulation of results. Third, perceived investing competence was measured as overconfidence, and not differentiated as overestimation, over placement, and miscalibration. These would be dimensions that could be explored further in future research to find out if certain parts of these dimensions have a positive impact on financial wellbeing and certain parts have a negative impact on financial wellbeing. Fourth, the study is conducted in the context of a specific emerging market, and this may restrict generalizability. Replication across a range of economic contexts, sophistication of investors and across cultures would strengthen external validity. Some other psychological and/or contextual factors, such as financial literacy, market volatility, or institutional trust, could also be incorporated into the moderated mediation models in future research. Such extensions could help deepen the understanding of the relationship between future time orientation and overconfidence and financial wellbeing. The results suggest that retail investor's future time orientation positively impacts the financial outcome of their portfolio, directly and indirectly by boosting overconfidence. The more that investors have a long time perspective, the more they feel secure and stable financially, with perceived investing competence further strengthening the relationship. The complementarity of overconfidence implies that confidence linked to long-term planning might serve as a psychological tool and not a cognitive error. This study offers a more complex picture of investor psychology, revealing the positive influence of perceived competence on financial wellbeing. The study results will enrich the study on financial wellbeing as it shows that the financial wellbeing of retail investors in an emerging market context is influenced by both psychological orientations and perceived capability.

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