
FINANCIAL VULNERABILITY AND PERSONALITY TRAITS OF GENERAL CONSUMERS OF DISTRICT ANANTNAG

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ABSTRACT

Vulnerability of Finance has major ramifications for not only for industry but government, and consumers in addition to being a major source of worry for investors. Consequently, taking the appropriate steps to examine the variables influencing financial vulnerability is required. The aim of the study was to access the impact of personality traits (b5 and locus of control) on financial vulnerability. The study consisted of a sample of 525 consumers from stated district. Structural equation modelling, or partial least squares, was used to analyse the data. The results revealed that both classifications of personality traits have a relationship with financial vulnerability. Three of the big five traits were positively correlated with financial vulnerability, whereas Agreeableness and intellect were negatively associated. In the locus of control model, external locus of control was positively correlated with financial vulnerability while internal locus of Control demonstrated no impact. Age was also investigated in relation to the association between personality traits and financial vulnerability, and certain connections were discovered. The findings of the study hold significance for numerous sectors of society.

Keywords: Big 5 traits; Locus of control; Personality traits; Financial Vulnerability etc.

1. INTRODUCTION

The dynamic economic landscape of recent years has engendered heightened financial vulnerability among individuals (Financial Times, 2020). The notion of financial vulnerability places emphasis on future orientation, specifically the possibility of encountering financial distress, while neglecting present-day living standards and financial management. Experiencing persistent financial challenges may result in heightened psychological distress and diminished cognitive abilities (Aw and Sabri, 2020; Gathergood, 2012). The research pertaining to the vulnerability of households in terms of finances has witnessed a significant upsurge, owing to the fact that this matter has emerged as a major apprehension for both governments as well as the financial industry. The potential of experiencing financial vulnerability among individuals may significantly influence their decision-making process when making purchases. Making it is imperative to analyze the

various factors that could potentially affect the financial vulnerability of consumers. Apart from objective factors such as income and low wealth, subjective factors can also have an impact on financial vulnerability (O'Connor et al., 2019). Recent research suggests that psychological factors may offer distinct perspectives that can be employed to form policy interventions, thereby assisting individuals who experience financial vulnerability (Hoffmann & McNair, 2019). One of the critical determinants that exert influence on vulnerability pertains to individual personality traits (Yazdanparast & Alhenawi, 2022). Consumers are capable of exhibiting a diverse range of behaviours as a result of differences in their perception. These perceptions and behaviours can be attributed to distinct personality traits inherent in individuals. Various personality traits can exhibit diverse behaviours in comparable situations. Certain personality traits have shown possess a high level of financial literacy in contrast to others (Pinjisakikool, 2017). This indicates that personality may also impact financially vulnerable among individuals. Examining various traits can aid in identifying the groups that are most susceptible to financial vulnerability. By targeting these consumers, marketers can develop and implement effective strategies to enhance their potential for sales. Notably limited research has been conducted so far on the impact of personality traits on financial vulnerability of consumers. The present study uniquely integrates two prominent classifications of personality traits, namely the Big Five and Locus of Control, to investigate which specific traits may significantly influence financial vulnerability among consumers. The personality taxonomies of Big 5 and locus of control have gained widespread usage due to their notable predictive ability. By scrutinizing the construct of financial vulnerability through the lens of these personality traits, one can potentially identify certain attributes that may be causally related to financial vulnerability. The identification of such traits could prove to be advantageous in the mitigation of financial vulnerability levels amongst consumers. The potential research area lies in the exploration of the correlation between personality traits and financial vulnerability, as it has a significant impact on one's financial well-being (Nanda & Banerjee, 2021).

Big five personality traits

- a) Openness to Experience.
- b) Conscientiousness.
- c) Extraversion.
- d) Agreeableness.
- e) Neuroticism.

It is often abbreviated and considered as the ocean and it is based on research contents which is widely used and adopted by most of the scholars while defening the behaviour of humans

2. LITERATURE REVIEW

2.1 FINANCIAL VULNERABILITY

The term "financial vulnerability" is frequently employed synonymously with financial distress, financial fragility, financial over-indebtedness, and financial debt burden (Ali et al., 2020; Daud et al., 2019). Financial vulnerability (FV) may be characterized as the possibility of an individual to experience financial difficulties (O'Connor et al., 2019). FV has generally been linked to poverty and a lower level of education, (Lusardi and Mitchell, 2011), it is important to acknowledge that even individuals with substantial wealth and education can experience financial vulnerability as a result of inadequate financial attitudes and deficient financial management capabilities (O'Connor et al., 2019). Consumer vulnerability refers to a condition of powerlessness that stems from inherent personal characteristics or circumstances (Baker et al., 2005). O'Connor et al. (2019) has put forward a comprehensive framework that incorporates both subjective and objective factors in assessing Financial Vulnerability (FV). The subjective risk factors, which are internal to the consumer, involve aspects such as the individual's financial awareness and confidence. On the other hand, the objective risk factors are independent of the consumer and include factors such as credit history and available assets. Considerable efforts have been devoted to examining financial vulnerability with a particular emphasis on businesses and nations (de Andres-Alonso et al., 2016), some studies have also scrutinized the behavioural implications and deleterious outcomes of financial vulnerability (Faulkner et al., 2019; He et al., 2019). Although a limited number of studies have investigated the impact of demographic and socioeconomic factors on consumer financial vulnerability, the amount of research examining other behavioural drivers is scarce (Fernández-López et al., 2023).

2.2 BIG 5 AND LOCUS OF CONTROL

Personality traits are described as relatively consistent patterns of thoughts, feelings, and actions that show a propensity to act a certain way when faced with a given situation (Roberts, 2009). The dimensions of individual differences known as personality traits incline toward persistent emotional, mental, and behavioural patterns (McCrae and Costa, 1990). The

"big five" model of personality traits, which includes neuroticism, agreeableness, extraversion, conscientiousness, and intellect (openness to experience) have become the most frequently accepted and utilised taxonomy of personality traits (McCrae and John, 1992). Numerous researchers have used the Big 5 model to examine customer behaviour (Gosling et al., 2003). Initially, the concept of locus of control was presented as a personality trait that implied a person's unwavering confidence in their own abilities (Rotter, 1966). Additionally, it has been portrayed as a resource for adaptation that made some coping mechanisms possible (Van den Brande et al., 2016). People with an internal locus of control believe they are deserving of and entitled to favourable results as a result of their own efforts and capabilities, making them feel in charge of their own destiny (Twenge et al., 2004). While people with an external locus of control, believe they have no influence over the outcomes that are important for them (Rotter, 1954). Individuals with high external locus of control frequently feel helpless because they believe that life's events are beyond their control. Contrarily, individuals characterized by a strong internal locus of control typically attempt to change their current condition (Keenan & McBain, 1979).

2.3 **BIG 5 TRAITS AND FV**

The Big Five framework stands as a preeminent paradigm for the categorization and quantification of an individual's personal characteristics (McCrae and John, 1992). The understanding of financial behaviour can be facilitated by the utilization of the Big Five personality traits (Brown and Taylor, 2014; Asebedo et al. 2019). Psychological factors, specifically the well-known Big Five personality traits, in conjunction with self-esteem, optimism, and trust, have been shown to be critical indicators of economic behaviours (Kesavayuth et al., 2018). Anglim and Grant's (2016) study yielded considerable correlations between the Big Five personality factors and subjective well-being (SWB). Notably, neuroticism emerged as the most significant correlate of SWB, followed by extraversion and conscientiousness. Conscientiousness and agreeableness have shown weaker associations but are still associated with greater SWB (Steel et al., 2008). Individuals who exhibit higher level of emotional stability, characterized by low neuroticism, and conscientiousness are more likely to experience higher levels of financial well-being (Chhatwani, 2022; Joshanloo, 2022). Extraversion is commonly linked to household finances regarding the extent of liabilities and assets retained, and this connection is frequently observed to be substantial (Brown & Taylor, 2014). The construct of financial wellbeing has been found to exhibit a positive relationship with extraversion while displaying a negative association with

neuroticism and agreeableness within the demographic of individuals aged 50 years and above in the United States (Tharp et al., 2020). Agreeable consumers exhibit a heightened susceptibility by displaying greater apprehension towards all forms of vulnerability (Yazdanparast & Alhenawi, 2022). Individuals exhibiting elevated degrees of conscientiousness have found to exhibit heightened levels of vulnerability. This can potentially be attributed to the fact that these individuals are characterized by their proclivity for organization and drive towards achieving their goals (Yazdanparast & Alhenawi, 2022). The phenomenon of financial distress has been explicated by conscientiousness and neuroticism, as demonstrated in a study conducted on a cohort of young adults (Xu et al., 2015). Conscientiousness exhibits a negative correlation, while neuroticism displays a positive correlation with regards to financial distress. These correlations have been found to be robust, even when controlling for early life background and various demographic and socioeconomic factors (Xu, 2015).

The findings of the study by Moss et al., (2018) indicate that emotional instability is less likely to impact the financial behaviour of individuals when they possess a sense of certainty and vividness about their future, which is commonly referred to as future clarity (McElwee & Haugh, 2010). Emotional instability may elicit anxieties concerning one's personal finances and undesirable financial conduct (Moss et al., 2018). Individuals who frequently encounter considerable anxiety or corresponding affective conditions exhibit a tendency to exhibit partiality in their focus, recollection, or evaluations towards unfavourable information. As a result, they augment their apprehensions and anxieties pertaining to their financial situation (Shapiro & Burchell, 2012). Neuroticism is significantly correlated with consumer vulnerability, as well as a diverse range of concerns. Individuals with higher levels of neuroticism are predisposed to experience negative emotions and are more vulnerable to the effects of stress (Yazdanparast & Alhenawi, 2022). In light of the aforementioned literature, it can be posited that the nature of the relationship between the big five traits and financial vulnerability is varied. Nevertheless, a discernible connection exists between the two variables. Thus we propose that:

- H1: Agreeableness has a significant impact on Financial Vulnerability.*
- H2: Conscientiousness has a significant impact on Financial Vulnerability.*
- H3: Neuroticism has a significant impact on Financial Vulnerability.*
- H4: Extraversion has a significant impact on Financial Vulnerability.*
- H5: Intellect has a significant impact on Financial Vulnerability.*

2.4 FV AND LOC

The concept of LOC is characterized as a broad and predominantly consistent inclination to perceive the world in a specific way, encompassing individuals' fundamental notions regarding the driving forces behind rewards and punishments (Rotter 1966). The concept of internal locus of control is related to the extent to which an individual perceives that the outcomes of their life experiences are under their personal control and subject to their own efforts and choices. Conversely, external locus of control is characterized by the belief that outcomes are determined by fate, luck, other people, or other external factors. LOC is a factor that influences people's behaviour as well as their non-financial and financial choices (Kesavayuth et al., 2018). Individuals with a higher internal locus of control exhibit a greater degree of financial responsibility. This may be attributed to their perceived capacity to effectively manage their finances, resist external influences and maintain self-control. Furthermore, individuals with a high internal locus of control display greater motivation and tenacity in completing challenging tasks when compared to those with a lower internal locus of control (Arifin 2019). According to Jorgensen et al. (2016), internal locus of control is more relevant in studies relating to personal financial management. Van de Venter et al (2012) demonstrated that there exists a positive relationship between internal locus of control and financial risk tolerance. Responsible financial management behaviour is negatively associated with external locus of control (Perry and Morris, 2005), and positively with internal locus of control (Cobb-Clark et al., 2016; Kidwell & Brinberg, 2003). The construct of internal Locus of Control exhibits a positive correlation with financial prudence in various domains such as savings behavior, budgeting, and controlling spending (Cobb-Clark et al., 2016; Perry and Morris, 2005). There exists a correlation between an individual's locus of control and their level of financial stress (Mansor et al., 2022). Hira et al. (1993) documented that an internal locus of control exhibited a correlation with a positive outlook regarding one's financial prospects. Thus we propose that:

H6: Internal Locus of Control has a significant impact on Financial Vulnerability.

H7: External Locus of Control has a significant impact on Financial Vulnerability.

2.5 AGE AND FV

Personality traits undergo transformations over time rather than being constant (Damian et al. (2019). Conscientiousness trait has been demonstrated to exhibit alterations in accordance with aging, as indicated by research conducted by (Wortman et al., 2012). During middle

adulthood, conscientiousness and emotional stability tend to increase whereas openness trait can decrease (Bleidorn and Hopwood. 2019). Young adulthood serves as a pivotal juncture in determining the level of financial stability one can expect to achieve in the later stages of life. It is conspicuously evident that the factor of age can exert a discernible influence on the interplay between personality traits and the susceptibility to financial vulnerability. Thus we propose that:

H8: Age has a significant impact on the personality and Financial Vulnerability relationship.

3. METHODOLOGY

The study employed a sample of 525 consumers from India using convenience sampling. The data was collected through online and offline survey from respondents. Table 1 provides a detailed information regarding the characteristics of the sample. Personality traits was measured using IPIP (Goldberg, 1992), 5 items were used to measure each of the big 5 traits. Locus of control was measured using 5 items for internal locus of control and 5 items for external locus of control (Furnham, 1986; Rotter, 1966, levenson, 1981). Subjective Financial Vulnerability was measured using a 4 item scale by Anderloni et al., (2012). All items were measured on a 5 point likert scale (strongly disagree to strongly agree). 2 items were dropped from the questionnaire due to reliability issues. The final questionnaire consisted of a total of 37 items. The structural equation modeling technique- partial least squares method was employed to conduct data analysis. Partial least squares path modeling, or partial least squares structural equation modeling (PLS-PM, PLS-SEM), enables the estimate of intricate cause-and-effect linkages in path models containing latent variables (Hair et al., 2018).

3.1. ORIGINALITY OF APPROACH

The originality of this study stems from its focus on the socio-economic and cultural context of Anantnag, an under-researched region, and how this region-specific perspective influences consumer behavior. By integrating financial vulnerability and personality traits, the author provides an interdisciplinary approach that not only explores these dynamics but also investigates how these factors interact in the decision-making process. This research contributes novel insights that can inform tailored financial literacy programs, welfare strategies, and behavioral finance approaches. These insights can be particularly valuable for policymakers and businesses aiming to understand consumer behavior in similar under-researched or culturally distinct areas.

TABLE 1 Sample Distribution

<i>Descriptive Information</i>	<i>Categories</i>	<i>Count</i>	<i>Percentage</i>
<i>Gender</i>	<i>1 = Male</i>	255	49%
	<i>2 = Female</i>	270	51%
<i>Age</i>	<i>1 = 18 - 31 years</i>	145	27.5%
	<i>2 = 32 - 45 years</i>	172	33%
	<i>3 = 46 - 59 years</i>	121	23%
	<i>4 = > 60 years</i>	87	16.5%
<i>Education</i>	<i>1 = Undergraduate or lower</i>	114	22%
	<i>2 = Graduate</i>	28	5%
	<i>3 = Postgraduate</i>	221	42%
	<i>4 = Doctorate or higher</i>	162	31%
<i>Monthly Income</i>	<i>1 = < INR 15000</i>	99	19%
	<i>2 = INR 16000 - INR 30000</i>	85	16%
	<i>3 = INR 31000 - INR 45000</i>	109	21%
	<i>4 = INR 46000 – INR 60000</i>	30	6%
	<i>5 = > INR 61000</i>	202	38%
<i>Employment</i>	<i>1 = Unemployed</i>	50	10%
	<i>2 = employed</i>	378	72%
	<i>3 = Retired</i>	12	2%
	<i>4 = Student</i>	85	16%

Source – Field Survey

4. **RESULTS**

To check the reliability and validity of the model items various tests were performed. Cronbach alpha and composite reliability was higher than .70 for all items (Hair et al., 2012; Hair et al., 2014). Convergent validity was tested using average variance extracted (AVE) and all values were above .50 (Bagozzi & Yi, 1988). Discriminant validity was tested using heterotrait-monotrait ratio (HTMT) and all values were below .90 (Henseler et al., 2015). No multi collinearity issues were observed as VIF values were below 2 (Hair et al., 2019). The direct paths were tested for big 5 and locus of control with financial vulnerability presented in table 2 (Figure 1). P value was less than .50 for all traits except internal locus of control ($\beta = -0.069$; T statistics=1.652; P value=0.099). Thus, no support was found for H6. Agreeableness and intellect demonstrated a negative relationship with financial vulnerability ($\beta = -0.236$ & -0.075) P value less than 0.05; while extraversion, neuroticism, conscientiousness and external locus of control demonstrated a positive association ($\beta = 0.154$; 0.115; 0.102; and 0.408) with P value <0.05, thus providing support for H1, H2, H3, H4, H5 and H7. The overall r-square was 0.389 which is weak but acceptable as most of the explanatory or predictive variables have a statistically significant impact (Ozili, 2022). Control variables age, gender, income, employment and education were used as control variables to ensure that the results provide a clear impact of personality traits but none of the variables was found to be significant.

TABLE 2 Regression Coefficient for the dependent variable Financial Vulnerability.

<i>Independent Variables</i>	<i>Beta β</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation</i>	<i>T Statistics</i>	<i>P Values</i>
<i>Agreeableness</i>	-0.236	-0.237	0.034	7.032	0.000
<i>Conscientiousness</i>	0.102	0.102	0.033	3.106	0.002
<i>Neuroticism</i>	0.115	0.117	0.032	3.618	0.000
<i>Extraversion</i>	0.154	0.156	0.033	4.721	0.000
<i>Intellect</i>	-0.075	-0.076	0.036	2.088	0.037
<i>Internal Locus of Control</i>	-0.069	-0.068	0.042	1.652	0.099
<i>External Locus of Control</i>	0.408	0.407	0.034	11.965	0.000

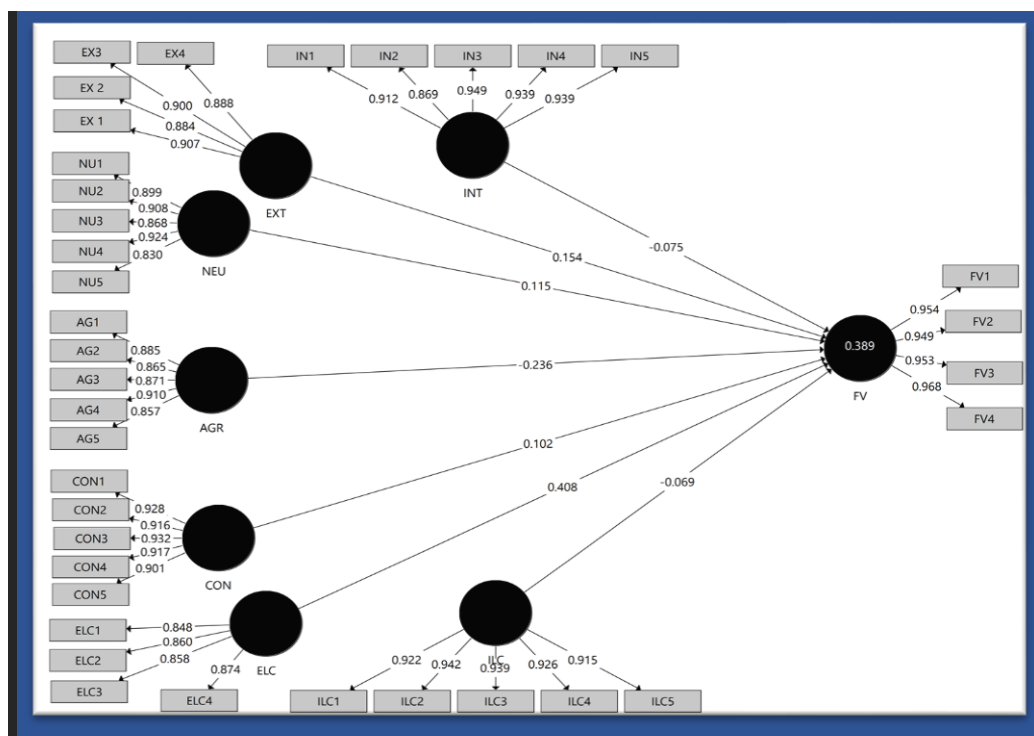


FIGURE 1 Structural model with loading factor and path coefficients.

Further the impact of age on the relationship between personality traits and financial vulnerability was tested by segregating age into two groups group 1 & 2 (18-45 years) and group 3 and 4 (46-60 and above). The results of regression analysis presented in table 3 show that the relationship between personality traits and financial vulnerability vary for the two age groups. Conscientiousness was found to be significant for age group 3 & 4 ($\beta = 0.154$; T statistics=2.883; P value=0.004), but not for 1 & 2 ($\beta = 0.066$; T statistics=1.638; P value=0.101). Further intellect was found to have no significant relationship in the two age

groups as P-value was >0.05 . Thus providing support for H8 that age can impact the association between personality traits and the level of financial Vulnerability.

TABLE 3 Differences in Financial Vulnerability across age groups.

<i>Personality Type</i>	<i>Age Group</i>	<i>N</i>	<i>Beta β</i>	<i>Mean</i>	<i>Standard Deviation</i>	<i>T Statistics</i>	<i>P value</i>
<i>AGR</i>	<i>1-2</i>	<i>317</i>	<i>-0.222</i>	<i>-0.224</i>	<i>0.039</i>	<i>5.658</i>	<i>0.000</i>
	<i>3-4</i>	<i>208</i>	<i>-0.242</i>	<i>-0.244</i>	<i>0.055</i>	<i>4.425</i>	<i>0.000</i>
<i>CON</i>	<i>1-2</i>	<i>317</i>	<i>0.066</i>	<i>0.069</i>	<i>0.040</i>	<i>1.638</i>	<i>0.101</i>
	<i>3-4</i>	<i>208</i>	<i>0.154</i>	<i>0.155</i>	<i>0.054</i>	<i>2.883</i>	<i>0.004</i>
<i>NEU</i>	<i>1-2</i>	<i>317</i>	<i>0.098</i>	<i>0.103</i>	<i>0.047</i>	<i>2.092</i>	<i>0.036</i>
	<i>3-4</i>	<i>208</i>	<i>0.137</i>	<i>0.139</i>	<i>0.049</i>	<i>2.805</i>	<i>0.005</i>
<i>EXT</i>	<i>1-2</i>	<i>317</i>	<i>0.129</i>	<i>0.132</i>	<i>0.044</i>	<i>2.933</i>	<i>0.003</i>
	<i>3-4</i>	<i>208</i>	<i>0.180</i>	<i>0.183</i>	<i>0.050</i>	<i>3.611</i>	<i>0.000</i>
<i>INT</i>	<i>1-2</i>	<i>317</i>	<i>-0.069</i>	<i>-0.070</i>	<i>0.048</i>	<i>1.445</i>	<i>0.149</i>
	<i>3-4</i>	<i>208</i>	<i>-0.082</i>	<i>-0.086</i>	<i>0.056</i>	<i>1.471</i>	<i>0.141</i>
<i>ILC</i>	<i>1-2</i>	<i>317</i>	<i>-0.040</i>	<i>-0.039</i>	<i>0.058</i>	<i>0.686</i>	<i>0.492</i>
	<i>3-4</i>	<i>208</i>	<i>-0.106</i>	<i>-0.104</i>	<i>0.057</i>	<i>1.864</i>	<i>0.062</i>
<i>ELC</i>	<i>1-2</i>	<i>317</i>	<i>0.455</i>	<i>0.455</i>	<i>0.047</i>	<i>9.622</i>	<i>0.000</i>
	<i>3-4</i>	<i>208</i>	<i>0.348</i>	<i>0.348</i>	<i>0.053</i>	<i>6.635</i>	<i>0.000</i>

Source – Field Survey

5. DISCUSSION

Personality traits were examined in relation to financial vulnerability and correlations were found with both the classifications of personality traits including big 5 and locus of control. Among big 5 traits, all the traits demonstrated a significant relationship with financial vulnerability. Other than agreeableness and intellect which demonstrated a negative relationship with FV, all other personality traits were positively related with FV. Although a study by Yazdanparast & Alhenawi (2022) supports that agreeable individuals are prone to feel vulnerable. Their selfless attitude may protect them from feeling vulnerable as they think about others more than themselves. Individuals with higher intellect/ openness trait focus on learning new things and enjoy new experiences, they may be more focused on how to improve their situation rather than feel vulnerable about it. Despite the fact that extraversion and financial wellbeing are positively correlated (Tharp et al., 2020); they were found to be more financially vulnerable. Extraverted people tend to be more outgoing and emotionally expressive, talking about the financial situation can make them feel more uncertain about

their future. Neuroticism is linked with low emotional stability and anxiety, they may feel sense of vulnerability as they are easily affected by stressful situations. As supported by studies that they are likely to have a lot of debt and face financial distress (Brown & Taylor, 2014; Oehler et al., 2018; Tauni et al., 2016). Finally, conscientiousness trait is related to being organized and planning their tasks in detail. These individuals may feel low vulnerability levels as they more focused on managing their finances rather than feel vulnerable about their financial situation. Studies have found negative relationship with regard to financial distress and conscientiousness (Xu, 2015).

Within the locus of control model, financial vulnerability was positively correlated with external locus of control but not with internal locus of control. ILC individuals may feel or attempt to overcome feelings of vulnerability because they believe they have control over the outcome of situations, which could be the reason why there is no significant relationship between ILC and FV. Research indicates a negative correlation between people's external locus of control and their degree of financial stress (Mansor et al., 2022); But the study found a positive relationship between ELC and FV. People with ELC believe they have no influence over the course of events, which makes them feel vulnerable because they are unable to shield themselves from entering an unfavourable financial situation. The impact of age on the relationship between personality and FV was examined and it was found that age can impact this relationship. A potential reason could be the change in personality along with age that alters the personality FV relationship (Damian et al., 2019). Overall it can be said that personality traits do have a significant impact financial vulnerability of consumers. Marketers can use this information to create tactics that will help them overcome the FV levels of these customers.

The study has helped to improve the understanding of FV as a construct. How certain personality traits can affect FV can be understood. The results of the current study demonstrated big 5 and LOC can be used effectively to understand level of FV among consumers. The understanding of this relationship could benefit different fields of study such as psychology, sociology including marketing. Through personality traits, potentially high vulnerable individuals can be identified, and educational messages could be developed for them to assist them in making wise financial decisions. If left untreated, it could result in a variety of psychiatric issues, including depression (O'Loughlin et al., 2017). Marketers may also use this information to develop marketing strategies and tactics. The identification of a distinct personality type of individuals may facilitate the counsellor or advisor in ascertaining

the most suitable financial management approach that the client ought to implement in order to enhance their financial welfare (Heo et al., 2018); And thus reduce financial vulnerability. Policy effectiveness can be enhanced when policymakers consider intrinsic personality aspects while designing interventions to guide the vulnerable section of society towards financial management behaviours (Hoffmann & Risse, 2020). The study did not include variables that are important determinants of FV such as income, wealth, and financial literacy; as the focus was to study the psychological side of FV among consumers. Furthermore, because the study was limited to a particular region, it may have overlooked the variations in cultural context, which may potentially have a major influence on results (Brown et al., 2018). Many studies pertaining to developing countries cannot be applicable to western countries due to difference in cultural orientations. An extensive body of literature highlights the positive correlation between financial literacy and financial well-being (Abdullah et al., 2019; Lusardi and Mitchell, 2011). There is still much research to be done on the connection between financial literacy and financial vulnerability in addition to personality.

6. CONCLUSION

Feeling vulnerable can be daunting and take a toll on mental health. It can lead to uncertainty regarding future and create distress. It can also result in poor decision making as the feelings of vulnerability can stop you from taking necessary risk. Although money and wealth can contribute to FV, certain traits can push or protect a person from feeling vulnerable. FV is a major problem for any economy due to the strain on mental health and productivity of individuals. Proper guidance and counselling based on evaluating traits of individuals can be beneficial in developing good attitude towards uncertain financial situations. The knowledge of traits and the linked level of FV can help mitigate the level of vulnerability among individuals. Parents can help their children develop tolerance towards financial uncertainties if they have any of the traits that are prone to be FV. Also, government and educational institutes can devise policies and programs to help individuals overcome financial vulnerability. Financial education has the potential to foster a more optimistic financial perspective in relation to uncertainties in the financial domain, thereby contributing to the mitigation of financial vulnerability among individuals.



REFERENCES

1. Abdullah, N., Fazli, S. M. and Arif, A. M. M. (2019). The relationship between attitude towards money, financial literacy, and debt management with young worker's financial well-being. *Pertanika, Journal of Social Sciences and Humanities*, 27(1), pp. 361-387.
2. Ali, L., Khan, M. K. N., & Ahmad, H. (2020). Financial fragility of Pakistani household. *Journal of Family and Economic Issues*, 41(3), 572–590. <https://doi.org/10.1007/s10834-020-09683-y>
3. Anderloni, L., Bacchiocchi, E., & Vandone, D. (2012). Household financial vulnerability: An empirical analysis. *Research in Economics*, 66(3), 284–296. <https://doi.org/10.1016/j.rie.2012.03.001>
4. Anglim, J. & Grant, S. (2016). Predicting Psychological and Subjective Well-Being from Personality: Incremental Prediction from 30 Facets over the Big 5. *Journal of Happiness Studies*. 17. 59-80. <https://doi.org/10.1007/s10902-014-9583-7>
5. Arifin, A. Z., Anastasia, I., Siswanto, H. (2009). The Effects of Financial Attitude, Locus of Control, and Income on Financial Behavior. In *Proceedings of the International Conference on Entrepreneurship and Business Management (ICEBM)*, Tunku Abdul Rahman University College, Kuala Lumpur, Malaysia, 7 November 2019; pp. 59–66.
6. Asebedo, S., & Payne, P. (2019). Market volatility and financial satisfaction: The role of financial self- efficacy. *Journal of Behavioral Finance*, 20(1), 42– 52. <https://doi.org/10.1080/15427560.2018.1434655>
7. Aw, E. C. X. and Sabri, M. F. (2020). Single mothers' subjective well-being: empirical evidence from Malaysia. *Health Care for Women International*, pp. 1-22.
8. Bagozzi, R.P. and Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, Vol. 16 No. 1, pp. 74-94.
9. Baker, S. M., Gentry, J. W., & Rittenburg, T. L. (2005). Building understanding of the domain of consumer vulnerability. *Journal of Macromarketing*, 25(2), 128-139.
10. Bleidorn, W., & Hopwood, C. J. (2019). Stability and change in personality traits over the lifespan. In D. P. McAdams, R. L. Shiner, & J. L. Tackett (Eds.). *Handbook of personality development* (pp. 237–252). The Guilford Press.



11. Brown, M., Henchoz, C. and Spycher, T. (2018). Culture and financial literacy: Evidence from a within-country language border. *Journal of Economic Behavior & Organization*, 150, pp. 62-85
12. 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>
13. Chhatwani, M. (2022). Personal control and financial well-being among the elderly: Moderating role of the big five. *Personality and Individual Differences*, 184, 111171. <https://doi.org/10.1016/j.paid.2021.111171>
14. Cobb-Clark, D. A., Sonja C. K., and Mathias G. S. (2016). Locus of Control and Savings. *Journal of Banking and Finance*, 73 (December):113-130.
15. Damian, R. I., Spengler, M., S., A., & Roberts, B. W. (2019). Sixteen going on sixty-six: A longitudinal study of personality stability and change across 50 years. *Journal of Personality and Social Psychology*, 117(3), 674– 695. <https://doi.org/10.1037/pspp0000210>
16. Daud, S. N. M., Marzuki, A., Ahmad, N., & Kefeli, Z. (2019). Financial vulnerability and its determinants: Survey evidence from Malaysian households. *Emerging Markets Finance and Trade*, 55(9), 1991–2003. <https://doi.org/10.1080/1540496X.2018.1511421>
17. De Andres-Alonso, P., Garcia-Rodriguez, I. and Romero-Merino, M. E. (2016). Disentangling the financial vulnerability of nonprofits. *VOLUNTAS: International Journal of Voluntary and Nonprofit Organizations*, 27(6), pp. 2539-2560.
18. Faulkner, J. P., Murphy, E. and Scott, M. (2019). Rural household vulnerability a decade after the great financial crisis”, *Journal of Rural Studies*, 72, pp. 240-251.
19. Fernández-López, S., Álvarez-Espino, M., Rey-Ares, L., & Castro-González, S. (2023). Consumer financial vulnerability: Review, synthesis, and future research agenda. *Journal of Economic Surveys*, 1–40. <https://doi.org/10.1111/joes.12573>
20. Financial Times (2020). US economy in peril as unemployment payments expire <http://www.ft.com/content/636a74fa-b95a-42af-b49a-91c147cfab28>
21. Furnham, A. (1986). Economic locus of control. *Human Relations*, 39(1), 29–43.
22. Gathergood, J. (2012). Debt and depression: causal links and social norm effects. *The Economic Journal*, 122(563), pp. 1094-1114.
23. Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment*, 4, 26-42. <https://doi.org/10.1037/1040-3590.4.1.26>

24. Gosling, S. D., Rentfrow, P. J., & Swann, W. B. Jr., (2003). A very brief measure of the Big Five personality domains. *Journal of Research in Personality*, 37, 504–528.
25. Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. (2014). *Multivariate Data Analysis*. 7th Edition, *Pearson Education, Upper Saddle River*.
26. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.
27. Hair, J.F., Sarstedt, M., Ringle, C.M., Gudergan, S.P. (2018). *Advanced Issues in Partial Least Squares Structural Equation Modeling (PLS-SEM)*. *Thousand Oaks, CA: Sage*. ISBN 9781483377391
28. Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, 40(3), 414–433. <https://doi.org/10.1007/s11747-011-0261-6>
29. He, T., Derfler-Rozin, R. and Pitesa, M. (2019). Financial vulnerability and the reproduction of disadvantage in economic exchanges. *Journal of Applied Psychology*, 105(1), pp. 80-96.
30. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
31. Heo, W., Saboe-Wounded Head, L., Cho, S. H., & Lee, P. S. (2018). Association between Personality and Financial Well-being: Strategies for More Effective Financial Education, Counseling and Advising. *Consumer Interests Annual*, 64, 1–5. <https://www.consumerinterests.org/assets/docs/CIA/CIA2018/HeoCIA18.pdf>
32. Hira, T. K., Fitzsimmons, V. S., Hafstrom, J. L., & Bauer, J. W. (1993). Factors associated with expectations of household's future financial condition. *Journal of Family and Economic Issues*, 14, 237-256.
33. Hoffmann, A. O. I., & McNair, S. J. (2019). How Does Consumers' Financial Vulnerability Relate to Positive and Negative Financial Outcomes? The Mediating Role of Individual Psychological Characteristics. *Journal of Consumer Affairs*, 53(4), 1630–1673. <https://doi.org/10.1111/joca.12233>
34. Hoffmann, A. O. I., & Risse, L. (2020). Do good things come in pairs? How personality traits help explain individuals' simultaneous pursuit of a healthy lifestyle



- and financially responsible behavior. *Journal of Consumer Affairs*, 54(3), 1082–1120. <https://doi.org/10.1111/joca.12317>
35. Jorgensen, B. L., Rappleyea, D. L., Schweichler, J. T., Fang, X., & Moran, M. E. (2016). The financial behavior of emerging adults: a family financial socialization approach. *Journal of Family and Economic Issues*, 38, 57–69. <http://dx.doi.org/10.1007/s10834-015-9481-0>
36. Joshanloo, M. (2022). Personality trait level and change predict future financial well-being: A longitudinal study in Australia. *Personality and Individual Differences*, 191(June). <https://doi.org/10.1016/j.paid.2022.111575>
37. Keenan, A., & McBain, G. D. M. (1979). Effects of type a behavior, intolerance of ambiguity, and locus of control on the relationship between role stress and work-related outcomes. *Journal of Occupational Psychology*, 52, 277–285. <http://dx.doi.org/10.1111/j.2044-8325.1979>
38. Kesavayuth, D., Ko, K. M., & Zikos, V. (2018). Locus of control and financial risk attitudes. *Economic Modelling*, 72, 122–131. <http://dx.doi.org/10.1016/j.econmod.2018.01.010>.
39. Kidwell, Blair, David Brinberg, and Robert Turrisi. (2003). Determinants of Money Management Behavior. *Journal of Applied Social Psychology*, 33 (6):1244-1260.
40. Levenson, H. (1981). Differentiating among internality, powerful others, and chance. *H. M. Lefcourt (Ed.), Research with the locus of control construct (Vol. 1, pp. 15–63)*. New York, NY: Academic Press
41. Lusardi, A. and Mitchell, O. S. (2011). Financial literacy around the world: An overview. *Journal of Pension Economics & Finance*, 10(4), pp. 497-508.
42. Mansor, M., Sabri, M. F., Mansur, M., Ithnin, M., Magli, A. S., Husniyah, A. R., Mahdzan, N. S., Othman, M. A., Zakaria, R. H., Mohd Satar, N., & Janor, H. (2022). Analysing the Predictors of Financial Stress and Financial Well-Being among the Bottom 40 Percent (B40) Households in Malaysia. *International Journal of Environmental Research and Public Health*, 19(19). <https://doi.org/10.3390/ijerph191912490>
43. McCrae, R. R., & Costa, P. T., Jr. (1990). *Personality and adulthood*. New York: Guilford.
44. McCrae, R. R., & John, O. P. (1992). An introduction to the five-factor model and its application. Special Issue: the five-factor model: issues and applications. *Journal of Personality*, 60, 175-215.



45. McElwee, R. P., & Haugh, J. A. (2010). Thinking clearly versus frequently about the future self: Exploring this distinction and its relation to possible selves. *Self and Identity*, 9, 298-321.
46. Moss, S. A., Ghafoori, E., & Smith, L. (2018). How to prevent unhelpful personality traits from evolving into unhelpful financial behaviors: The benefits of future clarity. *Journal of Financial Therapy*, 9(2), 1–17. <https://doi.org/10.4148/1944-9771.1166>
47. Nanda, A. P., & Banerjee, R. (2021). Consumer's subjective financial well-being: A systematic review and research agenda. *International Journal of Consumer Studies*, 45(4), 750–776. <https://doi.org/10.1111/ijcs.12668>
48. Oehler, A., Wendt, S., Wedlich, F., & Horn, M. (2018). Investors' personality influences investment decisions: Experimental evidence on extraversion and neuroticism. *Journal of Behavioral Finance*, 19(1), 30–48. <https://doi.org/10.1080/15427560.2017.1366495>
49. Ozili, Peterson K. (2002) The Acceptable R-Square in Empirical Modelling for Social Science Research. *Social Research Methodology and Publishing Results*, Available at SSRN: <https://ssrn.com/abstract=4128165> or <http://dx.doi.org/10.2139/ssrn.4128165>
50. O'Connor, G. E., Newmeyer, C. E., Wong, N. Y. C., Bayuk, J. B., Cook, L. A., Komarova, Y., ... Warmath, D. (2019). Conceptualizing the multiple dimensions of consumer financial vulnerability. *Journal of Business Research*, 100, 421-430.
51. O'Loughlin, D. M., Szmigin, I., McEachern, M. G., Barbosa, B., Karantinou, K., & Fern´andez-Moya, M. E. (2017). *Man thou art dust: Rites of passage in austere times*. *Sociology*, 51(5), 1050–1066. <https://doi.org/10.1177/0038038516633037>
52. Perry, V. G., and Marlene D. M. (2005). Who is in Control? The Role of Self-Perception, Knowledge, and Income in explaining Consumer Financial Behavior. *Journal of Consumer Affairs*, 39 (2):299-313.
53. Pinjisakikool, T. (2017). The effect of personality traits on households' financial literacy. Citizenship. *Social and Economics Education*, 16(1), 39-51. <https://doi.org/10.1177/2047173417690005>
54. Roberts, B. W. (2009). Back to the future: Personality and assessment and personality development. *Journal of Research in Personality*, 43(2), 137–145.
55. Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80.
56. Rotter, J. B. (1954). *Social learning and clinical psychology*. New York, NY: Prentice Hall.



57. Shapiro, G. K. & Burchell, B. J. (2012). Measuring financial anxiety. *Journal of Neuroscience, Psychology, and Economics*, 5(2), 92-103. <https://doi.org/10.1037/a0027647>
58. Steel, P., Schmidt, J., & Shultz, J. (2008). Refining the relationship between personality and subjective well-being. *Psychological Bulletin*, 134(1), 138–161. <https://doi.org/10.1037/0033-2909.134.1.138>
59. Tauni, M. Z., Fang, H. X., & Iqbal, A. (2016). Information sources and trading behavior: Does investor personality matter? *Qualitative Research in Financial Markets*, 8(2), 94–117. <https://doi.org/10.1108/QRFM-08-2015-0031>
60. 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(May), 110211. <https://doi.org/10.1016/j.paid.2020.110211>
61. Twenge, J. M., Zhang, L., & Im, C. (2004). It's Beyond My Control: A Cross-Temporal Meta-Analysis of Increasing Externality in Locus of Control, 1960-2002. *Personality and Social Psychology Review*, 8(3), 308–319. https://doi.org/10.1207/s15327957pspr0803_5.
62. Van den Brande, W., Baillien, E., De Witte, H., Vander Elst, T., & Godderis, L. (2016). The role of work stressors, coping strategies and coping resources in the process of workplace bullying: a systematic review and development of a comprehensive model. *Aggression and Violent Behavior*, 29, 61–71. <http://dx.doi.org/10.1016/j.avb.2016.06.004>.
63. Van de Venter, G., Michayluk, D., & Davey, G. (2012). A longitudinal study of financial risk tolerance. *Journal of Economic Psychology*, 33(4), 794-800
64. Wortman, J., Lucas, R. E., & Donnelan, M. B. (2012). Stability and change in the big five personality domains: Evidence from a longitudinal study of Australians. *Psychology and Aging*, 27(4), 867–874.
65. Xu, Y., Beller, A. H., Roberts, B. W., & Brown, J. R. (2015). Personality and young adult financial distress. *Journal of Economic Psychology*, 51, 90– 100. <https://doi.org/10.1016/j.joep.2015.08.010>
66. Yazdanparast, A., & Alhenawi, Y. (2022). Impact of COVID-19 pandemic on household financial decisions: A consumer vulnerability perspective. *Journal of Consumer Behaviour*, 21(4), 806–827. <https://doi.org/10.1002/cb.2038>