Association between Personality and Financial Well-being: Strategies for More Effective Financial Education, Counseling and Advising

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Introduction

Philosophically and psychologically, there is an argument that personality is either an inherited trait or a trait developed during a person's lifetime. In other words, there is a controversial debate whether personality is changeable or not. However, regardless the debate about changeability of personality, there are empirical research findings to show the significant relevance among personality, well-being, and financial management (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017; Creed & Evans, 2002; Donnelly, Iyer, & Howell, 2012; Johnston, Kassenboehmer, & Sheilds, 2016; Luhmann, Hofman, Eid, & Lucas, 2012; Xu, Beller, Roberts, & Brown, 2015). Research implies that personality relates to financial well-being. However, few attempts have been made to find the direct association between personality traits and financial well-being.

The main objective of the study is to determine whether personality is significantly associated with financial well-being. A significant association between personality and financial well-being could aid financial educators, counselors, and advisors in developing strategies to meet the financial management needs of consumers. An outcome of financial education/counseling/advising is to improve financial well-being, implementing strategies that specifically target personality characteristics could lead to successful results. For instance, a specific type of personality identified by the client could aid the educator/counselor/advisor in determining the appropriate financial management strategy a client would need to implement to improve their financial well-being.

This study utilizes the Big-Five personality traits (John & Srivastava, 1999) for the survey research. The Big Five personality traits are: (a) extraversion vs. introversion, (b) agreeable vs. antagonism, (c) conscientiousness vs. lack of direction, (d) neuroticism vs. emotional stability, and (e) openness vs. closedness to experience. The main hypotheses of the study are:

H_{1a}: Extroversion personality is significantly associated with financial well-being.
H_{2a}: Agreeable personality is significantly associated with financial well-being.
H_{3a}: Conscientious personality is significantly associated with financial well-being.
H_{4a}: Neurotic personality is significantly associated with financial well-being.
H_{5a}: Open personality is significantly associated with financial well-being.

Method

This study examined the association between personality and financial well-being. Therefore, the major dependent variable is financial well-being. The diverse fields in academia approach measuring and defining financial well-being from difference perspectives (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017). However, in the field of consumer studies which include financial counseling, education,

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and planning, a subjective questionnaire asking about current financial situation have been used frequently (Shim, Xiao, Barber, & Lyon, 2009; Volsloo, Fouche, & Barnard, 2014). This study utilizes a ten-question survey developed by the Consumer Financial Protection Bureau (CFPB) to measure financial well-being.

The main independent variable are the Big-Five personality traits measured by 44 survey items. The Big-Five personality items were used to find a relationship to well-being and financial management (Creed & Evans, 2002; Donnelly, Iyer, & Howell, 2012; Johnston, Kassenboehmer, & Sheilds, 2016; Xu, Beller, Roberts, & Brown, 2015). The Big-Five personality traits survey items were successfully tested for validity and reliability.

As explained above, the study examines the association between personality and financial well-being. Personality traits are psychological factors related to behaviors. Therefore, some major psychological factors need to be controlled for the analysis. In this study, financial stress, risk tolerance, and financial self-efficacy are including in the analytic model for controlling the other psychological effects on financial well-being. These psychological factors have a significant association with financial well-being (Grable & Britt, 2012; Joo & Grable, 2004; Shim, Xiao, Barber, & Lyon, 2009; Xu, Beller, Roberts, & Brown, 2015). To test financial stress, 24 items assessing financial affective reaction, interpersonal behavior, and bio-physiological responses were included in the survey. To measuring risk tolerance, Grable and Lytton's (1999) 13 survey items were utilized. Financial self-efficacy was measured using Lown's (2011) six-item self-efficacy scale.

In addition to the psychological factors, socio-economic variables are included in the analytic model to control for gender, age, education level, marital status, income level, and the number of children. Gender was coded as binary (male = 1, female = 2); age was coded as numeric variable; marital status is coded as binary (single = 0, married = 1); education level is coded as ordinal variable (lower than high school = 1, post graduate degree = 5); income level is coded as interval variable (lower than $15,000 = 1, over $150,000 = 8); and number of children is coded as numeric variable.

By utilizing the independent variables described above, the analytic model is Ordinary Least Squares (OLS) regression. The function of analytic model is:

$$Y(CFPBfwb) = \beta_0 + \beta i(BFextro, BFagree, BFconscious, BFneuro, BFopen) + \beta_5(FStress) + \beta_6(RiskTolerance) + \beta_7(FSefficacy) + \beta_j(gender, age, marital\ status, education\ level, income\ level, number\ of\ children) + e$$

where, β_1 denotes CFPB the coefficient of financial well-being scale score; β_i *are* coefficients of Big-Five personality traits (i.e., extroversion, agreeableness, consciousness, neuroticism, and openness); β_6 denotes the coefficient of financial stress; β_7 denotes the coefficient of financial risk tolerance; β_8 is the coefficient of financial self-efficacy; and β_j are coefficients of socio-economic variables (i.e., gender, age, marital status, education level, income level, and number of children).

Data, obtained by survey method, included 1,150 observations from across the United States. By utilizing an online survey company (QuestionPro), 2,946 responses were collected from the survey. All respondents were selected randomly among the online survey company's panels from across the United Stated. This study utilized the list wise method for controlling missing variables. Among 2,946 respondents, the responding rate was 39% (1,150/2,946) for all survey questionnaires.

Results

Table 1 shows descriptive statistics for 1,150 observations from the survey. Respondents show the average financial stress as 62.36 with standard deviation as 24.14. It implies that respondents show diversities in the financial stress level. The average financial well-being score is 29.63 with 7.03 standard deviation. In terms of Big Five personality, each category shows different average level: 24.43 for extroversion, 33.11 for agreeableness, 33.32 for consciousness, 29.29 for neuroticism, and 32.22 for openness. However, standard deviation of each category is relatively consistent except neuroticism: 5.51, 5.58, 5.78, 6.40, and 4.66 respectively. It implies that respondents distributed well for the Big-Five personality.

Table 2 shows the result of OLS analytic model. Personality traits are all significantly associated with financial well-being score. Specifically, each personality trait showed a different direction of significant association with financial well-being. Respondents who indicated a personality trait of extroversion, consciousness, and openness were more likely to have a positive well-being score.

Respondents who indicated a personality of agreeableness and neuroticism were more likely to have a negative well-being score. These results support the study hypotheses: (a) extroversion personality is positively associated with financial well-being; (b) agreeable personality is negatively associated with financial well-being; (c) conscientious personality is positively associated with financial well-being; (d) neurotics personality is negatively associated with financial well-being; and (e) open personality is positively associated with financial well-being. Additionally, the other psychological factors controlled in the analytic model showed interesting result: (a) financial stress is negatively associated with financial well-being; and (b) financial risk tolerance and self-efficacy are positively associated with financial well-being.

Conclusion

Findings suggest a significant implication for financial educators, counselors, and advisors to tailor strategies for different personality types. We want clients to do something to improve their financial situation with the information and/or advice provided. As expected in general situations, respondents with extroverted/conscious/open-minded traits show higher score of financial well-being. Someone with extrovert personality characteristics is considered sociable and active and will more likely be willing to implement the new information and advice. A conscientious personality type is achievement oriented so will be motivated to set and work toward accomplishing goals. A characteristic of openness is nonconformity so strategies that are not standard would be more appealing. However, very interestingly, agreeableness and neurotic personality characteristics show a negative association with financial well-being. Someone with an agreeable personality may appear to be willing to change behavior and implement advice but does not carry out the changes. Financial educators, advisors, and counselors, using findings from this research, should develop a strategy that requires follow-up and tracking to make sure information is implemented.

Furthermore, psychological factors were found to be significantly related to financial well-being. Financial stress is negatively associated with financial well-being. The more stress someone is experiencing, the lower his or her reported well-being. Additional analysis could determine which personality trait experiences more financial stress. Financial risk tolerance and self-efficacy are positively associated with financial well-being. Determining which personality traits are more likely to have a higher risk tolerance and report positive self-efficacy can be informative for financial educators, counselors, and advisors.

Linking the Big Five personality traits to financial well-being can be informative for financial educators, counselors, and advisors in meeting the needs of their clients. Understanding the association among behavioral intention, financial well-being, and personality can create long-term behavior change that will result in more financial stability. Additionally, further analysis of the data can determine which personality trait is more likely to experience financial stress, have a high-risk tolerance, and positive self-efficacy.

Table 1. Descriptive Table of Observations (N=1,150)

Variable (Continuous)	Mean (S.D)
CFPB financial well-being scale	29.63 (7.03)
Financial stress	62.36 (24.14)
Financial risk tolerance	21.48 (4.67)
Financial self-efficacy	17.69 (6.16)
Big Five – Extroversion	24.43 (5.51)
Big Five – Agreeableness	33.11 (5.58)
Big Five – Consciousness	33.32 (5.78)
Big Five – Neuroticism	29.29 (6.40)
Big Five – Openness	32.22 (4.66)
Age	32.74 (15.37)
Number of Children	.94 (1.58)
Variable (Categorical)	**Freq. (%)**
Female (=2)	785 (68.26%)
Marital status (married =1)	664 (57.74%)
Education	
Lower than high	31 (2.61%)

High school	232 (20.17%)
Some college	329 (28.61%)
College	417 (36.26%)
Post graduate	142 (12.35%)
Income level	
Lower than $15,000	122 (9.74%)
$15,000-$24,999	105 (9.13%)
$25,000-$34,999	138 (12.00%)
$35,000-$49,999	205 (17.83%)
$50,000-$74,999	240 (20.87%)
$75,000-$99,999	158 (13.74%)
$100,000-$149,999	137 (11.91%)
Over $150,000	55 (4.78%)

Table 2. OLS analytic finding (N=1,150)

	Coefficient	95% Confidential Interval
Financial stress	-.04 ***	[-.06, -.02]
Financial risk tolerance	.09 *	[.02, .17]
Financial self-efficacy	.48 ***	[.40, .55]
Big Five Personality		
Extroversion	.07 *	[.01, .13]
Agreeableness	-.13 ***	[-.20, -.07]
Consciousness	.07 *	[.01, .14]
Neuroticism	-.16 ***	[-.23, -.09]
Openness	.07 *	[.01, .14]
Age	-.02	[-.04, .00]
Number of Children	-.25 *	[-.45, -.06]
Income level	.61 ***	[.42, .79]
Gender		
Female	-.77 *	[-1.45, -.10]
Marital status		
Married	.02	[-.64, .68]
Education		
High school	1.05	[-.90, 2.99]
Some college	.63	[-1.29, 2.55]
College	1.16	[-.78, 3.10]
Post graduate	.78	[-1.31, 2.86]

Note. In education, lower than high school is reference group; * $p < .05$, ** $p < .01$, *** $p < .001$.

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