# "Role of big-five personality traits in predicting behavioral intention: A case of Indian corporate bond investors"

AUTHORS	Rajeev Matha (b) Geetha E. (b) Raghavendra (b) Kishore L. (b) Shivaprasad S. P. (b)
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Rajeev Matha, Research Scholar, Department of Commerce, Manipal Academy of Higher Education, India.

Geetha E., Ph.D., Associate Professor, Department of Commerce, Manipal Academy of Higher Education, India. (Corresponding author)

Raghavendra, Ph.D., Professor, Associate Dean, VIT-AP School of Business, VIT-AP University, India.

Kishore L., MBA, Assistant Professor, Department of Commerce, Manipal Academy of Higher Education, India.

Shivaprasad S. P., Research Scholar, Department of Commerce, Manipal Academy of Higher Education, India.



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## ROLE OF BIG-FIVE PERSONALITY TRAITS IN PREDICTING BEHAVIORAL INTENTION: A CASE OF INDIAN CORPORATE BOND INVESTORS

#### **Abstract**

Personality traits are qualities that make a person distinctive and describe stable behavior patterns. Therefore, understanding the influence of personality traits on behavioral intention will help predict investors' investment decisions. This study aims to assess the impact of personality traits, i.e., openness to experience, neuroticism, conscientiousness, agreeableness, and extraversion, on investors' behavioral intentions. Moreover, it assesses the mediating effect of attitude, subjective norms, and perceived behavioral control between investors' personality traits and behavioral intention. The study employed a structured questionnaire on a sample of 413 retail investors. Further, obtained data were empirically examined on Smart-PLS 3.3 using the PLS-SEM method. The study found that perceived behavioral control, subjective norms, and attitude positively affected behavioral intention. However, the personality traits did not influence the intention directly. Further, mediation analysis revealed that attitude and subjective norm fully mediated the relationship between extraversion, neuroticism, openness, and intention. In contrast, attitude and subjective norms did not exhibit a mediating relationship between agreeableness, conscientiousness, and intention. Finally, perceived behavioral control fully mediated the relationship between personality traits and intention, except for conscientiousness. The study contributes by extending the applicability of the theory of planned behavior by examining the impact of big-five personality traits on behavioral intention and mediating the role of the theory of planned behavior's dimension between personality traits and intention.

**Keywords** big-five personality traits, corporate bond market, theory

of planned behavior, investors' intention, PLS-SEM

JEL Classification G40, G41, E71

#### INTRODUCTION

The corporate bond market is a stable and long-term source of investment, which is essential for economic development by meeting the capital requirements of the corporate sector investments. The Indian corporate bond market is still nascent compared to global markets in terms of contribution to GDP. The percentage of the corporate bond market to GDP in the USA is 123.47%, in South Korea 74.03%, in Brazil 99.05%, and in Turkey 142.06%, whereas in India, it is 18%. Besides, retail investors' participation in the Indian debt market is low compared to the developed economies (Acharya, 2011; Thukral et al., 2015). A diversified investor base reduces capital erosion, and credit default risk in the corporate bond market as the risk of the investment will be shared among a large number of investors (Nandan & Saurabh, 2016). In order to understand why people avoid participating in capital markets, it is necessary to identify the factors that influence them on an individual and aggregate level (Nadeem et al., 2020).

Early finance theories affirmed that investors' decision-making had been approached from the economic viewpoint, which propounded that the individual is rational in decision-making (Fama, 1970). More recently, literature offered contradictory arguments stating that individual exhibits irrational behavior in decision-making (Akhtar & Das, 2019; Raut et al., 2018). These have been guided by several psychological, cognitive, motivational, and emotional attributes. Personality differentiates the individual's response to the environment and decision-making (Dole & Schroeder, 2001). The existing literature recognizes the critical role played by the personality traits of investors while making an investment decision. Furthermore, studies have also affirmed that the influence of personality traits on investors' decisions is greater when compared to that of other psychological attributes. However, there is still much uncertainty about how personality traits influence investors' behavioral intentions.

Over the past four decades, most social and behavioral sciences research has emphasized behavioral intention. According to Ajzen and Fishbein (1980), behavioral intentions are "cognitive in nature and act as a representation of a person's readiness to engage in a specific behavior." The theory of planned behavior (TPB) is a general psychological theory used by social science academics to investigate individual behavioral intentions. Therefore, the theory asserts that behavioral intentions are highly related to behaviors. Despite extensive use of the theory, further studies are recommended to expand TPB with background variables such as personality traits, emotions, demographic factors, and experience that could be used to understand the indirect relationship through the original constructs such as attitude (AT), subjective norms (SN), and perceived behavioral control (PBC) of the TPB (Ajzen, 2020). So far, studies have examined the investors' behavioral intention (BIT), either in the context of the equity segment or mutual funds. However, more attention needs to be paid to exploring the behavioral intention of investors toward the corporate bond market. In addition, much less attention is directed to exploring the intervening effect of the PBC, SN, and AT between personality traits and behavioral intention.

Consequently, this study sought to answer whether big-five personality traits, i.e., extraversion (PET), openness to experience (POE), neuroticism (PNUR), agreeableness (PAG), and conscientiousness (PCS), influence the behavioral intention of investors. Moreover, do original constructs of TPB mediates the relationship between big-five personality traits and behavioral intention? Considering the above questions, the present study is designed to empirically examine the impact of big-five personality traits on the behavioral intention of investors toward the corporate bond market and mediating effect of AT, SN, and PBC between personality traits and behavioral intention of the investors. Subsequently, the present paper extends the applicability of TPB by investigating the influence of big-five personality traits and behavioral intention of investors toward the Indian corporate bond market and the intervening effect of the PBC, SN, and AT between personality traits and investors' intention.

# 1. LITERATURE REVIEW AND HYPOTHESES

The theory of planned behavior (Ajzen, 1991) is one of the prominent psychological theories extensively used to study human behavior. According to the TPB, an individual's behavior is primarily determined by the intention's three antecedents (AT, SN, and PBC). Behavior, normative, and control beliefs are all underlying behavioral determinants. As people build normative and control beliefs, these behavioral characteristics arise spontaneously and naturally. "Intentions are assumed to capture the motivational factors that influence behavior and indicate

how hard people are willing to try or how much effort they would exert to perform the behavior" (Ajzen, 1991). This study utilizes the TPB to study the investors' intention toward the Indian corporate bond market.

The construct of attitude was first articulated by Fishbein and Ajzen (1975). Attitude toward the behavior implies "the extent to which an individual has a favorable or negative evaluation of the target behavior or favorable or unfavorable belief toward behavior." In the context of investor, "the positive attitude of an investor toward the behavior results in forming the intention and performing the trad-

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ing behavior." According to Raut et al. (2018), attitude is a critical antecedent of behavioral intention; an investor is more likely to be influenced by his or her own attitude than by other circumstances. Therefore, attitude is one of the major indicators of intention. Gopi and Ramayah (2007), Shanmugham and Ramya (2012), Sondari et al. (2015), Akhtar and Das (2019), and Raut et al. (2018) applied the TPB to predict behavioral intention. They found that attitude has a significant positive impact on behavioral intention. In contrast, Sivaramakrishnan et al. (2017) showed a negative relationship with investors' intentions. The majority of studies indicate that attitude positively influences the intention of investors.

The construct of subjective norm originated from the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975), which directly determines the intention. Subjective norm is the "individual perception of the likelihood that the potential group or individual approve or disapprove of performing the behavior in TPB" (Ajzen, 1991). Subjective norms or social influence factors significantly affect the investors' behavioral intention. For example, the influence of colleagues, friends, and family members induces the individual to execute the behavior even though they are not interested in performing it. In the investor context, social influence on investors persuades them to an investment behavior against their inclinations. Researchers attempted to evaluate the impact of subjective norms on behavioral intention and found that social influence factors, for instance, media reports, have a considerable favorable impact the behavioral investment intention (Sondari et al., 2015; Sivaramakrishnan et al., 2017; Raut et al., 2018). At the same time, Gopi and Ramayah (2007) opined that subjective norms considerably impact intention compared to attitude.

PBC is considered the primary construct that differentiates TPB from TRA in the TPB framework. PBC is referred to as "given the presence or absence of requisite resources and opportunities, the individual's perception of the ease or difficulty in performing the behavior of interest," or "person's belief in his ability to perform the behavior" (Ajzen, 1991). The high intensity of PBC boosts the effort and determination to achieve the desired behavior. PBC is operationalized as the investor's control on their decision or intention to invest in the corporate bond market by analyzing the underlying features, resources, and

barriers. Prior studies exhibited PBC as the key predictor of intention (Gopi & Ramayah, 2007; Raut et al., 2018; Sivaramakrishnan et al., 2017). Investors' perception of their ability to perform the behavior favorably impacts the intention. In contrast, Sondari et al. (2015) revealed that PBC failed to predict the behavioral intention among civil servant investors in Indonesia.

Further, personality traits can be essential in predicting investors' intentions. Personality is a set of features or characteristics that separates one person from another (Durand et al., 2014). These distinguishing characteristics are cognitive, motivational, and emotional characteristics that influence an individual's reaction to the environment and decision-making in particular circumstances (Dole & Schroeder, 2001). Personality traits are conceptualized as a multidimensional construct comprising five dimensions, i.e., extraversion (PET), openness to experience (POE), neuroticism (PNUR), agreeableness (PAG), and conscientiousness (PCS) (Norman, 1967; Costa & McCrae, 1997). Neuroticism refers to the individual's emotional stability in the decision-making process. Investors possess either rational or irrational behavior. Rational investors make investment decisions based on facts and figures.

In contrast, emotional investors rely on attitude and feelings. Extraversion implies individual behavior towards others. Extraversion is further classified based on the individual character as extroverts and introverts. Extroverts always prefer or like to interact with other individuals. On the other hand, most of the time, introverts prefer to be alone. Agreeability describes individuals' responses to knowledge or information received from others. Conscientiousness is the cognitive and analytical competence of an individual in the decision-making process. The last characteristic to be considered is openness, which describes the fascination with new ideas.

Mayfield et al. (2008) opined that long-term intention is significantly influenced by personality traits, while personality factors such as openness and conscientiousness did not predict short-term intention. On the contrary, Sadiq and Khan (2019) found that conscientiousness, extraversion, and agreeableness significantly influenced short-term intention. At the same time, openness to experience negatively impacted both long-term and short-term intentions. In

addition, extraversion and conscientiousness positively influenced the long-term intention of the investors. In contrast, Nandan and Saurabh (2016) argued that personality traits did not directly affect the short-term intention of investors directly, but neuroticism, openness, and extraversion negatively influenced the long-term intention. Ghaffar et al. (2022) found that neuroticism and consciousness considerably positively influence financial decision-making, while openness and agreeableness did not influence the retail investors' financial planning behaviors.

Nareswari et al. (2021) revealed that openness negatively impacted investment performance, whereas conscientiousness, extraversion, agreeableness, and neuroticism positively impacted perceived investment performance. Openness and agreeableness positively influenced risk behavior (Pak & Mahmood, 2015). Further, the study revealed that POE, PET, PCS, and PAG did not impact the attitude. At the same time, PNUR negatively influenced the attitude of the investor. Nevertheless, the subjective norm was favorably impacted by conscientiousness, openness, and extroversion. Whereas neuroticism and agreeableness negatively influenced the subjective norm. In addition, PBC was positively affected by extroversion and conscientiousness while negatively affected by agreeableness and neuroticism (Lai, 2019). Nandan and Saurabh (2016) opined that agreeableness, neuroticism, extraversion, and openness to experience negatively influenced attitude toward financial risk. At the same time, it was positively impacted by conscientiousness.

Moreover, mediating role of basic dimensions of TPB, such as AT, SN, and PBC, were extensively used in the context of entrepreneurial intention (Munir et al., 2019; Zhang & Cain, 2017) and students' behavior toward sports (Liao et al., 2022). In the behavioral finance context, the attitude of investors was studied as a mediator between personality traits and intention. It was found that attitude fully mediated the association between neuroticism, openness, extraversion, and intention and partially mediated between agreeableness and short-term intention. In contrast, agreeableness has not affected the intention (Nandan & Saurabh, 2016). Lai (2019) extended the TPB by exploring the indirect effect of AT, SN, and PBC. The study found that attitude, subjective norm, and PBC mediated the relationship between personality traits and intention; it also revealed that

attitude partially mediated the relationship between risk perception and intention (Ali, 2011). AT, SN, and PBC partially mediated the association between financial literacy and investors' behavioral intention (Mulyono, 2021). Raut (2020) found that attitude and PBC partially mediated the path between past investment behavior and financial literacy with intention. Akhtar and Das (2019) revealed that financial self-efficacy originated from PBC mediated the association between personality traits and intention. In contrast, according to Santi et al. (2020), financial self-efficacy did not mediate the association between personality factors and investors' intentions.

Most behavioral finance studies have focused either on equity or mutual fund investors' intentions or behaviors. However, the behavioral intentions of investors toward corporate bonds have not yet been determined. More specifically, prior behavioral studies have not explored the influence of personality characteristics on investors' intentions toward the corporate bond market. Furthermore, literature evidenced limited studies examining the mediating effect of attitude. However, no prior research studies have looked at the mediating role of TPB dimensions such as AT, SN, and PBC between personality traits and intention of corporate bond investors. Therefore, in order to address the knowledge gap, this paper aims to assess the mediating effect of TPB dimensions.

Thus, from a financial perspective, it is essential to understand the psychological antecedents of investors' intentions and preferences toward the corporate bond market. The objective of this study is to empirically examine the impact of big-five personality traits on behavioral intention and the mediating effect of AT, SN, and PBC between personality traits and the behavioral intention of investors toward the corporate bond market. Based on the literature review, the study hypothesizes:

- *H<sub>i</sub>*: Attitude significantly affects the behavioral intentions of corporate bond investors.
- *H*<sub>2</sub>: Subjective norms significantly affect the behavioral intentions of corporate bond investors.
- *H*<sub>3</sub>: Perceived behavioral control significantly affects the behavioral intentions of corporate bond investors.

- $H_4$ : Big-five personality traits significantly affect the behavioral intentions of corporate bond investors.
- *H<sub>5</sub>:* Big-five personality traits significantly affect the attitude toward behavior.
- $H_6$ : Big-five personality traits significantly affect subjective norms.
- H; Big-five personality traits significantly affect PRC
- *H<sub>8</sub>:* Attitude mediates the association between personality traits and intentions of corporate bond investors.

- *H<sub>g</sub>*: Subjective norms mediate the relationship between personality traits and intentions of corporate bond investors.
- $H_{10}$ : Perceived behavioral control mediates the relationship between big-five personality traits and intentions of corporate bond investors.

### 2. METHODOLOGY

A quantitative research design was used for the study. Based on the random sample procedure, data were gathered using a standardized questionnaire from retail investors. The minimum sample size for the PLS path model was determined

Table 1. Measurement items

Constructs	Measurement variable	Sources	
Attitude	AT1: Corporate bond investment is a good idea. AT2: Investing in corporate bonds is a wise choice. AT3: I like the idea of investing in corporate bonds.	Ajzen (1991), Taylor and Todd (1995), Raut et al. (2018)	
Subjective norms	SN1: Many of my colleagues and friends invest in corporate bonds. SN2: Those who have a significant influence on me think that I should invest in corporate bonds. SN3: People whose opinion I value would prefer that; I should invest in corporate bonds.	Ajzen (1991), Taylor and Todd (1995), Raut et al. (2018)	
Perceived behavioral control	PBC1: I know where to buy corporate bonds. PBC2: I can identify profitable bonds easily. PBC3: I can invest in favorable bonds conveniently.	Ajzen (1991), Taylor and Todd (1995), Raut et al. (2018)	
Behavioral intention	BIT1: I invest in the bond market frequently. BIT2: I encourage my friend and family to invest in the corporate bond market. BIT3: I will invest in the bond market in the near future.	Ajzen (1991), Taylor and Todd (1995), Raut et al. (2018)	
Neuroticism	PNUR1: Under immense stress and burden, I feel like I will break down. PNUR2: Frequently, I feel like I am totally unimportant. PNUR3: Too often, when things go wrong, I get discouraged and feel like giving up. PNUR4: I often feel tense and anxious.	Mayfield et al. (2008), Akhtar et al. (2018)	
Extraversion	PET1: I enjoy talking to people. PET2: I often feel as if I am bursting with energy. PET3: I am a cheerful, high-spirited person. PET4: I am a very active person. PET5: I make friends easily	Mayfield et al. (2008), Akhtar et al. (2018)	
Openness to experience	POE1: I am full of ideas.  POE2: I have a lot of intellectual curiosity.  POE3: I carry conversations to a higher level.  POE4: I often enjoy playing with theories of abstract ideas such as love, friendship, or freedom.	Mayfield et al. (2008), Akhtar et al. (2018)	
Agreeableness	PAG1: I often get into arguments with my family and co-workers. PAG2: Some people think I am selfish and egotistical. PAG3: Some people think of me as cold and calculating. PAG4: I generally try to be thoughtful and considerate	Mayfield et al. (2008), Akhtar et al. (2018)	
Conscientiousness	PCS1: I make plans and stick to them. PCS2: I waste much time before settling down to work. PCS3: Sometimes, I am not as dependable or reliable as I should be. PCS4: I never seem to be able to get organized.	Mayfield et al. (2008), Akhtar et al. (2018)	

*Note*: A five-point Likert scale was used (1 = Strongly Disagree to 5 = Strongly Agree). AT = Attitude, SN = Subjective norms, PBC = Perceived behavioral control, BIT = Behavioral intention, PNUR = Neuroticism, PET = Extraversion, POE = Openness to experience, PAG = Agreeableness, PCS = Conscientiousness.

based on the 10- times rule of thumb proposed by Hair et al. (2017). The "10-times rule" indicates that "the minimum sample size should be ten times the maximum number of inner or outer arrows pointing at the latent variable." In the current study, 33 inner and 8 outer arrows point to the latent variable; hence, the minimum sample size required is 410. For additional conformation, the Raosoft online sample calculator was used, based on the 95 % confidence interval, margin error of 5%, and 50 % response distribution, and arrived at a minimum sample of 377 (Memon et al., 2020). The questionnaire consisted of demographic factors, variables of the study, and their measurement items. The measurement scales for the study were drawn from existing literature that was validated. All the indicators of the constructs were measured employing a five-point Likert scale, which ranges from strongly disagree (1) to strongly agree (5). Table 1 exhibits the construct measurement scales along with their sources.

Statistical data analysis was performed on Smart-PLS 3.3.9 software using the partial least squares structural equation modeling (PLS-SEM). PLS-SEM is a widely accepted multivariate analysis examining the relationship between variables in the path

model. It explains the causal relationship between constructs without assuming the normality of the data. PLS-SEM primarily consists of measurement and structural models. First, the consistency of the measures was assessed using reliability and validity measurement models. The reliability tests, such as outer loadings, were used to measure the indicator reliability of the latent variables. Cronbach's Alpha and composite reliability were ascertained to verify the internal consistency of the data. The accuracy of a measure was confirmed by testing the convergent validity by employing the average of variance extracted (AVE) (Hair et al., 2017) and discriminant validity with the help of the Fornell-Larcker criterion (Fornell & Larcker, 1981; Hair et al., 2017), heterotrait-monotrait ratio (HTMT) (Hair et al., 2017; Henseler et al., 2015). Further, structural direct and indirect relationships were assessed using the path coefficients, R<sup>2</sup>, and Q<sup>2</sup> values (Figure 1).

#### 3. RESULTS

The respondents' profiles are shown in Table 2. Around 52.5% of respondents were male, and 47.5% were female. More than half (57.4%) of the investors were under the age group of less than 30.

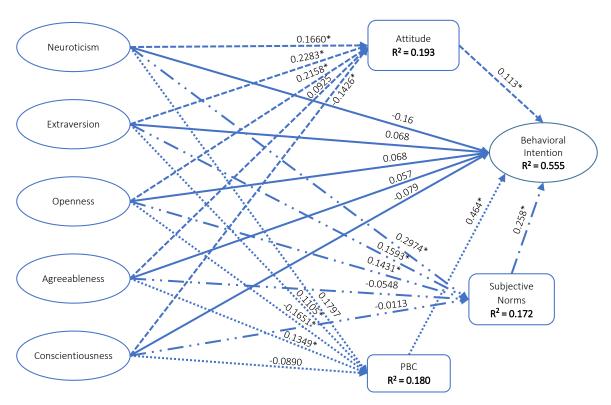


Figure 1. Conceptual framework

46.2% of respondents were categorized as post-graduates, followed by undergraduates (32.2%). A total of 42.9% of respondents represent the salaried class, and 68.5% of respondents' annual income is less than five lakhs.

Table 2. Respondents' demographic profile

Source: Authors' computation.

Demogra	phic profile	Frequency	Percentage	
Candan	Male	217	52.5%	
Gender	Female	196	47.5%	
	Less than 30	237	57.4%	
	31-40	82	19.9%	
Age	41-50	60	14.5%	
	51-60	23	5.6%	
	60 and above	11	2.7%	
	Below 12th class	11	2.7%	
	Undergraduate	133	32.2%	
Education gualification	Postgraduate	191	46.2%	
qualification	Professional	66	16.0%	
	Others	12	2.9%	
	Salaried	177	42.9%	
	Business	40	9.7%	
Ossumation	Professional	58	14.0%	
Occupation	Retired	13	3.1%	
	Housewife	18	4.4%	
	Others	107	25.9%	
	Less than 5 lakhs	283	68.5%	
Annual income	>5L-<10L	69	16.7%	
Annual Income	> 10L - <15L	40	9.7%	
	> 15L	21	5.1%	

Initially, the measurement model was assessed to understand how well the theory fits the data. It comprises reliability and validity. Structural models cannot be assessed without confirming the validity and reliability of the data through measurement models (Hair et al., 2018).

The PLS algorithm process in Smart PLS 3.3.9 software extracted reliability and validity results. In Table 3, reliability was assessed using the outer loadings; it represents the correlation between the latent variables and the indicators in its outer model. For assessing the indicator reliability, the minimum outer loading should be equal to, or more than 0.7 is considered reliable (Hair et al., 2018). The outer loadings were higher than 0.7 for all the indicators except for the construct consciousness PCS1 (0.628) and PCS2 (0.597). Hence, these two indicators were eliminated as the value was less than the threshold value.

Further, to validate the data's internal consistency, validate Cronbach's Alpha and composite reliability ascertained. Cronbach's Alpha estimates the reliability based on the intercorrelations of the observed indicators. Cronbach's Alpha and composite values for all the latent variables were higher than the threshold value of 0.7 or higher. Hence, all the variables are considered reliable. Convergent validity was measured using the average variance extracted (AVE). An AVE score of 0.5 or higher is considered acceptable. Table 3 shows the AVE score of more than 0.5 for all the variables; thus, convergent validity was established.

Table 3. Measurement models

Source: Authors' computation.

Construct	Items	Outer loadings	Cronbach's α	CR values	AVE	
	AT1	0.917				
Attitude	AT2	0.900	0.897	0.935	0.829	
	AT3	0.914				
	BIT1	0.831				
Intention	BIT2	0.890	0.786	0.876	0.702	
	BIT3	0.789				
•••••	PAG1	0.919				
Agreeableness	PAG2	0.780	0.810	0.870	0.691	
	PAG3	0.788	* * * * * * * * * * * * * * * * * * *			
	PBC1	0.878	• · · · · · · · · · · · · · · · · · · ·			
Perceived behavioral control	PBC2	0.900	0.884	0.928	0.811	
bellavioral control	PBC3	0.923				
C:	PCS3	0.846	0.710	0.072	0.774	
Conscientiousness	PCS4	0.912	0.712	0.872	0.774	
	PET1	0.816				
	PET2	0.741		0.902		
Extraversion	PET3	0.860	0.865		0.649	
	PET4	0.798				
	PET5	0.807				
	PNUR1	0.841				
Neuroticism	PNUR2	0.856	0.000	0.917	0.705	
Neuroticisiii	PNUR3	0.893	0.880	0.917	0.755	
	PNUR4	0.838				
	POE1	0.855				
Openness to	POE2	0.811	0.856	0.902	0.000	
experience	POE3	0.894	0.830	0.902	0.098	
	POE4	0.776				
	SN1	0.865				
Subjective norms	SN2	0.892	0.870	0.920	0.794	
	SN3	0.916				

Note: CR: Composite reliability, AVE: Average variance extracted.

Discriminant validity measures the extent to which each latent variable is distinct from other constructs in the model. Fornell-Lacker criterion and HTMT ratio values were used to assess the

discriminant validity of the constructs. Fornell-Lacker criterion assesses the discriminant validity by comparing the square root of AVE values and the correlation of the variables. In Table 4, Fornell-Larcker criterion values or the square root of AVE values was higher than the correlation of the variables; therefore, discriminant validity is acceptable (Fornell & Larcker, 1981). Further, discriminant validity was also confirmed using the more robust method, i.e., the HTMT ratio proposed by Henseler et al. (2015), which measures the similarity between the latent variables. HTMT ratio values above 0.9 reflect the nonexistence of discriminant validity. Table 5 shows that HTMT ratio values are less than 0.9; therefore, discriminant validity was established.

After validating the measurement model, in order to perform the hypotheses testing, path coefficient values were extracted using the PLS bootstrapping method, which bootstraps the current sample to 5000 samples. Table 6 exhibits the structural relationship using the path coefficients, the predictive power of exogenous variables employing  $R^2$  values, and  $Q^2$  for predictive relevance. Attitude  $(H_1)$   $(\beta)$ 

0.1124), subjective norms ( $H_2$ ) ( $\beta$  0.2579), and perceived behavioral control ( $H_3$ ) ( $\beta$  0.4640) have a significant positive impact on the behavioral intention of investors. Hence,  $H_1$ ,  $H_2$  and  $H_3$  were accepted.

The path coefficient values for big-five personality traits such as PAG (H<sub>42</sub>), PCS (H<sub>4b</sub>), PET (H<sub>4c</sub>), PNUR  $(H_{4d})$ , and POE  $(H_{4e})$  were not significant at a 5% level of significance. Therefore, big-five personality traits did not impact the investors' intention, and the  $H_{4a}$ ,  $H_{4b}$ ,  $H_{4c}$ ,  $H_{4d}$ , and  $H_{4e}$  were rejected. R<sup>2</sup> ranges from 0 to 1; a greater value indicates the greater explanatory power of the exogenous variables. R<sup>2</sup> values of 0.75, 0.5, and 0.25 are considered high, moderate, and weak explanatory power, respectively. Table 6 shows  $R^2 = 0.5559$ ; it refers to 55.59% changes in the behavioral intention of the investors explained by AT, SN, PBC, PAG, PCS, PET, PNUR, and POE. Q2 values are ascertained through the blindfolding technique, which forecasts the predictive relevance of the structural model. Q<sup>2</sup> value greater than zero for a specific endogenous variable indicates predictive relevance. The study model demonstrates predictive relevance as Q<sup>2</sup> values for behavioral intention is 0.3785.

Table 4. Fornell-Larcker criterion test

Source: Authors' computation.

Fornell-Larcker criterion									
	AT	BIT	PAG	PBC	PCS	PET	PNUR	POE	SN
AT	0.9102								
BIT	0.4982	0.8377							
PAG	-0.1162	-0.2081	0.8315	• · · · · · · · · · · · · · · · · · · ·					
PBC	0.4350	0.6637	-0.3043	0.9006					**************************************
PCS	-0.2200	-0.2470	0.4309	-0.2420	0.8796				• · · · · · · · · · · · · · · · · · · ·
PET	0.3442	0.3453	-0.1745	0.2905	-0.1515	0.8054			-
PNUR	0.1591	0.1657	-0.3700	0.1870	-0.3976	-0.0430	0.8573		-
POE	0.3156	0.3181	-0.2096	0.2634	-0.0764	0.5426	-0.0930	0.8355	
SN	0.4960	0.5495	-0.2277	0.4475	-0.1882	0.2356	0.3018	0.2142	0.8912

Table 5. Heterotrait-monotrait ratio (HTMT) test

Source: Authors' computation

Heterotrait-monotrait ratio (HTMT)									
	AT	BIT	PAG	PBC	PCS	PET	PNUR	POE	SN
AT									
BIT	0.5888							**************************************	
PAG	0.1033	0.2139							
PBC	0.4877	0.7958	0.3024						
PCS	0.2692	0.3245	0.5414	0.2993					
PET	0.3818	0.4135	0.1804	0.3273	0.1908			**************************************	
PNUR	0.1756	0.1993	0.4170	0.2097	0.4937	0.0887	•	**************************************	
POE	0.3544	0.3856	0.2324	0.2997	0.1604	0.6421	0.1110	•	
SN	0.5570	0.6627	0.2317	0.5081	0.2350	0.2655	0.3425	0.2385	

Additionally, the impact of personality traits on the AT, SN, and PBC were reported in Table 6. Personality traits such as PET (β 0.2283), PNUR ( $\beta$  0.1660), and POE ( $\beta$  0.2158) have a substantial positive impact on attitude PBC (p < 0.05). PCS  $(\beta -0.1426)$  negatively impacted the attitude, while PAG did not impact the attitude. Hence,  $H_{5b}$ ,  $H_{5c}$   $H_{5d}$  and  $H_{5e}$  were accepted, and  $H_{5a}$  was rejected. Table 6 exhibits  $R^2 = 0.1936$  and  $Q^2 =$ 0.1465. Personality traits like PET (β 0.1593), PNUR ( $\beta$  0.2974), and POE ( $\beta$  0.1431) have a substantial positive impact on subjective norms. PAG and PCS do not affect the SN (p-value > 0.05). Hence,  $H_{6c}$ ,  $H_{6d}$ , and  $H_{6e}$  were accepted, and  $H_{6a}$  and  $H_{6b}$  were rejected. Next,  $R^2 = 0.1726$  and  $Q^2 = 0.1289$ . Finally, PNUR ( $\beta$  0.1105) and POE ( $\beta$  0.1105) have a positive and PAG ( $\beta$  -0.1651) has a negative impact on PBC (p < 0.05). PCS and PET do not impact PBC (p-value > 0.05). Therefore,  $H_{7d}$  and  $H_{7e}$  were accepted, and  $H_{7a}$ .  $H_{7b}$  and  $H_{7c}$  were rejected

Lastly, the study examined the mediation anal-

ysis AT, SN and PBC. Table 7 demonstrates the

indirect relationships comparing the specific indirect paths with direct paths. AT, SN, and PBC mediate the relationship between personality traits such as PAG, PCS, PET, PNUR, POE, and the behavioral intention of investors. Interestingly, PAG, PCS, PET, PNUR, and POE do not directly affect the investor's intention, while few variables exhibited an indirect relationship. For example, PCS does not have a direct and indirect impact on intention in all three mediations (PCS -> AT -> BIT ( $\alpha$  -0.016,  $\beta$ -0.0791), PCS -> SN -> BIT ( $\alpha -0.0029$ ,  $\beta -0.0791$ ), PCS -> PBC -> BIT ( $\alpha$  -0.0413,  $\beta$  -0.0791). PAG did not mediate through the AT and SN but fully mediated through the PBC (α -0.0766\*, β 0.0570). PET has fully mediated through AT (α 0.0257, β 0.0684), SN (α 0.0411\*, β 0.0684), and PBC (α 0.0187\*, β 0.0684). PNUR indirectly influenced intention through AT (α 0.0834\*,  $\beta$  -0.0163), SN ( $\alpha$  0.0767,  $\beta$  -0.0163), and PBC ( $\alpha$  0.0513,  $\beta$  -0.0163). POE has an indirect path on intention through AT (α 0.0242\*, β 0.0687), SN ( $\alpha$  0.0369\*,  $\beta$  0.0687), and PBC ( $\alpha$  0.0626\*,  $\beta$ 0.0687).

**Table 6.** Structural path analysis

Source: Authors' computation.

Hypothesis	Structural Path	Path coefficient (β)	R2	Q2	Decision
H1	AT → BIT	0.1124*			Yes
H2	SN → BIT	0.2579*			
Н3	PBC → BIT	0.4640*			Yes
Н4а	PAG → BIT	0.0570	0.5559	0.3785	No
H4b	PCS → BIT	-0.0791	0.5559	0.3785	No
Н4с	PET → BIT	0.0684			No
H4d	PNUR → BIT	-0.0163			No
Н4е	POE → BIT	0.0687			No
Н5а	PAG  ightarrow AT	0.0925			No
H5b	PCS → AT	-0.1426*			Yes
Н5с	PET → AT	0.2283*	0.1936	0.1465	Yes
H5d	PNUR → AT	0.1660*			Yes
Н5е	POE → AT	0.2158*			Yes
Н6а	PAG → SN	-0.0548			No
H6b	PCS → SN	-0.0113			No
Н6с	PET → SN	0.1593*	0.1726	0.1289	Yes
H6d	PNUR → SN	0.2974*			Yes
Н6е	POE → SN	0.1431*			Yes
Н7а	PAG → PBC	-0.1651*			Yes
H7b	PCS → PBC	-0.0890			No
Н7с	PET → PBC	0.1797	0.1801	0.1801 0.1326	No
H7d	PNUR → PBC	0.1105*			Yes
Н7е	POE → PBC	0.1349*			Yes

Note: \* denotes statistically significant at 5% (0.05). Yes – Supports the hypothesis, No – Rejects the hypothesis.

**Table 7.** Mediation analysis

Source: Authors' computation.

Hypothesis	Path	Specific indirect effect (α)	Direct effect (β)	t Statistics	p values	Decision
Н8а	PAG  ightarrow AT  ightarrow BIT	0.0104	0.0570	1.3016	0.1931	No mediation
H8b	PCS  ightarrow AT  ightarrow BIT	-0.016	-0.0791	1.6631	0.0963	No mediation
Н8с	$ ext{PET}  ightarrow  ext{AT}  ightarrow  ext{BIT}$	0.0257*	0.0684	2.0911	0.0366	Full mediation
H8d	PNUR $ ightarrow$ AT $ ightarrow$ BIT	0.0187*	-0.0163	2.0766	0.0379	Full mediation
Н8е	POE $ ightarrow$ AT $ ightarrow$ BIT	0.0242*	0.0687	2.0074	0.0448	Full mediation
Н9а	PAG  ightarrow SN  ightarrow BIT	-0.0141	0.0570	0.8429	0.3994	No mediation
H9b	$PCS \rightarrow SN \rightarrow BIT$	-0.0029	-0.0791	0.1698	0.8652	No mediation
Н9с	$\operatorname{PET}  o \operatorname{SN}  o \operatorname{BIT}$	0.0411*	0.0684	2.0419	0.0412	Full mediation
H9d	PNUR  ightarrow SN  ightarrow BIT	0.0767*	-0.0163	4.1331	0.0000	Full mediation
Н9е	POE  ightarrow SN  ightarrow BIT	0.0369*	0.0687	2.1522	0.0314	Full mediation
H10a	PAG  ightarrow PBC  ightarrow BIT	-0.0766*	0.0570	2.8964	0.0038	Full mediation
H10b	$PCS \rightarrow PBC \rightarrow BIT$	-0.0413	-0.0791	1.4762	0.1399	No mediation
Н10с	$PET \rightarrow PBC \rightarrow BIT$	0.0834*	0.0684	2.6956	0.007	Full mediation
H10d	$PNUR \rightarrow PBC \rightarrow BIT$	0.0513*	-0.0163	2.0446	0.041	Full mediation
H10e	POE  ightarrow PBC  ightarrow BIT	0.0626*	0.0687	2.0212	0.0433	Full mediation

Note: \* denotes statistically significant at 5% (0.05).

### 4. DISCUSSION

This study set out to investigate the impact of bigfive personality traits on behavioral intention and the mediating effect of AT, SN, and PBC between personality traits and the behavioral intention of investors. The current study found that AT, SN, and PBC have a significant positive impact on the behavioral intention of investors. It supports the findings of Gopi and Ramayah (2007), Sondari et al. (2015), and Raut et al. (2018). However, these results were inconsistent with the findings of Sivaramakrishnan et al. (2017). Additional inquiry by Raut et al. (2018) stimulates that attitude would be considered a significant predictor of investors' BIT, while according to Yee et al. (2021), social influence from family and friends has a more significant effect on BIT than AT and PBC.

Moreover, the current study found that the bigfive personality traits, i.e., PAG, PCS, PET, PNUR, and POE, do not predict intention. Mayfield et al. (2008), Nandan and Saurabh (2016) support that personality does not determine the investors' short-term intention. At the same time, Sadiq and Khan (2019) found that PCS, PET, and PAG substantially impact short-term BIT. The long-term behavioral intention of investors was impacted by extraversion and conscientiousness. While Nandan and Saurabh (2016) found that neuroticism, openness, and extraversion negatively impacted the long-term intention. Personality traits such as POE, PNUR, and PET positively affected the attitude and subjective norms factors, while PCS and PAG traits did not affect the subjective norms. The findings are partly supported by Lai (2019), who observed that only neuroticism negatively influences the investor's attitude. In addition, the study observed that openness to experience and neuroticism have considerable positive impact on PBC, while conscientiousness negatively influences attitude, and agreeableness negatively affects PBC. The findings are inconsistent with Lai (2019), who found that PBC is positively affected by extroversion, conscientiousness, and openness and negatively affected by agreeableness and neuroticism.

The indirect path has been analyzed through attitude, subjective norms, and PBC between personality traits and BIT. The empirical study found that AT and SN fully mediated the relationship between PET, PNUR, POE, and BIT. In contrast, the indirect path between agreeableness, conscientiousness, and intention is not found through attitude and subjective norms. PBC fully mediates the structural path between personality traits, such as POE, PNUR, PAG, PET, and BIT, except for the path between PCS and intention. The study reaffirms Ali (2011), Nandan and Saurabh (2016), Lai (2019), Mulyono (2021), who opined that attitude fully mediates the association between PNUR, POE, PET traits, and BIT. At the same time, PBC did not mediate the structural relationship between personality traits and investors' BIT. In contrast, Akhtar and Das (2019) revealed that financial self-efficacy fully mediated the structural path between personality traits and investors' BIT.

Although the big-five personality traits, i.e., PAG, PCS, PET, PNUR, and POE, did not predict the intention directly, the indirect path was significant in explaining the impact on the intention. Most

studies considered the attitude of investors as a mediating variable and expressed that attitude intervenes in the association between personality traits and behavioral intention. The current study argues that along with the attitude, social influence from friends and peers and a person's belief in his ability to perform the behavior are equally important to explain the relationship between personality traits and the behavioral intention of investors.

#### CONCLUSION

This study set out to investigate the impact of big-five personality traits on behavioral intentions and mediating effect of AT, SN, and PBC between personality traits and behavioral intentions of investors. The PLS-SEM analysis revealed that attitude, subjective norms, and perceived behavioral control have a significant positive impact on the behavioral intention of investors. However, it also observed that the big-five personality traits, i.e., PAG, PCS, PET, PNUR, and POE, were not immediate predictors of the intention. Further mediation analysis found that attitude and subjective norm fully mediated the relationship between PET, PNUR, POE, and BIT. In contrast, the attitude and subjective norms did not exhibit a mediating relationship between PAG, PCS, and investors' BIT. In contrast, PBC fully mediated the relationship between personality traits and intention, except for conscientiousness.

The evidence from this study suggests that a significant positive impact of attitude implies a favorable belief toward the corporate bond market, which improves financial knowledge and investors' intention. Hence, the government and regulatory bodies should manage the transparent and liquid debt market and develop attractive investment avenues like ETFs to increase the participation of retail investors. A significant positive social influence to perform or not to perform the behavior signifies that investors' intention to invest in corporate bonds can be influenced mainly by the interaction with peers and friends or media reports. Thus, regulatory bodies and corporate houses should publish well-informed media reports to create an affirmative perception of the corporate bond market. A positive effect of PBC denotes that providing accurate investment information and creating a simplified trading mechanism will improve the investors' investment intention. As a result, the government can develop a fair and transparent investment avenue, regulated trading mechanism, and technological infrastructure, increasing investors' preference to invest in corporate bond markets. Moreover, the positive impact of extraversion on attitude and subjective norms signifies that emotionally stable individuals, who are fascinated by new ideas and like to interact with others, are likely to develop a favorable attitude and perception about social influence. Agreeableness did not affect AT and SN; this implies that kind, considerate, and sympathetic individuals do not influence the attitude and subjective norms. Conscientiousness negatively influences the attitude; thus, investors with high cognitive and analytical skills make rational decisions and will not form a positive attitude. The positive influence of neuroticism and openness to experience indicates that investors who are emotionally stable and fascinated by new ideas increase their ability to invest in the corporate bond market.

The principal theoretical implication of this study is that regulatory bodies and corporate houses can develop a mechanism of new policies that are required to be executed to strengthen investment behavior based on the investors' personality attributes. Consequently, this study made a major contribution to the existing body of literature in several ways. Firstly, the study comprehensively provided empirical evidence on the impact of personality traits on the behavioral intention of investors toward the Indian corporate bond market. Secondly, it extended the TPB by studying the attitude, subjective norms, and

PBC as intervening variables between personality traits and intention. Thirdly, the conceptual framework will provide an opportunity for the government, corporate bodies, and policymakers to advance strategies for enhancing bond market participation based on personality attributes.

Nevertheless, the scope of the study was limited to exploring only psychological factors under the TPB framework. Therefore, further studies can be extended by adding additional predictors of investors' intentions under psychological or behavioral models. Additionally, further research can be conducted employing multi-group analysis for assessing the moderating effect of demographic factors such as age, gender, literacy level, and income groups. Furthermore, the study's questionnaire is not fully free from subjectivity as the study is cross-sectional. Hence, the reliability of the results might decrease due to changes in the investors' decisions over time. Therefore, longitudinal research is recommended to examine the translation of behavioral intention to the actual behavior of investors. Finally, the study was limited to a specific geographical location. Therefore, further investigation is required for cross-country comparison to enhance the generalizability of the findings.

### **AUTHOR CONTRIBUTIONS**

Conceptualization: Geetha E., Rajeev Matha, Raghavendra, Kishore L.

Data curation: Rajeev Matha, Kishore L., Shivaprasad S. P.

Formal analysis: Geetha E., Rajeev Matha, Raghavendra, Kishore L., Shivaprasad S. P.

Funding acquisition: Geetha E., Rajeev Matha, Raghavendra, Kishore L.

Investigation: Geetha E., Rajeev Matha, Raghavendra, Kishore L.

Methodology: Rajeev Matha, Raghavendra, Kishore L. Project administration: Geetha E., Raghavendra, Kishore L.

Resources: Geetha E., Rajeev Matha. Software: Rajeev Matha, Shivaprasad S. P. Supervision: Geetha E., Raghavendra, Kishore L.

Validation: Geetha E., Rajeev Matha, Raghavendra, Kishore L.

Visualization: Geetha E.

Writing – original draft: Geetha E., Rajeev Matha, Raghavendra, Kishore L.

Writing - review & editing: Geetha E., Rajeev Matha, Raghavendra, Kishore L., Shivaprasad S. P.

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