INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES
Vol: 16 **No:** 01 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ijefs.202416118
Received: 17.05.2024 | **Accepted:** 19.06.2024 | **Published Online:** 20.07.2024

-RESEARCH ARTICLE-

PERSONALITY, FINANCIAL LITERACY, AND FINANCIAL ADVICE-SEEKING IN THE MIDST OF A PANDEMIC

Thuy Chung PHAN*(Corresponding Author)

School of Banking, College of Business,
University of Economics Ho Chi Minh City, Vietnam.
ORCID iD: https://orcid.org/0000-0003-1453-9763
Email: phanthuy@ueh.edu.vn

Vu Minh NGO

School of Banking, College of Business,
University of Economics Ho Chi Minh City, Vietnam.
ORCID iD: https://orcid.org/0000-0002-0997-4720
Email: vunm@ueh.edu.vn

Lam Van LE

School of Banking, College of Business,
University of Economics Ho Chi Minh City, Vietnam.
Email: levanlamtcnh@ueh.edu.vn

Rizwan Ahmed

Kent Business School, University of Kent, UK & School of Banking,
College of Business, University of Economics Ho Chi Minh City, Vietnam
ORCID iD: https://orcid.org/0000-0002-1457-4115
Email: R.Ahmed@kent.ac.uk

—Abstract—

This research endeavours to enhance comprehension regarding the financial advice-seeking behaviours of stock investors, with a particular emphasis on the tumultuous context of the COVID-19 pandemic. The principal aim is to investigate the influence of personality traits and financial literacy on investors' inclination towards seeking professional financial guidance amidst market instability. A comprehensive survey was

Citation (APA): Phan, T. C., Ngo, V. N., Le, L. V., Ahmed, R. (2024). Personality, Financial Literacy, and Financial Advice-Seeking in the Midst of A Pandemic. *International Journal of Economics and Finance Studies*, *16*(1), 398-426. doi: 10.34109/ijefs.202416118

conducted among 255 Vietnamese stock investors, all of whom possessed trading experience within the Vietnamese market. Methodological approaches centred on examining the interplay between investors' personality traits, financial literacy, and their propensity to solicit professional financial advice, while incorporating psychological factors such as regret, trust, and risk tolerance. Findings demonstrate a significant correlation between personality traits, financial literacy, and the inclination to rely on professional financial advisors for stock investment decisions. This influence persists notably, even after controlling for various psychological factors. Intriguingly, while personality traits consistently impact the reliance on professional advice, the effect of financial literacy exhibits a tendency to diminish over time. This study enriches the domain by elucidating the nuanced roles of personality traits and financial literacy in financial decision-making amidst crises, offering fresh insights into their interaction with psychological dimensions. The research holds implications for policymakers and financial advisors in their efforts to support retail investors, particularly within the context of an unprecedented global health crisis. Its distinctive focus on a specific investor cohort during such challenging times illuminates unique behavioural finance dynamics.

Keywords: Covid-19 Pandemic, Stock Investment Decisions, Financial Advice-Seeking, Big Five Personality Traits, Financial Literacy, Trust.

Introduction

Over the preceding decades, scholarly investigations have extensively documented the propensity of individual investors to make consequential financial errors that adversely impact their economic welfare. Specifically, empirical studies have revealed that individual investors exhibit tendencies such as maintaining portfolios lacking in diversification (Goetzmann & Kumar, 2008; Kelly, 1995) and engaging in excessive trading activities (Barber & Odean, 2000; Graham et al., 2009), culminating in suboptimal performance relative to the market benchmark (Barber et al., 2009). Concurrently, extant literature has indicated that the deleterious financial outcomes experienced by these investors can be alleviated through the utilization of financial advisory services. This potential mitigation arises primarily from the role of financial advice in aiding individual investors in circumventing their behavioural biases (Bluethgen et al., 2008; Hoechle et al., 2017; Kramer, 2012), enhancing their financial literacy (Calcagno & Monticone, 2015), fostering improved financial behaviors (Collins & O'rourke, 2010), and navigating the complexities of economic uncertainty inherent in financial markets (Robb et al., 2012).

Nonetheless, abundant empirical evidence suggests a reluctance among individual investors to actively pursue financial advice. This reticence stems from various factors, including deficiencies in financial literacy (Bhattacharya et al., 2012) and a lack of trust in both financial advisors and the broader industry (Lachance & Tang, 2012).

Additionally, certain investors refrain from seeking financial guidance due to feelings of apprehension when engaging with financial professionals (Gerrans & Hershey, 2017; Van Rooij et al., 2011). Furthermore, individual investors often exhibit a tendency to disregard financial recommendations obtained through advisory channels, attributed to their comparatively lower proficiency in financial practices (Bachmann & Hens, 2015). Recent research by Hsu (2022) highlights a correlation between the subdued demand for financial advice and behavioural biases such as overconfidence, mental accounting, and disposition effects.

In contrast to the burgeoning discourse surrounding the advantages and drawbacks of seeking financial advice, scant attention has been directed towards elucidating the determinants of the escalating demand for financial advisory services since the onset of the COVID-19 pandemic. Notably, financial advisors have reported a surge in client inquiries during this period, encompassing a myriad of financial concerns including the management of investment volatility and asset protection (Standards, 2020). This trend can be attributed to the rapid and unprecedented proliferation of the COVID-19 pandemic, precipitating extreme volatility in financial markets and precipitating substantial investor losses within compressed timeframes (Zhang et al., 2020) . Furthermore, scholarly investigations have underscored the transformation of financial advisory services from traditional face-to-face interactions to online platforms in response to the exigencies imposed by the pandemic, thereby reshaping the conceptualization and dissemination of financial advice (Fox & Bartholomae, 2020).

Confronted with such extraordinary circumstances as those engendered by the COVID-19 pandemic, investors typically manifest a complex amalgamation of financial attitudes that significantly impact their trading activities in stock markets (Talwar et al., 2021). Specifically, anxiety, financial security, optimism, and interest in financial matters emerge as pivotal financial attitudes shaping trading behaviour amidst unprecedented events like the COVID-19 pandemic (Talwar et al., 2021). Anxiety tends to precipitate conservative investment decisions, particularly in the presence of pervasive negative information regarding financial upheaval and the pandemic's repercussions. Conversely, a sense of financial security is inclined to mitigate risk aversion, thereby fostering heightened trading activity (Talwar et al., 2021). Moreover, optimism concerning future prospects and the anticipation of positive outcomes amidst uncertainty can engender increased trading activity in the wake of significant disruptors such as the COVID-19 pandemic. In light of these observations, we contend that there exists an imperative necessity to comprehend the financial advice-seeking behaviour of individual investors during the COVID-19 pandemic.

The COVID-19 pandemic's global uncertainty and panic have spurred highly volatile financial markets, resulting in significant losses within a short span (Bora & Basistha,

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

2021). Retail investors, distinct from institutional counterparts in investment scale and resources, are influenced by a blend of rational and irrational factors in their investment choices (Wen et al., 2019). The accessibility of online stock markets, particularly during lockdowns, has drawn retail investors to various financial instruments, despite the heightened risks of volatile markets during the pandemic. The surge in demand for financial advice stems from the need to navigate market volatility and make informed decisions to safeguard and potentially enhance investments amidst the crisis. Understanding the psychological drivers behind retail investors' financial decisions during the pandemic is crucial, given the potential risks associated with their trading behaviour (Guerrero et al., 2021).

Hence, this investigation aims to probe into the determinants of the demand for financial advisory services amidst the COVID-19 pandemic. Specifically, we delve into the ramifications of diverse factors, including financial literacy, personality traits, and psychological and socio-demographic attributes, on the inclination of retail investors to seek financial guidance during this unprecedented crisis. Furthermore, we scrutinize whether individual factors or their amalgamation better elucidate the utilization of advisors in investors' stock investment choices. To delineate more precisely, we pose the following inquiries: (1) What influence do personality traits, financial literacy, and psychological and socio-demographic factors wield on the quest for financial advice among individual investors amid COVID-19? (2) Do these influences persist unchanged when accounting for the extent of investors' reliance on financial advisors for investment decisions? (3) Are there discernible disparities in the attitudes and behaviours of individual investors toward financial advice pre and post the COVID-19 outbreak?

The selection of Vietnam as our study's focal point is propelled by the scarcity of research examining the drivers of financial advice-seeking behaviour within emerging markets. Moreover, recent data indicate that despite the pandemic's upheavals, the Vietnamese stock market has emerged as one of the top performers in both global and Asian contexts (Giang, 2020; Giang & Yap, 2020), potentially engendering a heightened demand for professional financial advisory services. Consequently, investigating the influence of diverse determinants on financial advice-seeking behaviours in Vietnam holds promise for yielding significant findings and furnishing valuable insights for financial consultancy firms and regulatory bodies overseeing the financial market.

Our research offers several noteworthy contributions to the extant literature on financial advice-seeking. Firstly, our investigation represents the inaugural endeavour focusing on the utilization of financial advisors for making stock investment decisions within the milieu of the COVID-19 pandemic. Secondly, to the best of our knowledge, we stand among the pioneering studies to establish a nexus between personality traits, financial literacy, psychological variables, and the behaviour of seeking financial advice. Thirdly, our study distinguishes itself by concurrently examining multiple indicators of personality traits, psychological and behavioural determinants, and socio-demographic attributes within the same analytical framework, thereby facilitating an assessment of their relative explanatory power. Lastly, our research sheds illumination on the roles of personality traits, financial literacy, and psychological factors in elucidating the heterogeneity observed in financial advice-seeking behaviours, thereby aiding in the identification of specific investor profiles that may benefit from targeted interventions aimed at enhancing their financial well-being through the provision of judicious financial guidance.

The results indicate that personality traits wield a greater influence than financial literacy on the inclination to seek financial advice. Specifically, factors like extraversion and financial literacy augment the likelihood of seeking and utilizing financial advice, even after accounting for socio-demographic variables. Additionally, these effects remain robust despite controlling for various psychological factors such as regret, trust, and risk tolerance. Notably, while the impact of personality traits persists across different degrees of reliance on financial advisors, the effect of financial literacy appears to diminish. Extraverted individuals and those experiencing anxiety and emotional instability demonstrate a heightened propensity to increase their engagement with financial advisory services.

The article follows a structured format outlined as follows. Section 2 engages with the pertinent literature and formulates hypotheses. Section 3 delineates the questionnaire design, data collection procedures, and variable construction. Empirical findings are expounded upon in Section 4, followed by discussion and conclusion in Sections 5 and 6, respectively.

Literature Review and Hypothesis Development

Personality Traits and Financial Advice-Seeking Decision

Personality traits encompass variations in cognitive, affective, and behavioural patterns among individuals. The Five-Factor model, pioneered by Costa Jr and McCrae (1992), serves as a prevalent framework for elucidating disparities in economic decision-making and behaviours at both individual and household levels. This model has been extensively applied to diverse realms such as financial asset management and debt accumulation (Brown & Taylor, 2014), savings habits (Kausel et al., 2016), stock trading behaviours (Tauni et al., 2017), pension choices (Balasuriya & Yang, 2019), financial risk-taking tendencies (Brooks & Williams, 2021), and decision-making preferences (El Othman et al., 2020). Its components comprise Extraversion (characterized by sociability and warmth), Conscientiousness (associated with organization and reliability), Neuroticism (indicative of emotional instability and insecurity), Openness (reflective of receptiveness to novel experiences and imaginative thinking), and Agreeableness (marked by humility and cooperation). Roberts et al. (2006) demonstrated that traits such as Extraversion, Agreeableness, and Conscientiousness tend to predominate and intensify during early adulthood, while attributes like Openness to new experiences may exhibit changes primarily in later stages of life.

Prior research has extensively explored the interplay between personality traits and the inclination to seek financial advice. Employing the framework of the Big Five personality traits, Kakhnovets (2011) identified a positive correlation between traits such as Neuroticism, Openness, and Agreeableness and the propensity to seek general counselling services. Similarly, Kimiyaghalam et al. (2016) observed positive impacts of Neuroticism, Openness, and Agreeableness on help-seeking behaviour. Gillen and Kim (2014) demonstrated that individuals exhibiting higher levels of Neuroticism are more inclined to seek financial assistance from professional sources, such as home equity loans and credit cards, within the economic realm. Conversely, Conscientiousness exhibited a negative association with seeking help from individual sources or family members. This negative linkage between Conscientiousness and help-seeking behaviour, observed in multiple studies, may be attributed to the perceived psychological costs associated with Conscientiousness, whereby conscientious individuals may be perceived as less proficient in specific tasks (Duckworth & Weir, 2010, 2011).

Examining data from the 2012 and 2014 waves of the Health and Retirement Study, Chatterjee and Fan (2021) uncover a positive correlation between Conscientiousness and Openness and the inclination to seek professional financial advice, while Extraversion exhibits a contrasting effect. These findings underscore the significance of specific personality traits as influential psychological determinants in financial advice-seeking behaviours. However, the results diverge from prior findings concerning the interrelations among Extraversion, Conscientiousness, Agreeableness, and the pursuit of financial guidance. One plausible explanation for this divergence is the predominance of older adults within the dataset, with 73% of participants aged 50 or older. Additionally, older adults tend to manifest contrasting attitudes and behaviours regarding their financial concerns and affairs.

Drawing from the existing literature on the correlation between personality traits and the inclination to seek financial advice, we posit the following hypotheses regarding these relationships:

H1a*: Extraversion positively influences the propensity to seek financial advice.*

H1b: *Conscientiousness negatively affects the likelihood of seeking financial advice.*

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

H1c: *Openness to experiences positively correlates with the inclination to seek financial advice.*

H1d: *Neuroticism positively relates to the inclination to seek financial advice.*

H1e: *Agreeableness positively impacts the inclination to seek financial advice.*

Financial Advice-Seeking and Financial Literacy

Previous research has yielded conflicting findings regarding the nexus between financial literacy and the propensity to seek financial advice. On one hand, financial advice may serve as a substitute for financial literacy, suggesting that individuals with limited financial knowledge encounter significant barriers to entry into financial markets, thereby heightening their demand for advisory services. Specifically, employing experimental analysis, Hung and Yoong (2013) identified a negative correlation between financial literacy and the inclination to seek advice. Similarly, Kramer (2016) presented empirical evidence in support of the substitute theory, demonstrating that private investors possessing high levels of financial literacy exhibit reduced likelihoods of seeking professional assistance compared to those with lower financial literacy levels, owing to heightened confidence in managing economic challenges. However, Gerrans and Hershey (2017) discovered that the negative association between financial literacy and the propensity to seek financial advice is pertinent solely to past advice-seeking behaviours, rather than those anticipated in the present or future.

Conversely, a substantial body of evidence supports the contention that financial literacy can complement financial acumen. Specifically, Calcagno and Monticone (2015) demonstrated that individuals possessing elevated levels of financial literacy exhibit heightened proclivities to seek financial advisory services, as they are cognizant of the advantages offered by professional guidance. Furthermore, less financially literate investors are more susceptible to overestimating their capabilities, thereby diminishing their inclination to seek advice (Kruger & Dunning, 1999). Building upon empirical findings, Van Rooij et al. (2011) revealed that Dutch investors with enhanced financial literacy levels demonstrate a greater propensity to utilize formal information sources, such as guidance from professionals. Similarly, Collins (2012) discerned that households in the United States with limited financial knowledge exhibit diminished engagement with financial advisors. More recently, Burke and Hung (2021) indicated a positive correlation between heightened financial literacy and the inclination to seek professional financial advice among American individuals.

Hence, the association between financial literacy and the pursuit of financial advice appears to be inconsistent. As highlighted by Kramer (2016), the variability in outcomes may hinge upon how financial literacy is operationalized. Numerous investigations have demonstrated a positive correlation between elevated levels of perceived financial literacy and the inclination to seek financial advice. However, this relationship tends to invert when actual financial literacy is taken into account. In our study, we scrutinize the influence of financial literacy on the assistance-seeking behaviour of retail investors in their investment decision-making process, while controlling for pre-existing psychological and behavioural factors. Given our methodological choices, we are guided by the complementary hypothesis.

H2: *Financial literacy is positively associated with the financial advice-seeking decision*

Method

Survey Design

The survey instrument comprises four primary sections. The initial segment encompasses inquiries aimed at gauging participants' psychological predispositions and behavioural biases, cognitive capacities, emotional states, and attitudes towards gambling. The subsequent section presents hypothetical scenarios designed to elicit responses regarding participants' stock allocation strategies and adjustments. The fourth component incorporates queries pertaining to participants' stock holdings, investment history, utilization of financial advisory services, and motivations behind trading activities during the COVID-19 pandemic. Additionally, the final section of the questionnaire encompasses fifteen items focused on eliciting information regarding participants' socio-demographic profiles.

The questionnaire underwent a translation process into Vietnamese and subsequent back-translation into English, facilitated by two proficient translators possessing backgrounds in economics, operating independently. To enhance the survey's efficacy, a preliminary study involving 100 undergraduate students was conducted prior to its dissemination to the wider populace.

Data Collection and Procedure

A web-based survey was developed and disseminated to participants via the Unipark platform (www.unipark.de), conducted within Ho Chi Minh City, Vietnam, spanning the period from April 2020 to August 2020. Employing a combination of quota and snowball sampling techniques, the study targeted three primary cohorts: clientele frequenting banks and brokerage firms, as well as university students across Vietnam. The initial sample comprised 908 respondents. Subsequently, 16 participants were excluded from the analysis due to prolonged survey completion times exceeding 30 minutes, along with responses featuring outlier values. From the resultant final sample

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

of 892 participants, a subset of 255 individuals was selected for further analysis, exclusively comprising investors with documented experience in trading stocks within the Vietnamese stock market.

Construction of Variables

Financial Advice-Seeking

In assessing the utilization of financial advisors for investment decisions, we adopted a methodology pioneered by Brenner and Meyll (2020). Specifically, participants were queried regarding their engagement with financial advisors within the preceding 12-month period concerning investment decisions. Among those affirming consultation with financial advisors, individuals who received guidance from either a financial advisor or an investment counsellor affiliated with brokerage firms were coded as "1", while those who did not seek such advice were coded as "0".

The existing body of literature has underscored the variability in the demand for financial advice among individuals, contingent upon the degree of involvement of financial advisors in their investment decision-making processes (Bachmann & Hens, 2015; Hsu, 2022). To further assess the prevalence of financial advice-seeking behaviours, participants were presented with a question aimed at elucidating their attitudes towards relying on professional financial advisors. The formulation of this query mirrored that employed by Bachmann and Hens (2015), which queried participants: "Which of the following statements best characterizes your inclination to entrust financial decisions to your current financial advisor?" Respondents were presented with five response options. To obviate challenges in estimation and mitigate the risk of erroneous inferences, individuals who indicated a preference for seeking their advisors' opinions and considering their recommendations before making decisions were grouped with those who predominantly delegate their decision-making to their advisors. Subsequently, the extent of financial advice-seeking was codified as follows: "1" denoted participants who favoured making decisions entirely independently, "2" indicated those who sought input from one or several advisors prior to decision-making, and "3" encompassed individuals willing to delegate the majority or all of their decisions to their advisors.

Personality Traits

The abbreviated version of the Big-Five Personality Inventory, developed by Rammstedt and John (2007), was utilized to assess respondents' personality traits. Utilizing a 5-point Likert scale ranging from "strongly disagree" to "strongly agree," this concise 10-item instrument encompasses the five dimensions of personality traits:

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Although derived from the comprehensive 44-item standard version of the Big Five Personality Inventory (John et al., 1991), the abbreviated version maintains significant validity and reliability (Balgiu, 2018; Rammstedt & John, 2007).

Financial Literacy

Financial literacy was assessed using three questions known as the "Big 3," originally developed by Lusardi and Mitchell (2007). Participants were queried regarding fundamental financial knowledge pertaining to interest rates, inflation, and risk diversification. Given the widespread utilization of this instrument across various studies for gauging financial literacy, we opted to retain these specific questions in our research protocol. For analytical purposes, responses to the questions were dichotomously coded as either correct or incorrect, and subsequently aggregated to delineate four levels of financial literacy. The financial literacy variable was then categorized on a scale ranging from 0 (indicating extremely low financial literacy) to 3 (reflecting high financial literacy).

Psychological Variables

We include select psychological factors as control variables in the study, namely financial risk tolerance, Trust, and regret tendency, due to their established correlations with financial advice-seeking behaviour. Trust serves as a significant determinant of economic decisions and exhibits a positive association with portfolio delegation (Guiso et al., 2008). Additionally, financial risk tolerance has demonstrated both positive and negative relationships with the inclination to seek financial advice, as indicated by previous research (Gerhardt & Hackethal, 2009; Lachance & Tang, 2012). Recent findings by Kramer (2016) suggest that regret tendency and risk tolerance exert adverse effects on the demand for financial advice. Kramer (2016) further highlights the role of financial professionals in assuaging investors' regret following investment setbacks, aligning with the "responsibility-shifting" hypothesis.

Trust in financial professionals was gauged using a question employing a 7-point Likert scale, asking respondents to assess their agreement with the statement: "Most financial professionals can be trusted." A higher score indicates greater Trust in financial advisors, influencing investment decisions. Additionally, risk tolerance was assessed through a question prompting participants to self-assess their risk-taking inclination on a scale of 0 to 10, where "0" represents extremely low-risk tolerance and "10" signifies extremely high-risk tolerance. Lastly, regret tendency was measured using a question adapted from Statman (2008), with participants rating their agreement level on a scale from "1=Strongly disagree" to "10=Strongly agree" regarding feelings of regret after making choices.

INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES
Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

Regret tendency was coded on a scale of 1 to 10, where "1" denotes high regret tendency and "10" reflects extremely low regret tendency.

Control Variables

Similar to prior research on financial advice-seeking, our regression analyses incorporate control variables such as trading experience, income, and various socio-demographic factors. Trading experience is measured through self-reported inquiries concerning trading frequency, stock allocation, and trading history in the stock market. Additionally, gender, age, marital status, income, and educational attainment serve as additional control variables in our regression model. Further details regarding the dependent, independent, and control variables are provided in Appendix A.

Empirical Results

Data Summary

Table 1 provides a comprehensive overview of key sample characteristics comprising 255 investors. Notably, the sample predominantly consists of highly educated individuals, with over 60% holding an undergraduate degree. Moreover, the sample predominantly comprises young investors, with the majority (72%) under the age of 30 and the vast majority (78%) unmarried. Male participants constitute 53% of the sample. Additionally, more than half of the respondents report a monthly income below 8 million VND. The table also highlights that 61% of respondents actively seek professional investment advice. However, it is noteworthy that only 47% of all respondents consider financial advice for their investment decisions.

Table 2 presents the descriptive statistics of respondents categorized by their engagement in advice-seeking and advice-taking behaviours. The data reveals that individuals who actively seek financial advice for investment decisions demonstrate the highest levels of financial literacy, whereas those who entirely delegate investment decisions to advisors exhibit the lowest financial literacy scores. Regarding personality traits, individuals who incorporate advice into their decision-making process exhibit the highest levels of Extraversion, whereas those who do not consider advice for investment decisions display the highest levels of Agreeableness.

Table 1: Descriptive Analysis.

Variable	Obs	Mean (SD)/ Proportion	Standard Deviation	Min	Max
Panel A: Advice-Seeking Behaviour					
Advice-Seeking Decision					
Not seeking advice	100	39%			
Seeking advice	155	61%			
Advice-Taking Decision					

INTERNATIONAL JOURNAL OF ECONOMICS AND FINANCE STUDIES
Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

Do not take the advice	136	53%			
Take advice for decision	119	47%			
Panel B: Personality Traits					
Extraversion	255	3.183	0.829	1	5
Agreeableness	255	3.158	0.715	1	5
Conscientiousness	255	3.042	0.685	1	5
Neuroticism	255	2.982	0.740	1	5
Openness	255	3.205	0.722	1	5
Panel C: Financial Literacy Score					
0	31	12%			
1	69	27%			
2	95	37%			
3	60	24%			
Panel D: Psychological Variables					
Trust	255	2.941 (1.233)	1.234	1	7
Regret tendency	255	4.847 (1.610)	1.610	1	7
Risk Tolerance					
Higher than average risk-tolerant	59	23%			
Lower-than-average risk-tolerant	196	77%			
Panel E: Trading Activity					
Trading experienced	255	1.839 (1.024)	1.024	1	4
Trading frequency	255	2.718 (1.658)	1.659	1	7
Panel F: Demographic Variables					
Having kids	255	1.433 (0.865)	0.865	1	6
Gender					
Female	119	47%			
Male	136	53%			
Age					
< 30	184	72%			
30 – 39	52	20%			
40 – 49	13	5%			
> 50	6	2%			
Married					
Yes	56	22%			
No	199	78%			
Education					
Lower than high school	2	1%			
High school	98	38%			
Undergraduate	129	51%			
Master	22	9%			
Doctor	4	2%			
Income					
< 8 million VND	140	55%			
8 to < 16 million VND	57	22%			
16 to < 24 million VND	20	8%			
24 to < 32 million VND	17	7%			
32 to < 40 million VND	9	4%			
> 40 million VND	12	5%			

However, individuals who demonstrate excessive openness and readily agree with every opinion they encounter may diminish the significance of specific advice and its impact on decision-making. Lastly, individuals who fully delegate investment

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

decisions to advisors demonstrate the highest levels of Neuroticism and the lowest levels of Conscientiousness.

Table 2: Summary Statistics According to Advice-Seeking and Advice-Taking Decisions.

Variable	Advice-Seeking Decision	Advice-Taking Levels		
		Do Not Take the Advice for Decisions	Taking the Advice for Decision	Fully Delegation to Advisors
Panel A: Personality Traits				
Extraversion				
Mean (SD)	3.272 (0.771)	3.091 (0.867)	3.300 (0.757)	3.166 (0.937)
Agreeableness				
Mean (SD)	3.137 (0.715)	3.216 (0.721)	3.106 (0.730)	3.069 (0.593)
Conscientiousness				
Mean (SD)	3.070 (0.665)	3.040 (0.757)	3.069 (0.593)	2.833 (0.577)
Neuroticism				
Mean (SD)	2.990 (0.726)	2.941 (0.747)	3.000 (0.700)	3.291 (0.964)
Openness				
Mean (SD)	3.195 (0.737)	3.235 (0.752)	3.185 (0.695)	3.041 (0.620)
Panel B: Financial Literacy				
Mean (SD)	1.769 (0.935)	1.669 (0.958)	1.833 (0.942)	1.166 (1.029)
Panel C: Psychological variables				
Trust in Financial Advisors				
Mean (SD)	3.038 (1.243)	2.816 (1.212)	3.111 (1.262)	2.833 (1.114)
Regret Tendency				
Mean (SD)	5.000 (1.565)	4.698 (1.674)	5.027 (1.549)	4.916 (1.311)
Risk tolerance				
Mean (SD)	0.193 (0.396)	0.272 (0.446)	0.194 (0.397)	0.090 (0.301)
Panel D: Investment Behaviour				
Experienced				
Mean (SD)	1.832 (1.024)	1.860 (1.062)	1.805 (0.980)	1.909 (1.044)
Trading Frequency				
Mean (SD)	2.756 (1.701)	2.588 (1.603)	2.842 (1.686)	3.083 (2.020)

Respondents characterized by the lowest risk tolerance tend to seek comprehensive delegation of investment services. Conversely, those with the highest risk tolerance predominantly engage in independent investment practices and refrain from considering advice for investment decisions. Notably, individuals who exhibit the highest level of trust in their advisors are not those who opt for complete delegation of investment decisions; rather, they tend to consider guidance for their decisions. A lack of financial literacy emerges as a primary determinant leading to the full delegation of investment decisions, rather than reliance on advisor trust. Furthermore, individuals demonstrating the strongest tendency for regret are inclined to seek advice from financial advisors for investment decisions. Table 3 also presents correlations among levels of advice-seeking, personal traits, and financial literacy.

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

Table 3: Correlation Between Advice-Taking Decisions, Personality Traits, and Financial Literacy.

		1	2	3	4	5	6	7
1	Advice taking	1						
2	Extraversion	0.098	1					
3	Agreeableness	-0.097	0.096	1				
4	Conscientiousness	-0.021	0.077	0.232***	1			
5	Neuroticism	0.084	-0.338***	-0.218***	-0.174***	1		
6	Openness	-0.056	-0.018	-0.203***	0.0297	-0.018	1	
7	Financial literacy	-0.002	-0.138**	-0.019	-0.043	-0.023	0.056	1

*Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.*

Regression Results and Analysis

The Effect of Trust, Financial Literacy, and Personality Traits on Financial Advice-Seeking Decision

Table 4 presents logistic regression estimates exploring the relationship between financial literacy, Big-Five personality traits, and investors' propensity to seek professional financial advice, controlling for various factors. The dependent variable in models (1) to (4) is a binary variable termed "advice-seeking decision," indicating whether investors opt for financial advice services or not (further detailed in Appendix A).

The logistic regression findings from Table 4 reveal a substantial positive association between trust in advisors and the inclination to seek financial advice, as anticipated (models 1 and 3). This outcome aligns with prior research findings (Burke & Hung, 2021; Kramer, 2016; Lachance & Tang, 2012). Lachance and Tang (2012) identified trust and cost as the most influential factors impacting financial advice-seeking decisions. Moreover, regret aversion demonstrates a significant and positive correlation with advice-seeking behaviour. Investors exhibiting a greater aversion to potential regret are more inclined to seek guidance from financial advisors for their investment decisions.

Furthermore, the level of measured financial literacy among investors significantly influences their propensity to seek financial advice (model 4). Higher levels of financial literacy correspond to increased likelihoods of seeking financial advice. These findings are consistent with prior research indicating the positive impact of financial literacy on engaging with more sophisticated investment advisory services (Calcagno & Monticone, 2015; Nguyen & Rozsa, 2019; Van Rooij et al., 2011).

Additionally, results from models 3 and 4 indicate a significant and positive association between the extraversion trait and the dummy variables representing the decision to seek financial advice, at the 10% and 5% significance levels, respectively, irrespective of other factors.

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

Table 4: Trust, Financial Literacy, Personality Traits, and Financial Advice-Seeking Behaviour Using Logistic Regression.

	(1)	(2)	(3)	(4)
	Advice-Seeking Decision	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Seeking Decision**
Trust in Financial Advisors	0.208* (0.119)		0.218* (0.122)	
Financial Literacy		0.246 (0.152)		0.319** (0.157)
Extraversion			0.371* (0.190)	0.429** (0.194)
Agreeableness			-0.139 (0.219)	-0.172 (0.220)
Conscientiousness			0.316 (0.223)	0.339 (0.223)
Neuroticism			0.235 (0.222)	0.259 (0.223)
Openness			-0.127 (0.203)	-0.113 (0.203)
Regret Tendency	0.136 (0.090)	0.140 (0.089)	0.157* (0.092)	0.161* (0.092)
Risk Tolerance	-0.390 (0.336)	-0.441 (0.334)	-0.374 (0.344)	-0.443 (0.344)
Experienced	-0.070 (0.159)	-0.055 (0.157)	-0.087 (0.164)	-0.070 (0.163)
Trading Frequency	0.014 (0.093)	0.026 (0.093)	-0.003 (0.096)	0.010 (0.097)
Gender (Male)	0.375 (0.286)	0.310 (0.285)	0.470 (0.296)	0.399 (0.295)
Having Kids	0.155 (0.229)	0.261 (0.231)	0.187 (0.235)	0.314 (0.237)
Married	-0.555 (0.505)	-0.416 (0.503)	-0.553 (0.518)	-0.365 (0.511)
Age (Base group: age < 30)				
Age 30 – 39	-1.703*** (0.534)	-1.741*** (0.539)	-1.680*** (0.553)	-1.712*** (0.559)
Age 40 – 49	-0.936 (0.913)	-0.943 (0.901)	-0.849 (0.947)	-0.867 (0.929)
Age > 50	-2.765** (1.086)	-2.584** (1.093)	-2.919*** (1.119)	-2.696** (1.105)
Education (Base group: Under High school Cert.)				
High school Cert.	1.488 (1.652)	1.523 (1.597)	1.838 (1.634)	1.830 (1.612)
Undergraduate	1.322 (1.656)	1.257 (1.604)	1.727 (1.637)	1.614 (1.618)
Master	2.516 (1.758)	2.421 (1.712)	2.947* (1.760)	2.783 (1.746)
Doctor	2.145 (2.078)	1.864 (2.005)	2.888 (2.112)	2.630 (2.051)
Income (Base group: < 8 million VND)				
8 to < 16 million VND	0.422 (0.413)	0.351 (0.412)	0.334 (0.430)	0.251 (0.433)
16 to < 24 million VND	0.601 (0.597)	0.509 (0.594)	0.556 (0.613)	0.458 (0.609)
24 to < 32 million VND	0.548 (0.641)	0.546 (0.627)	0.494 (0.664)	0.485 (0.649)
32 to < 40 million VND	1.545 (0.968)	1.315 (0.968)	1.573 (1.028)	1.334 (1.025)
> 40 million VND	1.144 (0.871)	1.113 (0.868)	0.887 (0.882)	0.903 (0.892)
Constant	-1.908 (1.894)	-1.949 (1.845)	-4.400* (2.562)	-4.823* (2.572)
N	255	255	255	255

Note: Please refer to Appendix A for the exact definition of all variables. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All values are marginal effects of original logistic regression.

This suggests that investors displaying higher levels of extraversion in their personality traits are notably more inclined to seek professional financial advice from external sources. This observation is consistent with findings from several previous studies (Amaral & Kolsarici, 2020; Tauni et al., 2017; Tauni et al., 2018). Individuals demonstrating extraverted personality traits tend to direct their attention and decision-making towards external stimuli (Amaral & Kolsarici, 2020), fostering a predisposition towards social interaction and a greater propensity to seek external assistance when faced with personal matters.

The remaining four characteristics are found to be statistically insignificant in

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

elucidating the choice to seek professional financial advice. This outcome contributes to the existing literature exploring the impact of personality traits on financial decision-making, including studies on financial risk-taking behaviours (Brooks & Williams, 2021), debt management (Rendall et al., 2021), and investment portfolio construction (Bucciol & Zarri, 2017). Previous research has demonstrated the significant influence of traits such as Neuroticism (Brooks & Williams, 2021), Agreeableness, and cynical hostility (Brooks & Williams, 2021; Rendall et al., 2021) on individuals' assessments of financial risks, financial management practices, and investment strategies. This finding underscores the pivotal role of another crucial personality trait, extraversion, in shaping individuals' decisions to engage professional financial advisors for investment endeavours.

The Effect of Trust, Financial Literacy, and Personality Traits on Financial Advice-Taking Decision

To further deepen our comprehension of investors' choices regarding the adoption of received financial advice, another logistic regression was employed to examine the significant determinants of investors' decisions to adopt financial advice, as illustrated in Table 5. The dependent variable in the models presented in Table 5 is termed the "advice-taking decision," as delineated in Appendix A. Notably, trust in advisors and investors' financial literacy emerge as pivotal factors in the adoption of advice within investors' decision-making processes. This finding echoes the results observed in Table 4 regarding financial advice-seeking behaviours: a greater degree of trust in advisors correlates positively with the likelihood of incorporating advice received into investors' financial decisions.

The findings from Table 5 further demonstrate the continued significant and positive influence of Extraversion on the decision to engage financial advisors for financial decision-making purposes. Additionally, Table 5 highlights the heightened and more substantial impacts, particularly within the realm of Neuroticism, at the 10% significance level. Investors exhibiting emotional instability and moodiness display a greater propensity to seek guidance from financial advisors when making financial decisions. This outcome aligns partly with the observations made by Brooks and Williams (2021), who noted that Neuroticism tends to reduce risk tolerance in economic decision-making. Similarly, the present study's findings suggest that investors characterized by dominant traits of Neuroticism may turn to financial advice as a means to mitigate unnecessary risks in their investment endeavours.

Table 5 corroborates previous research on key determinants of investors seeking financial advice (Bhattacharya et al., 2012; Kramer, 2016; Nguyen & Rozsa, 2019). Income notably influences advice-seeking behaviour, with higher-income investors

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

showing a greater inclination to seek advice. Age is also influential, with older investors demonstrating less propensity to seek advice compared to younger counterparts. However, gender, number of children, and marital status do not significantly affect the likelihood of seeking financial advice.

Table 5: Trust, Financial Literacy, Personality Traits, and Financial Advice-Taking Behaviour Using Logistic Regression.

	(1)	(2)	(3)	(4)
	Advice- Taking Decision	**Advice- Taking Decision**	**Advice- Taking Decision**	**Advice- Taking Decision**
Trust in Financial Advisors	0.224* (0.117)		0.229* (0.119)	
Financial Literacy		0.230 (0.150)		0.281* (0.155)
Extraversion			0.306 (0.187)	0.358* (0.189)
Agreeableness			-0.293 (0.214)	-0.315 (0.214)
Conscientiousness			0.262 (0.219)	0.270 (0.219)
Neuroticism			0.388* (0.220)	0.394* (0.220)
Openness			-0.237 (0.202)	-0.226 (0.201)
Regret Tendency	0.107 (0.090)	0.109 (0.089)	0.133 (0.093)	0.139 (0.092)
Risk Tolerance	-0.480 (0.339)	-0.532 (0.337)	-0.433 (0.348)	-0.483 (0.346)
Experienced	-0.091 (0.157)	-0.073 (0.156)	-0.091 (0.162)	-0.072 (0.162)
Trading Frequency	0.112 (0.091)	0.125 (0.091)	0.093 (0.094)	0.105 (0.095)
Gender (Male)	-0.142 (0.282)	-0.194 (0.281)	-0.031 (0.292)	-0.087 (0.291)
Having Kids	-0.008 (0.230)	0.095 (0.233)	-0.009 (0.236)	0.111 (0.238)
Married	-0.664 (0.495)	-0.558 (0.497)	-0.682 (0.508)	-0.553 (0.508)
Age (Base group: age < 30)				
Age 30 – 39	-1.645*** (0.537)	-1.686*** (0.544)	-1.652*** (0.557)	-1.691*** (0.564)
Age 40 – 49	-1.181 (0.874)	-1.228 (0.861)	-1.076 (0.902)	-1.105 (0.890)
Age > 50	-3.342*** (1.269)	-3.242** (1.291)	-3.615*** (1.303)	-3.432*** (1.303)
Education (Base group: Under High school Cert.)				
High school Cert.	-1.581 (1.317)	-1.274 (1.295)	-2.384 (1.464)	-2.138 (1.423)
Undergraduate	-1.897 (1.282)	-1.694 (1.267)	-2.614* (1.422)	-2.481* (1.389)
Master	-0.772 (1.307)	-0.614 (1.289)	-1.394 (1.445)	-1.332 (1.411)
Income (Base group: < 8 million VND)				
8 to < 16 million VND	1.098*** (0.419)	1.014** (0.414)	1.136*** (0.439)	1.049** (0.435)
16 to < 24 million VND	0.910 (0.594)	0.807 (0.588)	0.935 (0.611)	0.830 (0.604)
24 to < 32 million VND	1.034 (0.640)	1.011 (0.622)	1.003 (0.661)	0.976 (0.642)
32 to < 40 million VND	0.338 (0.892)	0.055 (0.874)	0.125 (0.950)	-0.182 (0.949)
> 40 million VND	0.496 (0.781)	0.447 (0.772)	0.369 (0.791)	0.323 (0.805)
Constant	0.965 (1.522)	0.767 (1.528)	0.318 (2.255)	-0.117 (2.263)
N	255	255	255	255

Note: Please refer to Appendix A for the exact definition of all variables. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All values are marginal effects of original logistic regression.

Moderating Effects of Big-Five Personalities on Advice-Seeking and Advice-Taking Decisions

The findings depicted in Table 6 highlight the moderating role of the Big Five personality traits in shaping the association between trust in advisors and decisions related to seeking or taking financial advice. Specifically, none of the moderating effects of the Big Five

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

personalities exhibit statistical significance concerning advice-seeking decisions. This outcome, in conjunction with the regression estimates from model 1 to model 5, suggests that Trust (significant at the 5% and 10% levels) and Extraversion (significant at the 10% level) independently drive investors' choices to seek financial advice. These outcomes are consistent with the results delineated in Table 4 and align with prior research exploring the relationship between Trust and decisions regarding financial advice-seeking (Burke & Hung, 2021; Lachance & Tang, 2012).

Concerning the analysis of moderating effects on advice-taking decisions (model 6 to model 10), the same significant simple effects of Trust (at 5% level), Extraversion (at 10% level), and Neuroticism (at 5% level) are observed. These results replicate the findings reported in Table 5 and provide robust confirmation of the effects of these critical factors as determinants of investors' advice-seeking decisions (Burke & Hung, 2021; Lachance & Tang, 2012).

Table 6: Moderating Effects of Big Five Personalities on the Relationship Between Trust and Advice-Seeking/Advice-Taking Decisions.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
	Advice-Seeking Decision	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**
Trust in Financial Advisors (TR)	0.252**	0.236*	0.234*	0.234*	0.237**	0.250**	0.252**	0.256**	0.242**	0.253**
	(0.123)	(0.121)	(0.121)	(0.121)	(0.120)	(0.120)	(0.117)	(0.118)	(0.118)	(0.117)
Extraversion (PE)	0.342*	0.348*	0.356*	0.354*	0.355*	0.290	0.323*	0.328*	0.299	0.327*
	(0.186)	(0.186)	(0.185)	(0.189)	(0.186)	(0.186)	(0.184)	(0.184)	(0.187)	(0.184)
Agreeableness (PA)	-0.153	-0.125	-0.136	-0.134	-0.115	-0.309	-0.286	-0.283	-0.275	-0.274
	(0.216)	(0.216)	(0.216)	(0.215)	(0.217)	(0.213)	(0.211)	(0.211)	(0.211)	(0.212)
Conscientiousness (PC)	0.286	0.271	0.267	0.267	0.261	0.216	0.190	0.183	0.189	0.182
	(0.220)	(0.219)	(0.218)	(0.218)	(0.219)	(0.217)	(0.214)	(0.214)	(0.213)	(0.214)
Neuroticism (PN)	0.296	0.252	0.258	0.258	0.267	0.492**	0.431**	0.435**	0.433**	0.440**
	(0.218)	(0.217)	(0.216)	(0.216)	(0.217)	(0.217)	(0.215)	(0.214)	(0.214)	(0.214)
Openness (PO)	-0.145	-0.162	-0.152	-0.151	-0.194	-0.232	-0.246	-0.236	-0.229	-0.267
	(0.198)	(0.200)	(0.198)	(0.199)	(0.206)	(0.200)	(0.201)	(0.199)	(0.199)	(0.204)
PExTR	0.216					0.274**				
	(0.134)					(0.133)				
PAxTR		0.053					0.037			
		(0.154)					(0.149)			
PCxTR			-0.008					0.062		
			(0.158)					(0.156)		
PNxTR				-0.010					-0.123	
				(0.169)					(0.166)	
POxTR					-0.123					-0.098
					(0.162)					(0.163)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	255	255	255	255	255	255	255	255	255	255

Note: Please refer to Appendix A for the exact definition of all variables. Standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01. All values are marginal effects of original logistic regression.

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

Model 6 highlights the noteworthy influence of the moderating effects of Extraversion on the association between Trust and advice-taking decisions at a 5% significance level. This implies that investors with higher levels of extraversion are more inclined to incorporate financial advice into their decision-making process, even when possessing an equivalent level of Trust as their introverted counterparts (Benischke et al., 2019). Prior research has established that extroverted individuals are more prone to taking risks than those with introverted personality traits (Benischke et al., 2019). This tendency towards risk-taking can be attributed to extroverts' proclivity to seek out novel experiences and exhibit open-mindedness and independence in their ideas (Gardiner & Jackson, 2012). The heightened propensity for embracing new ideas and engaging in risk-taking elucidates why more extroverted investors are more likely to integrate financial advice into their decisions when combined with a high level of Trust in the quality of the advice received.

Table 7: Moderating Effects of Big Five Personalities on the Relationship Between Financial Literacy and Advice-Seeking/Advice-Taking Decisions.

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**	**(7)**	**(8)**	**(9)**	**(10)**
	Advice-Seeking Decision	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**
Financial Literacy (FL)	0.278*	0.271*	0.295*	0.277*	0.276*	0.231	0.224	0.261*	0.218	0.252*
	(0.153)	(0.153)	(0.157)	(0.154)	(0.152)	(0.151)	(0.152)	(0.154)	(0.152)	(0.153)
Extraversion (PE)	0.388**	0.397**	0.416**	0.402**	0.405**	0.358*	0.345*	0.383**	0.354*	0.373**
	(0.188)	(0.190)	(0.190)	(0.188)	(0.188)	(0.185)	(0.186)	(0.186)	(0.184)	(0.185)
Agreeableness (PA)	-0.142	-0.166	-0.165	-0.167	-0.165	-0.311	-0.313	-0.314	-0.308	-0.307
	(0.216)	(0.214)	(0.215)	(0.214)	(0.214)	(0.211)	(0.210)	(0.210)	(0.211)	(0.211)
Conscientiousness (PC)	0.278	0.281	0.275	0.274	0.287	0.195	0.203	0.180	0.222	0.235
	(0.219)	(0.219)	(0.219)	(0.221)	(0.219)	(0.214)	(0.214)	(0.214)	(0.217)	(0.216)
Neuroticism (PN)	0.283	0.279	0.309	0.284	0.283	0.438**	0.422**	0.483**	0.427**	0.439**
	(0.216)	(0.217)	(0.221)	(0.216)	(0.216)	(0.212)	(0.214)	(0.218)	(0.213)	(0.214)
Openness (PO)	-0.122	-0.139	-0.129	-0.138	-0.128	-0.228	-0.235	-0.212	-0.236	-0.221
	(0.199)	(0.198)	(0.199)	(0.198)	(0.200)	(0.199)	(0.198)	(0.199)	(0.198)	(0.200)
PExFL	0.146					0.022				
	(0.181)					(0.179)				
PAxFL		-0.027					-0.117			
		(0.212)					(0.207)			
PCxFL			0.145					0.221		
			(0.233)					(0.224)		
PNxFL				-0.042					0.140	
				(0.204)					(0.198)	
POxFL					0.095					0.351*
					(0.200)					(0.200)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	255	255	255	255	255	255	255	255	255	255

Note: Please refer to Appendix A for the exact definition of all variables. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. All values are marginal effects of original logistic regression.

The findings in Table 7 explore how the big five personality traits moderate the

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

relationship between financial literacy and advice-seeking or advice-taking decisions. Extraversion and Neuroticism emerge as significant factors impacting financial advice-seeking and decision-making, aligning with the observations in Table 6. Furthermore, these results reaffirm the influence of financial literacy on advice-seeking and advice-taking behaviours, consistent with the outcomes presented in Tables 4 and 5.

Primarily, the moderating impacts of Openness were observed to be significant in influencing the relationship between financial literacy and advice-taking decisions, as indicated by model 10 in Table 7. This outcome implies that individuals exhibiting greater levels of openness in their personality traits tend to be more inclined to seek and integrate financial advice into their decision-making, particularly when they also exhibit higher levels of financial literacy.

Endogeneity Issue

Table 8: Logistic regression results using instrument variables approach for financial literacy.

	(1)	(2)	(3)	(4)	(5)	(6)
	Advice-Seeking Decision	**Advice-Seeking Decision**	**Advice-Seeking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**	**Advice-Taking Decision**
Financial Literacy	0.671*	0.576*	0.597*	0.691*	0.619*	0.640*
	(0.378)	(0.349)	(0.345)	(0.373)	(0.346)	(0.345)
Trust in Financial Advisors		0.192**	0.209**		0.215**	0.221**
		(0.085)	(0.088)		(0.087)	(0.088)
Extraversion			0.345**			0.303**
			(0.137)			(0.134)
Agreeableness			-0.055			-0.163
			(0.138)			(0.138)
Conscientiousness			0.240*			0.208
			(0.142)			(0.141)
Neuroticism			0.191			0.265*
			(0.142)			(0.138)
Openness			-0.098			-0.169
			(0.127)			(0.130)
Other Controls Variables	Yes	Yes	Yes	Yes	Yes	Yes
N	255	255	255	255	255	255

Note: Please refer to Appendix A for the exact definition of all variables. Standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. A two-step probit with endogenous regressors is used in this analysis.

This study acknowledges the potential endogeneity of measured financial literacy when examining its relationship with advice-seeking behaviour. Endogeneity concerns may arise due to unobserved variables, despite efforts to mitigate this risk through demographic, preference, and Trust controls. However, the possibility of omitted variable bias cannot be entirely ruled out. Moreover, our estimates might be susceptible to reverse causation, wherein the decision to engage a financial advisor influences one's

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

financial literacy level. Consequently, caution is warranted when interpreting our Ordinary Least Squares (OLS) results as causal effects. Aligning with prior authors (Kimball & Shumway, 2010; Van Rooij et al., 2011), we queried respondents about their economic knowledge, presumed to precede investment activities. Our hypothesis posits a positive correlation between economic education and current financial literacy, albeit not directly associated with seeking professional financial guidance.

Findings derived from Table 8, following the utilization of instrumental variables for financial literacy, reveal that the associations among financial literacy, Big Five personality traits, and financial advice-seeking behaviours mirror those observed in the principal outcomes outlined in Tables 4 and 5 concerning both advice-seeking and advice-taking decisions.

Discussion

Theoretical Implications

The objective of this study is to delineate and comprehend the pivotal factors influencing financial advice-seeking behaviours amid the COVID-19 pandemic. Notably, the Big Five personality traits, Trust, and financial literacy emerge as crucial determinants delineating individuals' propensities to solicit assistance from professional financial advisors.

This study underscores the pivotal roles of trust and financial literacy in shaping investor behaviour, particularly amid unprecedented events like the COVID-19 pandemic. Aligned with recent scholarly research (Rabbani et al., 2021; Westermann et al., 2020), our findings highlight the substantial impact of financial literacy and trust in financial advisors on the inclination to seek and adhere to financial advice. This insight extends the discourse on investor behaviour to address the unique challenges posed by the COVID-19 crisis. The pandemic has magnified financial concerns, emphasizing the need for investors to navigate heightened market volatility and make prudent investment decisions to safeguard and potentially grow their assets amidst uncertainty. This underscores the importance of understanding the psychological determinants influencing financial decision-making during such crises (Guerrero et al., 2021). Thus, our study significantly contributes to the understanding of investor behaviour by contextualizing the influence of psychological factors in financial decision-making within the extraordinary context of a global health crisis.

This study further explores the nuanced interplay between financial literacy and the integration of financial advice, shedding light on the diminishing impact of financial literacy in investors' decision-making processes. This decline in influence aligns with

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

the concept of overconfidence in financial knowledge, a phenomenon extensively examined in academic literature. Higher levels of financial literacy can sometimes breed excessive confidence in one's financial decision-making abilities, as evidenced by Moore (2003). This overconfidence may lead to reduced dependence on external advice, as noted by Barber and Odean (2001), potentially resulting in excessive trading behaviours that negate the advantages of financial literacy.

During the COVID-19 crisis, openness emerged as the key personality trait shaping investors' reliance on financial advisors. These results underscore the significance of personality traits in economic decision-making (Sadi et al., 2011). Prior research by Tauni et al. (2017) supports these findings, indicating that individuals with higher openness levels engage more in financial trading and seek financial advice more often. Additionally, Mayfield et al. (2008) observed that those with greater openness are more inclined towards long-term investments, highlighting the importance of financial literacy in such endeavours.

Furthermore, the interplay between personality traits, particularly Openness, and financial literacy is noteworthy. Openness, reflecting a readiness to embrace novel concepts, may moderate the impact of financial literacy. Even with a strong grasp of financial matters, individuals high in Openness might still seek external financial guidance, drawn by their inclination to explore different viewpoints. This inclination serves to counterbalance the usual overconfidence linked with extensive financial literacy.

The study by Hibbert et al. (2013) reinforces this concept, showing that individuals with high financial literacy yet low Openness tend to eschew advice, relying solely on their perceived financial expertise. Conversely, those high in both financial literacy and Openness are more inclined to integrate advice, recognizing the value of external viewpoints. This intersection underscores a nuanced relationship between financial literacy and personality traits, particularly Openness, indicating that decision-making is influenced not just by knowledge but also by individual tendencies and cognitive styles.

Managerial Implications

This study carries vital implications for policymakers and financial institutions. It highlights that financial literacy enhances rather than replaces the need for financial advice, advocating for educational programs alongside advisory services. Integrating finance education with advisory services can mitigate poor decision-making, promoting greater financial stability and well-being among investors.

Secondly, this study underscores three key findings. Firstly, trust in advisors correlates with seeking and following financial advice, emphasizing its importance for customer retention and loyalty. Secondly, certain personality traits influence investors' advice-seeking behaviour, suggesting personalized marketing and consulting strategies could enhance effectiveness.

The study's third finding emphasizes the importance of tailored approaches in financial advisory services. Specifically, it highlights the necessity for advisors to adjust their strategies based on clients' levels of financial literacy and openness. For individuals with high financial literacy but openness to external advice, advisors should focus on building trust and providing sophisticated analytical content. Conversely, clients with lower financial literacy may require more foundational educational materials to improve their financial understanding and decision-making confidence. By adopting such a nuanced approach, advisors can better meet the diverse needs and preferences of their clients.

The fourth implication underscores the importance of advocating for holistic financial education initiatives that transcend traditional financial literacy. These programs should incorporate behavioural dimensions, including risk perception and the influence of personality traits on economic decision-making. Policymakers should ensure that such programs are accessible and inclusive, accommodating individuals with diverse levels of financial literacy and receptiveness to new information. Given the potential vulnerabilities of certain investor segments, particularly during periods of market volatility, policymakers should also consider bolstering consumer protection measures. This might entail implementing stricter regulations on the marketing of complex financial products and mandating advisory consultations for investors prior to significant investment undertakings.

Conclusion

This study offers significant insights into the intricate dynamics of investor behaviour, particularly amidst the COVID-19 pandemic, by examining the interplay of financial literacy, personality traits, and their combined influence on financial advice-seeking and decision-making. Drawing from a sample of 255 stock investors in Vietnamese markets, our findings emphasize the multifaceted nature of these decisions. While financial literacy holds importance, its impact is nuanced and moderated by personality traits, notably openness. We reveal that individuals with higher financial literacy and openness are more inclined to integrate financial advice into their investment decisions, even after adjusting for psychological variables, investment experience, and socioeconomic factors. Specifically, extraverted investors, those with higher risk tolerance, and individuals with greater financial literacy, trust, and regret tendencies exhibit a heightened propensity to seek financial advice, highlighting the complex interplay between knowledge, confidence, and receptiveness to novel financial concepts.

Although this study offers valuable insights into investor behaviour during the COVID-19 pandemic, particularly regarding financial literacy and personality traits, it is subject to certain limitations that warrant consideration for future research endeavours. Firstly, the study's focus on a specific demographic group, drawing from a sample of investors within the Vietnamese market, may restrict the generalizability of the findings. Expanding the research scope to encompass a more diverse range of geographic locations and demographic profiles would bolster the external validity of the findings. Secondly, the cross-sectional design employed in this study provides a static snapshot of investor behaviour and attitudes during a specific period of the pandemic. This approach may overlook the dynamic nature of these behaviours and attitudes, which could evolve in response to fluctuating market conditions or the unfolding economic ramifications of the pandemic. Employing longitudinal designs in future research endeavours could capture the trajectory of investor behaviour over time, especially in the post-pandemic landscape. Thirdly, reliance on self-reported data for assessing financial literacy, personality traits, and investment decisions introduces potential biases. Participants' responses may be susceptible to social desirability or recall biases, thereby impacting the accuracy and reliability of the data. Additionally, while the study accounted for certain psychological variables, it did not encompass a comprehensive array of factors influencing investment decisions. Factors such as cognitive biases, emotional intelligence, and stress levels during periods of heightened market volatility were not addressed, despite their potential significance in shaping investment behaviour. Integrating a broader spectrum of psychological and behavioural factors into future research endeavours could yield a more nuanced understanding of the underlying drivers of investment decisions.

List of Abbreviations

TR: Trust in financial advisors
PE: Extraversion
PA: Agreeableness
PC: Conscientiousness
PN: Neuroticism
PO: Openness

Acknowledgement

This research is funded by The University of Economics Ho Chi Minh City (UEH), Vietnam.

References

Amaral, C., & Kolsarici, C. (2020). The financial advice puzzle: The role of consumer heterogeneity in the advisor choice. *Journal of Retailing and Consumer Services*, *54*, 102014. https://doi.org/10.1016/j.jretconser.2019.102014

Bachmann, K., & Hens, T. (2015). Investment competence and advice seeking. *Journal of Behavioral and Experimental Finance*, *6*, 27-41. https://doi.org/10.1016/j.jbef.2015.03.001

Balasuriya, J., & Yang, Y. (2019). The role of personality traits in pension decisions: findings and policy recommendations. *Applied Economics*, *51*(27), 2901-2920. https://doi.org/10.1080/00036846.2018.1563670

Balgiu, B. A. (2018). The psychometric properties of the Big Five inventory-10 (BFI-10) including correlations with subjective and psychological well-being. *Global Journal of Psychology Research: New Trends and Issues 8*(2), 61-69 https://doi.org/10.18844/gjpr.v8i2.3434

Barber, B. M., Lee, Y.-T., Liu, Y.-J., & Odean, T. (2009). Just how much do individual investors lose by trading? *The Review of Financial Studies*, *22*(2), 609-632. https://doi.org/10.1093/rfs/hhn046

Barber, B. M., & Odean, T. (2000). Trading is hazardous to your wealth: The common stock investment performance of individual investors. *The Journal of Finance*, *55*(2), 773-806. https://doi.org/10.1111/0022-1082.00226

Barber, B. M., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. *The quarterly journal of economics*, *116*(1), 261-292. https://doi.org/10.1162/003355301556400

Benischke, M. H., Martin, G. P., & Glaser, L. (2019). CEO equity risk bearing and strategic risk taking: The moderating effect of CEO personality. *Strategic Management Journal*, *40*(1), 153-177. https://doi.org/10.1002/smj.2974

Bhattacharya, U., Hackethal, A., Kaesler, S., Loos, B., & Meyer, S. (2012). Is unbiased financial advice to retail investors sufficient? Answers from a large field study. *The Review of Financial Studies*, *25*(4), 975-1032. https://doi.org/10.1093/rfs/hhr127

Bluethgen, R., Gintschel, A., Hackethal, A., & Mueller, A. (2008). Financial advice and individual investors' portfolios. *Available at SSRN*, 1-40. https://doi.org/10.2139/ssrn.968197

Bora, D., & Basistha, D. (2021). The outbreak of COVID-19 pandemic and its impact on stock market volatility: Evidence from a worst-affected economy. *Journal of public affairs*, *21*(4), e2623. https://doi.org/10.1002/pa.2623

Brenner, L., & Meyll, T. (2020). Robo-advisors: a substitute for human financial advice? *Journal of Behavioral and Experimental Finance*, *25*, 100275. https://doi.org/10.1016/j.jbef.2020.100275

Brooks, C., & Williams, L. (2021). The impact of personality traits on attitude to financial risk. *Research in International Business and Finance*, *58*, 101501.

https://doi.org/10.1016/j.ribaf.2021.101501

Brown, S., & Taylor, K. (2014). Household finances and the 'Big Five'personality traits. *Journal of Economic Psychology*, *45*, 197-212. https://doi.org/10.1016/j.joep.2014.10.006

Bucciol, A., & Zarri, L. (2017). Do personality traits influence investors' portfolios? *Journal of Behavioral and Experimental Economics*, *68*, 1-12. https://doi.org/10.1016/j.socec.2017.03.001

Burke, J., & Hung, A. A. (2021). Trust and financial advice. *Journal of Pension Economics & Finance*, *20*(1), 9-26. https://doi.org/10.1017/S147474721900026X

Calcagno, R., & Monticone, C. (2015). Financial literacy and the demand for financial advice. *Journal of Banking & Finance*, *50*, 363-380. https://doi.org/10.1016/j.jbankfin.2014.03.013

Chatterjee, S., & Fan, L. (2021). Older adults' life satisfaction: The roles of seeking financial advice and personality traits. *Journal of Financial Therapy*, *12*(1), 4. https://doi.org/10.4148/1944-9771.1253

Collins, J. M. (2012). Financial advice: A substitute for financial literacy? *Financial Services Review*, *21*(4), 307. https://doi.org/10.2139/ssrn.2046227

Collins, J. M., & O'rourke, C. M. (2010). Financial education and counseling—Still holding promise. *Journal of Consumer Affairs*, *44*(3), 483-498. https://doi.org/10.1111/j.1745-6606.2010.01179.x

Costa Jr, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and Individual Differences*, *13*(6), 653-665. https://doi.org/10.1016/0191-8869(92)90236-I

Duckworth, A., & Weir, D. (2010). Personality, lifetime earnings, and retirement wealth. *Michigan Retirement Research Center Research Paper*(2010-235), 1-21. https://doi.org/10.2139/ssrn.1710166

Duckworth, A., & Weir, D. (2011). Personality and response to the financial crisis. *Michigan retirement research center research paper No. WP*, *260*, 1-20. https://doi.org/10.2139/ssrn.2006595

El Othman, R., El Othman, R., Hallit, R., Obeid, S., & Hallit, S. (2020). Personality traits, emotional intelligence and decision-making styles in Lebanese universities medical students. *BMC psychology*, *8*, 1-14. https://doi.org/10.1186/s40359-020-00406-4

Fox, J., & Bartholomae, S. (2020). Household finances, financial planning, and COVID-19. *Financial Planning Review*, *3*(4), e1103. https://doi.org/10.1002/cfp2.1103

Gardiner, E., & Jackson, C. J. (2012). Workplace mavericks: How personality and risk-taking propensity predicts maverickism. *British journal of psychology*, *103*(4), 497-519. https://doi.org/10.1111/j.2044-8295.2011.02090.x

Gerhardt, R., & Hackethal, A. (2009). The influence of financial advisors on household portfolios: A study on private investors switching to financial advice. *Available at SSRN 1343607*, 1-37. https://doi.org/10.2139/ssrn.1343607

Gerrans, P., & Hershey, D. A. (2017). Financial adviser anxiety, financial literacy, and financial advice seeking. *Journal of Consumer Affairs*, *51*(1), 54-90. https://doi.org/10.1111/joca.12120

Giang, N. (2020). Vietnam Stocks Become the World's Best after Extreme Turmoil in March. *Bloomberg News Wire*, *28*. https://www.bnnbloomberg.ca/vietnam-stocks-become-world-s-best-after-extreme-turmoil-in-march-1.1421125

Giang, N. K., & Yap, L. (2020). Vietnam is Asia's best stock market performer in may. In: Bloomberg.

Gillen, M., & Kim, H. (2014). Older adults' receipt of financial help: Does personality matter? *Journal of Family and Economic Issues*, *35*, 178-189. https://doi.org/10.1007/s10834-013-9365-0

Goetzmann, W. N., & Kumar, A. (2008). Equity portfolio diversification. *Review of Finance*, *12*(3), 433-463. https://doi.org/10.1093/rof/rfn005

Graham, J. R., Harvey, C. R., & Huang, H. (2009). Investor competence, trading frequency, and home bias. *Management science*, *55*(7), 1094-1106. https://doi.org/10.1287/mnsc.1090.1009

Guerrero, F., Papadovasilaki, D., Ridinger, G., & Sundali, J. (2021). Investor beliefs in the midst of a market crash and the COVID 19 pandemic: Survey and experimental evidence. *Decision*, *8*(4), 295-326. https://doi.org/10.1037/dec0000152

Guiso, L., Sapienza, P., & Zingales, L. (2008). Trusting the stock market. *The Journal of Finance*, *63*(6), 2557-2600. https://doi.org/10.1111/j.1540-6261.2008.01408.x

Hibbert, A. M., Lawrence, E. R., & Prakash, A. J. (2013). Does knowledge of finance mitigate the gender difference in financial risk-aversion? *Global finance journal*, *24*(2), 140-152. https://doi.org/10.1016/j.gfj.2013.07.002

Hoechle, D., Ruenzi, S., Schaub, N., & Schmid, M. (2017). The impact of financial advice on trade performance and behavioral biases. *Review of Finance*, *21*(2), 871-910. https://doi.org/10.1093/rof/rfw032

Hsu, Y.-L. (2022). Financial advice seeking and behavioral bias. *Finance Research Letters*, *46*, 102505. https://doi.org/10.1016/j.frl.2021.102505

Hung, A., & Yoong, J. (2013). Asking for help: Survey and experimental evidence on financial advice and behavior change. *The market for retirement financial advice*, *182*, 182-212. https://www.rand.org/pubs/working_papers/WR714-1.html

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). Big five inventory. *Journal of personality and social psychology*, 469–471. https://doi.org/10.1007/978-3-319-24612-3_445

Kakhnovets, R. (2011). Relationships among personality, expectations about counseling, and help-seeking attitudes. *Journal of counseling & development*, *89*(1), 11-19. https://doi.org/10.1002/j.1556-6678.2011.tb00056.x

Kausel, E. E., Hansen, E., & Tapia, P. (2016). Responsible personal finance: the role of conscientiousness in bank and pension savings in C hile. *International Review of Finance*, *16*(1), 161-167. https://doi.org/10.1111/irfi.12069

Kelly, M. (1995). All their eggs in one basket: Portfolio diversification of US households. *Journal of economic behavior & organization*, *27*(1), 87-96. https://doi.org/10.1016/0167-2681(95)00006-E

Kimball, M. S., & Shumway, T. (2010). Investor sophistication and the home bias, diversification, and employer stock puzzles. *Diversification, and Employer Stock Puzzles (January 29, 2010)*, 1-29. https://doi.org/10.2139/ssrn.1572866

Kimiyaghalam, F., Safari, M., & Mansori, S. (2016). Who seeks a financial planner? A review of literature. *Journal for Studies in Management and Planning*, *2*(7), 170-189. https://www.researchgate.net/publication/305754542

Kramer, M. M. (2012). Financial advice and individual investor portfolio performance. *Financial Management*, *41*(2), 395-428. https://doi.org/10.1111/j.1755-053X.2012.01185.x

Kramer, M. M. (2016). Financial literacy, confidence and financial advice seeking. *Journal of economic behavior & organization*, *131*, 198-217. https://doi.org/10.1016/j.jebo.2016.08.016

Kruger, J., & Dunning, D. (1999). Unskilled and unaware of it: how difficulties in recognizing one's own incompetence lead to inflated self-assessments. *Journal of personality and social psychology*, *77*(6), 1121-1134. https://doi.org/10.1037//0022-3514.77.6.1121

Lachance, M.-E., & Tang, N. (2012). Financial advice and trust. *Financial Services Review*, *21*(3), 209-266. https://www.econbiz.de/Record/financial-advice-and-trust-lachance-marie-eve/10009714817

Lusardi, A., & Mitchell, O. S. (2007). Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, *54*(1), 205-224. https://doi.org/10.1016/j.jmoneco.2006.12.001

Mayfield, C., Perdue, G., & Wooten, K. (2008). Investment management and personality type. *Financial Services Review*, *17*(3), 219-236. https://www.researchgate.net/publication/228432785

Moore, D. L. (2003). *Survey of financial literacy in Washington State: Knowledge, behavior, attitudes, and experiences*. Washington State Department of Financial Institutions, 1-61. https://doi.org/10.13140/2.1.4729.4722

Nguyen, T. A. N., & Rozsa, Z. (2019). Financial literacy and financial advice seeking for retirement investment choice. *Journal of Competitiveness*, *11*(1), 70-83. https://doi.org/10.7441/joc.2019.01.05

Rabbani, A., Heo, W., & Grable, J. E. (2021). The role of financial literacy in describing the use of professional financial advisors before and during the COVID-19 pandemic. *Journal of Financial Services Marketing*, *26*(4), 226-236. https://doi.org/10.1057/s41264-021-00109-w

Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of research in Personality*, *41*(1), 203-212. https://doi.org/10.1016/j.jrp.2006.02.001

Rendall, S., Brooks, C., & Hillenbrand, C. (2021). The impacts of emotions and personality on borrowers' abilities to manage their debts. *International review*

Vol: 16 **No:** 1 **Year:** 2024 **ISSN:** 1309-8055 (Online) (**pp.** 398-426) **Doi:** 10.34109/ ijefs.202416118

of financial analysis, *74*, 101703. https://doi.org/10.1016/j.irfa.2021.101703

Robb, C. A., Babiarz, P., & Woodyard, A. (2012). The demand for financial professionals' advice: The role of financial knowledge, satisfaction, and confidence. *Financial Services Review*, *21*(4), 291-306. https://users.ssc.wisc.edu/~carobb/wp-content/uploads/2016/08/FSR-2012.pdf

Roberts, B. W., Walton, K. E., & Viechtbauer, W. (2006). Patterns of mean-level change in personality traits across the life course: a meta-analysis of longitudinal studies. *Psychological bulletin*, *132*(1), 1-25. https://doi.org/10.1037/0033-2909.132.1.1

Sadi, R., Asl, H. G., Rostami, M. R., Gholipour, A., & Gholipour, F. (2011). Behavioral finance: The explanation of investors' personality and perceptual biases effects on financial decisions. *International Journal of Economics and Finance*, *3*(5), 234-241. https://doi.org/10.5539/ijef.v3n5p234

Standards, C. F. P. B. (2020). *Pulse Survey: The Impact of Covid-19 on CFP® Professionals and Their Clients*. Certified Financial Planner Board of Standards, 1-14. https://www.cfp.net/knowledge/reports-and-statistics/certificant-surveys/april-2020-cfp-professionals-covid-19-survey

Statman, M. (2008). The expressive nature of socially responsible investors. *Available at SSRN 1094068*, 1-19. https://doi.org/10.2139/ssrn.1094068

Talwar, M., Talwar, S., Kaur, P., Tripathy, N., & Dhir, A. (2021). Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic? *Journal of Retailing and Consumer Services*, *58*, 102341. https://doi.org/10.1016/j.jretconser.2020.102341

Tauni, M. Z., Fang, H. X., & Iqbal, A. (2017). The role of financial advice and word-of-mouth communication on the association between investor personality and stock trading behavior: Evidence from Chinese stock market. *Personality and Individual Differences*, *108*, 55-65. https://doi.org/10.1016/j.paid.2016.11.048

Tauni, M. Z., Majeed, M. A., Mirza, S. S., Yousaf, S., & Jebran, K. (2018). Moderating influence of advisor personality on the association between financial advice and investor stock trading behavior. *International Journal of Bank Marketing*, *36*(5), 947-968. https://doi.org/10.1108/IJBM-10-2016-0149

Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial economics*, *101*(2), 449-472. https://doi.org/10.1016/j.jfineco.2011.03.006

Wen, F., Xu, L., Ouyang, G., & Kou, G. (2019). Retail investor attention and stock price crash risk: evidence from China. *International review of financial analysis*, *65*, 101376. https://doi.org/10.1016/j.irfa.2019.101376

Westermann, S., Niblock, S. J., Harrison, J. L., & Kortt, M. A. (2020). Financial advice seeking: A review of the barriers and benefits. *Economic Papers: A journal of applied economics and policy*, *39*(4), 367-388. https://doi.org/10.1111/1759-3441.12294

Zhang, D., Hu, M., & Ji, Q. (2020). Financial markets under the global pandemic of COVID-19. *Finance Research Letters*, *36*, 101528. https://doi.org/10.1016/j.frl.2020.101528