



# Personal Traits and Motivation Impact on Collectibles as an Alternative Investment: A Case Study of Trading Card Game Community in Greater Jakarta

\*Aldrich Aryadi<sup>1</sup> and Margaretha Lingga<sup>2</sup>

<sup>1,2</sup>Swiss German University, Tangerang, Indonesia

aldricharyadi11@gmail.com

**Abstract.** Collecting is a unique economic behavior that bridges pure consumption and investment, shaped by many psychological factors. This study examines how personality traits and motivations impact the decision to invest in collectibles, with a particular focus on Trading Card Game (TCG) collectibles. Previous research has explored how personality and motivation influence investment decisions in collectibles as a whole, and commodities such as luxury cars and watches. This study narrows the focus to the TCG community in Greater Jakarta. Data were gathered from 158 respondents, 60 of whom view trading cards as an alternative investment. Binary regression analysis was employed to test the hypothesis, examining the relationship between the dependent and independent variables. The results indicate that the trait of openness negatively affects the decision to invest in trading card games, whereas collector motivation has a positive influence on this decision. These findings contribute to a more nuanced understanding of the factors driving investment in TCG collectibles and suggest that both personality traits and motivational factors play significant roles in investment behavior within this niche market.

**Keywords:** Collector motivation, Big Five Personality, Investment Decision, Collectibles, Trading Card Games, Financial Behavior

---

<sup>1</sup> \*Corresponding Author : Aldrich Aryadi

# 1 Introduction

## 1.1 Background

The trading card game (TCG) market, including titles like Magic: The Gathering, Pokémon, and Yu-Gi-Oh!, has seen substantial growth and significant interest from enthusiasts, investors, and collectors worldwide. In 2021, the market was valued at US\$12.9 billion, with projections suggesting it could reach US\$57.1 billion by 2031, reflecting a compound annual growth rate of 15.9% [1]. This growth is particularly notable in Indonesia's Greater Jakarta Area, where around 30 local game stores have emerged, attracting a diverse audience of students and professionals. The increasing interest in TCGs has made the community's financial behavior and motivations in purchasing and collecting activities increasingly intriguing.

The financial dynamics within the TCG market present an intriguing blend of entertainment, collectibles, and investment, yet they also introduce complexities in

understanding the financial behaviors and investment strategies of participants. In Indonesia, significant TCG transactions occur on platforms like Tokopedia and Facebook, with participants purchasing TCG products for gameplay, collecting, and investment. Comparable to the stock market movement, TCG prices fluctuate due to factors like rotation, rule changes, and rarity. Notable transactions, such as the sale of a Magic: The Gathering Alpha Edition Black Lotus card for \$511,000 in January 2021, highlight the high value of rare cards. Additionally, discussions within the trading community about viewing lower-priced cards as "penny stocks" underscore the investment potential in TCGs. This evolving market underscores the need to comprehend the financial behaviors within the TCG community, particularly regarding their substantial investments in trading cards.

Understanding the financial behaviors and motivations within the Trading Card Game (TCG) community is crucial for several reasons. Firstly, TCGs have evolved into viable investment opportunities beyond traditional gaming or collecting hobbies, attracting individuals looking for diverse investment avenues. Secondly, the TCG community is diverse, comprising players, collectors, investors, and experts, each with unique motivations and financial behaviors. This diversity underscores the importance of tailored guidance and support for this varied demographic. Thirdly, given the dual nature of entertainment and investment in TCGs, participants require some financial literacy. Studying their financial behaviors can illuminate decision-making processes and highlight the need for enhanced financial education. Lastly, understanding market dynamics such as trends, risks, and social influences is crucial for predicting market shifts and interpreting investment decisions within the TCG market. Despite growing interest in TCG finances, there remains a need for comprehensive studies that systematically explore these aspects within the community.

## 1.2 Research Problems

On June 20, 2023, a new set combining Magic: The Gathering and Lord of the Rings was released, featuring a unique serialized One Ring card with Elvish writing. This card was pulled from a booster box in early August 2023 and bought by rapper Post Malone for \$2 million, breaking his previous record of \$800,000 for a Magic: The Gathering Alpha Black Lotus card [2]. In Indonesia, a One Piece TCG featuring characters from the popular manga saw a record-breaking transaction when a signed Monkey D. Luffy parallel card sold for Rp 30,000,000.00 on Facebook Marketplace on August 30, 2023. These high-value transactions highlight the significant financial behavior and motivations driving individuals to spend substantial amounts on collectible cards.

This research investigates the financial behavior of participants within the TCG community concerning TCG cards and products, utilizing the Big Five Personality model established by D.W. Fiske in 1949. It aims to analyze how the personality traits of extraversion, agreeableness, openness, conscientiousness, and neuroticism influence individuals' financial decision-making processes when investing in TCGs.

### 1.3 Hypothesis

Openness refers to the person's persistent desire to learn something new. People with high openness tend to be creative and intellectually curious [3]. The research by J. Kleine, T. Peschke, and N. Wagner finds that investor collector tends to have high openness personality trait [4]. This result is also confirmed by another research by Kleine et al. where openness has a significant impact on collectors [5].

H<sub>1</sub><sup>1</sup>. The trait of openness significantly influences a person's decisions to invest in trading card games.

According to Kleine et al., collectors are associated with low conscientiousness [5]. Previous research by Kleine et al. shows no significance between conscientiousness and investment decisions in collectibles. This indicates the spontaneous personality of collectible investors. This also shows flexibility personality among investor collectors [4].

H<sub>1</sub><sup>2</sup>. The trait of conscientiousness significantly influences a person's decisions to invest in trading card games.

The research conducted by Kleine et al. indicates no significant prevalence of extraversion among collector investors [4]. This is also confirmed by more recent research by Kleine et al. where no significance was found between the extroversion trait and collector [5]. Extraversion is characterized by sociability, talkativeness, and dominance in social contexts [3]. Given that trading card games often involve group play, requiring a certain degree of social interaction, this aligns with the observed high extraversion personality not only among investor collectors but also within the broader TCG community.

H<sub>1</sub><sup>3</sup>. The trait of extraversion significantly influences a person's decisions to invest in trading card games.

Agreeableness reflects the degree to which individuals are cooperative, compassionate, and helpful [3]. According to the research conducted by Kleine et al., investor collectors are linked to a lower level of agreeableness, suggesting that they tend to be less cooperative and more competitive [4]. Though, a recent study by Kleine et al. found no significance between extroversion and collector [5].

H<sub>1</sub><sup>4</sup>. The trait of agreeableness significantly influences a person's decisions to invest in trading card games.

Kleine et al. revealed that collector typically demonstrate low levels of neuroticism, suggesting diminished susceptibility to stressors and heightened emotional stability [5]. In another research by Kleine et al., it is revealed that neuroticism trait does not significantly influence a person to become an investor

collector. This observed trait holds potential relevance within the TCG and collectibles milieu, considering the recreational nature inherent in engaging with collectibles [4].

H<sub>1</sub><sup>5</sup>. The trait of neuroticism significantly influences a person's decisions to invest in trading card games.

Research by Saridakis & Angelidou uses collector motivation as an independent variable to measure the outcome condition of consumer collecting. The study demonstrates that motive configuration is highly informative in determining the outcome of collecting behavior traits. The motivations include adventure, social, gratification, idea, and value motives [6].

H<sub>1</sub><sup>6</sup>. Collector Motivations significantly influences a person's decisions to invest in trading card games.

## **2 Literature Review**

### **2.1 Collectibles as an Alternative Investment**

The research article "Rich Men's Hobby or Question of Personality: Who Considers Collectibles as Alternative Investment?" by Jens Kleine, Thomas Peschke, and Niklas Wagner explores the profiles of 'investor collectors' who view collecting as a strategic investment rather than just a hobby. Based on surveys from 4,042 participants, the study found that about 70% of these investor collectors were men with higher education levels, better incomes, and substantial savings. Among the respondents, 225 explicitly collected for investment, anticipating capital appreciation. Utilizing the Big Five personality model and binary regression analysis, the study revealed that these collectors displayed high openness, showing a readiness to explore new investment opportunities combined with non-financial benefits, as well as greater resilience and self-sufficiency. Investor collector also tend to have lower agreeableness, being competitive in their ways to arrange deals. The findings highlight that these individuals value both financial and non-monetary gains from their collecting activities, offering insights into the interplay between collecting and investment behaviors [4].

### **2.2 Collectors, Consumptions, and Investment**

The 2021 research by Jens Kleine, Thomas Peschke, and Niklas Wagner, titled "Collectors: Personality between Consumption and Investment," categorizes collector motivation into consumption, investment, and pure collecting, each with distinct utility functions. Analyzing data from a survey of 4,042 participants, including 1,601 collectors, the study examines the intersection of collecting as an economic behavior with demographic factors and the Big Five personality traits. The findings indicate that collectors typically possess greater financial means and higher educational levels. Notably, individuals with high Openness and low Neuroticism are more likely to own collectibles, while investor collectors tend to exhibit low Agreeableness and Conscientiousness, suggesting a competitive and spontaneous nature. In contrast, pure collectors display high Conscientiousness, reflecting a

systematic and goal-oriented approach [5].

Overall, the research highlights the significant influence of personality traits on collecting behavior and utility preferences. Collectors exhibit distinct characteristics, with high Openness and low Neuroticism prominently defining their disposition. The study identifies three categories of collector motivation—consumer collectors, investor collectors, and pure collectors—each associated with specific personality traits and economic behaviors. These findings underscore the connection between personality traits and individual utility, offering insights into the diverse motivations driving collecting behavior [5].

### **2.3 Theory of Consumer Collecting**

The research by Saridakis & Angelidou [6] delves into developing a case-based generalizable theory of consumer collecting behavior, with a specific focus on Thai collectors within a toy collector community on Facebook. Analyzing data from 208 respondents, the study explores motives, behavior traits, and demographics using Likert-type scales. Moving beyond traditional regression analysis, the research model advocates for algorithms and a shift from symmetric to asymmetric thinking in data analysis and theory development. Through fuzzy-set qualitative comparative analysis (fsQCA), the study identifies necessary and sufficient conditions influencing specific outcome conditions, assessing solutions based on consistency and coverage values. The findings reveal that motive configurations alone are sufficient to explain various collecting traits with high consistency and coverage scores, while demographic configurations, alone or combined with motives, have limited explanatory power. The study establishes an empirical typology of collectors based on financial and non-financial motives, highlighting the synergistic effects of motives on collecting behavior and proposing an alternative approach to understanding collector types. Specifically, combinations of motives, such as adventure and social motives, are found to play a crucial role in determining different collector types within the proposed typology [6].

### **2.4 Hedonic and Utilitarian Shopping Motivations Case Study Among Portuguese Young Adults**

A study by Cardoso and Pinto [7] analyzes hedonic and utilitarian shopping motivations among Portuguese young adults, using a sample of undergraduate students from three universities in Oporto. Through principal axis factoring, they identified two high-order factors—"Recreational" and "Functional"—and seven dimensions explaining 60.22% of the variance in consumer behavior. The research categorizes consumers into five shopper groups: "Involved shopper," "Pragmatic shopper," "Moderate shopper," "Dynamic shopper," and "Social shopper," examining how these groups differ in their shopping attitudes. Cluster analysis revealed distinct profiles, such as the "Involved shopper," who enjoys both social and discount shopping, and the "Pragmatic shopper," who focuses on efficiency. The study underscores the importance of understanding these motivations for developing targeted marketing strategies and highlights the cross-cultural relevance of hedonic and utilitarian dimensions in consumer behavior [7].

## 2.5 Pricing and Investment in the Classic Car Market

In their 2019 journal article, "My Kingdom for a Horse (or a Classic Car)," Laurs and Renneboog analyze the price determinants and investment performance of classic cars across various categories, ranging from veteran cars to modern classics, using data from 29,000 global auction sales spanning from 1998 to 2017 [8]. Employing a hedonic pricing methodology, the study constructs classic car price indices to enable risk-return analysis. Utilizing a hedonic regression model with variables capturing production period, condition, marque, and other characteristics, the research explains about 70% of the price variation, focusing on the era, displacement, authenticity, and condition of classic cars. The findings reveal an average nominal yearly appreciation rate of 5.63% for classic cars during the examined period, comparable to returns from assets like gold and equities on a risk-adjusted basis. However, certain niche segments such as blue-chip classics, Italian classics, and Ferraris exhibit higher returns but also greater volatility. The study underscores the importance of considering transaction and storage costs, as well as the impact of production era, marque, and condition on classic car values, providing valuable insights into the risk and returns associated with classic car investments [8].

## 2.6 Buyer Motivation in the Arts and Antiques Collectibles Market

The study by Zolfagharian and Cortes [9] investigates the motivations behind consumer purchases of Artwork, Collectibles, and Antiques (ACA), emphasizing tangible art and identifying 16 motives, such as expected price fairness, social acceptability, aesthetics, pleasure, immersion, culture, and harmony. It differentiates between heavy and light consumers, focusing on individual buyers. The research finds that heavy buyers prioritize value preservation and price fairness more than value appreciation and diversifying capacity, indicating potential substitutability between these economic motives. Heavy buyers also score higher on motives related to good cause and harmony. The study aims to bridge economic and non-economic perspectives in understanding ACA consumer behavior [9].

## 2.7 Purchase Intention in Non-Fungible Token Collections

The study conducted by Fortagne and Lis [10] delves into the determinants shaping consumers' purchase intentions regarding non-fungible token collectibles (NFTCs). Employing the Stimulus-Organism-Response (SOR) model, the research identifies several significant factors impacting purchase intention, including perceived functionality, aesthetics, price value, blockchain security, and privacy. Notably, while scarcity exhibits a positive effect on hedonic attitude, its impact on utilitarian attitude is negative. These findings underscore the multifaceted nature of consumer perceptions and attitudes towards NFTCs, providing crucial insights for stakeholders to cater to consumer needs effectively. Moreover, the study suggests avenues for NFT stakeholders to enhance trust and transparency through blockchain technology implementation and explore innovative business models like fractional ownership and smart contracts [10].

Methodologically, Fortagne and Lis [10] operationalize constructs using

established scales adapted to the context of NFT collectibles. Employing structural equation modeling, the study validates the research model, ensuring reliability and validity. The analysis confirms a good fit, with utilitarian and hedonic attitudes identified as significant determinants of NFTC purchase intention. Additionally, mediation analysis sheds light on the indirect effects of various characteristics on purchase intention, offering nuanced insights for both theory and practice in the evolving NFT market. Overall, the research contributes valuable insights into the underlying drivers of consumer behavior towards NFT products, facilitating informed decision-making and strategy formulation in the burgeoning NFT industry [10].

### **3 Research Methodology**

#### **3.1 Scope of Study**

The methodology section of the study encompasses a quantitative approach aimed at elucidating the financial behavior within the Trading Card Game (TCG) community in Greater Jakarta. It outlines the methods for data collection, analysis, and interpretation, which involve surveys and interviews with TCG collectors and investors. The section will detail the rationale behind sample size determination, sampling techniques, and data collection tools, providing insight into the research's scope and target audience. Additionally, it will elaborate on data analysis strategies, including statistical methods and thematic analysis, intended to derive meaningful insights into investment strategies and market perceptions within the TCG community. By documenting the research process comprehensively, this study aims to offer a robust understanding of financial behaviors and perspectives within the Indonesian TCG community.

#### **3.2 Population and Sample Planning**

This research utilized a purposive sampling method. Also known as judgmental or selective sampling, it selects participants based on specific criteria relevant to the research objectives. Assuming the confidence level is 95%, the Z-Score is 1.96, a standard deviation of 0.5, and a margin of error of 0.08, the following formula will be used:

##### **Equation 1: Sample Planning Equation Result**

Therefore, a minimum number of 150 samples were collected.

#### **3.3 Data Sources and Collection**

The study adopts a comprehensive approach by integrating both primary and secondary data sources. Primary data is gathered through methods like surveys and interviews, while secondary data is derived from existing studies, literature, and databases, enhancing the depth of understanding of the research topic.



The questionnaires utilized in this research amalgamate inquiries from previous studies to comprehensively evaluate various aspects of respondents' traits and motivations. For assessing the Big Five Personality Traits, the author adopts the Big Five Inventory-SOEP (BFI-S) developed by Schupp and Gerlitz (2008), previously utilized by Kleine et al. [11]. These questionnaires, translated into Indonesian using Ramdhani's work, consisted of 15 questions, 7 Likert scale probing respondents' Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism [12]. To gauge investment decision traits, the author follows Kleine et al.'s methodology, focusing on a binary variable to classify respondents as investor collectors or otherwise [5]. Motivations behind collecting activities are assessed using questionnaires from Saridakis and Angelidou's study [6], originally developed by Arnold and Reynolds [13] and Formanek [14], which delve into adventure, social, gratification, idea, and value motives. Additionally, screening questions are included to ensure the respondents' suitability, while background information aids in further analysis, with incentives like giveaways provided to encourage participation [13].

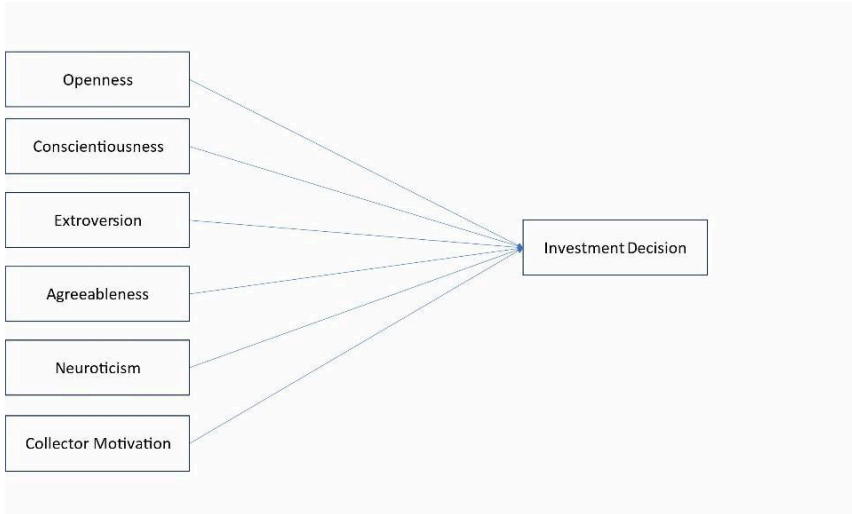
The data collection process for this study will involve distributing questionnaires through online platforms, primarily targeting the trading card collector and investor community in Indonesia, with a focus on the Greater Jakarta Area. Utilizing social media channels and messaging applications such as WhatsApp, Instagram, and Facebook, the research aims to engage with this vibrant community, leveraging dedicated online groups to reach and gather insights from participants.

### **3.4 Research Framework**

In this study, the dependent variables are the Big Five Personality Traits, namely Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism, as well as collector motivation. Each of these traits and motivations plays a crucial role in shaping individuals' behavior, particularly in their decision-making processes regarding investment in trading card games. Openness reflects curiosity and a willingness to explore new experiences, while Conscientiousness pertains to traits like organization and responsibility. Extroversion relates to sociability and outgoingness, whereas Agreeableness involves considerations of kindness and cooperativeness. Neuroticism reflects aspects of anxiety and susceptibility to stress. Additionally, collector motivation is divided into adventure, social, gratification, idea, and value motives, each influencing individuals' propensity to invest in trading card games.

In experimental research, the dependent variable is manipulated to understand its effects independently of other factors. In this study, the independent variable will be the "Decision to Invest in Trading Card Games." By exploring how the Big Five Personality Traits and collector motivations influence this decision, the research aims to uncover the nuanced dynamics at play within the trading card game market. This investigation seeks to elucidate the interplay between individual personality traits, collector motivations, and investment behaviors, shedding light on the factors driving investment decisions in niche markets such as trading card games.

S



**Figure 1:** Research Framework

### 3.5 Data Analysis

#### 3.5.1. Correlation

Correlation in statistics quantifies the relationship between two variables, revealing how changes in one variable correspond to changes in another. A positive correlation suggests that an increase in one variable typically accompanies an increase in the other, whereas a negative correlation indicates that an increase in one variable is often associated with a decrease in the other.

#### 3.5.2. Regression Analysis

A collection of statistical techniques called regression analysis is used to estimate the relationships between a dependent variable and one or more independent variables [14]. It helps predict the value of the dependent variable based on the values of the independent variables, enabling understanding, forecasting, and making inferences about the relationship between variables.

## 4 Result and Discussion

### 4.1 Respondents Gathered

A questionnaire was distributed within the Trading Card Games (TCG) community in the Greater Jakarta Area, primarily through platforms like Facebook and WhatsApp groups. To ensure relevance, a screening question was included, resulting in 158 out of 165 respondents passing this initial filter. The questionnaire collected demographic data, including age, gender, marital status, and experience

with TCGs, providing a comprehensive profile of the respondents within the targeted community.

**Table 1:** Respondent's Profile

PERSONAL TRAITS AND MOTIVATION IMPACT ON COLLECTIBLES AS AN ALTERNATIVE INVESTMENT: A CASE STUDY OF TRADING CARD GAME COMMUNITY IN GREATER JAKARTA				
Respondent's Profile				
Total Respondents: 158				
No	Demography	Characteristics	Frequency	Percentage
1	Age	<18	6	3.80%
		18 - 24	67	42.40%
		25 - 39	80	50.60%
		40 - 54	5	3.20%
		55 - 65	0	0.00%
		>65	0	0.00%
2	Gender	Male	155	98.10%
		Female	3	1.90%
3	Marital Status	Single	135	85.44%
		Married	21	13.29%
		Others	2	1.27%
4	Active TCG (Select 1 or more)	Magic the Gathering	78	49.37%
		One Piece TCG	27	17.09%
		Cardfight Vanguard	78	49.37%
		Shadowverse Evolve	49	31.01%
		Pokemon TCG	42	26.58%
		Yu-Gi-Oh!	27	17.09%
		Flesh and Blood	5	3.16%
		Others	30	18.99%
5	Years of Involvement in TCG	<6 Months	18	11.39%
		6 Months - 1 Year	15	9.49%
		1 - 2 Years	16	10.13%
		2 - 5 Years	34	21.52%
		5 - 8 Years	20	12.66%
		8 - 10 Years	18	11.39%
>10 Years	37	23.42%		
6	Do you invest in Trading Card Games collection?	Yes	60	37.97%
		No	98	62.03%

## 4.2 Binary Regression Analysis

**Table 2: Binary Regression Result Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)	
							Lower	Upper
Step 1 <sup>a</sup>								
Constant	-.515	.219	5.539	1	.019	.597	.389	.917
Openness	.267	.218	1.500	1	.221	1.306	.852	2.001
Extroversion	.302	.190	2.507	1	.113	1.352	.931	1.964
Agreeableness	-.270	.200	1.815	1	.178	.764	.516	1.131
Neuroticism	-.089	.178	.253	1	.615	.914	.646	1.295
Collector Motivation	1.410	.244	33.420	1	.000	4.097	2.540	6.609
Constant	-6.264	2.048	9.356	1	.002	.002		

a. Variable(s) entered on step 1: O, C, E, A, N, CM.

The analysis of the variables in the study reveals significant findings regarding their impact on investment decisions within the Trading Card Games (TCG) community. Notably, "Openness" demonstrates a negative relationship with investment decisions, with a significant value indicating its influence. Conversely, while "Collector Motivation" shows a positive relationship with investment decisions, it exhibits substantial significance, supporting the hypothesis. However, "Conscientiousness," "Extroversion," "Agreeableness," and "Neuroticism" do not display significant relationships with investment decisions, leading to the acceptance of the null hypothesis for these variables. These results contribute to understanding the nuanced influences of personality traits and collector motivation on investment behaviors within the TCG community.

## 5. Discussion

### 5.1 Openness

The study reveals a significant negative correlation between openness and investment decisions in trading card games (TCG), indicated by a p-value of 0.019 and an exp beta score of 0.597. This suggests that individuals with high openness are less likely to invest in TCGs, a finding that contrasts with previous research by Kleine et al. (2019), which found a positive correlation between openness and investment in collectibles [4]. The negative correlation in this study may be attributed to the older age group (25-39) of the respondents, who are likely facing life stages that demand financial stability and prudence, such as career advancement and family planning. These individuals might prefer traditional, secure investments over speculative ones like TCGs.

Additionally, the TCG community in Greater Jakarta shows that individuals with high openness are drawn to the cultural, artistic, and narrative aspects of trading cards rather than their financial value. They engage with TCGs as a form of cultural enrichment and personal enjoyment, emphasizing the hobby's storytelling and historical significance over monetary gain. This inclination towards immersive experiences and selective investment in cards with personal or artistic value further explains the reduced propensity for profit-driven investments among highly open individuals.

### *5.2 Conscientiousness*

The study finds that conscientiousness does not significantly influence investment decisions in trading card games, as evidenced by a p-value of 0.221. This aligns with previous research by Kleine et al. (2019) and more recent studies by Kleine et al. (2021) and Lai (2019), all of which show no significant correlation between conscientiousness and investment in collectibles [4],[5],[16].

Conscientious individuals typically favor structured, reliable, and low-risk investments, which contrasts with the fluctuating values and uncertainties of the trading card market. The lack of formal investment frameworks in trading cards also deters conscientious individuals, who prioritize practicality and stability, making traditional investments more appealing than the subjective and volatile nature of trading card collectibles.

### *5.3 Extroversion*

Extroversion does not significantly impact investment decisions in trading card games, as indicated by a p-value of 0.113. This finding is consistent with previous research by Kleine et al. [4], [5], and Lai [16], all of which failed to establish a significant relationship between extroversion and investment behavior in collectibles. The diverse composition of the trading card game (TCG) community, encompassing individuals from various demographics and backgrounds, contributes to this variability in extroversion levels. While some participants may engage in TCGs for social interactions, others focus more on gameplay mechanics or collecting, diminishing the influence of extroversion on investment decisions across the community.

The demographic diversity within the TCG community highlights how different motivations and preferences among players, collectors, and hobbyists shape their engagement with trading cards. This spectrum of extroversion levels underscores the challenge of predicting investment behavior solely based on this personality trait. Consequently, extroversion's lack of significant influence on investment decisions in TCGs reflects the multifaceted nature of motivations within the community, where social interaction is just one aspect among many driving factors.

### *5.4 Agreeableness*

The influence of agreeableness on investment decisions in trading card games was found to be non-significant with a p-value of 0.178. This contrasts with the

earlier findings by Kleine et al., which suggested a negative relationship between agreeableness and investment in collectibles, albeit with varying statistical significance across studies [4]. Recent research by Kleine et al. [5] and Lai [16] similarly concluded that agreeableness does not significantly influence engagement in collecting activities or investment intentions. Despite its lack of correlation with investment decisions, factors such as financial considerations, sentimental attachment to artworks, and personal interests in cards themselves appear to drive behavior within the trading card community more than agreeableness.

The diversity among collectors and investors in the trading card community underscores why agreeableness may not be a pivotal factor in guiding investment behavior. Motivations vary widely, ranging from financial gain to personal enjoyment and nostalgic value, eclipsing the influence of agreeableness as a determinant of investment decisions. This multifaceted landscape highlights the complexity of factors at play in the trading card market, where individual preferences and motivations significantly shape investment choices.

### *5.5 Neuroticism*

The research findings indicate that neuroticism does not significantly influence investment decisions in trading card games, as evidenced by a non-significant p-value of 0.615. This aligns with previous studies by Kleine et al. (2019) and Lai (2019), which similarly found no substantial correlation between neuroticism and investment intentions or subjective norms related to investment behavior. Neurotic individuals, characterized by emotional instability and anxiety, might approach investments cautiously due to fear of financial loss [4],[16]. However, within the trading card community, these traits manifest diversely, leading some individuals to view card collecting as a source of emotional comfort and distraction rather than a high-stakes investment opportunity. This diversity of motivations and coping mechanisms associated with neuroticism underscores why this trait does not emerge as a significant predictor of investment decisions in the context of trading card games.

### *5.6 Collector Motivation*

The research results indicate that collector motivation significantly influences people's decisions to invest in trading card games. The binary regression analysis yielded a p-value of 0.00, highlighting a strong significance between these variables. Additionally, the research found a positive relationship between collector motivation and investment decisions, evidenced by a beta value of 4.097. This suggests that as collector motivation increases, the likelihood of investing in trading card games also rises substantially. This result is comparable to the previous research by Saridakis & Angelidou where motive configuration effectively and sufficiently explains the different types of collectors [6].

Indicators such as adventure, social interaction, gratification, idea, and value motives play substantial roles in driving individuals towards investing in trading cards. Collectors often seek the thrill of discovering rare cards (adventure), the enjoyment of connecting with like-minded enthusiasts (social), the personal

satisfaction of building a unique collection (gratification), and the appreciation for the creativity and themes represented by the cards (idea). Additionally, while the value motive shows a diversified score, reflecting differing views on the financial aspect of trading cards, it still contributes significantly to the investment decision for those who see TCGs as a potentially profitable venture. This combination of various yet strong motivational factors collectively drives the significant positive relationship between collector motivation and investment decisions in trading cards.

## 6. Conclusion and Recommendation

This study explores the influence of personality traits and collector motivation on investment decisions in the trading card games (TCG) community, using a quantitative approach to analyze the roles of five personality traits (Openness, Conscientiousness, Extroversion, Agreeableness, Neuroticism) and collector motivation. The study reveals that while openness is negatively correlated with investment decisions, diverging from previous research, collector motivation shows a positive correlation, aligning with earlier findings. These results highlight the complex dynamics within the TCG community, influenced by demographic factors and the unique nature of TCGs. This study finds that collector motivation (practically value motive) positively impacts a person's decision to invest in TCG. This can be used by the TCG industry in the future to tailor specific products that pushes card value to appeal towards the investor collector. Additionally, this study can also enrich the community when making decisions to invest (by purchasing) in trading card game assets. Despite limitations such as the small sample size from Greater Jakarta, recommendations for future research include expanding geographical coverage and focusing on specific TCG titles to enhance the robustness and accuracy of findings, thus providing deeper insights into the interplay between personality traits, collector motivation, and investment decisions.

## 7. References

- [1] Business Research, "Collectible Card Game Market Size, Share and Forecast Report," *www.businessresearchinsights.com*, 2023.  
Available:  
<https://www.businessresearchinsights.com/market-reports/collectible-card-game-market-101837>
- [2] D. Jones, "Post Malone bought Magic: The Gathering's 'One Ring' card valued as high as \$2 million," *NPR*, Aug. 03, 2023.  
Available:  
<https://www.npr.org/2023/08/03/1191841285/post-malone-bought-magic-gathering-mtg-one-ring-card-million>
- [3] R. R. McCrae, "The Five-Factor Model of personality traits: consensus and controversy," *The Cambridge Handbook of Personality Psychology*, pp. 148–161, 2009, doi: <https://doi.org/10.1017/cbo9780511596544.012>
- [4] J. Kleine, T. Peschke, and N. Wagner, "Rich men's hobby or question of personality: Who considers collectibles as alternative investment?," *Finance Research Letters*, vol. 35, p. 101307, Jul. 2019, doi: <https://doi.org/10.1016/j.frl.2019.101307>.

Available:

<https://www.sciencedirect.com/science/article/abs/pii/S1544612319309857>.

[Accessed: Apr. 16, 2021]

- [5] J. Kleine, T. Peschke, and N. Wagner, “Collectors: Personality between consumption and investment,” *Journal of Behavioral and Experimental Finance*, vol. 32, p. 100566, Dec. 2021, doi: <https://doi.org/10.1016/j.jbef.2021.100566>
- [6] C. Saridakis and S. Angelidou, “A case-based generalizable theory of consumer collecting,” *European Journal of Marketing*, vol. 52, no. 5/6, pp. 946–972, May 2018, doi: <https://doi.org/10.1108/ejm-10-2016-0570>
- [7] P. Ribeiro Cardoso and S. Carvalho Pinto, “Hedonic and utilitarian shopping motivations among Portuguese young adult consumers,” *International Journal of Retail & Distribution Management*, vol. 38, no. 7, pp. 538–558, Jun. 2010, doi: <https://doi.org/10.1108/09590551011052124>
- [8] D. Laurs and L. Renneboog, “My kingdom for a horse (or a classic car),” *Journal of International Financial Markets, Institutions and Money*, vol. 58, pp. 184–207, Jan. 2019, doi: <https://doi.org/10.1016/j.intfin.2018.10.002>
- [9] M. A. Zolfagharian and A. Cortes, “Motives For Purchasing Artwork, Collectibles And Antiques,” *Journal of Business & Economics Research (JBBER)*, vol. 9, no. 4, p. 27, Apr. 2011, doi: <https://doi.org/10.19030/jber.v9i4.4207>
- [10] M. A. Fortagne and B. Lis, “Determinants of the purchase intention of non fungible token collectibles,” *Journal of Consumer Behaviour*, Oct. 2023, doi: <https://doi.org/10.1002/cb.2264>
- [11] J. Schupp and J. Y. Gerlitz, “Big Five Inventory-SOEP (BFI-S). ,” *Zusammenstellung Sozialwissenschaftlicher Items Und Skalen (ZIS)*, 2008, doi: <https://doi.org/10.6102/zis54>
- [12] N. Ramdhani, “Adaptasi Bahasa dan Budaya dari Skala Kepribadian Big Five,” *Jurnal Psikologi*, vol. 39, no. 2, pp. 189–205, 2012, doi: <https://doi.org/10.22146/jpsi.6986>  
Available: <https://journal.ugm.ac.id/jpsi/article/view/6986>
- [13] M. J. Arnold and K. E. Reynolds, “Hedonic shopping motivations,” *Journal of Retailing*, vol. 79, no. 2, pp. 77–95, Jan. 2003, doi: [https://doi.org/10.1016/S0022-4359\(03\)00007-1](https://doi.org/10.1016/S0022-4359(03)00007-1)
- [14] R. Formanek, “Why They Collect: Collectors Reveal Their Motivations,” *Journal of Social Behavior and Personality*, vol. 6, no. 6, p. 275, Jan. 1991.
- [15] S. Taylor, “Regression Analysis,” *Corporate Finance Institute*, Dec. 19, 2023. Available: <https://corporatefinanceinstitute.com/resources/data-science/regression-analysis/>
- [16] C.-P. Lai, “Personality Traits and Stock Investment of Individuals,” *Sustainability*, vol. 11, no. 19, p. 5474, Oct. 2019, doi: <https://doi.org/10.3390/su11195474>



**Open Access** This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

