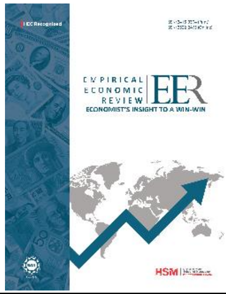
**Empirical Economic Review (EER)**
**Volume 7 Issue 2, Fall 2024**
ISSN$_{(P)}$: 2415-0304, ISSN$_{(E)}$: 2522-2465
Homepage: https://ojs.umt.edu.pk/index.php/eer

**Article QR**




**Title:** **Unravelling the Interplay between Personality Traits and Financial Behaviour among Young Adults in Pakistan**

**Author (s):** Hira Aftab[1], Muhammad Usama Majeed[2], Ali Arslan[3], and Wardah Javed[1]

**Affiliation (s):** [1]University of the Punjab, Lahore, Pakistan
[2]National University of Modern Languages, Lahore, Pakistan
[3]Pak-Aims Lahore, Pakistan

**DOI:** https://doi.org/10.29145/eer.72.03

**History:** Received: February 10, 2024, Revised: April 30, 2024, Accepted: October 20, 2024, Published: December 10, 2024

**Citation:** Aftab, H., Majeed, M. U., Arslan, A., & Javed, W. (2024). Unravelling the interplay between personality traits and financial behaviour among young adults in Pakistan. *Empirical Economic Review*, *7*(2), 46-74. https://doi.org/10.29145/eer.72.03

**Copyright:** © The Authors

**Licensing:** This article is open access and is distributed under the terms of Creative Commons Attribution 4.0 International License

**Conflict of Interest:** Author(s) declared no conflict of interest

A publication of
Department of Economics and Statistics, Dr. Hasan Murad School of Management
University of Management and Technology, Lahore, Pakistan

# Unravelling the Interplay between Personality Traits and Financial Behaviour among Young Adults in Pakistan

Hira Aftab[1*], Muhammad Ussama Majeed[2], Ali Arslan[3], and Wardah Javed[1]

[1]Institute of Business and Information Technology, University of the Punjab, Lahore, Pakistan
[2]Department of Management Sciences, National University of Modern Languages, Lahore Campus, Pakistan
[3]Pak-Aims Lahore, Pakistan

## Abstract

The current study aimed to explore the intricate relationship between personality traits and financial satisfaction among young adults in Pakistan, emphasizing the mediating role of financial behaviour. Analyzing the data collected from 470 respondents through Partial Least Squares Structural Equation Modelling (PLS-SEM), the study investigated the associations between personality traits (neuroticism, openness to experience, conscientiousness, agreeableness, and extraversion), financial behaviour, and financial satisfaction. The findings revealed significant relationships: openness, extraversion, and conscientiousness positively impact the financial satisfaction, while neuroticism and agreeableness negatively influence it. Moreover, the study also highlighted that financial behaviour mediates the connection between personality traits and financial satisfaction. Additionally, this study elucidated how personality traits affect financial contentment through financial behaviour mediation. The focus on Pakistani young adults added originality and relevance to the study, since their financial behaviours impact education, policy-making, and government efforts to enhance the financial skills. Practical implications extend to educators, policymakers, and government bodies, enabling tailored interventions to improve financial literacy and well-being. Acknowledging the influence of personality traits on financial behaviours and satisfaction may enhance financial education programs and strategies, ultimately promoting better financial decision-making among young adults in Pakistan and beyond.

[*]Corresponding Author: hira.aftab@ibitpu.edu.pk

***Keywords*: agreeableness, conscientiousness, extraversion, financial behaviour, financial satisfaction, neuroticism, openness, personality traits, young adults

## Introduction

The quest for happiness is intrinsically linked to the pursuit of financial fulfilment and serves as a fundamental aspiration for many, particularly for young adults striving for autonomy and economic stability. Financial satisfaction, emerging as a key component of well-being, is shaped by an individual's proficiency in managing the financial resources to effectively meet immediate and future needs. As delineated in the literature, such satisfaction extends beyond mere resource allocation, intertwining with deeper psychological fulfilment and contributing significantly to overall happiness (Fachrudin et al., 2022). It is within this context that the capability to balance consumption against savings, and to manage financial obligations without accruing debt, underscores a broader narrative of financial well-being.

The intricate relationship between personality traits and financial behaviours provides a rich vein of inquiry. According to many researchers, these previous architectures, such as Hans Eysenck’s three-factor model, Raymond Cattell’s 16 comprehensive factors of personalities, and Gordon Allport's proposed complex list of 4000 personality traits are more likely to make things complicated and narrow down the views. Consequently, (Fiske, 1949) introduced the Five Factor Theory that later got developed by (Norman, 1963), Smitch (1967), Goldberg (1981), and McCrae and Costa (1987). The big five personality traits have a considerable impact on financial behavior and well-being than other related factors. On the other hand, financial satisfaction is influenced by financial behavior and money preferences, providing edge to an investor making wise financial decisions (Ozer & Mutlu, 2019). Furthermore, managing loans effectively by paying off on time (Arniati et al., 2019; Roszaini et al., 2018), maintaining good financial practices during ups and down (Farrell et al., 2016), and avoiding loan defaults (Vosloo et al., 2014). Therefore, it can be extracted from the previously published researches that personality not only shapes our behavior of handling money, however, it also affects our spending habits and debt management to improve investment strategies and future planning (Ozer & Mutlu, 2019).

Effective financial management helps to achieve high quality living standards and to avoid financial crises (Farrell et al., 2016; Vosloo et al., 2014). To foster financial stability, diligent budgeting, setting goals, and money management are crucial (Arniati et al., 2019). Therefore, this study aimed to explore the impact of big five personality traits on financial satisfaction while specifically focusing on how these traits affect the financial behaviour of young Pakistani adults. Grounded on the Theory of Planned Behaviour (TPB), this study explored how societal norms affect attitudes and individual beliefs which eventually lead towards financial actions. This study aimed to highlight how personality traits influence the financial satisfaction among young adults in Pakistan through their impact on financial behaviour. By understanding these dynamics, the current study attempted to provide useful insights into the strategies in order to increase the level of financial well-being through tailored, personality-driven financial guidance.

## Literature Review

The study of individual differences encapsulates recognizing the unique and distinctive personality traits that are core to understanding human behaviour. This field of psychology suggests that each individual has a particular set of characteristics known as "personality", which defines an individual's particular emotional and behavioural patterns (Costa & McCrae, 1992; Keith & Frese, 2005; Rammstedt et al., 2010). These are not stable characteristics, however, they play a crucial role in influencing the actions and reactions across different situations (Costa & McCrae, 1992; Funder, 2006; Hogan & Kaiser, 2005).

### Big Five Personality Traits

Of all the frameworks designed to analyse personality, the big five personality traits' model is more robust and universal in its applicability, cuts across cultures, and is invariably applicable across theoretical inclinations (Cortina et al., 1992; John & Srivastava, 1999). The five broad dimensions of the model represent a range of emotions and behaviours that define human psychology. The first and foremost, that is, extraversion, describes individuals who are outgoing, confident, and driven. Individuals falling under this dimension depict abundant positive energy when engaging in group interactions (Goldberg, 1990; Hogan & Kaiser, 2005). These extraverts frequently experience positive emotional reactions (PA), which influence their overall perspective (Matthews & Deary, 1998). In contrast, introverts, who exhibit low levels of extraversion, have insignificant energy levels, fewer social connections, and a preference for solitude. This preference is not necessarily indicative of a depressed personality, however, it demonstrates a need for solitary rejuvenation (Matthews & Deary, 1998). Secondly, neuroticism (N), also known as emotional instability, holds significant importance in personality research as it is closely linked to the emergence of negative affectivity (NA). Highly neurotic individuals exhibit excessive negative emotions including anger, despair, and impatience. Elevated neuroticism scores often correlate with the feelings of environmental negativity, such as anxiety, despair, anger, concern, and irritability (Terracciano et al., 2008). In contrast, those scoring low on this dimension tend to be emotionally stable, demonstrating resilience and reduced susceptibility to external stressors.

Thirdly, agreeableness, characterized by qualities, such as accommodation, responsiveness, friendliness, cooperativeness, forgiveness, and sensitivity, reflects an individual's ability to maintain positive interpersonal relationships (Organ & Lingl, 1995). People with high agreeableness scores tend to inspire trust, encourage collaboration, and are seen as "agreeable" due to their adaptability and peace-making abilities (Connolly & Viswesvaran, 2000). Conscientiousness, the fourth personality trait also referred to as dependability, stands out as the strongest predictor of job performance according to Barrick and Mount (1991). Individuals who exhibit this trait by adhering to rules and displaying self-discipline are often more successful in their work. Conversely, those with low conscientiousness scores are perceived as unmotivated, indifferent to their responsibilities, and prone to insubordination.

The sixth element within Costa and McCrae's (1992) model of personality is referred to as "openness to experience". This characteristic, as described by Digman (1990), defines individuals who exhibit attributes, such as creativity, intellectual curiosity, an appreciation for art and beauty, and emotional sensitivity. Conversely, individuals scoring lower on openness to experience scale typically approach new ideas with scepticism and often prefer more straightforward and conservative solutions. Despite its significance, this trait has received comparatively less attention in academic literature. Moreover, scholars have not reached a consensus pertaining to its accurate impact on emotional responses in social situations, shrouding this dimension in mystery (John et al., 2008).

Extraversion is the first dimension, depicting individuals as outgoing, energetic, and sociable. Extraverts are characterized by their tendency to engage actively with their surroundings, often experiencing high levels of positive affectivity (PA), which significantly colours their worldview (Goldberg, 1990; Hogan & Kaiser, 2005). In contrast, introverts—those scoring low on extraversion—display a penchant for solitude, not out of melancholy but as a means to recharge (Matthews & Deary, 1998).

Neuroticism, or emotional instability, is a predictor of a person's propensity to experience negative emotions, such as anxiety, sadness, and irritability. High scores in neuroticism are associated with a pervasive sense of dissatisfaction and heightened sensitivity to adverse environments, while low scores indicate emotional stability and resilience (Terracciano et al., 2008).

Agreeableness reflects an individual's interpersonal attributes, such as kindness, trustworthiness, and cooperativeness. Highly agreeable individuals are adept at building and maintaining harmonious relationships and are often perceived as supportive and compassionate (Connolly & Viswesvaran, 2000; Organ & Lingl, 1995). Conscientiousness involves a spectrum of traits related to self-discipline, carefulness, and dependability. Regarded as the most predictive of job performance, individuals high in conscientiousness are organized, reliable, and efficient. Conversely, lower scores might indicate a lack of direction or motivation (Barrick & Mount, 1991). Finally, openness to experience is concerned with the degree of intellectual curiosity, creativity, and preference for novelty a person exhibits. Those high in this trait tend to embrace new ideas and unconventional values, displaying a broader range of interests and a deep appreciation for art and beauty. However, its impact on social interactions and emotional responses remains less understood and somewhat controversial among researchers (Digman, 1990; John et al., 2008). The underlying connection between personality traits and financial behaviour forms the crux of this research. Additionally, it also emphasizes the need to delve deeper into how intrinsic personality characteristics may affect the financial satisfaction and behaviours of young adults.

## Big Five Personality Traits and Financial Satisfaction

According to Daft (2002), the dimension of extroversion is composed of a series of personality attributes, one of which includes the sub-dimension of dominance. Inhibition and rigid ideas, sociable nature, openness, and a good sense of humour are not included in common traits of an extroverted individual (Sadi et al., 2011). Among others, Zaidi and Tauni (2012) evaluated overconfidence bias as one of the demographics and personality attributes, establishing a positive correlation between extraversion and overconfidence bias. Therefore, it would imply that investors characterized by high energy levels, an amicable and positive outlook emotionally, and enthusiasm are more prone to overconfidence. They display a higher degree of risk tolerance, extending to holding on to losing stocks in the hope that the shares would bounce back (Sadi et al., 2011). Moreover, Quintelier (2014) drew attention to the fact that extraversion was negatively related to ethical consumer behaviour. It means that the extroverted would not be seriously involved in morally responsible purchases. These findings collectively imply that such consumers might not be inclined to pay a premium for a higher ESG (Environmental, Social, and Governance) rating due to a potential lack of strong awareness regarding sustainable investments. Hence, the study proposed:

*Hypothesis 1: Extroversion has a positive and significant impact on financial satisfaction.*

Neuroticism can manifest in various ways, encompassing traits, such as pessimism, depression, anger, and anxiety. Individuals inclined towards neurotic tendencies often exhibit characteristics, such as self-absorption, anxiety, and irritability, which contribute to their risk-averse behaviour, setting them apart from individuals with lower levels of neuroticism (Said et al., 2011; Pan & Statman, 2013). This heightened pessimism and lack of self-confidence may lead them to make premature decisions, such as selling their stocks before realizing their full potential (Zaidi & Tauni, 2012). According to Xiao (2008), financial behaviour refers to the management of money including how one handles, uses, and treats his/her current financial resources. Furthermore, Gudmunson and Danes (2011) explained it as a pattern of behaviour over time which involves earning, spending, exchanging, and giving away. In a nutshell, financial behaviour implies a behavioural practice in relation to money management and spending style including saving, borrowing, and using cash. According to Unal and Düger (2015), financial behaviour involves good budgeting management, emphasizes savings and returns, and summarizes it into better financial satisfaction for an individual.

TPB emphasizes the role that intention plays in the formation of behaviours. It holds the view that individuals are more likely to perform a behaviour if they evaluate the latter positively and also feel that others want them to perform the behaviour. Intention is determined by two major variables: attitude and subjective norms, which are based on individual beliefs and social expectations In the case of financial behaviour, too, numerous factors are involved, for instance internal and external. Of the internal factors, personality assumes a very important place. It is an individual's relatively unique combination of beliefs, emotions, motivations, and actions (McCrae & John, 1992). Past research has shown that the majority of adults have a hard time managing their finances and budgeting to meet their everyday needs, wants, and financial commitments, as represented in a study conducted by Mien and Thao (2015). In this regard, following recommendations were proposed:

*Hypothesis 2: Neuroticism has a positive and significant impact on financial satisfaction*

An individual's willingness to embrace novel experiences as well as their curiosity pertaining to a diverse range of subjects and concepts may offer insights into their openness to innovative encounters. Those who naturally display interest tend to excel in management roles. This is because they possess a high receptivity to new experiences and actively seek exposure to various cultures and diverse ways of thinking through activities, such as traveling, engagement with the arts, cinema, or extensive reading. Conversely, individuals with lower scores on this dimension tend to focus on a limited set of concerns and may be resistant to deviating from established norms. In leadership roles, flexibility becomes essential, as effective leadership often entails implementing changes that benefit the organization (Daft, 2002).

Aren and Hamamci (2020) argued that investors should be willing to take risks. Furthermore, Nga and Yien (2013) discovered a positive association between risk tolerance and openness. Mayfield et al. (2008)

noted that such individuals tend to invest their money in long-term securities. Hence, the study proposed:

*Hypothesis 3: Openness to experience has a positive and significant impact on financial satisfaction*

Agreeableness is typically characterized by qualities, such as cooperativeness, forgiveness, empathy, understanding, and trustworthiness, along with a general ease of getting along with others. A leader with a low agreeableness score might be perceived as indifferent and unapproachable, whereas a leader with a high agreeableness score may be perceived as friendly and accessible. Furthermore, those who score well on agreeableness tend to have a substantial number of close friends, while individuals with lower scores often prefer solitude. Individuals with high agreeableness scores are known for their reliability, willingness to compromise, kindness, and helpfulness in group settings. However, their agreeable nature may not naturally position them as leaders.

Individuals with high agreeableness prioritize the opinions of others over their own, indicating a propensity to accept information provided to them without conducting in-depth independent research (Aren & Hamamci, 2020). It is worth noting that agreeableness exhibits a negative association with risk-taking, implying that such investors may place significant trust in the advice of financial analysts and may struggle to make independent investment decisions (Pak & Mahmood, 2015).

*Hypothesis 4: Agreeableness has a positive and significant impact on financial satisfaction*

Conscientiousness, as described by Daft (2002), denotes an individual's inclination towards being responsible, trustworthy, tenacious, and goal-oriented in their daily life. This definition of conscientiousness encompasses the entirety of an individual's disposition. The distinguishing factor between a high conscientious person and the one who exhibits lower conscientiousness is that the former approaches a limited set of objectives and strategies to achieve them in a systematic manner. According to Daft (2002), this characteristic emphasizes on an individual's commitment to their professional responsibilities rather than on their interpersonal interactions. Hence, the study proposed that:

*Hypothesis 5: Conscientiousness has a positive and significant impact on financial satisfaction*

## Financial Behaviour as a Mediator

Financial behaviour serves as a mediator to understand the intricate relationship between an individual's personality traits and their financial satisfaction. According to Ozer and Mutlu, (2019), there exists a profound connection between an individual's financial activities and their personality traits, specifically, agreeableness, conscientiousness, and openness to new experiences. Brooks and Williams (2021) emphasized that a person's personality characteristics wield significant influence over their financial and economic decision-making processes. Nicholson et al. (2005) established that risk inclination is strongly associated with high levels of openness and extraversion, however, low levels of neuroticism, agreeableness, and conscientiousness. Nga and Yien (2013) also examined the relationship between big five personality traits and an individual's potential to make sustainable financial decisions and attain success at their workplace.

Aren and Hamamci (2020) further established the complex relationship between risk aversion and big five personality traits along with the emotions of fear, anger, anticipation, and grief. They established the key link between risk appetite and desire, and neuroticism; openness as a strong predictor of risk aversion, while fear and sorrow proved to be the solid measures of risk aversion. Unlike in the study conducted by Nga and Yien (2013), an analysis of the big five personality traits in relation to investment choices by Chitra and Sreedevi (2011) established that personality traits had a stronger influence on investment decisions as compared to demographic factors. Financial behaviour refers to the wide scope of activities involving the management of money with an overall impact on the well-being of individuals, families, communities, and even nations (Mudzingiri et al., 2018). Herding, indebtedness, spending, and investment behaviours are examples of financial behaviour. Investment behaviour refers to how investors assess, plan, evaluate, and adjust their decision-making processes which includes seeking, analysing, interpreting information, and investment mindset (Lee & Kacen, 2008).

Quintelier (2014) conducted a study on the influence of personality traits on consumption behaviour. The research primarily focused on ethical purchasing decisions, mentioning a mutually supportive relationship within the consumption patterns related to both ecological consciousness and economic stability. Certain personality traits were identified as influencing individuals' propensity for ethical consumption, with some personality types being more responsive to specific incentives. Extraversion was found to be negatively associated with the moral consumer behaviour, while openness exhibited a positive correlation with such behaviour. Conversely, extroversion was linked to greater engagement in immoral consumer behaviour.

Furthermore, financial satisfaction, as defined by Hira and Mugenda (1998), reflects an individual's subjective assessment of the sufficiency of their financial resources to meet current and future financial obligations. Achieving financial satisfaction translates to a state of contentment and happiness, devoid of stress related to monetary circumstances (Arifin, 2018). Literature shows that the refinement of financial behaviour improves financial satisfaction (Fachrudin et al., 2022). Furthermore, several studies have proven the significant impact of financial behaviour on financial satisfaction (Hasibuan et al., 2017; Joo & Grable, 2004). Effective financial management practices are related to a feeling of contentment and satisfaction. Lown and Ju (1992) defined financial contentment as a gap between the desired and actual financial conditions. In other words, the greater the gap, the more pressed the desire for its attainment and the lesser the financial satisfaction.

In the light of these foregoing relationships, the study proposed the following hypotheses:
*Hypothesis 6: Agreeableness is significantly mediated by financial behaviour in determining the financial satisfaction*

*Hypothesis 7: Financial behaviour significantly mediates the relationship between extraversion and financial satisfaction*

*Hypothesis 8: Financial behaviour significantly mediates the relationship between conscientiousness and financial satisfaction*

Financial behaviour plays a pivotal role in mediating the relationship between personality traits and financial satisfaction, as suggested by various studies. Suryani et al. (2018) not only provided insights into the financial behaviour, however, also aligned it with the theoretical framework of the Trans Theoretical Model of Change. In this context, "financial contentment" pertains to an individual's subjective evaluation of their financial situation (Ali et al., 2015). It is essential to note that financial contentment doesn't always equate to financial health, as individuals may express contentment with their financial situation even when they are in the situation of debt (Narges & Laily, 2011).

Personality traits have a discernible impact on financial satisfaction, as demonstrated by Tharp et al. (2020). Among these traits, neuroticism stands out as a frequent precursor to poor financial decision-making (Oehler et al., 2018). Neurotic individuals often grapple with financial challenges and exhibit tendencies towards compulsive spending.

Investments, which generate returns and capital gains, are instrumental in enhancing the overall well-being (Fachrudin & Ihsan, 2021). Moreover, financial behaviour demonstrates a positive correlation with financial satisfaction. According to Oquaye et al. (2020), consumers engage in cost comparisons across various stores when making purchases and tend to exhibit timely bill payment practices.

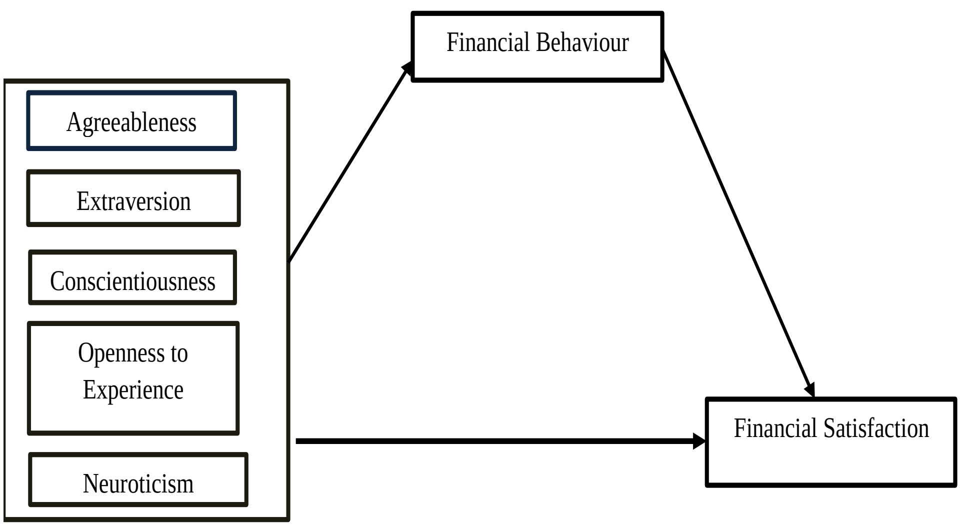
In light of these relationships, the following hypotheses was proposed:

*Hypothesis 9 (H9): Financial behaviour significantly mediates the relationship between openness to experience and financial satisfaction*

*Hypothesis 10 (H10): Financial behaviour significantly mediates the relationship between neuroticism and financial satisfaction*

**Figure 1**

*Conceptual Framework*



## Methodology

The current study utilized a descriptive design within the quantitative methodology to explore the relationship between variables. Statistical analysis was employed to evaluate the data collected through questionnaires. The study targeted adults aged between 18-30 in Lahore. The rationale behind selecting young adults as the study population is rooted in the fact that youth comprise over 63% of Pakistan's total population. It makes it one of the world's largest young populations, as reported in The International News on May 27, 2021. This demographic is of particular interest since young adults undergo a significant transition from financial dependence on their parents to independence, gaining control over their decisions related to consumption, savings, and other financial matters. The study employed convenience sampling approach to select potential respondents.

Data was collected via online Google Forms and the physical questionnaire was distributed to young adults. An online survey link was shared with young adults in Lahore, while approximately 185 questionnaires were distributed in person. A total of 470 responses were collected, chosen for its ability to provide narrower error margins and lower standard deviations, resulting in more robust and reliable research outcomes. While, having a larger dataset enhances model accuracy, there is a point where adding more data no longer improves precision. The survey was conducted in English and included questions related to demographic background, financial behaviour, financial satisfaction, and personality traits.

To assess young adults' financial behaviour, a scale was used to analyse common financial activities including timely bill and debt payments, living within one's means, and considering future investments rather than solely focusing on saving. The financial behaviour scale employed was developed by Fachrudin et al. (2022). Additionally, Fachrudin designed a scale consisting of four items to evaluate individuals' financial satisfaction. This scale incorporates approximately 10 elements. To assess personality traits, John and Srivastava (1999) developed a Likert scale with five statements for each trait, encompassing neuroticism, openness to experience, conscientiousness, agreeableness, and extraversion, resulting in a total of 25 items.

## Results

### Demographic Profile

Demographic characteristics serve as reference points and explanatory factors to aid organizations in deriving key insights from the study and making the findings more accessible to a broader audience. The percentages and frequencies of each variable were calculated using SPSS and are presented in Table 1 for reference.

**Table 1**
*Statistics of Respondents*

| | | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 237 | 50.4 |
| | Female | 232 | 49.5 |
| Age | 18-20 | 74 | 15.7 |
| | 21-23 | 221 | 47.0 |
| | 24-26 | 117 | 24.9 |
| | 27-30 | 58 | 12.3 |
| Education | Secondary | 2 | 0.4 |
| | Diploma | 4 | 0.9 |
| | Matric | 14 | 3.0 |
| | Intermediate | 26 | 5.5 |
| | Bachelor’s degree | 290 | 61.7 |
| | Master's degree | 129 | 27.4 |
| | Doctorate (PhD) | 05 | 1.1 |
| Marital Status | Single | 399 | 84.9 |
| | Married | 71 | 15.1 |
| Personal Monthly | Below Rs.25,000 | 217 | 46.2 |
| | Rs.25,001- Rs.50,000 | 99 | 21.1 |
| | Rs.50,001-Rs.75,00 | 52 | 11.1 |
| | Rs.75,001-Rs.100,000 | 45 | 9.6 |
| | More than Rs.100,000 | 57 | 12.1 |

The demographic analysis of participants, according to Table 1, indicates a nearly equal distribution of men and women, with men representing 49.4% and women comprising 50.6% of the total respondents. The largest portion of participants falls within the age range of 21 to 23, accounting for 47.0% of the entire sample. The majority of respondents had a bachelor's degree, constituting 61.7% of the total sample. Furthermore, majority of participants were single, constituting 84.9% of the overall sample. Regarding the personal monthly income, the majority of respondents reported incomes below Rs. 25,000, while 12.1% reported an income exceeding Rs. 100,000.

## Evaluation of Reflective Measurement Model

The current study employed PLS-SEM to examine the hypotheses outlined in the introductory section. Specifically, the latest version of Smart PLS 4 was utilized to assess the proposed hypotheses. The examination of the theoretical model commences with a measurement analysis, also known as the outer model, encompassing all variables studied including personality traits, financial behaviour, and financial satisfaction.

Different assessment criteria apply in the case of reflective measurement models. For reflective models, the outer loadings were scrutinized, whereas for formative models, outer weights were estimated (Hair et al., 2014). Initially, construct validity and reliability would be calculated.

The first step in evaluating the reflective measurement model is to assess the internal consistency reliability (Hair et al., 2014). Both Cronbach's alpha and Composite Reliability (CR) were measured, which yielded values between 0 and 1. Hair et al. (2014) suggested that CR values, ranging from 0.60 to 0.70, are considered suitable for data evaluation. Values falling between 0.70 and 0.90 are deemed satisfactory, as per Nunnally and Bernstein (1994). CR values exceeding the threshold of 0.95 are regarded as undesirable and unacceptable. Table 2 represents the internal consistency reliability results.

**Table 2**

*Internal Consistency Reliability*

| Items | Cronbach’s alpha | Composite Reliability |
|---|---|---|
| FB | 0.811 | 0.820 |
| FS | 0.899 | 0.905 |
| PTA | 0.869 | 0.884 |
| PTC | 0.829 | 0840 |
| PTE | 0.720 | 0.732 |
| PTN | 0.887 | 0.941 |
| PTO | 0.901 | 0.904 |

Among the personality traits, extraversion (PTE) exhibits the lowest Cronbach's Alpha score at 0.720, whereas openness (PTO) demonstrates the highest reliability with a score of 0.901. In terms of composite reliability, extraversion (PTE) and openness (PTO) represent two personality traits with the lowest and highest values, respectively.

High estimates or the values of outer loadings indicate a strong grouping or association among the indicators of the variable. A general guideline for outer loading suggests that for any assessment where the estimated construct-specific indicators' outer loadings fall within the range of 0.40 to 0.70, these specific indicators should be considered for removal if their elimination results in an improvement in the CR and Average Variance Extracted (AVE). Conversely, indicators with outer loading values below 0.40 should be omitted from subsequent evaluations (Hair et al., 2011). Table 3 shows the outer loading values.

**Table 3**
*Outer Loadings*

| | FB | FS | PTE | PTA | PTN | PTC | PTO |
|---|---|---|---|---|---|---|---|
| FB1 | 0.744 | | | | | | |
| FB2 | 0.712 | | | | | | |
| FB3 | 0.701 | | | | | | |
| FB4 | 0.725 | | | | | | |
| FB5 | 0.701 | | | | | | |
| FB6 | 0.751 | | | | | | |
| FB7 | 0.749 | | | | | | |
| FB8 | 0.731 | | | | | | |
| FB9 | 0.739 | | | | | | |
| FB10 | 0.767 | | | | | | |
| FS1 | | 0.852 | | | | | |
| FS2 | | 0.857 | | | | | |
| FS3 | | 0.860 | | | | | |
| FS4 | | 0.931 | | | | | |
| PTE1 | | | 0.703 | | | | |
| PTE2 | | | 0.701 | | | | |
| PTE3 | | | 0.717 | | | | |
| PTE4 | | | 0.748 | | | | |
| PTA1 | | | | 0.785 | | | |
| PTA2 | | | | 0.831 | | | |

| | FB | FS | PTE | PTA | PTN | PTC | PTO |
|---|---|---|---|---|---|---|---|
| PTA3 | | | | 0.783 | | | |
| PTA4 | | | | 0.763 | | | |
| PTA5 | | | | 0.882 | | | |
| PTN1 | | | | | 0.701 | | |
| PTN2 | | | | | 0.908 | | |
| PTN3 | | | | | 0.880 | | |
| PTN4 | | | | | 0.854 | | |
| PTN5 | | | | | 0.909 | | |
| PTC1 | | | | | | 0.772 | |
| PTC2 | | | | | | 0.720 | |
| PTC3 | | | | | | 0.742 | |
| PTC4 | | | | | | 0.701 | |
| PTC5 | | | | | | 0.928 | |
| PTO1 | | | | | | | 0.802 |
| PTO2 | | | | | | | 0.806 |
| PTO3 | | | | | | | 0.756 |
| PTO4 | | | | | | | 0.940 |
| PTO5 | | | | | | | 0.929 |

The next step involves determining the AVE values. All of the AVE estimates presented in the Table above exceed the critical threshold of 0.50 (50%). Among the personality traits, extraversion (PTE) exhibits the lowest AVE value at 0.501. Conversely, financial satisfaction boasts the highest AVE value, standing at 0.767, followed by financial behaviour. The personality traits, namely agreeableness, conscientiousness, neuroticism, and openness, display AVE values of 0.526, 0.656, 0.600, 0.698, and 0.722, respectively. Table 4 shows the AVE values.

**Table 4**

*Average Variance Extracted (AVE)*

| Variables | Average Variance Extracted |
|---|---|
| FB | 0.526 |
| FS | 0.767 |
| PTA | 0.656 |
| PTC | 0.600 |
| PTE | 0.501 |
| PTN | 0.698 |
| PTO | 0.722 |

## Evaluation of Structural Model

In order to pinpoint the connections, known as path coefficients, within the structural model subsequent to the examination of collinearity, route coefficients are utilized to delineate the expected associations among variables. According to the research conducted by Hair et al. (2014), the normalized path coefficient estimates and values typically range from -1 to +1. In this study, the significance of each path coefficient was assessed using both t and p values, as detailed in Hair et al. (2014).

**Table 5**

*Significance of Path Coefficients*

| | Original Sample (O) | Sample Mean (M) | Std. Deviation (STDEV) | *t* Statistics | *p* Values |
|---|---|---|---|---|---|
| FB -> FS | 0.211 | 0.215 | 0.056 | 3.755 | 0.000 |
| PTA -> FS | 0.133 | -0.136 | 0.049 | 2.699 | 0.007 |
| PTC -> FS | 0.160 | 0.162 | 0.044 | 3.611 | 0.000 |
| PTE -> FS | 0.123 | 0.123 | 0.050 | 2.450 | 0.014 |
| PTN -> FS | 0.098 | 0.099 | 0.047 | 2.104 | 0.035 |
| PTO -> FS | 0.134 | 0.131 | 0.056 | 2.396 | 0.017 |

Table 5 shows the path coefficient values of the associations between the variables and personality traits. For conscientiousness and financial satisfaction, the maximum value is 0.160, while the lowest value for neuroticism and financial satisfaction is -0.098. It is evident that all of the model's route coefficients have t values exceeding the critical value of 1.96, indicating significance. The p values also confirm the significance of the associations between independent and dependent variables, with a significance level of 0.05 (5%), based on the data.

The indirect consequences of the path coefficient values in this model are presented in Table 4.6. The first association, PTN->FB->FS, has a path coefficient value of -0.004 and a t value of 0.328, which is less than the critical threshold of 1.96 ($t < 1.96$) and is, thus considered significant. Similarly, the second relationship's path coefficient values of 0.034 and 2.311 are both significant, exceeding the threshold of 1.96 ($t > 1.96$). The third relationship's path coefficient value of 0.057 and the t value of 2.424 are also both significant, surpassing the threshold value of 1.96 ($t > 1.96$). The path coefficient values for the fourth relationship, 0.023, and its t value of 2.095 are likewise significant, exceeding the critical level of 1.96 ($t > 1.96$). In a similar vein, the fifth relationship's path coefficient value of 0.049 and $t$ value of 2.569, which is the highest among both indirect relationships, are both significant, with t values exceeding 1.96 ($t > 1.96$). Relationships with p values greater than 0.05 are considered statistically significant.

**Table 6**

*Total Indirect Effect*

| | Original Sample (O) | Mean (M) | Std. Deviation (STDEV) | *t* Statistics | *p* value |
|---|---|---|---|---|---|
| PTN -> FB -> FS | -0.004 | -0.004 | 0.012 | 0.328 | 0.743 |
| PTC -> FB -> FS | 0.034 | 0.034 | 0.015 | 2.311 | 0.021 |
| PTO -> FB -> FS | 0.057 | 0.058 | 0.023 | 2.424 | 0.015 |
| PTA -> FB -> FS | 0.023 | 0.023 | 0.011 | 2.095 | 0.036 |
| PTE -> FB -> FS | 0.049 | 0.051 | 0.019 | 2.569 | 0.010 |

The current study delved into 10 hypothesized correlations. The first five hypotheses explored the impact of personality traits on financial satisfaction, while the subsequent five investigated how financial behaviour serves as a mediator between personality attributes and financial satisfaction.

## Discussion

This study aimed to investigate the mediating role of financial behaviour in the relationship between personality traits, specifically agreeableness, extraversion, neuroticism, openness to experience, conscientiousness, and financial satisfaction. The results illuminated the significant role of financial conduct in moderating the influence of big five personality traits on financial well-being. While an individual's personality traits may be innate, it is evident that by modifying their financial behaviour, they may enhance their level of financial satisfaction. Building good financial habits early in life and maintaining them appears to be a key factor in achieving greater financial contentment. To achieve this understanding, data was collected from 470 Pakistani young adults using convenience sampling through both online and paper surveys.

PLS-SEM was employed to assess the relationships between the research variables. Descriptive statistics obtained using SPSS revealed that the sample had nearly equal proportions of male and female respondents, with 50.6% males and 49.4% females. A majority of respondents (47%) fell within the age range of 21 to 23 and 61.7% held a bachelor's degree. The majority of respondents (84.9%) were single. In terms of personal monthly income, most participants had incomes below Rs. 25,000, with 12.1% reporting incomes exceeding Rs. 100,000.

While personality has been recognized as a strong predictor of life satisfaction in previous researches, the links between personality and financial contentment have not been extensively explored in large populations. Prior studies, such as Tharp et al. (2020), investigated the associations between personality traits and financial satisfaction. This research determined that extraversion was positively correlated with financial satisfaction, while neuroticism and agreeableness showed negative correlations. According to Matz and Gladstone (2020), agreeable individuals may face financial challenges. This is because they are less likely to advocate for fair pay or negotiate effectively during salary or contract negotiations, leading to financial dissatisfaction. Wang et al. (2012) revealed that financial well-being was inversely related to agreeableness and neuroticism, while extraversion, conscientiousness, and openness to experience were positively associated with financial well-being. Zheng (2015) found that extraversion, agreeableness, conscientiousness, and openness to experience positively influenced individuals' perceptions of their innovation and life satisfaction. Whereas, individual creativity and life satisfaction were negatively correlated with neuroticism.

Path coefficient analysis using PLS-SEM in the study indicated that extraversion, conscientiousness, and openness to new experiences were positively associated with financial satisfaction, while agreeableness and neuroticism were negatively associated with it. Neuroticism, in particular, was found to have a direct negative impact on financial satisfaction, suggesting that individuals with high neuroticism may experience decreased financial well-being and seek guidance when making financial decisions. Conscientiousness was also found to indirectly influence the financial satisfaction through financial behaviour, as suggested by Davis and Runyan (2016). Notably, research exploring the impact of openness, extraversion, and agreeableness on financial satisfaction through financial behaviour is relatively scarce, with only agreeableness and openness having a negative impact on financial contentment via one's financial condition.

In summary, the findings highlighted that extraversion, openness to new experiences, conscientiousness, and agreeableness all have a significant impact on financial behaviour, and consequently, on financial satisfaction. However, neuroticism does not exert such an indirect influence on financial well-being.

## Conclusion

The current study delved into the intricate relationship between the big five personality traits and financial satisfaction, using financial behaviour as the lens of examination. The analysis revealed the existence of significant relationships among all the constructs scrutinized. Notably, individuals with a conscientious personality, characterized by goal-oriented behaviours, exhibited higher levels of financial satisfaction, driven by their relentless pursuit of financial objectives. Similarly, extraversion, reflective of sociability and outgoing tendencies, demonstrated a positive correlation with financial satisfaction. Openness to unconventional solutions, a hallmark of non-conformity, also emerged as a positive predictor of financial contentment. Unexpectedly, agreeableness and neurotic personality traits displayed negative associations with financial satisfaction. Excluding neuroticism, all four personality traits wielded a considerable influence on financial satisfaction through financial behaviour. These findings underscored the potential for individuals to augment their financial contentment through deliberate modifications to their financial conduct, underscoring the significance of instilling and perpetuating sound financial habits from an early age. The implications of this study recommended that financial educators, advisors, and counsellors should implement comprehensive strategies, encompassing follow-ups and monitoring mechanisms to ensure the practical application of financial knowledge. Policymakers should explore initiatives aimed at enhancing financial education, fostering an environment conducive to responsible financial behaviour, and nurturing personality development within the realm of financial decision-making. Ultimately, individuals should proactively endeavour to refine their financial behaviour, an endeavour that warrants support from families and organizations. Furthermore, companies should also consider the personalities and financial behaviours of their employees when formulating management strategies.

## Limitations and Future Recommendations

In this study, several limitations warrant consideration. Firstly, the presence of social desirability bias in self-reported data may influence the results, as respondents might align their responses with perceived social norms. To mitigate this, future research should be conducted to explore methods, such as anonymous surveys or experimental designs to minimize bias. Secondly, the study's cross-sectional design, driven by time and budget constraints, limits its ability to capture changes over time. Prioritizing longitudinal studies in future research would offer a more dynamic view of how personality traits, financial behaviour, and financial satisfaction evolve. Additionally, the study's narrow geographical focus on Lahore restricts its generalizability. Expanding the scope to encompass young adults from diverse cities may provide a broader perspective. Broadening the age range to include senior citizens may offer insights into how personality traits affect financial outcomes across different life stages. Finally, incorporating variables, such as gender and financial knowledge into future research models would enhance comprehensiveness and deepen the understanding of these complex dynamics.

Furthermore, there are several valuable avenues for future research. Longitudinal studies may track changes in the relationships between personality traits, financial behaviour, and financial satisfaction over time. Expanding the geographical scope to encompass various cities and regions would enable the researchers to explore the influence of cultural and regional factors. Incorporating additional variables, such as gender, financial literacy, and socioeconomic factors, would provide a more holistic understanding of the complexities surrounding financial behaviour and satisfaction. Experimentation and intervention studies can elucidate causal relationships, offering actionable strategies to improve financial well-being. Qualitative research can complement quantitative findings by delving into the motivations and behaviours underlying these relationships. Developing and testing interventions aimed to enhance financial literacy and responsible financial behaviour is essential in order to improve financial satisfaction and the overall well-being. Comparative studies across demographic groups, such as age, gender, and socioeconomic status, would deepen the understanding of how personality traits impact financial satisfaction in diverse populations. Addressing these limitations and pursuing these recommendations would advance the comprehension of intricate connections between personality traits, financial behaviour, and financial satisfaction.

### Research Implications

This research carries significant theoretical implications, advancing our understanding of the intricate relationship between personality traits, financial behaviour, and financial satisfaction. Firstly, it contributed to the integration of psychology and economics by emphasizing the relevance of individual personality differences in financial decision-making. Secondly, the identification of financial behaviour as a mediator between personality traits and financial satisfaction enriches the existing theories, highlighting the pivotal role of financial behaviour as a link through which personality traits exert their influence on the economic well-being. Lastly, this study unveiled the complexity of these dynamics, challenging oversimplified models and emphasizing the need for a more nuanced comprehension of financial decision processes.

Practically, this research offers actionable insights across various domains. Firstly, it suggests the customization of financial education programs to align with individuals' unique personality traits, potentially enhancing the effectiveness of financial literacy initiatives. Secondly, policymakers can harness these insights to craft policies that consider the influence of personality traits, thereby tailoring interventions for better societal outcomes. Thirdly, financial institutions can develop personalized financial products and services that cater to customers' personality characteristics, enhancing customer satisfaction and financial well-being. Fourthly, financial counsellors and advisers may incorporate personality assessments into their practices, offering tailored guidance and strategies. Additionally, individuals can leverage this knowledge to initiate and sustain long-term behavioural change, cultivating healthier financial habits. Finally, exploring the impact of personality traits across diverse demographic groups may inform targeted interventions aimed at addressing financial disparities and promoting economic equity. In essence, this research aimed to bridge theory and practice, offering valuable guidance for educators, policymakers, financial professionals, and individuals seeking to enhance their financial well-being through the recognition of personality traits in financial decision-making.

## Conflict of Interest

The authors of the manuscript have no financial or non-financial conflict of interest in the subject matter or materials discussed in this manuscript.

## Data Availability Statement

Data associated with this study will be provided by corresponding author upon reasonable request.

## Funding Details

No funding has been received for this research.

## References

Ali, A., Rahman, M. S. A., & Bakar, A. (2015). Financial satisfaction and the influence of financial literacy in Malaysia. *Social Indicators Research*, *120*, 137–156. https://doi.org/10.1007/s11205-014-0583-0

Aren, S., & Hamamci, H. N. (2020). Relationship between risk aversion, risky investment intention, investment choices: Impact of personality traits and emotion. *Kybernetes*, *49*(11), 2651–2682. https://doi.org/10.1108/K-07-2019-0455

Arniati, T., Puspita, D. A., Amin, A., & Pirzada, K. (2019). The implementation of good corporate governance model and auditor independence in earnings' quality improvement. *Entrepreneurship and Sustainability Issues*, *7*(1), 188–200. http://doi.org/10.9770/jesi.2019.7.1(15)

Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personnel Psychology*, *44*(1), 1–26. https://doi.org/10.1111/j.1744-6570.1991.tb00688.x

Brooks, C., & Williams, L. (2021). The impact of personality traits on attitude to financial risk. *Research in International Business and Finance*, *58*, Article e101501. https://doi.org/10.1016/j.ribaf.2021.101501

Chitra, K., & Sreedevi, V. R. (2011). Does personality traits influence the choice of investment? *IUP Journal of Behavioral Finance*, *8*(2), 47–57.

Connolly, J. J., & Viswesvaran, C. (2000). The role of affectivity in job satisfaction: A meta-analysis. *Personality and Individual Differences*, *29*(2), 265–281. https://doi.org/10.1016/S0191-8869(99)00192-0

Cortina, J. M., Doherty, M. L., Nealschmjtt, Kaufman, G., & Smith, R. G. (1992). The "Big Five" personality factors in the IPI and MMPI: Predictors of police performance. *Personnel Psychology*, *45*(1), 119–140.

Costa, 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

Daft, R. L. (2002). *Management by Richard L. Daft (2002, Hardcover)* (6th ed.). Thomson Learning.

Davis, K., & Runyan, R. C. (2016). Personality traits and financial satisfaction: Investigation of a hierarchical approach. *Journal of Financial Counseling and Planning*, *27*(1), 36–46. https://doi.org/10.1891/1052-3073.27.1.47

Digman, J. (1990). Personality structure: Emergence of the five-factor model. *Annual Review of Psychology*, *41*, 417–440.

Fachrudin, K. A., & Ihsan, M. F. (2021). The effect of financial distress probability, firm size and liquidity on stock return of energy users companies in Indonesia. *International Journal of Energy Economics and Policy*, *11*(3), 296–300.

Fachrudin, K. A., Pirzada, K., & Iman, M. F. (2022). The role of financial behavior in mediating the influence of socioeconomic characteristics and neurotic personality traits on financial satisfaction. *Cogent Business & Management*, *9*(1), Article e2080152. https://doi.org/10.1080/23311975.2022.2080152

Farrell, L., Fry, T. R. L., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of Economic Psychology*, *54*, 85–99. https://doi.org/10.1016/j.joep.2015.07.001

Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *The Journal of Abnormal and Social*

*Psychology*, *44*(3), 329–344. https://psycnet.apa.org/doi/10.1037/h0057198

Funder, D. C. (2006). Towards a resolution of the personality triad: Persons, situations, and behaviors. *Journal of Research in Personality*, *40*(1), 21–34. https://doi.org/10.1016/j.jrp.2005.08.003

Goldberg, L. R. (1981). Language and individual differences: The search for universals in personality lexicons. In L. Wheeler (Ed.), R*eview of personality and social psychology* (Vol. 2, pp. 141–165). Sage Publications.

Goldberg, L. R. (1990). An alternative "description of personality: The big-five factor structure. *Journal of Personality and Social Psychology*, *59*(6), 1216–1229.

Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues*, *32*, 644–667. https://doi.org/10.1007/s10834-011-9275-y

Hair, J. F., Jr, Sarstedt, M., Hopkins, L., & G. Kuppelwieser, V. (2014). Partial least squares structural equation modeling (PLS-SEM) An emerging tool in business research. *European Business Review*, *26*(2), 106–121. https://doi.org/10.1108/EBR-10-2013-0128

Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, *19*(2), 139–152. https://doi.org/10.2753/MTP1069-6679190202

Hasibuan, B. K., Lubis, Y. M., & HR, W. A. (2017, October 25). *Financial literacy and financial behavior as a measure of financial satisfaction* [Paper presentation]. 1st Economics and Business International Conference 2017. Medan, Indonesia. https://doi.org/10.2991/ebic-17.2018.79

Hira, T. K., & Mugenda, O. M. (1998). Predictors of financial satisfaction: Differences between retirees and non-retirees. *Journal of Financial Counseling and Planning*, *9*(2), 75–84.

Hogan, R., & Kaiser, R. (2005). What we know about leadership. *Review of General Psychology*, *9*(2), 196–180. https://doi.org/10.1037/1089-2680.9.2.169

John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 102–138). Guilford Press.

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big five trait taxonomy. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). Guilford Press.

Joo, S., & Grable, J. E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*, *25*(1), 25–50. https://doi.org/10.1023/B:JEEI.0000016722.37994.9f

Keith, N., & Frese, M. (2005). Self-regulation in error management training: Emotion control and metacognition as mediators of performance effects. *Journal of Applied Psychology*, *90*(4), 677–691. https://doi.org/10.1037/0021-9010.90.4.677

Lee, J. A., & Kacen, J. J. (2008). Cultural influences on consumer satisfaction with impulse and planned purchase decisions. *Journal of Business Research*, *61*(3), 265–272. https://doi.org/10.1016/j.jbusres.2007.06.006

Lown, J. M., & Ju, I. S. (1992). A model of credit use and financial satisfaction. *Financial Counseling and Planning*, *3*(1), 105–124.

Matthews, G., & Deary, I. J. (1998). *Personality traits*. Cambridge University Press.

Mayfield, C., Perdue, G., & Wooten, K. (2008). Investment management and personality type. *Financial Services Review*, *17*(3), 219–236

McCrae, R. R., & Costa, P. T., Jr. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*, 81–90. https://psycnet.apa.org/doi/10.1037/0022-3514.52.1.81

McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its applications. *Journal of Personality*, *60*(2), 175–215. https://doi.org/10.1111/j.1467-6494.1992.tb00970.x

Mien, N. T. N., & Thao, T. P. (2015, July 10–12). *Factors affecting personal financial management behaviors: Evidence from Vietnam* [Paper presentation]. Proceedings of the Second Asia-Pacific Conference on Global Business, Economics, Finance and Social Sciences. Danang City, Vietnam.

Mudzingiri, C., Muteba Mwamba, J. W., Keyser, J. N., & Poon, W. C. (2018). Financial behavior, confidence, risk preferences and financial literacy of university students. *Cogent Economics and Finance*, *6*(1), Article e1512366. https://doi.org/10.1080/23322039.2018.1512366

Narges, D., & Laily, H. P. (2011). Determinants of financial wellness among Malaysia workers. *African Journal of Business Management*, *5*(24), 10092–10100. https://doi.org/10.5897/AJBM10.1267

Nga, J. K., & Yien, L. K. (2013). The influence of personality trait and demographics on financial decision making among Generation Y. *Young Consumers*, *14*(3), 230–243. https://doi.org/10.1108/YC-11-2012-00325

Nicholson, N., Soane, E., Fenton-O'Creevy, M., & Willman, P. (2005). Personality and domain-specific risk taking. *Journal of Risk Research*, *8*(2), 157–176. https://doi.org/10.1080/1366987032000123856

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *The Journal of Abnormal and Social Psychology*, *66*(6), 574–583. https://psycnet.apa.org/doi/10.1037/h0040291

Oehler, A., Wendt, S., Wedlich, F., & Horn, M. (2018). Investors' personality influences investment decisions: Experimental evidence on extraversion and neuroticism. *Journal of Behavioural Finance*, *19*(1), 30–48. https://doi.org/10.1080/15427560.2017.1366495

Oquaye, M., Owusu, G. M. Y., & Bokpin, G. A. (2020). The antecedents and consequence of financial well-being: A survey of parliamentarians in Ghana. *Review of Behavioural Finance*, *14*(1), 68–90. https://doi.org/10.1108/RBF-12-2019-0169

Organ, D. W., & Lingl, A. (1995). Personality, satisfaction, and organizational citizenship behavior. *The Journal of Social Psychology*, 135(3), 339–350. https://doi.org/10.1080/00224545.1995.9713963

Ozer, G., & Mutlu, U. (2019). The effects of personality traits on financial behaviour. *Journal of Business Economics and Finance*, *8*(3), 155–164. https://doi.org/10.17261/Pressacademia.2019.1122

Pak, O., & Mahmood, M. (2015). Impact of personality on risk tolerance and investment decisions: A study on potential investors of Kazakhstan. *International Journal of Commerce and Management*, *25*(4), 370–384. https://doi.org/10.1108/IJCoMA-01-2013-0002

Pan, C. H., & Statman, M. (2013). Investor personality in investor questionnaires. *Journal of Investment Consulting*, *14*(1), 48–56.

Quintelier, E. (2014). The influence of the Big 5 personality traits on young people's political consumer behavior. *Young Consumers*, *15*(4), 342–352. https://doi.org/10.1108/YC-09-2013-00395

Rammstedt, B., Goldberg, L. R., & Borg, I. (2010). The measurement equivalence of Big-Five factor markers for persons with different levels of education. *Journal of Research in Personality*, *44*(1), 53–61. https://doi.org/10.1016/j.jrp.2009.10.005

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.

Smith, G. M. (1967). Usefulness of peer ratings of personality in educational research. *Educational and Psychological Measurement*, *27*(4), 967–984. https://doi.org/10.1177/001316446702700445

Suryani, A., Pirzada, K., & Pirzada, K. (2018). Analysis of opportunistic behavior of management to company performance. *Polish Journal of Management Studies*, *18*(1), 379–388.

Terracciano, A., Löckenhoff, C. E., Zonderman, A. B., Ferrucci, L., & Costa, P. T. (2008). Personality predictors of longevity: Activity, emotional stability, and conscientiousness. *Psychosomatic Medicine*, *70*(6), 621–627. https://doi.org/10.1097/PSY.0b013e31817b9371

Tharp, D. T., Seay, M. C., Carswell, A. T., & MacDonald, M. (2020). Big Five personality traits, dispositional affect, and financial satisfaction among older adults. *Personality and Individual Differences*, *166*, Article e110211. https://doi.org/10.1016/j.paid.2020.110211

Vosloo, W., Fouche, J., & Barnard, J. (2014). The relationship between financial efficacy, satisfaction with remuneration and personal financial well-being. *International Business & Economics Research Journal*, *13*(6), 1455–1470.

Wang, J.-L., Jackson, L. A., Zhang, D.-J., & Su, Z.-Q. (2012). The relationships among the big five personality factors, self-esteem, narcissism, and sensation-seeking to Chinese University students' uses of social networking sites (SNSs). *Computers in Human Behavior*, *28*(6), 2313–2319. https://doi.org/10.1016/j.chb.2012.07.001

Xiao, J. J. (2008). Applying behavior theories to financial behavior. In J. J. Xiao (Ed.), *Handbook of consumer finance research* (pp. 53 – 68). Springer.

Ünal, S., & Düger, Y. S. (2015). An empirical analysis on the relation between academics' financial well-being and financial behavior. *The International Journal of Economic and Social Research*, *11*(1), 213–227.

Zaidi, F. B., & Tauni, M. Z. (2012). Influence of investor's personality traits and demographics on overconfidence bias. *Institute of Interdisciplinary Business Research*, *4*(6), 730–746.

Zheng, X., Cheung, C. M. K., Lee, M. K. O., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People*, *28*(1), 90–106. https://doi.org/10.1108/ITP-08-2013-0144