DELVING INTO BEHAVIORAL FINANCE: UNCOVERING THE LINKAGE BETWEEN INVESTMENT PREFERENCE, INVESTOR'S PROFILE, PERSONALITY TRAITS, RISK PERCEPTION, AND INVESTMENT GOALS

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Abstract

Investment is a popular economic vehicle where, in the hope of producing more revenue, people invest their capital. Investors are expected to make investment decisions that maximize returns. This study conducted a survey of 96 working adults who made investments in stock, bonds, short-term instruments, mutual funds, and/or foreign currencies. It used explanatory variables such as the

profile of investors, the perception of risk, personality characteristics, and investment goals. Investment preference was the outcome variable. Significant results revealed that for medium-term investments, only the conservative and moderate investor profiles had a significant relationship with investor preference. Investment goals showed only partial significance.

Keywords

Investment Preference, Risk Profile, Personality Traits, Risk Perception

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1. Introduction

The mere possession of still banks (e.g. piggy bank) in this day is not enough to address the constantly changing needs and wants of people. Hence, people began to take interest in investing. The investment provides different possibilities, such as traditional vehicles (e.g. gold, silver) and new vehicles (e.g. mutual funds, stocks). Modern ones are more beneficial in managing investment risk as compared to traditional ones (Jain, 2019).

The Al Mamun, Yasmeen, and Farida (2015) research concluded that the impact of emotion and cognition of individual investors could be balanced in relation to investment. Investors tend to be emotionally biased at times when making decisions. Cognitive and affective prejudices cause investors to act irrationally, preventing them from making optimal investment decisions (Lubis, Kumar, Ikbar, & Muneer, 2015).

A study by Pak and Mahmood (2015) conducted among university students aimed to find the relationship between personality traits, risk tolerance, and investment decisions, utilizing personality traits, namely: openness to experience, conscientiousness, neuroticism, extraversion, and agreeableness. The study showed that personality characteristics affect the risk tolerance behavior of certain individuals, which in turn affects investment decisions about stocks, securities, and bonds. The results of the study conducted by De Bortoli, da Costa, Goulart, and Campara (2019) and Lubis et al., (2015) supports and are consistent with this finding. On the other hand, the outcome of the study conducted by Parameswari and Krishnan (2015) failed to find a clear correlation between the five personality characteristics and investment attitude, having a meaningful outcome for only one of the personalities, that is, agreeableness.

This study focused its investigation on the link between investment preferences, investors' profile, personality traits, risk perception, and investment goals. It also determined the mediating impact of risk aversion between (1) the profile of the investor and investment preference and (2)

personality traits and investment preference.

2. Related Literature

Current studies as regards the relationships between investment preferences, investors' profiles, risk perception, investor goals, and personality traits are shown below.

2.1 Investment Preferences and Investor's Profile

In his study, Klement (2015) found out that investor risk profiling, together with the proper knowledge about the investors' goals, time horizon, risk aversion, and liquidity needs, helped financial practitioners and institutions to effectively recommend suitable investments to their clients. He also concluded that suitability was dependent on the investors' attributes. Traditional financial theories suggest that investors are generally risk-averse and will only take an additional risk if investors, for the additional risk predicted, anticipate higher expected returns. Moreover, traditional models state that an investor's risk profile is determined by the risk aversion factor in the utility function of the investor. Investors do not act the way traditional theories describe them to be.

2.2 Investment Preferences and Risk Perception

In normal circumstances, investors would think about the rate of return and the risks involved before making an investment. Returns drive investors and investment risk to deter them (Rahmawati, Kumar, Kambuaya, Jamil, & Muneer, 2015). Preferences for investment depending on how much risk investors are prepared to take. The study revealed that education, wealth, age, and gender were significantly correlated with risk tolerance. Educated and wealthy investors were more risk-tolerant than those who were illiterate and badly-off.

2.3 Investment Preferences and Investment Goals

According to a long-established assumption, people's investment decisions are driven by risk and return criteria, which are also found to have an impact on stock investment preference (Aren & Aydemir, 2015). In order to earn income and to defer consumption to a later date, investors refrain from spending their (extra) money.

2.4 Investment Preferences, Personality Traits, and Risk Perception

Research by Tamban and Maningas (2019) investigated the difference between genders in terms of the personality trait of agreeability and concluded that there was no statistical difference in terms of agreeability between genders. On the other hand, the study by Shah (2016) revealed that women demonstrated a higher level of agreeableness compared to their male counterparts. Furthermore, a study by Lubis, et al (2015) on agreeableness, extraversion, openness to experience,

and defense mechanisms had a relationship with financial risk. Liu, Woo, and Hon (2016) conducted a study on the relationship between personality traits and investment preferences and concluded that extraversion and conscientiousness have a positive relationship with investment preference. However, the relationship between conservative investor and investment preference was found to be statistically insignificant.

2.5 Investment Preferences, Investor's Profile, and Risk Perception

An investor's profile is an important tool used by financial institutions in finding suitable investment plans for their clients. The development of the profile of the investor consists partly of risk aversion, which demonstrates that a relationship exists between them (Klement, 2015). Furthermore, the study by Kanten and Kurt (2018) showed that investment decisions made by individuals are positively related to risk aversion.

3. Framework of the Study

The theoretical and conceptual frameworks are depicted as a schematic diagram showing the relationships between investment preference, the response variable, and the explanatory variables, namely, investor's profile, investor goals, risk perception, and personality traits. Also shown are the mediating effects of risk preference on the relationship between investor's profile and investment preference, and between personality traits and investment preference.

3.1 Theoretical Framework

To explain the behavior of investors, this research borrowed from the concepts of two competing schools of thought, conventional and behavioral finance theories, to explain the behavior of investors. These concepts were used as a basis to explain the relationships of the variables. Traditional finance explains how investors function in an ideal environment, while in the real world, behavioral finance. Traditional finance theories regard investors as rational thinkers. If provided with perfect information, investors are expected to make decisions consistent with the results of financial calculations without any biases. Traditional finance also assumes that investors are inherently risk-averse and only assume the additional risk if compensated for doing so.

3.2 Conceptual Framework

Figures 1, 2, and 3 present the conceptual frameworks of the study. Figure 1 illustrates how the independent such as investor's profile, personality trait, risk perception, and investment goal affect the dependent variables, the investment preferences investigated in the study.
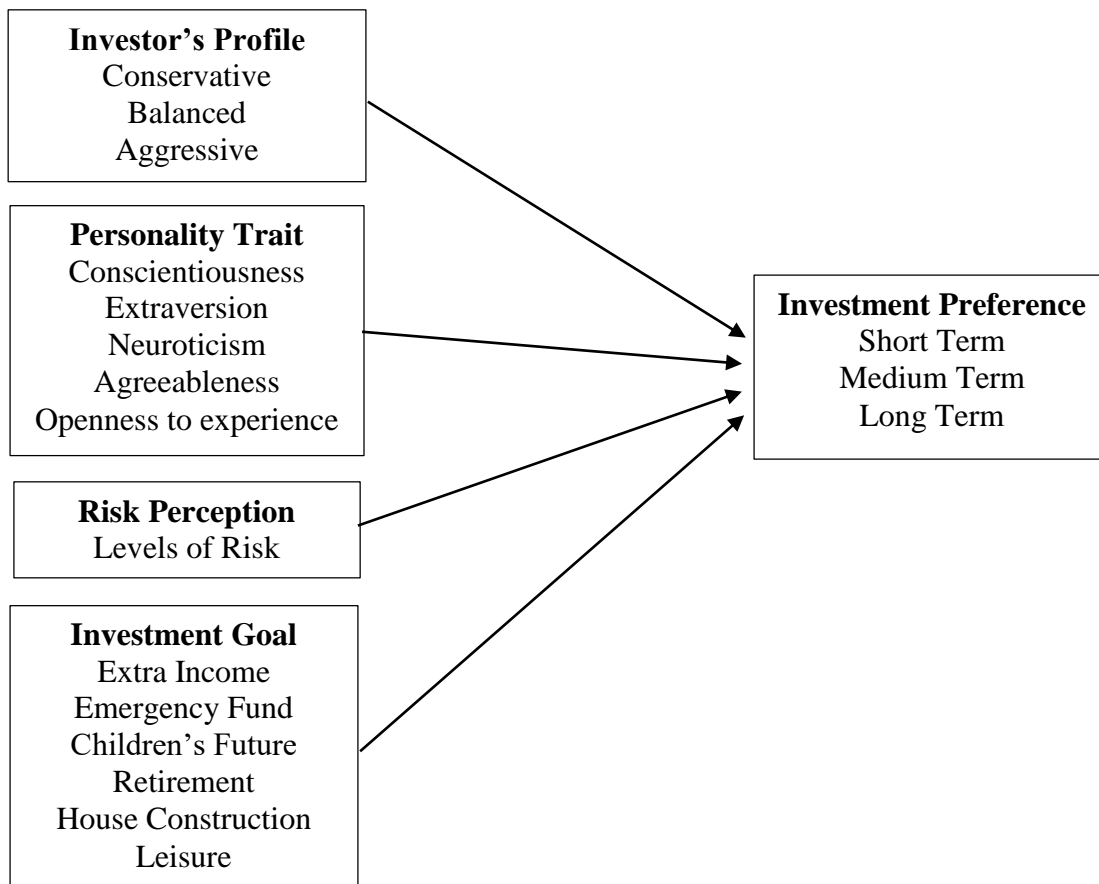
Figure 1: Framework of *Investor's Profile, Personality Traits, Risk Perception, Investment Goal, and Investment Preference*

In Figure 2, paths *a* and *b* show the mediation of the variable risk perception on the relationship between investor's profile and investment preferences. Path c links the direct relationship between an investor's profile and investment preference.
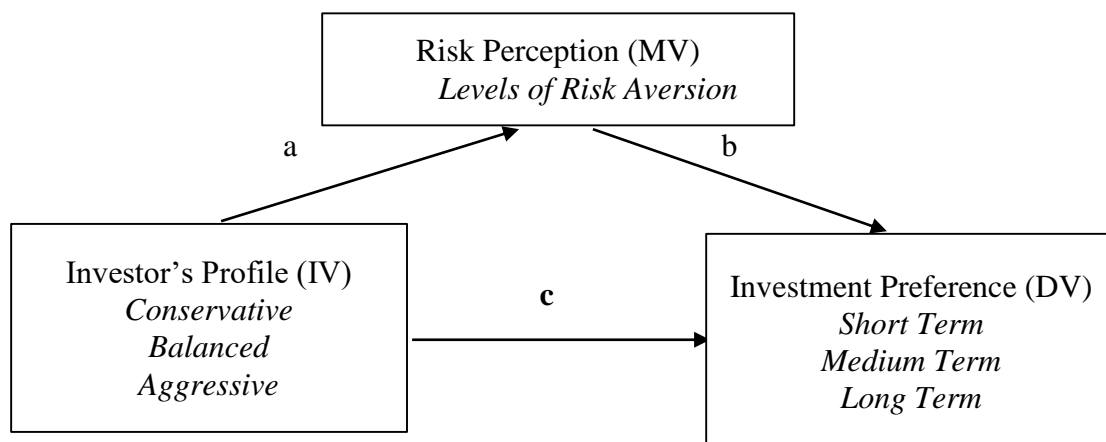
Figure 1: *Risk Perception as a mediator on Investor Profile and Investment Preference*

In the same manner, Figure 3 illustrates that paths a and b show the mediation of variable risk perception on the relationship between personality traits and investment preferences. Path c, on the other hand, shows the direct relationship between an investor's profile and investment preference.
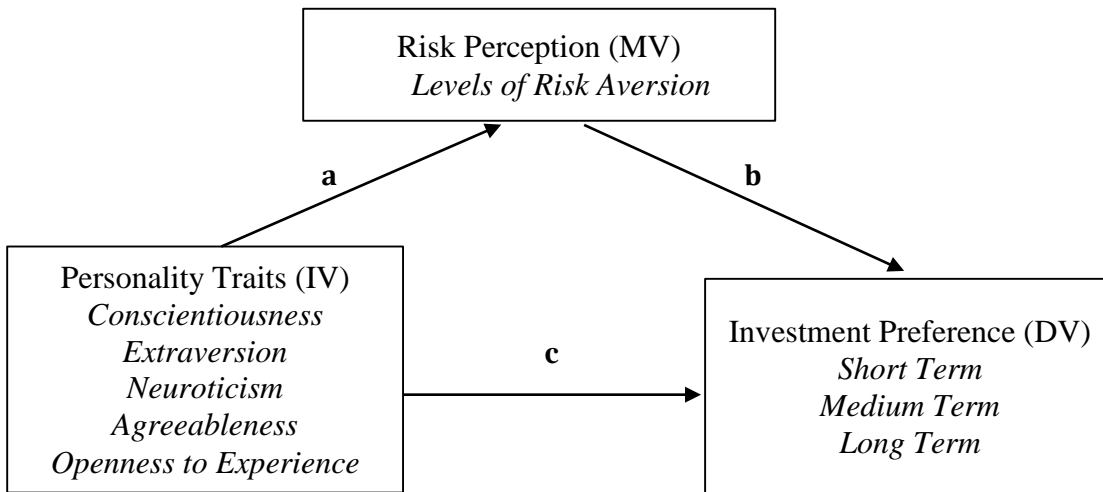

Figure 3: *Risk Perception as Mediator on Personality Traits and Investment Preference*

4. Methodology

The study utilized causal or explanatory research design, using the following independent variables, namely: investor's profile, personality traits, risk perception, and investment goals. The dependent variable was the investment preference. The researchers utilized a survey questionnaire to gather the data from the purposive sample of 96 employed Filipino citizens residing in the Philippines who engaged themselves in investment activities like stocks, bonds, short-term instruments, mutual funds, or foreign currencies market.

The instrument used was taken from the following: investor profile (https://cdn.sunlife.com/static/ph/About%20us/Find%20a%20form/IPQ28April2015.pdf), big five personality traits (Gosling, Rentfrow, & Swann, 2003), level of risk aversion (Mayfield, Perdue, & Wooten, 2008), and the investment preferences.

The researchers subjected the questionnaire to reliability and validity tests to ensure that it was appropriate to be used for this study. The result of the tests revealed that it was consistent and acceptable, with none of the variables having a score of less than 0.50. Furthermore, the personality trait of openness to the experience obtained a score of 0.72 and a risk aversion of 0.69, showing

high-reliability results. Scores less than 0.50 meant that the items per variable present covariance.

4.1 Statistical Treatment of Data

The researchers delved into the descriptive analysis of the variables, and they determined the correlations between variables.

4.2 Regression Analysis

The study used simple and multiple regression models to establish a prediction between the independent variables and the dependent variables.

The following models were used in the study, using both simple and multiple regressions.

$$ShortTI = \alpha + \beta_1{*}IPCons + \beta_2{*}IPMod + \beta_3{*}IPEX + a_t \quad (1)$$

$$MedTI = \alpha + \beta_1{*}IPCons + \beta_2{*}IPMod + \beta_3{*}IPEX + a_t \quad (2)$$

$$LongTI = \alpha + \beta_1{*}IPCons + \beta_2{*}IPMod + \beta_3{*}IPEX + a_t \quad (3)$$

$$ShortTI = \alpha + \beta_1{*}PCons + \beta_2{*}PAgree + \beta_3{*}PNeur + \beta_4{*}PExtra + \beta_5{*}POpen + a_t \quad (4)$$

$$MedTI = \alpha + \beta_1{*}PCons + \beta_2{*}PAgree + \beta_3{*}PNeur + \beta_4{*}PExtra + \beta_5{*}POpen + a_t \quad (5)$$

$$LongTI = \alpha + \beta_1{*}PCons + \beta_2{*}PAgree + \beta_3{*}PNeur + \beta_4{*}PExtra + \beta_5{*}POpen + a_t \quad (6)$$

$$ShortTI = \alpha + \beta_1{*}RiskA + a_t \quad (7)$$

$$MedTI = \alpha + \beta_1{*}RiskA + a_t \quad (8)$$

$$LongTI = \alpha + \beta_1{*}RiskA + a_t \quad (9)$$

$$ShortTI = \alpha + \beta_1{*}GoalEF + \beta_2{*}GoalEI + \beta_3{*}GoalCF + \beta_4{*}GoalRet + \beta_5{*}GoalHC + \beta_5{*}GoalLei + a_t \quad (10)$$

$$MedTI = \alpha + \beta_1{*}GoalEF + \beta_2{*}GoalEI + \beta_3{*}GoalCF + \beta_4{*}GoalRet + \beta_5{*}GoalHC + \beta_5{*}GoalLei + a_t \quad (11)$$

$$LongTI = \alpha + \beta_1{*}GoalEF + \beta_2{*}GoalEI + \beta_3{*}GoalCF + \beta_4{*}GoalRet + \beta_5{*}GoalHC + \beta_5{*}GoalLei + a_t \quad (12)$$

Where:

> ShortTI - Short Term Investments
>
> LongTI - Long Term Investments
>
> MedTI - Medium Term Investments
>
> IPCons - Conservative Investment Preference
>
> IPMod - Moderate Investment Preference
>
> IPEX - Aggressive Investment Preference
>
> PAgree - Agreeableness
>
> PNeur - Neuroticism

PExtra - Extraversion

PCons - Consciousness

POpen - Openness to Experience

RiskA - Risk Aversion

GoalCF - Children's Future

GoalRet - Retirement

GoalHC - House Construction

GoalEF - Emergency Fund

GoalLei - Leisure

GoalEI - Extra Income

4.3 Mediation Analysis

For the Mediation analysis of data, the researchers utilized the steps formulated by Baron and Kenny (1986). They did separate analyses for investor's profiles and personality traits.

4.4 Analysis of Variance (ANOVA)

ANOVA is used to compare two or more independent groups (Milosan, 2014). The researchers utilized it to find the difference in investment preferences by investment profile. It was also used to treat the data on the investor's profile and investment goals.

5. Discussion and Results

A discussion of both descriptive and inferential statistics are shown in the following sections.

5.1 Descriptive Statistics

Tables 1 to 4 present the demographic characteristics of the respondents in terms of the type of investor, formal education, investment products taken, and years of experience in investing.

Table 1 shows the data on a count by type of investors. Results revealed that of the 96 respondents 85 or 88.54% were employee-investors of firms and 11 or 11.45% were the employer-investors.

Table 1: *Count by Type of Investors*

Investor Type	f	%
Employee - Investors	85	88.54
Employer - Investors	11	11.45
Total	96	100

Source: Authors' calculations

Table 2 presents the data on the count of respondents with and without formal education on investments. Results revealed that 52 or 54.16% did not have any formal education while 44 or 45.83% had.

Table 1: *Count of Respondents With and Without Formal Education on Investments*

Formal Education	f	%
Yes	44	45.83
No	52	54.16
Total	96	100
Source: Authors' calculations		

The data in table 3 dealt with the proportion of investment products taken by the respondents. Results showed that investing in stocks is the most popular with 66 or 40% investors into it. Investing in mutual funds came out next with 44 or 26.67% investors. The least popular was investing in the forex market with only 9 or 5.45% investors. Both the bonds and money market obtained 23 or 13.94% investors.

Table 2: *Proportion of Investment Products Taken*

Type of Investment	f*	%
Stocks	66	40.00
Bonds	23	13.94
Money Market	23	13.94
Mutual Funds	44	26.67
Forex Market	9	5.45
Total	165	100
Source: Authors' calculation		

*Respondents chose severally

The data in table 4 revealed that of the 85 there were 38 or 44.70% employee-investors with less than a year or 1 year of investing experience, but only 1 or 9.09% of the 11 employer-investors. When compared, however, there were 9 or 81.81% from among the employer-investors with more than 5 years of investing experience, but only 21 or 24.70% from the employee-investors. Combining the frequency count of both employee-investors and employer-investors, there were more, with 39 or 40.62% had 1 year or less investing experience. There were 30 or 31.25% with more than 5 years of experience for both employee-investors and employer-investors.

Table 3: *Years of Experience in Investing*

Number of Years of Investing Experience	Employee-Investor f	%	Employer-Investor f	%	Total	%
Less than a year to 1 year	38	44.70	1	9.09	39	40.62
2 to 3 years	18	21.17	1	9.09	19	19.79
4 to 5 years	8	9.94	0	0	8	8.33
More than 5 years	21	24.70	9	81.81	30	31.25
Total	85	100	11	100	96	100
Source: Authors' calculation						

The result in table 5 implied that respondents were categorized as either aggressive, moderate, or conservative investors, 50% of whom were moderate.

Table 4: *Investors Risk Profile*

Investor Type	f	%
Aggressive	22	22.91
Moderate	48	50
Conservative	26	27.08
Total	96	100
Source: Authors' calculation		

Figure 4 shows almost half, that is, 49%, of the total number of respondents invested primarily for the purpose of acquiring extra income with gaining extra income coming in a far second (22%).
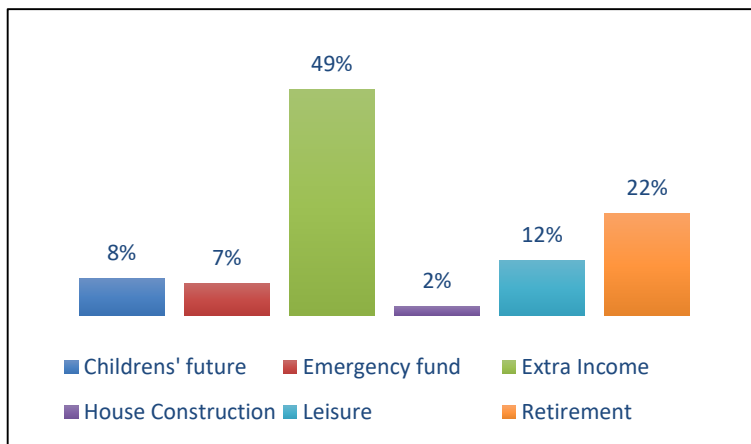

Figure 4: *Investment Goals of Investors*

Descriptive statistics were also taken in order to summarize the data scores. Only risk perception, investment preference, and personality traits were included for the descriptive statistics.

Investor's profile and investment goals were treated as dummy variables.

Table 5: *Descriptive Statistics of the Variables*

Variable	Levels	Mean	Std. Dev.	Median	Mode
Risk Perception	Risk Aversion	2.97	0.66	3	3.2
Investment Preference	Short Term	3.23	0.64	3.2	3
	Medium Term	3.21	0.63	3.2	3
	Long Term	3.36	0.59	3.2	3
Personality Traits	Agreeableness	3.47	0.60	3.5	4
	Conscientiousness	3.84	0.73	4	4
	Openness	3.79	0.81	4	4
	Extraversion	3.38	0.74	3.5	3.5
	Neuroticism	3.22	0.79	3	3
Source: Authors' calculation					

As shown in Table 6, risk preference yielded an average of 2.97, while investment preference ranged from 3.21 (medium-term) to 3.36 (long term). Personality traits, on the other hand, ranged from 3.22 (neuroticism) to 3.84 (conscientiousness). The standard deviations showed 2.97 for risk perception, 0.59 (long term) and 0.64 (short term) for investment preference, and 0.60 (agreeableness) to 0.81 (openness) for personality traits. The medians were computed for each variable in order to determine the middlemost scores. Risk aversion resulted in 3.00, while all variables under-investment preference resulted in 3.20, and for personality traits, between 3.00 (neuroticism) and 4.00 (conscientiousness and openness). Lastly, a mode for risk perception showed 3.20, while all variables under-investment preference showed 3.00, and personality traits values between 3.0 (neuroticism) to 4.00 (agreeableness, conscientiousness, and openness) investment goals.

Table 7 showed that conservative profile had a positive significance and weak correlation to risk aversion (0.303), while a negative significance and weak correlation to medium term (-0.223) and long term (- 0.209) investments. Thus, the results showed a partial significant relationship between an investor's profile and investment preference.

Table 6: *Independent Variables, Mediator and Dependent Variables Correlation*

Independent Variables		Risk Aversion	Short Term	Medium Term	Long Term
Risk Perception	Risk Aversion	1.000	0.147	-0.095	-0.067
Investor's Profile	Conservative	0.303**	-0.145	-0.223	-0.209*
	Moderate	-0.076	0.189	0.190	0.050

	Aggressive	-0.201	-0.075	-0.003	0.142
Personality Traits	Agreeableness	-0.037	0.135	0.185	-0.044
	Conscientiousness	-0.106	-0.108	0.045	0.023
	Openness	-0.263**	0.004	0.144	0.060
	Extraversion	-0.165	0.040	0.080	0.093
	Neuroticism	-0.112	-0.069	-0.030	-0.004
Investment Goals	Extra Income	-0.200	-0.175	-0.096	-0.100
	Emergency Fund	0.305**	0.215*	0.047	0.059
	Retirement	-0.061	0.027	0.007	-0.001
	Leisure	-0.114	-0.045	0.015	0.056
	House	0.051	-0.051	-0.073	0.009
	Children's Future	-0.056	0.153	0.140	0.058
*Note: *p<0.05, **p<0.01, ***p<0.001*					
Source: Regression analysis					

Furthermore, openness to experience had a negatively significant and weak correlation with risk aversion (-0.263). The emergency fund had a positively significant and weak correlation with both risk aversion (0.305) and short term investment (0.215). Other than the significantly correlated variables, the rest of the variables showed very weak correlations. For risk aversion, it showed a negative correlation to all the variables, except on short term investment, conservative profile, emergency fund, and house construction. For short term investment, there was a negative correlation with conservative, aggressive, conscientiousness, neuroticism, extra income, leisure, and house construction. Also, for medium-term investment, there was a positive correlation to all variables except risk aversion, conservative, aggressive, neuroticism, extra income, and house construction. Lastly, for long term investments, a positive correlation for all variables, except for risk aversion, conservative, agreeableness, neuroticism, extra income, and retirement, was shown.

5.2 Regression of Investment Preference on Investor's Profile, Personality Traits, and Investment Goals

In table 8, risk perception showed no significant relationship with investment preference. This result was consistent with that of Liu, Woo, and Hon (2016), stating that conservative investor type was not related to investment preference. Also, among the investment goals, only the emergency fund showed a significant relationship with short-term investment preference (t = 2.130, p = 0.036) at the 5% level of significance.

Table 7: *Regression Output of Short-term Investments*

Independent Variables		B	Std. Error	t	p
Risk Perception	Risk Aversion	0.143	0.099	1.440	0.155
Investor's Profile	Conservative	-0.221	0.155	-1.420	0.158
	Moderate	0.291	0.164	1.770	0.079
	Aggressive	0.092	0.185	0.500	0.621
Personality Traits	Agreeableness	0.243	0.123	1.960	0.054
	Conscientiousness	-0.209	0.122	-1.710	0.091
	Openness	0.058	0.096	0.610	0.546
	Extraversion	0.043	0.097	0.440	0.661
	Neuroticism	-0.045	0.095	-0.470	0.637
Investment Goals	Extra Income	0.111	0.456	0.240	0.809
	Emergency Fund	0.528	0.248	2.130	0.036*
	Retirement	0.257	0.468	0.455	0.584
	Leisure	0.145	0.486	0.300	0.765
	House	-0.230	0.461	-0.500	0.620
	Children's Future	0.550	0.500	1.100	0.274
*Note: *p<0.05, **p<0.01, ***p<0.001*					
Source: Regression analysis					

For medium term investments, only investor profile, i.e., conservative ($t = -2.20$, $p = 0.029$) and moderate ($t = 2.36$, $p = 0.020$) had significant relationship with investor preference as shown in table 9.

Table 8: *Regression Output of Medium-term Investments*

Independent Variables		B	Std. Error	T	p
Risk Perception	Risk Aversion	-0.900	0.098	-0.920	0.359
Investor's Profile	Conservative	-0.332	0.149	-2.220	0.029*
	Moderate	0.375	0.159	2.360	0.020*
	Aggressive	0.253	0.179	1.420	0.160
Personality Traits	Agreeableness	0.219	0.121	1.810	0.074
	Conscientiousness	-0.081	0.119	1.330	0.498
	Openness	0.125	0.094	-0.680	0.186
	Extraversion	0.027	0.095	0.290	0.775
	Neuroticism	-0.079	0.093	-0.850	0.396
Investment Goals	Extra Income	0.249	0.459	0.540	0.589
	Emergency Fund	0.414	0.510	0.810	0.418
	Retirement	0.314	0.470	0.680	0.499
	Leisure	0.336	0.488	0.690	0.493

	House	-0.317	0.450	-0.700	0.483
	Children's Future	0.600	0.502	1.190	0.235
Note: *p<0.05, **p<0.01, ***p<0.001					
Source: Regression analysis					

For long term investments, table 10 revealed that only conservative (t = -2.080, p = 0.041) and aggressive (t = 2.150, p = 0.034) showed a significant relationship with investor preference.

Table 9: *Regression Output of Long-term Investments*

Independent Variables		B	Std. Error	t	p
Risk Perception	Risk Aversion	-0.060	-0.092	-0.660	0.514
Investor's Profile	Conservative	-0.293	0.141	-2.080	0.041*
	Moderate	0.255	0.150	1.700	0.093
	Aggressive	0.364	0.169	2.150	0.034*
Personality Traits	Agreeableness	-0.081	0.117	-0.690	0.489
	Conscientiousness	0.010	0.115	0.090	0.929
	Openness	0.037	0.091	0.410	0.685
	Extraversion	0.083	0.091	0.910	0.367
	Neuroticism	-0.020	0.090	-0.230	0.817
Investment Goals	Extra Income	-0.098	0.436	-0.220	0.823
	Emergency Fund	0.086	0.484	0.180	0.860
	Retirement	-0.038	0.447	-0.090	0.932
	Leisure	0.054	0.464	0.120	0.907
	House	0.038	0.425	0.090	0.928
	Children's Future	0.075	0.477	0.160	0.876
Note: *p<0.05, **p<0.01, ***p<0.001					
Source: Regression analysis					

Based on the data in tables 7 – 9, it may be inferred that the relationship between an investor's profile and investment preference was partially true. Specifically, conservative and moderate profiles significantly predict medium-term investment. On the other hand, conservative and aggressive significantly predicted long term investment. This implied that investors are partially rational and irrational. This finding is consistent with that of Al Mamun, Yasmeen, and Farida (2015), where they concluded that investors acted in a manner that combined both emotion and cognition.

5.3 Mediation of Risk Aversion on the Relationship between Investment Preference and Investment Profile

The initial analysis in mediation showed that risk aversion had a significant relationship with conservative (t = 3.09, p = .003) and aggressive (t = -1.99, p = .049) investment preference as depicted in table 11.

Table 10: *Regression of Risk Aversion on Investor's Profile*

Step 1: Risk Preference as a Dependent Variable				
Independent Variable	*B*	*Std. Error*	*t*	*p*
Conservative	0.474	0.154	3.090	0.003**
Moderate	-0.100	0.135	-0.740	0.461
Aggressive	-0.298	0.149	-1.990	0.049*
*Note: *p<0.05, **p<0.01, ***p<0.001*				
Source: Regression analysis output				

As presented in Table 12, the result of the succeeding step showed that only medium-term (t = -2.22, p = 0.029) and long-term (t = -2.080, p = 0.041) had significant relationship with investor profile.

Table 11: *Regression of Investment Preference on Investor's Profile*

Step 2: Investment Preference as a Dependent Variable					
Independent Variable	*Dependent Variable*	*B*	*Std. Error*	*t*	*p*
Conservative	Short Term	-0.221	0.155	-1.420	0.158
	Medium Term	-0.332	0.149	-2.220	0.029*
	Long Term	-0.293	0.141	-2.080	0.041*
Aggressive	Short Term	-0.108	0.148	-0.730	0.457
	Medium Term	-0.004	0.145	-0.030	0.979
	Long Term	0.189	0.135	1.390	0.167
*Note: *p<0.05, **p<0.01, ***p<0.001*					
Source: Regression analysis output					

Tables 13 and 14 showed that risk aversion had no mediating effect between the relationships of investor's profile, in particular, the conservative and aggressive profiles, with investment preference.

Table 12: *Risk Aversion as Mediator on Conservative and Investment Preference*

Independent Variable	Dependent Variable	B	Std. Error	t	p
Short Term	Risk Aversion	0.204	0.103	1.990	0.050
	Conservative	-0.318	0.161	-1.980	0.051
Medium Term	Risk Aversion	-0.028	0.101	-0.280	0.780
	Conservative	-0.319	0.158	-2.020	0.046*
Long Term	Risk Aversion	-0.004	0.095	-0.040	0.968
	Conservative	-0.292	0.149	-1.950	0.054
*Note: *p<0.05, **p<0.01, ***p<0.001*					
Source: Regression analysis output					

Table 14: *Risk Aversion as Mediator on Aggressive and Investment Preference*

Step 3: Investment Preference as a Dependent Variable to both Variables					
Independent Variable	*Dependent Variable*	*B*	*Std. Error*	*t*	*p*
Short Term	Risk Aversion	0.133	0.102	1.310	0.194
	Aggressive	-0.068	0.151	-0.450	0.650
Medium Term	Risk Aversion	-0.094	0.100	-0.940	0.349
	Aggressive	-0.032	0.148	-0.210	0.830
Long Term	Risk Aversion	-0.036	0.094	-0.390	0.700
	Aggressive	0.178	0.139	1.280	0.203
*Note: *p<0.05, **p<0.01, ***p<0.001*					
Source: Regression analysis output					

5.4 Mediation of Risk Aversion on the Relationship between Personality Traits and Investment Preference

Table 15 shows only openness to experience had a significant relationship with risk aversion ($t = -2.64$, $p = 0.010$).

Table 15: *Regression of Risk Aversion on Personality Traits*

Independent Variables	B	Std. Error	t	p
Agreeableness	-0.04	0.113	-0.35	0.724
Conscientiousness	-0.095	0.093	-1.03	0.306
Openness to Experience	-0.215	0.081	-2.64	0.01*
Extraversion	-0.147	0.908	-1.62	0.109
Neuroticism	-0.093	0.085	-1.09	0.278
*Note: *p<.05, **p<0.01, ***p<0.001*				
Source: Regression analysis output				

Regressing the three levels of investment preference to openness to experience showed insignificant relationships between the variables as reflected in table 16.

Table 13: *Regression of Investment Preference on Personality Trait (Openness)*

Step 2: Investment Preference as a Dependent Variable					
Independent Variable	*Dependent Variable*	*B*	*Std. Error*	*t*	*p*
Openness to Experience	Short Term	0.003	0.082	0.040	0.967
	Medium Term	0.112	0.079	1.410	0.163
	Long Term	0.044	0.076	0.580	0.560
*Note: *p<.05, **p<0.01, ***p<0.001*					
Source: Regression analysis output					

The regression output, as shown in Table 17, showed that risk aversion was not a mediating variable between the relationship of personality trait and investment preference. This result was consistent with the results of the study of De Bortoli, et al (2019), revealing that personality trait was found to have an inverse relationship with risk aversion. This finding implied that people who are not novelty-seeking are not willing to take greater risks.

Table 14: *Risk Aversion as Mediator on Openness to Experience and Preference*

Independent Variable	*Dependent Variable*	*B*	*Std. Error*	*t*	*p*
Short Term	Risk Aversion	0.154	0.103	1.490	0.139
	Openness to Experience	0.037	0.085	0.430	0.666
Medium Term	Risk Aversion	-0.058	0.100	-0.580	0.566
	Openness to Experience	0.099	0.083	1.200	0.233
Long Term	Risk Aversion	-0.050	0.096	-0.520	0.606
	Openness to Experience	0.033	0.079	0.430	0.671
*Note: *p<0.05, **p<0.01, ***p<0.001*					
Source: Regression analysis output					

A one-way analysis of variance (ANOVA) was conducted to further confirm the results of the regression of investment preference.

Table 18 results showed no significant differences between the different investor's profiles. Although it was different from the regression results, the p-value of medium-term ($F(2, 93) = 2.79$, $p = 0.067$) and long term investment ($F(2, 93) = 2.44$, $p = 0.093$) were significant at the 10% level of significance.

Also, ANOVA was used to verify if there were differences between the different kinds of investment goals. Table 19 showed the results, that is, there were no significant differences between them. This verified the regression output where the only emergency fund was found to predict short term investment.

Table 15: *Analysis of Variance of Investment Preference by Investor's Profile*

Dependent Variable	Source	SS	df	MS	F	p
Short Term	Between groups	1.502	2	0.751	1.85	0.163
	Within groups	37.798	93	0.406		
	Total	39.300	95	0.414		
Medium Term	Between groups	2.117	2	1.059	2.79	0.067
	Within groups	35.352	93	0.380		
	Total	37.470	95	0.394		
Long Term	Between groups	1.657	2	0.829	2.44	0.093
	Within groups	31.648	93	0.340		
	Total	33.305	95	0.351		
Note: *p<.05, **p<0.01, ***p<0.001						
Source: Regression analysis output						

Table 19: *Analysis of Variance of Investment Preference by Investment Goals*

Dependent Variable	Source	SS	df	MS	F	p
Short Term	Between groups	3.328	5	0.666	1.67	0.151
	Within groups	35.972	90	0.400		
	Total	39.300	95	0.414		
Medium Term	Between groups	1.126	5	0.225	0.56	0.732
	Within groups	36.344	90	0.404		
	Total	37.470	95	0.394		
Long Term	Between groups	0.475	5	0.095	0.26	0.934
	Within groups	32.830	90	0.365		
	Total	33.305	95	0.351		
Note: *p<.05, **p<0.01, ***p<0.001						
Source: Regression analysis output						

6. Conclusion and Recommendations

Aggressive investors tend to invest more in long-term rather than short-term investments which differed from the usual views in finance since this type of investors generally look not only

in the short term but long term as well. They often use short term investment as a way to just earn immediate cash. These results are consistent with the findings of Klement (2015), where he established a relationship between an investor's profile and risk aversion. Also, in this study, there was no statistically significant relationship established between conservative investors and their investment preference.

Risk aversion is shown to have a significant relationship with the conservative and aggressive investor type. As far as the conservative investor is concerned, the result is consistent with the findings of Jain and Kesari (2020), where the presence of conservatism bias had a confounded relationship with financial risk tolerance.

The study failed to establish a relationship between an investor's profile and investment preferences. Investors have different personality traits, thus, it is difficult to fully explain how they behave in terms of their investment preferences. The findings are consistent with that of Parameswari and Krishnan (2015), where they also failed to find a strong connection between the five personality traits and attitude towards investment, with only one (agreeableness) being a significant result.

The study showed that risk aversion did not mediate the relationship between an investor's profile and investment preference. Similarly, no mediating effect of risk aversion was found between the relationship of personality traits and investment preference.

Emergency funds tend to influence short-term investments positively which could be attributed to different ways people might need emergency money in general. The very nature of this type of fund, which is intended for emergency purposes, makes it an investment product, where investors are able to withdraw their money whenever they want to do so.

The inability of risk perception to predict investment preferences could be attributed to the various ways by which people engage in investing, such as tapping the services of brokers, or through the use of technical analysis to help in investment decision making.

The results of the study have managerial implications. It is of prime importance, for instance, to investment advisors and analysts. An understanding of their customers' profiles could equip advisors with the right tool to tailor-fit their proposals to their respective clients. Since based on the study, there are differences in investment preference among conservative, moderate, and aggressive investors, it is imperative that they package their investment offerings based on their risk profiles. Failing to understand the differences in their customers' traits could have less-than-desired results. On the issue of the relationship between investments and openness to experience, results showed

the consistency that, generally, people shy away from activities that they presume to be risky. Investing is one of them. To encourage more people to engage in the same, investment companies could develop, for instance, mobile applications that would educate people about the benefits of investments in relation to their personal goals. This could minimize the fear factor people have as far as investing is concerned.

Future study related to this one may embark to include demographic-related factors which were not included in this study. A different taxonomy of personality traits, other than the one used in this research, may be considered. Another study may be done on the effects of formal knowledge as a factor.

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