DO PERSONALITY TRAITS AFFECT SUSTAINABLE INVESTMENT DECISION? THE MEDIATOR ROLE OF GREEN CONSUMPTION

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ETHICAL DECLARATION

I hereby declare that I am the sole author of this thesis and that I have conducted my work in accordance with academic rules and ethical behaviour at every stage from the planning of the thesis to its defence. I confirm that I have cited all ideas, information and findings that are not specific to my study, as required by the code of ethical behaviour, and that all statements not cited are my own.

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ABSTRACT

DO PERSONALITY TRAITS AFFECT SUSTAINABLE INVESTMENT DECISION? THE MEDIATOR ROLE OF GREEN CONSUMPTION

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Global warming is a rapidly growing global issue, and it requires the involvement of all parties, including governments, regulatory agencies, financial intermediaries, consumers and investors, to be part of the solution. To combat global warming, it is crucial to understand the constraints and determinants of everyday sustainable decisions, which are influenced by human decision-making processes. One of the most comprehensive concepts explaining the underlying reasons for human decisions is personality traits. This study focuses on how the Big 5 Personality Traits affect every day sustainable consumption and investment decisions. It claims that personality traits influence sustainable investment decisions through green consumption as a mediator. The sample is a group of 417 students in Izmir. A simple mediation analysis using Hayes' Process Macro in SPSS was conducted to examine the indirect effect of personality traits on sustainable investment commitment, with green consumption attitude serving as the mediator variable. While the existing literature explores the effects of consumption choices and personality traits on sustainable investment

decisions, this study addresses a critical gap by investigating the mediating role of green consumption. By considering personality traits as predictors, the study elucidates both the direct and indirect effects of these traits on sustainable investment decisions, mediated through green consumption attitude. Specifically, the findings highlight the significance of agreeableness in shaping green consumption attitudes, which in turn affects sustainable investment commitment. This nuanced understanding provides valuable insights for regulatory authorities, portfolio managers and individual investors by emphasizing the critical role of personality traits and sustainability commitment, particularly through green consumption.

Keywords: Agreeableness, Big 5 Personality Traits, Green Consumption, Mediation Analysis, Sustainable Investment.

ÖZET

KİŞİLİK ÖZELLİKLERİ SÜRDÜRÜLEBİLİR YATIRIM KARARINI ETKİLER Mİ? YEŞİL TÜKETİMİN ARACI ROLÜ

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Küresel ısınma hızla büyüyen küresel bir sorundur ve çözüm hükümetler, düzenleyici kurumlar, finansal aracılar, tüketiciler ve yatırımcılar dahil tüm tarafların katılımını gerektirir. Küresel ısınmayla mücadele etmek için, insanın karar verme süreçlerinden etkilenen günlük sürdürülebilir kararların kısıtlarını ve belirleyicilerini anlamak çok önemlidir. İnsan kararlarının altında yatan nedenleri açıklayan en kapsamlı kavramlardan biri kişilik özellikleridir. Bu çalışma, Büyük 5 Kişilik Özelliğinin günlük sürdürülebilir tüketim ve yatırım kararlarını nasıl etkilediğine odaklanmaktadır. Kişilik özelliklerinin yeşil tüketim yoluyla sürdürülebilir yatırım kararlarını aracı olarak etkilediğini iddia ediyor. Örneklem Türkiye'nin İzmir ilindeki öğrencilerden oluşan 417 kişilik bir gruptur. Kişilik özelliklerinin sürdürülebilir yatırım bağlılığı üzerindeki dolaylı etkisini incelemek için SPSS'de Hayes' Süreç Makrosu kullanılarak basit bir aracılık analizi yapıldı ve yeşil tüketim tutumu aracı değişken olarak görev yaptı. Mevcut literatür tüketim tercihleri ve kişilik özelliklerinin sürdürülebilir yatırım kararları üzerindeki etkilerini araştırırken, bu çalışma yeşil

tüketimin aracılık rolünü araştırarak kritik bir boşluğa değinmektedir. Kişilik özelliklerini belirleyici olarak ele alan çalışma, bu özelliklerin yeşil tüketim tutumunun aracılık ettiği sürdürülebilir yatırım kararları üzerindeki hem doğrudan hem de dolaylı etkilerini açıklamaktadır. Özellikle bulgular, yeşil tüketim tutumlarını şekillendirmede uyumluluğun önemini vurguluyor ve bu da sürdürülebilir yatırım bağlılığını etkiliyor. Bu incelikli anlayış, özellikle yeşil tüketim yoluyla kişilik özelliklerinin ve sürdürülebilirlik taahhüdünün kritik rolünü vurgulayarak düzenleyici otoritelere, portföy yöneticilerine ve bireysel yatırımcılara değerli bilgiler sağlar.

Anahtar Kelimeler: Aracılık Analizi, Büyük 5 Kişilik Özelliği, Sürdürülebilir Yatırım, Uyumluluk, Yeşil Tüketim.

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LIST OF ABBREVIATION

AGG: Agreeableness

CON: Conscientiousness

ESG: Environmental, Social, Governance

EXT: Extraversion

GCA: Green Consumption Attitude

GCB: Green Consumption Behavior

GCI: Green Consumption Intention

IE: Indirect Effect

INL: Intellect

NEU: Neuroticism

PEB: Pro-environmental Behavior

SID: Sustainable Investment Decision

CHAPTER 1: INTRODUCTION

In recent years, environmental risks have escalated, posing critical problems globally. Industrial activities have inflicted damage on our natural resources, essential for sustaining life, bringing them to the brink of depletion. Key detrimental activities include urbanization, population growth, environmental pollution, excessive water consumption and the use of fossil fuels. Additionally, natural disasters, epidemics, climate change and forest fires further harm the environment (White and Heckenberg, 2014; Bocken and Short, 2021). Adopting product categories that are environmentally friendly, possessing quality and functional features, benefitting both businesses and consumers in the long term and protecting the ecosystem, has become imperative. Environmental considerations, emerging post-1960s, have evolved into vital parameters for contemporary businesses. The green movement, encompassing technology, education, health and tourism, holds promise for future generations, permeating all aspects of life. With conscious consumers driving selective consumption habits, green consumption has found its place in daily life.

Green consumption hinges on consumers' purchasing intentions, behaviors, economic expectations, environmental impacts and internal and external environmental principles, encompassing home life and travel environments. Businesses supporting green consumption prioritize producing goods and services that ensure a quality life for future generations, employing fewer resources, less energy and generating less waste. The overarching aim of green consumption is to safeguard the health of all living things in the global world and the natural systems supporting life. This new consumption approach creates a market segment for environmentally conscious consumers. Being recognized as a green company enhances public perception, leading to increased sales and stock prices. However, merely eco-labeling is insufficient to be considered a green business; active support for the green movement in daily operations is also essential (Golubevaité, 2008). The phenomenon of sustainable consumption means "taking into account the sensitivity of the ecological balance, minimizing natural resources, waste emissions and environmental pollutants, without taking away the right of future generations to meet their needs, as well as products and products that meet the basic needs of today's generations and provide a better standard of living

for people." It is defined as "use of services" (Seyfang, 2004).

Because of the direct effects they have on the environment, consumption and investment are crucial for Pro-environmental Behavior (PEB). Sustainable consumption lessens waste and the depletion of resources, while green investments provide funding for ecologically beneficial initiatives. Effective policy must comprehend the factors that influence these choices. Dastrup et al. (2012) discovered, for instance, that homeowners' decisions to install solar panels are heavily influenced by financial incentives and Welsch and Kühling (2009) emphasized the significance of social interactions on the adoption of sustainable energy.

Sustainable behavior is also influenced by social and psychological variables. Studies indicate that judgments about investments and consumption are influenced by psychological patterns and beliefs (Axsen et al., 2012; Riedl and Smeets, 2017). The social milieu, institutional limitations and the infrastructure that is already in place— such as recycling facilities and public transportation—all have an impact (Blake, 1999). Sustainable behavior can be promoted by financial incentives such as pollution levies and subsidies for renewable energy. Thus, policymakers can encourage greater sustainability by focusing on psychological and economic factors.

Using mediation modeling, the thesis investigates whether the Big Five personality traits contribute to the explanation of why some people, even with essentially comparable demographics, choose to forego from return on stocks for the sake of investing in sustainable stocks while others do not. In this thesis, the term 'investment' refers to the financial investment decisions made by individual investors. The term 'sustainable investment decision' denotes the choice of individual financial decision-makers to invest their saving in the sustainable alternatives of company stocks.

After the study, financial planners can create products that better fit the understanding and lifestyle of the younger generation by being aware of how specific personality factors influence financial decision-making. The present study is of significant importance for financial planners and investment managers for several reasons. Firstly, it focuses on university students in Izmir, Turkey, who are poised to become future investors and decision-makers in the financial world. Understanding their attitudes and

behaviors towards sustainable investment is crucial for financial planners and investment managers to tailor their strategies and products to meet the evolving demands of this demographic.

Moreover, the study acknowledges that these students, due to their young and educated profiles, are likely to have higher awareness and interest in sustainability compared to other age groups. Younger and better educated customers are better able to comprehend the value of environmentally friendly consumption as well as the negative social and environmental effects of unsustainable consumption (Ottman et al., 2006; Yadav and Pathak, 2017). According to Gomes et al. (2023), their willingness to pay extra is positively impacted by environmental concerns, green future estimates and green perceived quality. Perceived benefits, however, had less of an effect. The study highlights the need of taking these aspects into account for Generation Z-focused green marketing strategies, emphasizing how perceived quality and environmental awareness influence consumers' green consumption habits. Generation Z represents a sizable portion of the market for many eco-friendly product categories and is actively involved in promoting sustainable manufacturing and consumption practices. (Hoefel and Francis, 2018b). As it is proved in the literature, Z is more open to green consumption and this is an advantage for this study. Digital natives, often known as Generation Z, have distinct consumption habits, especially when it comes to their love of eco-friendly and sustainable goods. This generation's beliefs for social justice, equality and the environment influence their willingness to spend more for environmentally friendly goods. This demographic represents a growing segment of socially conscious investors who prioritize environmental and social factors in their investment decisions. This understanding can inform the development of targeted marketing strategies and investment products that resonate with this demographic.

Online survey is used to collect data from 417 college students who is studying in İzmir. The questionnaires include big-5 personality traits scale, green consumption attitude-intention-behavior questions and sustainable investment decision question as well as demographics. According to the result of the study there is no relationship between gender, income level, investment experience and source of the income and sustainable investment decision. Also, the study showed that while direct relationship between personality traits and sustainable investment decision does not exist, indirect

relationship through green consumption attitude does and statistically significant. Thus, by studying the relationship between personality traits, green consumption attitude and sustainable investment decision-making, the study offers insights that can help financial planners and investment managers better understand the drivers behind sustainable investment choices.

Overall, the study's focus on university students in Izmir not only provides valuable insights into the attitudes and behaviors of future investors but also offers practical implications for financial planners and investment managers looking to tap into the growing market for sustainable investments. In the following sections, the thesis will include current literature, theoretical framework, methodology, results and discussion and conclusion.

CHAPTER 2: LITERATURE REVIEW

There are many studies examining the effects of personality traits on investment and consumption behavior. When it comes to sustainability, the number of studies examining both investment and consumption decisions is countless. In this chapter, the most effective studies previously conducted on these issues will be explained in detail together with their guiding results.

2.1. Big 5 Personality Traits and Sustainable Investment

Roberts (2009) described personality traits as relatively stable thought, feeling and behavior patterns that indicate a propensity to act in particular ways when faced with particular situations. The results of Komarraju et al. (2009) show that extraversion and conscientiousness are associated with extrinsic motivation, but openness and conscientiousness strongly predict intrinsic motivation. Amotivation is inversely correlated with conscientiousness and agreeableness. The "Big Five" model, which originated in psychology and is now widely utilized in economic studies, is the main framework for evaluating personality traits (McCrae and John, 1992). Research by Gerhard et al. (2018) demonstrates that a comprehensive strategy which takes into account personality traits, cognitive abilities (such as financial literacy) and individual attitudes explains saving behavior more well than approaches that merely take into account a small number of relevant components.

Personality traits stand out as a meaningful variable when examining sustainable investments. There are studies (e.g., Conlin et al., 2015; Bucciol and Zarri, 2017; Gerhard et al., 2018), emphasizing the association between personality traits and individual financial behavior. However, according to Gutsch et al. (2023), there is no proof that personality traits influence sustainable investing behavior. Thus, current research has not been able to come to a consensus on which individual traits are most closely associated with saving behavior and how they are connected, despite multiple attempts to use the Big Five to predict investing behaviors (Gerhard et al., 2018). There are a number of reasons why opinions regarding which of the Big Five personality qualities influence particular investing or consumption behaviors are divided. First of

all, human behavior is intrinsically complicated and impacted by a wide range of variables other than personality traits, including education and socioeconomic background (Gathergood, 2012). Second, research results are impacted by measurement and methodological variability, which includes variations in sample populations and measuring instruments (Credé, Harms, Niehorster and Gaye-Valentine, 2012). Thirdly, cultural perspectives on money and other contextual variations are important (Hofstede, 2001). Fourthly, because different people may react differently depending on the combination of qualities, the interaction of traits might make prediction power more difficult (Yao and Curl, 2011).

Furthermore, the association between personality and financial behavior is mediated by emotional and motivational elements, such as personal objectives and emotional states (Moffitt et al., 2011). Situational factors can momentarily outweigh personality-based tendencies, such as recent financial events (Thaler and Sunstein, 2009). Variability in findings is also a result of measurement inconsistencies brought on by different scales and tools (Gosling, Rentfrow and Swann, 2003). The literature is further distorted by publication bias, which gives the impression of inconsistency (Franco, Malhotra and Simonovits, 2014). Finally, there are continual changes in understanding due to the constant evolution of theories and models of personality. (Roberts and Mroczek, 2008). Consequently, personality qualities by themselves do not explain the lack of agreement; rather, a mixture of these intricate and interrelated elements do, which emphasizes how challenging it is to pinpoint the precise influence of personality features on decisions about consumption and saving.

On the other hand, examining the relationship between personality traits and sustainable investment indicates that Agreeableness, Conscientiousness and Neuroticism negatively affect attitudes toward Socially Responsible Investing (SRI), while Openness and Extraversion positively influence these attitudes (Rathi and Geetha, 2023). On the other hand, Sontic et al. (2017) discovered that risk preferences and environmental attitudes are two ways in which personality traits indirectly influence expensive, one-time investments in energy efficiency. Following paragraphs discuss the literature about Big 5 Personality traits and sustainable investments.

Extraversion is the extent to which an individual engages with others and their

environment, as well as their tendency to seek out social interaction, excitement and foster positive relationships. This trait encompasses an individual's friendliness, assertiveness and emotional expressiveness. Extraversion directs individuals' focus toward the external world, as noted by Sontic et al. (2017). Individuals who score high in Extraversion typically exhibit traits such as assertiveness, ambition, energy and optimism. However, the facets of Extraversion have shown inconsistent associations with pro-environmental attitudes and behaviors, according to Boeve-de Pauw et al. (2011). While the socially-oriented aspects of Extraversion have been linked to pro-environmental behaviors, they have not consistently correlated with pro-environmental attitudes, as indicated by Brick and Lewis (2016). Previous analyses, including those by Sontic et al. (2017) and Milfont and Sibley (2012), have found either minimal or no significant impact of Extraversion on pro-environmental attitudes. Therefore, no clear relationship between Extraversion and environmental concern is hypothesized. However, in this study, in order to consider all factors of personality traits together we will also take into account extraversion and include our analysis because we hypothesize that personality traits have significant impact on sustainable investment decision. Results for the extraversion in this essence also will be reported in the discussion session by referring the related literature.

Agreeableness refers to the inclination to maintain relationships and interact cooperatively with others. It signifies a willingness to collaborate and accept other people. Individuals characterized by a high level of agreeableness typically exhibit cooperative tendencies and prioritize group interests over their own. Conversely, those with low agreeableness tend to display antisocial behaviors and a self-centered orientation. (Sontic et al., 2017). According to Markowitz et al. (2012), within the domain of Agreeableness, facets related to empathy and altruism stand out as particularly significant factors influencing the connection between agreeableness and pro-environmental attitudes and actions. Soutter et al. (2020) further suggests that addressing environmental challenges often demands sacrifices that may not directly benefit oneself, underscoring the importance of empathizing with future generations, other species and the broader ecosystem. According to Nyhus and Webley (2001), agreeableness is linked to pro-social behavior toward others, which can lead to increased charitable giving. As a result, individuals with high agreeableness may have less money available for personal savings. This perspective is supported by other

studies, which have found that agreeableness is negatively associated with stock market participation and household savings (e.g., Nyhus and Webley, 2001; Gerhard et al., 2018).

According to Markowitz et al. (2012), agreeableness and pro-environmental views and behaviors are correlated in part because of empathy and altruism. Furthermore, pro-environmental motives have repeatedly been connected to altruism, a core trait of agreeableness (Klein, 2017). According to Nga and Yien (2013), there is a positive correlation between agreeableness and the desire for sustainable investment. Individuals with high agreeableness have a tendency to trust other people's opinions and knowledge more than their own, suggesting that they accept information from others without giving it much thought (Costa and McCrae, 1997; Aren and Hamamci, 2020). Research has demonstrated a negative correlation between agreeableness and risky behavior. Such an investor, for example, would find it difficult to make their own investment decisions and instead blindly rely on the advice of a financial expert (Pak and Mahmood, 2015). Though it is difficult to predict whether agreeable investors would be prepared to pay for a higher ESG rating, some data has challenged prior conclusions. Björnström Hellbom and Jigholm, (2021) have found that there is negative value for agreeableness to pay extra for the ESG rating fund, which was seen as a refusal to forgo any benefits.

People who score highly on conscientiousness are typically responsible and driven to succeed. However, this kind of success is not at chance-based settings like gambling. Instead, the responsible people work toward achieving their objectives under supervision (Sontic et al., 2017). Instead of depending on luck or superstitions, conscientious investors do extensive research before making any investing selections. They might choose their investments more carefully because of their intense desire for success (Nga and Yien, 2013). People that are more conscientious, emotionally stable and receptive to new experiences are more likely to be aware of sustainable investments. Since sustainable investing is a relatively new concept, it is easy to see how it correlates with being open to new experiences (Gutsche et al., 2023).

Neuroticism, which is the opposite of a stable personality, denotes emotional instability and the tendency to experience negative emotions. It involves a

predisposition to feel and expect to feel bad. (Marcus and Roy, 2019). When someone exhibits neuroticism, it indicates that they are more likely than others to have mood swings, emotional outbursts, or to become easily agitated. This characteristic is linked to financial hardship, which lowers satisfaction levels and compulsive buying behavior (Oehler et al., 2018; Fachrudin et al., 2022). According to Migliore (2011), neuroticism is defined by emotional instability and is linked to higher-than-normal levels of stress and anxiety. People with high neuroticism frequently display characteristics including moodiness, impulsivity, insecurity and a short fuse (McCrae and Costa, 1997). According to Busic et al. (2017), neuroticism and agreeableness have a negative effect on the likelihood of investing in EE through risk preferences, while extraversion and openness to experience have a positive effect.

Being open to experience is linked to a greater readiness to try new things, which almost always include risk. (Sontic et al., 2017). Two major aspects of Openness, flexibility and abstract thinking, are needed to predict long-term environmental effects, claim Brick and Lewis (2016). This causal association is supported by a number of empirical research that show a positive correlation between Openness and environmental concern. (Goldberg et al., 2012; Zettler et al., 2020). According to Markowitz et al. (2012), the aspects of openness typically have the largest correlations with pro-environmental beliefs and actions. Intellectual curiosity is one facet of openness that seems to be regularly linked to pro-environmental attitudes and actions. Pro-environmental sentiment may stem from a desire for knowledge as well as a deeper comprehension of how humans affect the natural world (Donche et al., 2012). Research, however, indicated that Openness's unconventionality component was only linked to pro-environmental attitudes, not pro-environmental actions (Brick and Lewis, 2016).

2.2. Green Consumption and Big 5 Personality Traits

Though scholars and theorists cannot agree upon a single, widely recognized definition, they all agree that "green consumption" is intimately linked to sustainable development and sustainable consumer behavior. In their discussion of green consumer behavior, Nair and Maram (2015) highlight the significance of sustainable consumption in reaching long-term environmental objectives. Green consumption, as

noted by Dirzyte and Rakauskiene (2016), is essential to advancing a green economy, which is a cornerstone of sustainable development. Furthermore, Wu and Chen (2014) stress that the theory of planned behavior has a big impact on green consumption habits, which are important for promoting sustainable consumer practices. Together, these viewpoints show that, despite disagreements over the precise meaning of "green consumption," it is generally understood to refer to sustainability and ecologically conscious consumer behavior. It covers consuming practices that are environmentally friendly and contribute to safeguarding natural resources for future generations. Green consumerism includes actions like preserving the environment, reducing pollution, using renewable resources sensibly and making sure that animal species survive and thrive (Ali et al., 2023). Research on green consumption has ignored the important impact of intuitive and emotional factors on changing behavior, preferring instead to place an undue emphasis on objective elements like knowledge and economic rationality (Carrus et al., 2008). Though emotions such as fear, wrath, guilt, humiliation, or pride may influence behavior, little study has been done to clearly link emotions to green consumption, especially when it comes to emotions other than those elicited by advertising (Obermiller, 1995).

Moreover, the influence of attitudes, beliefs and values on green consumer behavior has been studied in greater detail (Jackson, 2005; Kilbourne and Bec 1998). Studies that link pre-existing value models to pro-environmental behavior (PEB) have discovered that people who are receptive to change and have altruistic tendencies are more likely to participate in PEB (Thøgerson et al., 1997). Recent studies have examined the impact of particular environmental values and beliefs on behavior; they have demonstrated, for instance, that environmental attitudes can forecast consumers' propensity to recycle and pay a premium for environmentally friendly products (Laroche et al., 2001; Diamantopoulos et al., 2003; Krystallis et al., 2008; Nixon et al., 2009).

Although values have been found to affect PEB in general, there is evidence to suggest that this relationship is not linear and that different types of PEB are not affected equally by the same values (Pepper et al., 2009; Gutierrez Karp, 1996; Corraliza et al., 2005). For example, aspirations to reuse products and minimize waste are highly correlated with beliefs connected to environmental conservation and the worth of

nature; nevertheless, recycling activities are more significantly influenced by pragmatic and normative social forces (Barr, 2007). This demonstrates how complicated the relationship is between behavior and values when it comes to environmentally friendly consumption.

According to environmental psychology research, a person's self-identity has a big impact on how pro-environmental behavior (PEB) is behaved (Fekadu and Kraft, 2001). As an example, self-identification as a recycler is a good indicator of real recycling behavior and those who consider themselves to be environmentally conscious are more likely to buy organic food (Mannetti et al., 2004; Sparks et al., 1995). Some customers even go so far as to identify with particular eco-friendly lifestyles and their PEBs reflect this identification (Connolly and Prothero, 2003; Schaefer and Crane, 2005). Three main narrative roles were identified by Autio and colleagues after they looked at the identities that young consumers create around green consumption behaviors: the environmental hero, who supports green consumption; the antihero, who opposes green consumerism; and the anarchist, who views green consumption as a reaction against consumerist culture (Autio et al., 2009). Another psychological viewpoint examines if particular personality types are more prone to participate in PEB. Research indicates that traits such as conscientiousness, agreeableness and extroversion are positively correlated with PEB (Fraj and Martinez, 2006). According to Quintelier (2014), agreeableness influences morally upright consumer behavior in a favorable way.

The "attitude-behavior gap," which occurs when environmental knowledge and pro-environmental values, attitudes and intentions do not necessarily translate into green purchasing and other pro-environmental behaviors (PEB) in practice, is a topic that is frequently covered in the study literature on green consumption (Picket-Bakerr and Ozaki, 2008; Autio et al., 2009; Kollmuss and Agyeman, 2002). This discrepancy is typically explained by research' propensity to overstate the degree of environmental views or intentions because of a bias associated with how socially acceptable pro-environmental reactions are. Moreover, the attitude-behavior gap may be underreported in studies that rely solely on self-reported behaviors. Davies et al., for instance, discovered that whereas 84% of non-participants in curbside recycling programs stated they recycled all or most of their home waste, on-site inspection

revealed a different story (Davies et al., 2002). These discrepancies are caused by a number of variables, such as customer behavior, budgetary limitations, lifestyle choices and ingrained brand allegiances that restrict PEB. Green purchasing is further hampered by uncertainty, the perception of trade-offs between ethical considerations and the notion that green items must be sacrificed in terms of performance, cost, or convenience without appreciable environmental advantages (Peattie, 2001; Chatzidakis et al., 2007; Kollmuss and Agyeman, 2002; Biel and Dahlstrand, 2005; Ottman et al., 2006).

Green consumption is now thought to be directly related to long-term conversations about sustainable development (Kim et al., 2012; Lee, 2008). In response to customers' increased concerns about the environment, businesses all over the world have modified their business plans by implementing "green marketing" (Lee, 2008; Miniero et al., 2014). This trend is especially apparent in the fast-growing economies of Asia, where a growing proportion of customers with financial strength are prepared to spend more than their predecessors (Lee, 2008). According to Eagle et al. (2015), one of the main adaptation tactics utilized to promote the public's positive response to climate change is green education. The study by Yu et al., (2017) suggested model, personality factors served as the primary moderator along with environmental beliefs, societal norms and sustainability values as behavioral chains. The model offers an effective prediction of pro-environment behavioral intention.

Although results from earlier research have indicated a correlation between personality traits and pro-environmental activities, the results have been mixed. The proceeding part will discuss how different personality traits are related to green consumption. Nuanced conclusions have been obtained from research on the interaction between environmental behaviors and personality attributes. Milfont and Sibley (2012) found that conscientiousness and agreeableness had a favorable impact on environmental commitment and self-reported energy-saving behavior. They also found significant relationships with neuroticism, but not with extraversion or openness to new experiences. In addition, Brick and Lewis (2014) showed that in a sizable sample of US consumers, extraversion, conscientiousness and openness to new things were positively correlated with environmental beliefs, such using reusable bags. Hirsh (2010) provided more support for these beneficial relationships by showing that while

extraversion did not significantly correlate with higher levels of environmental concern, agreeableness, openness, stability and conscientiousness did.

In contrast, Kvasova (2015) observed a strong negative link between agreeableness and ecologically friendly acts, whereas Terrier et al. (2016) discovered a positive correlation between agreeableness and such actions. According to Sun et al. (2018), agreeableness significantly improved people's sentiments on green products. Lastly, agreeableness was found to be positively connected with pro-environmental beliefs by Wang et al. (2021). Overall, these studies show how personality influences on environmental behaviors are complex and sometimes contradictory, with conscientiousness and agreeableness showing generally positive associations, though there are some notable exceptions (Milfont and Sibley, 2012; Brick and Lewis, 2014; Hirsh, 2010; Terrier et al., 2016; Kvasova, 2015; Sun et al., 2018; Wang et al., 2021).

2.3. Green Consumption and Sustainable Investment Decision

When examining the motives beyond consumption and investment, it can be seen that there are robust differences. On the one hand, individual investor considers return rate, risk level and liquidity when making an investment decision. On the other hand, individual consumption more about the lifestyle and preferences of consumers and features about the product. A few important characteristics that greatly impact investment decision-making include return rate, risk tolerance and liquidity. Jain and Mandot (2012) discovered that investors' choices for these financial features are significantly shaped by demographic factors, including age, income and education level. They emphasized that, depending on their financial objectives and risk tolerance, investors make decisions that prioritize higher return rates and lower risk levels. According to Pritsker's (2002) survey of the literature on the subject, liquidity is a crucial consideration for both individual and institutional investors when making investment decisions since it influences their capacity to acquire or sell assets fast without having an impact on the price of the asset. Furthermore, Puspitaningtyas (2017) underscored the significance of methodical risk evaluation in investment choices, illustrating how investors carefully consider the risk-return trade-off in order to maximize their investment portfolios. All of these results show that return rate, risk tolerance and liquidity are important considerations for individual investors when

matching their investments to their financial goals.

On the other hand, lifestyle, individual tastes and product attributes have a greater influence on consumption choices. Husnain and Akhtar (2015) investigated how brand preferences were influenced by lifestyle and discovered that consumers' decisions between real and fake cellphones are heavily influenced by their lifestyle factors. The study showed that customers' desire to use brand selections to express their identity and social status is what drives their preferences. In their investigation of consumer preferences in the context of wine consumption, Risius, Klann and Meyerding (2019) found a strong correlation between customers' consumption patterns and lifestyle choices and characteristics like flavor, origin and production methods. Their findings demonstrated how consumers' preferences for products are influenced by lifestyle factors, such as social influences and health consciousness. By studying sustainable consumption, Marchand, Walker and Cooper (2010) expanded on this idea by showing that customers favor sustainable items due to reasons related to their own well-being, such as lower stress levels and healthier lives. The aforementioned research highlights the profound influence of lifestyle preferences and the aspiration to harmonize product attributes with individual identities and values on the decisions made about consumption.

However, another interesting question arises as to whether there is any relationship between consumption and investment patterns when it comes the pro-environmental choices at individual level. People who are considered socially conscious consumers have been seen to exhibit these traits in the selections they make for their portfolios. The findings show that demographics have very little effect on investments that are socially conscious (Williams, 2007). Nowadays, socially conscious investing has gained popularity as an investment strategy that not only offers objectives above and beyond financial expectations, but also significantly increases customer demand (Capelle-Blancard and Monjon, 2012).

The way people consume has a big impact on social justice and environmental degradation (Venkatesan, 2017). Unsustainable consumption causes resource depletion and inequality (Lorek and Vergragt, 2015). However, equitable socio-economic activities are greatly aided by sustainable investment, such as social and

solidarity funding (Yumei et al., 2021). By encouraging sustainable production and consumption behaviors, investment decisions can promote positive change on sustainable practices (Harlow et al., 2016). Conscious consumption, when applied at the individual level, can effectively bridge the divide between investment and consumption, thereby advancing sustainability. Making the shift to sustainable consumption can be facilitated by comprehending the factors that influence consumption and taking use of nonrational features. Thus, reaching global sustainability targets requires striking a balance between investments and sustainable consumption.

Given that consumer behavior is a simple measure of an individual's understanding of sustainability, it is remarkable that the relationship between sustainable consumption and investment behavior has received so little attention (Palacios-González an Chamorro-Mera, 2018). Data on consumer preferences suggests that this approach may be a useful means of assessing people's sustainability preferences.

The 2022 paper by Brunen and Laubach explores the question of whether people who practice sustainable consumption have a preference for sustainable investment options. The study's conclusions demonstrate a strong correlation between selecting sustainable investment strategies and engaging in sustainable consumption. Clients that are interested in sustainable consumption, in particular, have been found to choose robo-advisors that provide sustainable investment methods. This preference exists even when sustainable portfolios have higher management expenses. According to the report, sustainable consumers consistently behave in both their consumption and investment decisions by factoring in their social and environmental values. The study also emphasizes the fact that, absent appropriate action, stated sustainable consumer behaviors may not necessarily align with true preferences for sustainable investments. This disparity emphasizes how crucial it is to take preferences as demonstrated by real decisions rather than depending only on self-reported behavior.

There are many facets to the relationship between investing drive and consumption. Numerous investigations clarified this relationship. According to Sandberg and Sjöström, (2021) investors who prioritize sustainability may have both ethical and financial motivations, which could result in a variety of approaches and results. Strong

evidence for consumption-related incentive was identified among volunteers by Wu, Li and Wang, (2015) but there was no conclusive proof that an investment motive would have an impact on future income. The unpaid labor supply is shaped by both investment and consumption reasons, with consumption having a greater influence, as shown by Bruno and Fiorillo (2009). The importance of the hedonic (arousal-seeking) and investment (want to win money) dimensions for casino gamblers is examined by Dzik (2006).

A complex combination of environmental and psychological factors shapes decisions about investments and consumption. Dzik (2006) looks into gambling habits to learn about the reasons people consume and invest, emphasizing how these reasons affect people's money management techniques. According to the study, gamblers are motivated by both investment (the desire to make money) and hedonic (the pursuit of pleasure) factors. However, the concept of the pure investor, driven only by the desire to make money, frequently results in dire financial situations. These results imply that emotional and psychological elements, in addition to economic benefits, have an impact on decisions about consumption and investments (Dzik, 2006).

The influence of social norms and environmental knowledge is shown in another study examining the connection between pro-environmental activities and consumer choices. Widayat et al. (2021) looked at how people's pro-environmental behaviors are influenced by their responsible consumer behavior and how these behaviors relate to awareness, norms and attitudes. The study discovered that people's intentions to purchase ecologically friendly products are significantly influenced by social norms and environmental awareness. These results imply that adding the influence of social and cultural elements to the theory of planned behavior can improve its ability to describe environmental activities (Widayat et al., 2021).

2.4. Pro-Environmental Behavior Among Young Generation

Pro-environmental behavior (PEB) is defined by Markowitz et al. (2012, p. 83) as underlying, situationally consistent elements that encourage people to engage in a wide range of pro-environmental behaviors. This was pro-environmentalism in a larger sense. Conversely, Busic et al. (2017) added to this definition by demonstrating that

PEB encompasses a broad variety of personal decisions and falls into three categories: routine purchases, environmental habits and environmental participation.

Young people's environmental behavior, especially that of Generation Z, is shaped by a multitude of elements, such as social pressures, values and a sense of closeness to nature (Mandic et al. 2023; Abramova et al. 2023; Schönherr et al., 2024). Sustainability research has found that younger generations' pro-environmental behavior—especially with regard to investment and consumption—has grown in importance. Known for its increased social responsibility and environmental conscientiousness, Generation Z demonstrates unique pro-environmental behaviors that are shaped by a range of elements, including social influences, personal values and the perceived advantages of sustainable activities (Thomas, 2022). Due to their propensity to support companies and goods that share their ecological ideals, this generation's investment and consumption decisions are closely linked to their environmental conscientiousness (Su et al., 2019).

Su et al.'s (2019) study on Generation Z customers in the United States emphasizes how this group is divided according to how environmentally sensitive they are. According to the report, Gen Z customers who are very environmentally conscious, also known as sustainable activists, prioritize healthful and environmentally friendly product qualities when making selections about what to buy. On the other hand, people who are somewhat or lowly concerned about the environment, referred to as sustainable believers and sustainable moderates, respectively place more emphasis on external factors like convenience and cost. According to Su et al. (2019), this division highlights the variation among Gen Z members with regard to their dedication to sustainable consumption, which is impacted by their level of ecological conscientiousness and values.

Subsequent research highlights how Corporate Social Responsibility (CSR) influences Gen Z's environmental behavior. Thomas (2022) discovered that Gen Z's desire to pay more for environmentally responsible firms, especially in the luxury hotel industry, is strongly influenced by their perceptions of CSR efforts. The study showed that favorable opinions of corporate social responsibility (CSR) improve a company's green image, which in turn encourages consumers to be more eager to support and

invest in these firms. Gender moderates this association, with women more likely to be willing to pay more for products from companies that engage in active corporate social responsibility. These results imply that CSR programs can successfully appeal to Gen Z's environmental ideals, influencing their investment and consumption decisions (Thomas, 2022).

Research indicates that members of Generation Z demonstrate a notable level of environmental concern, as evidenced by their participation in eco-friendly travel, recycling, resource conservation and mindful consumption practices. Their environmental attitudes are motivated by deep-rooted moral principles, an emotional bond with the natural world and a strong sense of responsibility to preserve the environment. Additionally, it has been shown that pro-environmental behaviors enhance social and personal well-being, underscoring the advantages of these actions for the welfare of communities and the development of adolescents. In order to promote sustainable habits and cultivate a greener future, it is imperative to comprehend the motivations underlying the pro-environmental conduct of the younger generation.

Recent research has focused on the younger generation's pro-environmental behavior, particularly with regard to investment and consumption. Research like Helm et al. (2019) have looked at how young adults' financial and environmental habits are influenced by materialistic beliefs. According to the research, while proactive financial and environmental activities are adversely affected by materialism, actions such as consuming less greatly improve subjective well-being and lessen psychological suffering (Helm et al., 2019). This differentiation between reduced consumption and green shopping emphasizes that the latter is better at fostering environmental sustainability and individual well-being (Brown and Kasser, 2005; Gilg et al., 2005).

Lee and Ahn (2016) go into further detail about the factors that influence sustainable consumption among young adults, highlighting the significance of values and self-identity. Sustainable consumption practices are more likely to be adopted by young consumers who strongly identify with environmental and social responsibility (Lee and Ahn, 2016). This is consistent with research by Strizhakova and Coulter (2013), who contend that although green purchasing practices are advantageous, they might

not be sufficient to considerably lessen environmental effect if there isn't also a more general movement towards lower consumption levels. Higher emotional intelligence can aid in converting involvement into concrete, long-lasting activities, as demonstrated by the incorporation of emotional intelligence into this framework (Iyer and Muncy, 2016).

The social dimensions of pro-environmental conduct are also quite important. Studies on the Fridays for Future movement by Kilbourne and Pickett (2008) and Hume (2010) emphasize the significance of peer influence and social identity. Due to a shared social identity, young people who believe their peers are involved in environmental protection are more likely to engage in pro-environmental activism (Hume, 2010). According to studies conducted by Gutersleben et al. (2008) and Hurst et al. (2013), efforts to improve social norms surrounding sustainability can have a major impact on the consumption and investment decisions of young people. This social influence is crucial in promoting sustained environmental habits.

CHAPTER 3: THEORETICAL FRAMEWORK

3.1. Basic Concept of Personality Theory and Big 5 Personality Traits

When examining personality theories, four distinct perspectives emerge: the Psychoanalytic-Social Perspective, the Trait Perspective, the Behavioral Perspective and the Humanistic Perspective. All psychoanalytic perspectives explain human behaviors and decisions through the concept of the unconscious. Although each defines the unconscious in different ways, they all assert that it engages in dynamic interaction with conscious and unconscious factors.

In the Psychoanalytic-Social perspective, analysts underscore the role of unconscious processes and early childhood experiences in shaping personality. However, they assert that the Ego, which facilitates adaptation to life's demands, is more crucial than Freud initially proposed. Emphasizing the significance of social and cultural factors, they argue that personality is shaped not only through interactions with parents but also through broader interpersonal relationships. Advocates of this perspective contend that, while acknowledging the impact of the unconscious and early experiences, recognizing the pivotal role of the Ego and considering the broader social context are essential for a comprehensive understanding of personality development.

The Behavioral Perspective defines personality as a structure that evolves through interactions with the environment and is contingent upon mutable circumstances. Variations can occur throughout an individual's lifespan and changes in environmental conditions and social factors can be beneficial. The proponents of this approach encounter challenge in explaining individual differences since they cannot observe and identify the experiences acquired during early childhood and unconscious factors that shape individuals. This limitation in observing and deciphering early childhood experiences and unconscious factors poses difficulties for theorists adhering to this perspective in elucidating individual discrepancies in personality.

The Humanistic Perspective emphasizes that individuals, when provided with necessary conditions, will move towards "desired direction." It focuses on the present

rather than dwelling on the past or future, highlighting the importance of choices made in the present for attaining better outcomes. It suggests that evolving into a better version of oneself is achievable by altering environmental factors. When examining individual differences, proponents of this perspective consider processes and changes. However, critics argue that researchers endorsing this perspective often overlook the inclination towards "evil" side inside of the people.

Lastly, the Trait Perspective directs its focus towards language, the structure of words and how individuals define themselves. It identifies core characteristic features like extraversion, agreeableness, or perfectionism based on self-reported descriptions and endeavors to explain these fundamental dimensions through individual differences. Researchers in the Trait Perspective have explored personality using various models such as the Big Five personality traits (Digman, 1990), the 16 dimensions of personalities (Cattell, 1979) and the three-factor theory (Eysenck, 1990), aiming to render personality measurable. Among these studies, the Big Five Personality Traits, the adaptation of which has been tested for its psychometric properties in Turkish, stands as the most widely used framework. This adaptation will be utilized as the explanatory variable for identifying personality traits within this thesis.

Researchers uses the psychological characteristics of investors to explain their investment decisions. The most important basis for applied research is the extensive and commonly used Big Five personality classification system (Barrick and Mount, 1991; Hogan and Hogan, 1991). Numerous studies in the late 20th century have focused on the dimensional aspects of personality. Research on how language affects personality were the first to provide insight into the structure of personality. A comprehensive list of personality traits has been developed by Hery Odbert and Gordon Allport. The factor analysis method was then used, in conjunction with other studies, to categorize personality into five factors. Goldberg was the first to use the term "five factors" in his research, referring to the categorization that Cattell had started in 1943. The five factor personality traits were finalized and detailed by McCrae and Costa in 1999. These five factors—extraversion, agreeableness, conscientiousness, emotional stability and openness to new things—were identified through comprehensive statistical analyses and are well-known for their consistency in a wide range of situations and cross-cultural applicability. There are different

suggestions regarding the content and name of the 5th sub-factor, but it is stated that the widespread acceptance and use is 'openness to experience' (Mc Crae, 1994; De Young et al., 2014). Some researchers have also adopted the use of 'openness to experience/intelligence' (Ingram et al., 2013; Ashton et al., 2000). In the rest of this thesis, this sub-factor will be referred to as intelligence/imagination, due to its translation into Turkish and the psychometric properties of the scale used. Examining the Big Five could lead to a greater understanding of how particular personality traits can be used to improve overall welfare through financial planning and management.

There is an opposite for every dimension in Big 5 Personality traits categorization. Each dimension has six sub-factors, once more (See Table1). Numerous researchers have employed this theory—which consists of thirty factors in total—as a personality scale. The opportunity to methodically investigate personality and its subdimensions is provided by it (John and Srivastava, 1999).

Table 1. Sub-Dimensions of Big 5 Personality Traits (Source: John and Srivastava, 1999, p. 110).

Big 5 Personality Traits	Facet
Extraversion	Sociable
	Forceful
	Energetic
	Adventurous
	Enthusiastic
	Outgoing
Agreeableness	Forgiving
	Not Demanding
	Warm
	Not Stubborn
	Not Show-off
	Sympathetic

Table 2 (Continued). Sub-Dimensions of Big 5 Personality Traits (Source: John and Srivastava, 1999, p. 110).

Conscientiousness	Efficient
	Organized
	Not Careless
	Thorough
	Not Lazy
	Not Impulsive
Neuroticism	Tense
	Irritable
	Not Contented
	Shy
	Moody
	Not Self-Confident
Openness/Intellect/Imagination	Curious
	Imaginative
	Artistic
	Wide Interests
	Excitable
	Unconventional

3.2. Aim and Importance of the Present Study

The aim of the present study is to explore the intricate relationships between personality traits, green consumption attitude and sustainable investment decision-making among university students in Izmir, Turkey. This study is motivated by the notion that the attitudes and behaviors of young, educated individuals, such as university students, can have a profound impact on the future of sustainable investing and environmental conservation. By focusing on this demographic, the study seeks to determine whether specific personality traits influence the inclination towards sustainable investment decisions. Additionally, the research aims to investigate the mediating role of green consumption attitude in the relationship between personality traits and sustainable investment decision-making.

Furthermore, the study aims to assess the influence of gender, interest in financial and economic developments, previous investment experience and income level on green consumption attitude and sustainable investment decisions. Understanding these relationships can provide valuable insights into how demographic and personal factors shape individuals' attitudes towards sustainable investing.

People in Generation Z, or those born between 1995 and 2010, are becoming more interested in investing (CFA Research and Policy Center, 2023). The investment behavior of Generation Z is influenced by various factors such as social influence, enabling environment, performance expectancy and effort expectancy (Halik and Nugroho, 2022) Gen Z's interest in investing in the capital market is strongly influenced by financial literacy, investment knowledge and motivational factors (Nugroho and Shahreza, 2023). To properly cater to this burgeoning investment demographic, organizations providing financial services and technology must understand the attitudes and behaviors of Gen Z investors. The inclination of this age towards secure and intuitive investment applications underscores the need of customizing financial services to cater to their requirements.

Four main research questions about the connection between personality traits and sustainable investment decisions have been developed based on an extensive study of the literature. First, the study looks into whether personality factors affect individual investors' decisions about sustainable investments. Second, it looks at how personality qualities affect customers' attitudes toward green consumption. Thirdly, the study investigates how individual investors' decisions on sustainable investments are influenced by their attitudes toward green consumption. Finally, it examines if the association between personality factors and sustainable investment decisions made by individual investors in Izmir is mediated by views toward green consumption. The purpose of these inquiries is to clarify the intricate interactions that exist between people's psychological traits and their environmentally conscious spending and financial decisions.

Overall, the study aims to contribute to the literature on sustainable investment behavior, particularly among young, educated individuals and provide practical

implications for promoting sustainable investment practices in the future.

3.3. Research Hypotheses

H1: Personality Traits significantly affect the investors' sustainable investment decision-making.

H2: Personality Traits of an individual investor significantly impacts the green consumption attitude.

H3: The individual investor with higher (lower) green consumption attitude has stronger (weaker) sustainable investment decision.

H4: The personality traits affect the sustainable investment decision of an investor through green consumption attitude.

3.4. Model

The relationship between two variables has long been a subject of inquiry, with prior work typically referring to "the effect of a predictor variable (X) on an outcome variable (Y), the link between X and Y, the explanatory power of "What are the independent variables that predict?" was the main topic of discussion (Gürbüz, 2019). Nonetheless, this perspective has evolved, particularly in the last 20 years and scholars are now more focused on the question of "by which mechanism the relationship between variables occurs" (Gürbüz and Bayık, 2021). As a result of this circumstance, terms like "intermediary, mediator, medium and intermediate variable" have become popular. The mediating variable (M), which is also referred to as the "intervention" or "process" variable, is essentially a third variable that explores "how" or "why" the relationship between the variables occurs and explains the mechanism of the relationship between the independent (X) and dependent (Y) variables (MacKinnon, 2008; Namazi and Namazi, 2016).

Research design, not statistical analysis method, provides examination and evaluation

of causal hypotheses in social sciences (Bullock et al., 1994). To substantiate assertions of causation, researchers need to fulfill several requirements in order to establish this connection. To infer causation between X and Y, one must generally meet four requirements (Gürbüz, 2019): In order to suggest that X causes Y, there must be four requirements: (1) an observable relationship; (2) temporal order; (3) demonstrating that the relationship cannot be explained by an unidentified third variable; (4) regarding causality; and (5) demonstrating that X is the only factor causing Y. has a theoretical or logical foundation.

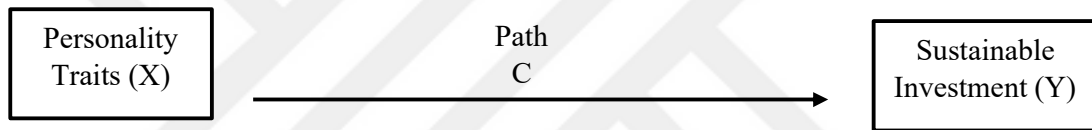### i. *Total Effect Model*

Figure 1. The pathway of the relationship between Personality Traits and Sustainable Investment.
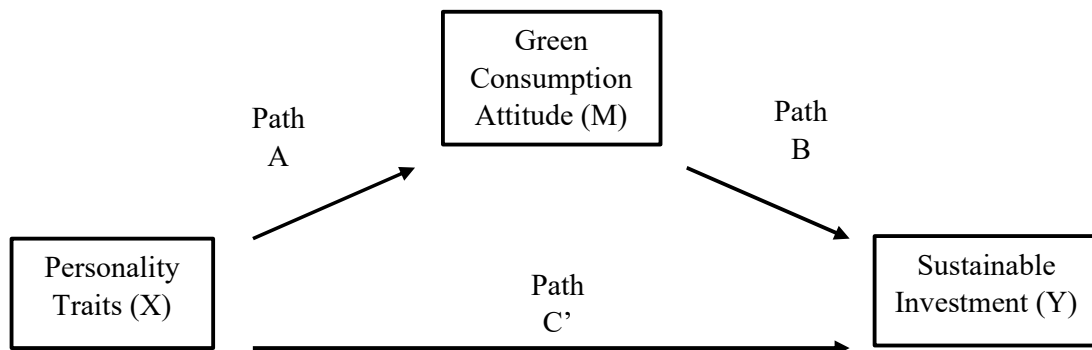
ii. *Mediation Model*

Figure 2. The simple mediation pathway for the relationship among Personality Traits and Sustainable Investment, mediated by Green Consumption Attitude.

Direct Effect = Path C'
Indirect Effect = Path A x Path B

First, a few fundamental ideas about the mediating variable must be explained. Direct impact, indirect impact and overall impact are some of these ideas. When a mediating variable (M) is present in the model, the direct impact represents the path from X to Y and illustrates how Y would change if X increased by one unit, as seen in Figure 2. Similar to mediation, the indirect impact is computed by multiplying the coefficients of the paths from X to M and Y to Y. This computes the change in M if X increases by one unit and the change in Y when X is held constant. In addition to displaying the impact of X on Y when the mediator variable is excluded from the model, the total effect is the sum of the direct and indirect effects in our model it has showed in Figure 1 (Namazi and Namazi, 2016). X must come before M and M must come before Y in a causal relationship. Put differently, mediator variable models are predicated on the temporal sequence of antecedent, mediator and outcome; that is, antecedent changes must occur before mediator variable changes and mediator variable changes must occur before result changes (Rijnhart et al., 2021). Three variables make up a basic mediator model, as shown in Figure 2: X, M and Y.

According to the implicit method of Baron and Kenny (1986), a viable model requires each step or path to be statistically significant. In this process, a variable must fulfill the following requirements in order to be deemed a mediator: The requirements are as follows: (1) X must significantly affect Y (path c); (2) X and M's relationship must be significant (path a); (3) M must significantly affect Y (path b) when both X and M are included in the model; and (4) when M is included in the model, the previously significant relationship between X and Y (now called path c') should become non-significant for full mediation, should weaken for partial mediation, or remain unchanged for no mediation (Baron and Kenny, 1986; Rasoolimanesh et al., 2021).

However, strict adherence to Baron and Kenny's (1986) methodology has frequently resulted in the rejection of potentially important indirect effects at the first step, where there must be a significant association between X and Y. As a result, there have been Type II errors, false conclusions, research projects that have been abandoned and journal rejections of manuscripts (Zhao et al., 2010). Moreover, the aforementioned approach has led to a misconception regarding mediation, leading some writers to fail to recognize crucial perspectives that are essential for the improvement of theory, thereby impeding subsequent theoretical breakthroughs (Rungtusanatham et al., 2014).

The requirement that the overall influence of X on Y be large in order to prove the presence of mediation (Step 1) is a fundamental criticism of the causal steps approach. This need is deceptive, which makes empirical investigation difficult, particularly in complex models or research with small sample sizes (LeBreton et al., 2009). Prominent methodologists, such as Zhao et al. (2010), Hayes (2018) and Rucker et al. (2011), contend that the existence and size of the indirect impact are not limited or determined by the importance and magnitude of the total effect (Gürbüz and Bayık, 2021).

A key problem overlooked by Baron and Kenny (1986) and other researchers that used this test, according to Zhao et al. (2010), is that a minor influence of X on Y is mathematically identical to the 'total effect' of X on Y. The overall effect (path c) is the product of the direct (path c') and indirect (path a * path b) impacts. The total effect in complex models is the total of all conceivable indirect effects plus the direct effects and different combinations of these effects can lead to a negligible total effect (Hayes and Rockwood, 2017). Consequently, neither a significant nor an insignificant total impact implies that there isn't a substantial indirect effect. A significant total effect does not always imply the presence of a significant indirect effect. Regarding mediation, the relationship test between X and Y is unimportant. When an indirect effect is observed despite a non-significant total effect, researchers should continue testing their ideas despite initial non-significance (Zhao et al., 2010).

3.5. Contribution to the Literature

There is huge amount of study in the literature that investigates the relationship between sustainable investment and personality. Also, there are lots of studies in the literature who have found significant relationship between green consumption and personality traits. However, this study especially investigates the mediating role of green consumption attitude on relationship between personality traits and sustainable investment. The gap this study will fill is to find the role of green consumption attitude to foster the sustainable investment in young generation. In April 2024, there were 88,712 investors aged 0–14 with a portfolio value of 3,262 million TRY; 138,817 investors aged 15–19 with a portfolio value of 3,096 million TRY; 810,416 investors aged 20–24 with a portfolio value of 23,641 million TRY; 1,099,220 investors aged

25–29 with a portfolio value of 62,064 million TRY; and 1,179,722 investors aged 30-34 with a portfolio value of 113,597 million TRY, representing comprehensive age groupings (Merkezi Kayıt İstanbul, 2024). Lastly, this study will show the difference between consumption and investment preferences on sustainability.

CHAPTER 4: METHOD

4.1. Sample and Data Collection

4.1.1. Sample

A total of 417 individuals took part in and completed the online survey. To be eligible, participants had to be volunteer, be 18 or older and be university students studying in İzmir. Students in Izmir constitute an important example of sustainable investment. Thanks to their young and educated profiles, their awareness and interest in sustainability may be higher than other age groups. These college-educated students often have an academic context for sustainability issues, which can increase their knowledge and interest in sustainable investing. In addition, the young generation's sensitivity to the future and the importance they attach to sustainability issues may increase the interest and participation of students in Izmir in sustainable investments. Since these students constitute an important group that will participate in the business world and society in the future, it can be thought that their awareness and attitudes towards sustainable investment can lead to a positive change. For these reasons, students in Izmir are a valuable sample of sustainable investment and can make significant contributions to research in this field.

The data were gathered using the convenience sampling method through an online platform (Google Forms). To access the surveys, participants had to click on the link or scan the QR code provided. Of the participants, 227 were female (54.4%) and 190 were male (45.6%). Their ages ranged from 18 to 42 (M = 21.07, SD = 3.09). The demographic information of all 417 participants, including gender, education status, faculty, finance course enrollment, interest in economic/financial developments, income level, source of income and investment experience, is presented in Table 2.

Table 3. Demographic Information of Participants

Variables		N	%
Gender	• Female	227	54.4
	• Male	190	45.6
Education Status	• Associate Program	63	15.10
	• Bachelor Program	333	79.86
	• Master Program	8	1.92
	• Doctorate Program	13	3.12
Faculty	• Faculty of Economics and Administrative Sciences	29	6.95
	• Faculty of Art and Sciences	23	5.52
	• Faculty of Health Sciences	39	9.35
	• Faculty of Medicine	1	0.24
	• Faculty of Engineering	100	23.98
	• Faculty of Law	3	0.72
	• Faculty of Fine Arts and Design	36	8.63
	• Faculty of Business	171	41.01
	• Other	15	3.60
Finance Course	• Yes	205	49.16
	• No	212	50.84
Following Economic/Financial Developments	• Yes	291	69.78
	• No	126	30.22
Income Level	• It may be difficult to meet all expenses with current income.	34	8.15
	• There may occasionally be difficulty in covering all expenses with current income.	123	29.50
	• We have no difficulty in covering all expenses with current income.	71	17.03

Table 4 (Continued). Demographic Information of Participants

	• We do not have difficulty in covering all expenses with our current income, but we cannot allocate resources for savings.	83	19.90
	• We do not have difficulty in covering all expenses with our current income and we can save money.	106	25.42
Income Source	• Another person (Family, Partner etc.)	361	86.57
	• Herself/ Himself	44	10.55
	• Scholarship	10	2.40
	• Other	2	0.48
Investment Experience	• Yes	251	60.19
	• No	166	39.81
Total		417	100

4.1.2. Procedure

The current study commenced after obtaining approval from the Ethics Committee of Izmir University of Economics. Participants were provided with the scales via Google Forms (online survey) and various channels such as social media and email were utilized to reach them. The survey link was distributed through these platforms and students were also directly provided with the QR code by their course instructors to access the survey. Participants were asked to fill out the test 'on the condition that they agreed to participate in scientific research voluntarily and with the knowledge that they could withdraw at any time'. Participation eligibility criteria included being a volunteer, a student studying in İzmir and at least 18 years old. Following a thorough explanation of the goal of the study, participants filled out an informed consent form. The study's goals, methods, length, confidentiality policies, anonymous participation, voluntary nature and opportunity to withdraw at any moment were all explained to them. Only those who gave their consent were enrolled in the research. The survey

comprised the following sections: Demographic form, Big 5 Personality Trait Scale (B5KT-50-Tr), Green Consumption Attitude – Intention – Behavior Questionnaire and definitions and aims of Stock, Traditional Stock and Sustainable Stock. Definitions of these terms and their relation to risk and return were provided. The duration of the survey was ten minutes approximately.

4.1.3. Data Collection Instruments

The instruments utilized in this study included a Demographic Information Form, the Turkish version of the Big 5 Personality Trait Scale (B5KT-50-Tr), the Green Consumption Attitude-Intention-Behavior Questionnaire and questions regarding Sustainable Investment Choice. Additionally, to inform participants about the study and obtain their consent, an informed consent form was presented at the beginning of the survey.

4.1.3.1. Demographic Information Form

Participants completed the demographic data form consisting of 10 questions regarding their age, gender, education status, faculty, enrollment in finance courses, interest in economic/financial developments, income level, source of income and investment experience.

4.1.3.2. Big 5 Personality Scales

The Big Five model was created in 1936 by Allport and Odbert. Openness to experience, extraversion, neuroticism, conscientiousness and agreeableness are the five personality traits that are described (Digman, 1990; Weller and Thulin, 2012). The test has a number of advantages, including being easily accessible, free of cost, developed from a pool of over two thousand items, scoring the items, allowing the items to be arranged in any order for the scale and offering the chance for cross-cultural comparison due to its multilingual translations (Tatar, 2016). It is suggested that "openness to experience" is the widely accepted and used factor (McCrae, 1994; DeYoung, 2014). However, there are differing suggestions regarding the substance and nomenclature of Factor V. The concept of "openness to experience/intelligence"

has also been accepted by certain scholars (Ashton, 2000; Soubelet, 2010; Ingram, 2013).

The scale used in this study was adopted into Turkish by Arkun Tatar in 2016. The scale has 50 items, 10 items for each of the 5 factors. The scale use 'Intellect' for the fifth item. For assessing the test's construct validity, an exploratory factor analysis (EFA) was conducted, revealing that the data was suitable for factor analysis, with a Kaiser-Meyer-Olkin (KMO) measure of 0.878 and a significant Bartlett's Test of Sphericity result ($\chi 2(1225) = 13534.75$, $p < 0.001$). The test accounted for 35.58% of the total variance with 5 factors (5F). Confirmatory factor analysis (CFA) showed a Good Fit Index (GFI) of 0.968, an Adjusted Good Fit Index (AGFI) of 0.905, a Root Mean Square Error (RMR) of 0.033, a Root Mean Square Error of Approximation (RMSEA) of 0.128 and a Comparative Fit Index (CFI) of 0.843 ($p < 0.001$) for the 5F structure (Tatar, 2016).

The scale's items are rated on a 5 point Likert scale with (1) Strongly Disagree; (2) Disagree; (3) Neither Agree nor Disagree; (4) Agree; (5) Strongly Agree. The total is the sum of the individual factors' cumulative scores. Then it is divided to 10 to get the average score out of 5. There were also reverse items in the scale and all of them translated to the normal rating in SPSS. The higher the score for a factor means the participants show more featured of the factor represented (Extraversion, Agreeableness, Conscientiousness, Neuroticism and Intellect). When the results were evaluated as a whole, it was seen that the translation process of B5KT-50-Tr was successful, it met the basic psychometric requirements and had values compatible with other scales used in terms of both validity and reliability. All questions regarding the Big5 Personality Traits (B5KT-50-Tr) can be found in the Appendix. (See. Appendix B)

4.1.3.3. Green Consumption Questionnaire

The study utilized a "green purchase behavior" measure adapted from Lee (2008), with the first three items for "green purchase intention" taken from Chan (2001) and the final two items modified from Nguyen et al. (2019). Attitudes towards green products were measured using a six-item scale, with the first four items from Sreen et al. (2018)

and the final two from Nguyen et al. (2019). Constructs that had been established in previous studies were utilized to measure attitudes toward green items, green purchasing intention and green buy behavior, all of which were used to build the data collection survey.

All items in the questionnaire were rated on a five-point scale (1: Strongly Disagree; 2: Disagree; 3: Neither Agree nor Disagree; 4: Agree; 5: Strongly Agree). A higher score indicated a stronger and more committed attitude, intention and behavior towards green product consumption. Reliability and Confirmatory Factor Analyses were conducted to measure construct and internal validity, with Cronbach's Alpha .95 indicating adequate internal validity. As the target respondents were Turkish individual investors, all questionnaire items were translated into Turkish, with some words adjusted to better suit Turkish culture. To ensure construct consistency between the original and translated versions, all elements were translated back into English (Nguyen, 2019). The questions regarding Green Consumption Attitude - Intention - Behavior can be found in Appendix C.

4.1.3.4. Sustainable Investment Decision Questions

The question aims to see the decision of individuals regarding sustainable investment by presenting a scenario where participants are asked to choose between a sustainable stock and a traditional stock based on different return rates of the traditional stock. The respondents are asked at what return rate of the traditional stock they would abandon their preference for the sustainable stock. The options range from a scenario where participants would always choose the sustainable stock to scenarios where they would switch to the traditional stock at increasingly higher return rates.

After defining each term (stock, sustainable stock, traditional stock and return of a stock) the scenario was given to the participants:

The question was: The 6-month return rate of the sustainable stock is 50% and the return options of the traditional stock are as follows. Considering the return rates, what is the minimum return on Traditional stocks that you would give up your choice of Sustainable stocks? Choose which of the levels below suits you best.

Option for the question as follow:

Table 5. Sustainable Investment Decision Question (Base %50 of return)

Level	Traditional stock rate of return (%)
1	I would prefer to invest in traditional stocks regardless of the return on sustainable stocks.
2	53
3	56
4	59
5	62
6	65
7	68
8	71
9	Regardless of the return on traditional stocks, I would rather invest in sustainable stocks.

In this study, the dependent variable converted to the binary variable by using dummy variables. Mean scores of the SID50 have taken and it is founded as 5.47 for 417 participants. Then, it is concluded that the level 1-2-3-4 should be classified as easy to forego from the sustainable stock. While level 5-6-7-8-9 is classified as not easy to forego from a sustainable stuck for the sake of higher return of traditional stock. It is converted to binary variable because the aim of the model was to examine the mediator role of green consumption attitude and in most of statistical techniques that enable researcher to run mediation analyze requires continuous or binary outcome variable.

To ensure the reliability and validity of the measurement, several analyses can be conducted. First, the reliability of the question was assessed using Cronbach's Alpha, which measures the internal consistency of the responses. The question's face validity was also evaluated by experts in the field to ensure that it appears to measure what it is intended to measure. Moreover, the given base return rate for the sustainable investment stock changed and asked again to the participants to control the choices are consistent and the return rates are compatible. These analyses helped ensure that the

question effectively captures participants' decision regarding sustainable investment in a reliable and valid manner. In this thesis, the term 'investment' refers to the financial investment decisions made by individual investors. The term 'sustainable investment decision' denotes the choice of individual financial decision-makers to invest their saving in the sustainable alternatives of company stocks.

4.2. Statistical Analysis

The sample size for the study was determined using a confidence interval of 95%, with the population being students in İzmir, totaling 191,345. The required sample size, calculated based on a 95% confidence interval, was found to be 384 participants. The statistical analysis was conducted using PROCESS v4.2 by Andrew Hayes and SPSS v29 and no missing data was reported.

Prior to the main analysis, preliminary analyses were conducted, which included reliability analyses of the scales, normality analyses, confirmatory factor analysis, correlations and descriptive statistics. Descriptive statistics such as mean, standard deviation, percentage and frequency scores were computed. Skewness and kurtosis values fell within the acceptable range of -1.50 to +1.50, indicating normality (Tabachnick and Fidell, 2007). Reliability analyses using Cronbach's Alpha showed strong reliability for all scales and factors except for the Intellect of the Big 5 Personality Scale (B5KT-50-Tr).

Correlation analyses were performed to examine the relationships between the study variables, which included Personality Traits, Green Consumption Attitude and Sustainable Investment Decision. Binary Logistic Regression analysis was used to determine the relationship between the study variables and mediation analysis was conducted to understand the mediating role of green consumption attitude in the relationship between personality traits and sustainable investment decision.

CHAPTER 5: RESULTS AND DISCUSSION

This chapter is divided into two main sections: preliminary analysis and main analysis. The preliminary analysis includes reliability tests, checks for normality, confirmatory factor analysis, correlation analysis and descriptive and frequency analyses. The main analysis section covers Binary Logistic Regression, Linear Regression and Mediation Analysis.

5.1. Preliminary Analysis

5.1.1. Reliability Tests

The study assessed the validity of the scales by calculating Cronbach's Alpha values, revealing high values for each scale and questionnaire, indicating strong internal consistency. However, the "Intellect" factor of the Big 5 personality trait scale did not demonstrate sufficient ($\alpha > .70$) internal consistency, as indicated by its Cronbach's Alpha score of $\alpha = .67$. (Table 4)

Table 4. Cronbach's Alpha Values of All Scales and Questionnaires Used.

Scales and Questionnaires	α
Big 5 Personality Traits (B5KT-50-Tr)	.88
Extraversion	.86
Agreeableness	.79
Conscientiousness	.78
Neuroticism	.85
Intellect	.67
Green Consumption Attitude – Intention – Behavior	.95
Attitude	.92
Intention	.92
Behavior	.84
Sustainable Investment Decision	.86

5.1.2 Normality Tests

The study calculated skewness and kurtosis values to assess the normality of the study variables. The results indicated that all variables fell within the critical range for normality, which is between -1.50 and +1.50, as suggested by Tabachnick and Fidell (2007).

Table 5. Skewness and Kurtosis Values of All Variables Used.

Scales and Questionnaires	Skewness	Kurtosis
Big 5 Personality Traits (B5KT-50-Tr)		
Extraversion	-.200	-.352
Agreeableness	-.366	.163
Conscientiousness	-.212	-.208
Neuroticism	-.148	-.589
Intellect	-.132	-.234
Green Consumption Attitude – Intention – Behavior		
Attitude		
Intention	-.464	-.375
Behavior	-.381	-.406
	-.089	-.597
Sustainable Investment Decision	-.177	-.954

5.1.3. Descriptive Statistics

The study calculated the means (M), standard deviations (SD), maximum (Max) and minimum (Min.) scores to describe the statistical characteristics of the study variables, as presented in Table 6.

Table 6. Descriptive Statistics of the Variables.

Scales and Questionnaires	M	SD	Max.	Min.
Big 5 Personality Traits (B5KT-50-Tr)				
Extraversion	33.03	7.56	50	12
Agreeableness	37.16	6.10	50	17
Conscientiousness	37.69	6.30	50	13
Neuroticism	30.39	8.01	50	11
Intellect	38.30	4.86	50	23
Green Consumption ATT- INT- BEH				
Attitude	21.85	6.03	30	6
Intention	16.60	5.36	25	5
Behavior	12.65	4.15	20	4
Sustainable Investment Decision	5.47	2.41	9	1

5.2. Main Analysis

5.2.1. Correlation Analysis

In examining the correlations between the variables, several patterns emerge. Extraversion, there is a moderate positive correlation between Extraversion and agreeableness ($r = 0.386$, $p < 0.01$), indicating that individuals with higher levels of extraversion tend to also exhibit higher levels of agreeableness. Additionally, a weak positive correlation is observed between Extraversion and Conscientiousness ($r = 0.213$, $p < 0.01$), as well as between Extraversion and Neuroticism ($r = 0.331$, $p < 0.01$), suggesting that individuals with higher levels of extraversion may also display higher levels of conscientiousness and neuroticism. However, extraversion shows no significant correlation with attitude, intention and behavior towards green consumption indicating that extraversion may not directly influence attitudes, intentions, or behaviors related to sustainable investment decision.

Finally, there are several noteworthy correlations involving agreeableness. Agreeableness demonstrates a moderate positive correlation with conscientiousness ($r = 0.312$, $p < 0.01$), indicating that individuals with higher levels of agreeableness may

also exhibit higher levels of conscientiousness. Additionally, agreeableness shows a strong positive correlation with attitude towards green consumption ($r = 0.411$, $p < 0.01$), suggesting that individuals with higher levels of agreeableness may hold more positive attitudes towards green consumption. Moreover, agreeableness demonstrates moderate positive correlations with intention towards green consumption ($r = 0.353$, $p < 0.01$) and behavior towards green consumption ($r = 0.281$, $p < 0.01$), indicating that individuals with higher levels of agreeableness may also have stronger intentions and behaviors towards green consumption practices.

Table 7. Pearson Correlation Coefficient Among Independent Variables

	EXT	AGG	CON	NEU	ATT	INT	BEH
EXT	1						
AGG	.386**	1					
CON	.213**	.312**	1				
NEU	.331**	.048	.242**	1			
ATT	.071	.411**	.150**	-.086	1		
INT	-.011	.353**	.173**	-.130**	.765**	1	
BEH	.035	.281**	.140**	-.100*	.723**	.796**	1

**: p<.01

*: p<.05

Note. SID50: Sustainable Investment Decision, EXT: Extraversion, AGG: Agreeableness, CON: Conscientiousness, NEU: Neuroticism, ATT: Attitude Towards Green Consumption, INT: Intention Towards Green Consumption, BEH: Behavior Towards Green Consumption.

ANOVA was conducted to compare the effect of sustainable investment decision on extraversion, agreeableness, conscientiousness, neuroticism, attitude towards green consumption, intention towards green consumption and behavior towards green consumption.

There was no significant difference in extraversion among the different categories of

sustainable investment decision at the p < .05 level for the three groups, F(2, 415) = 0.708, p = .401. Similarly, no significant difference was found in agreeableness among the different categories of sustainable investment decision, F(2, 415) = 0.472, p = .497. Conscientiousness also showed no significant difference among the categories, F(2, 415) = 0.928, p = .398. Neuroticism did not differ significantly across the categories of sustainable investment decision, F(2, 415) = 0.471, p = .628. However, there was a significant difference in attitude towards green consumption among the different categories of sustainable investment decision, F(2, 415) = 6.778, p = .010. Intention towards green consumption approached significance but did not reach the p < .05 threshold, F(2, 415) = 3.741, p = .054. Lastly, behavior towards green consumption showed no significant difference among the categories, F(2, 415) = 1.061, p = .131.

Table 8. ANOVA Results Among Outcome Variable and Predictors

	Sum of Squares	df	F	Sig.
EXT	.405	1	.708	.401
AGG	.172	1	.462	.497
CON	.088	1	.221	.639
NEU	.151	1	.235	.628
ATT	6.750	1	6.778	.010**
INT	4.270	1	3.741	.054*
BEH	6.624	1	5.245	.013**

**: p<.01

*: p<.05

Note. SID50: Sustainable Investment Decision, EXT: Extraversion, AGG: Agreeableness, CON: Conscientiousness, NEU: Neuroticism, ATT: Attitude Towards Green Consumption, INT: Intention Towards Green Consumption, BEH: Behavior Towards Green Consumption.

5.2.2. Regression Analysis

5.2.2.1. Linear Regression

Table 9. Personality Traits and Green Consumption Intention

Variable	Estimates	*SE*	95% CI		*p*
			LL.	UL	
Extraversion	-.139	.073	-.340	-.052	.008**
Agreeableness	.377	.089	.487	.837	.001**
Conscientiousness	.116	.083	.035	.360	.017*
Neuroticism	-.130	.065	-.303	-.046	.008**

Refers to significance at 5% level.

*** Refers to significance at 1% level.*

A multiple regression was run to predict green consumption intention from extraversion, agreeableness, conscientiousness and neuroticism. The regression model was significant, indicating that extraversion, agreeableness, conscientiousness and neuroticism explained a significant proportion of the variance in green consumption intention scores, $R^2 = .172$, $F(4, 412) = 21.377$, $p < .001$.

Agreeableness significantly predicted green consumption intention, $b = .377$, $t(412) = 7.421$, $p < .001$. This suggests that higher levels of agreeableness are associated with stronger intentions towards green consumption. Conscientiousness also significantly predicted green consumption intention, $b = .116$, $t(412) = 2.391$, $p = .017$. This indicates that higher levels of conscientiousness are associated with stronger intentions towards green consumption. Neuroticism was a significant negative predictor of green consumption intention, $b = -.130$, $t(412) = -2.670$, $p = .008$. This means that higher levels of neuroticism are associated with weaker intentions towards green consumption. Extraversion was also a significant negative predictor of green consumption intention, $b = -.139$, $t(412) = -2.682$, $p = .008$. This indicates that higher levels of extraversion are associated with weaker intentions towards green consumption.

Table 10. Personality Traits and Green Consumption Behavior

Variable	Estimates	*SE*	95% CI		*p*
			LL.	UL	
Extraversion	-.053	.074	-.218	.073	.327
Agreeableness	.278	.090	.295	.648	.001**
Conscientiousness	.094	.083	-.010	.317	.066
Neuroticism	-.119	.066	-.283	-.024	.020*

Refers to significance at 5% level.

** *Refers to significance at 1% level.*

A multiple regression was run to predict green consumption behavior from extraversion, agreeableness, conscientiousness and neuroticism. The regression model was significant, indicating that extraversion, agreeableness, conscientiousness and neuroticism explained a significant proportion of the variance in green consumption behavior scores, $R^2 = .101$, $F(4, 412) = 11.587$, $p < .001$.

Agreeableness significantly predicted green consumption behavior, $b = .278$, $t (412) = 5.249$, $p < .001$. This suggests that higher levels of agreeableness are associated with more positive green consumption behaviors. Neuroticism also significantly predicted green consumption behavior, $b = -.119$, $t (412) = -2.329$, $p = .020$. This indicates that higher levels of neuroticism are associated with less positive green consumption behaviors. Conscientiousness was not a significant predictor, $b = .094$, $t (412) = 1.847$, $p = .066$. Extraversion was not a significant predictor, $b = -.053$, $t (412) = -.982$, $p = .327$.

Table 11. Personality Traits and Green Consumption Attitude (Path A)

Variable	Estimates	*SE*	95% CI		*p*
			LL.	UL	
Extraversion	-.074	.068	-.232	.036	.150
Agreeableness	.426	.083	.539	.865	.001**
Conscientiousness	.056	.077	-.062	.240	.246
Neuroticism	-.096	.061	-.240	-.001	.048*

Refers to significance at 5% level.

** *Refers to significance at 1% level.*

A multiple regression was run to predict green consumption attitude from extraversion, agreeableness, conscientiousness and neuroticism. The regression model was significant, indicating that extraversion, agreeableness, conscientiousness and neuroticism explained a significant proportion of the variance in green consumption attitude scores, $R^2 = .187$, $F(4, 412) = 23.632$, $p < .001$. Agreeableness significantly predicted green consumption attitude, $b = .426$, $t(412) = 8.471$, $p < .001$. This suggests that higher levels of agreeableness are associated with more positive attitudes towards green consumption. Neuroticism also significantly predicted green consumption attitude, $b = -.096$, $t(412) = -1.983$, $p = .048$. This indicates that higher levels of neuroticism are associated with less positive attitudes towards green consumption. Extraversion was not a significant predictor, $b = -.074$, $t(412) = -1.442$, $p = .150$. Conscientiousness was not a significant predictor, $b = .056$, $t(412) = 1.162$, $p = .246$.

Several important research support the choice to employ green consumption attitude as a mediator rather than green consumption intention or action. According to Ajzen's (1991) theory of planned behavior, attitudes are more trustworthy for long-term prediction because they are consistent and long-lasting predictors of intents and behaviors. Values strongly influence environmental attitudes, which are reliable indicators of behavior in a variety of situations, according to Schultz and Zelezny (1999). Vermeir and Verbeke (2008) showed that attitudes toward sustainable consumption play a fundamental role in predicting intentions and behaviors. Furthermore, agreeableness correlates more strongly with environmental attitudes than with particular intentions or behaviors, according to research by Hirsh and Dolderman (2007). This suggests that attitudes work better as a mediator to capture the impact of personality traits on sustainable investment decisions. Consequently, in this situation, a more thorough and reliable mediator is the attitude toward green consumption.

Table 12. Personality Traits and Sustainable Investment Decision (Path C)

Variable	β	OR	*p*	95% CI for OR	
Extraversion	.174	1.190	.282	.867	1.633
Agreeableness	-.239	.788	.231	.533	1.165
Conscientiousness	.109	1.115	.552	.779	1.595
Neuroticism	-.000	.998	.991	.754	1.323

*Refers to significance at 5% level.

** Refers to significance at 1% level.

Binary logistic regression was conducted to determine whether Extraversion (EXT), Agreeableness (AGG), Conscientiousness (CON) and Neuroticism (NEU) predict the sustainable investment decision (SID50) of individual investors. The effects of extraversion (EXT), agreeableness (AGG), conscientiousness (CON) and neuroticism (NEU) on the probability that individuals have a sustainable investment decision (SID50) were investigated using a binary logistic regression. With a p-value of .685 and a χ^2 (4) of 2.278, the logistic regression model was not statistically significant. The model accurately identified 68.3% of instances and explained 0.8% (Nagelkerke R^2) of the variance in sustainable investment decision. Extraversion (EXT) was not a significant predictor (B = 0.174, p = .282, OR = 1.19, 95% CI [0.867, 1.633]). Agreeableness (AGG) was not a significant predictor (B = -0.239, p = .231, OR = 0.788, 95% CI [0.533, 1.165]). Conscientiousness (CON) was not a significant predictor (B = 0.109, p = .552, OR = 1.115, 95% CI [0.779, 1.595]). Neuroticism (NEU) was not a significant predictor (B = -0.002, p = .991, OR = 0.998, 95% CI [0.754, 1.323]).

From the table, it is obvious that there is no significant relationship between personality traits and sustainable investment decision. In the literature Gutsch et al. (2023) suggest that there is no relationship between personality traits and sustainable investment decision. Thus, our results support their findings. However, personality is a broader concept and as it discussed in the literature review there are plenty of

research that there is a significant relationship between pro-environmental behavior and personality traits. Even the first results showed that there is no significant total effect of Big 5 personality traits on sustainable investment decision, we can still continue to search the mediating factors that might affect the relationship between them. (Zhao et al, 2010).

Table 13. Green Consumption Attitude and Sustainable Investment Decision (Path B)

Variable	β	OR	p	95% CI for OR	
Green Consumption Attitude	.270	1.309	.010**	1.066	1.608
Green Consumption Intention	.189	1.208	.055	.996	1.464
Green Consumption Behavior	.255	1.291	.013*	1.054	1.580

Refers to significance at 5% level.

** Refers to significance at 1% level.*

Three separate logistic regression analysis was conducted to determine whether green consumption attitude (ATT), green consumption intention (INT) and green consumption behavior (BEH) predict the sustainable investment decision of individual investors. At the 1% significance level, green consumption mindset is a significant predictor of the desire to make sustainable investments. According to the odds ratio of 1.309, the likelihood of intending to make sustainable investments increases by about 30.9% for every unit increase in green consumption attitude. Based on the confidence interval (1.066 to 1.608), it can be inferred that this effect is positive and statistically significant. At the 5% significance level (p =.055), green consumption intention is not a significant predictor of sustainable investment decision, although it is close to being significant. According to the odds ratio of 1.208, there is a 20.8% rise in the likelihood of having a sustainable investment decision for every unit increase in green consumption intention. There is some uncertainty in this estimate, as indicated by the confidence interval (0.996 to 1.464), which suggests that the true effect might be anywhere from slightly below to above 1. At the 5% significance level, green consumption patterns are a significant predictor of the intention to make sustainable investments. According to the odds ratio of 1.291, there is an approximate 29.1% rise in the likelihood of intending to make sustainable investments for every unit increase

in green consumption behavior. According to the confidence interval (1.054 to 1.580), this effect is positive and statistically significant. It is confirmed that attitude, intention and behavior on green consumption is consistent for participants. Intention was not significant with sustainable investment decision and attitude is more possible to determine than behavior. Thus, in this study it is continued with Green Consumption Attitude as mediator variable, because it has the strongest significance level with sustainable investment decision.

Different motives for consumption and investment, risk aversion in agreeable personality, herding behavior of agreeable personality, or disinterest can be counted as the reason of negative relationship between agreeableness and sustainable investment decision. According to the traditional investment theory, related risk, expected return and investor liquidity preferences are the only factors that affect investment decisions. Furthermore, a number of studies have shown that although most individuals claim to be highly driven and emotionally committed in the sustainability issue, in practice they really do relatively little and know much less about it. Green consumption attitude and behavior is an important determinant of sustainable investment decision. Regarding environmental concern, many analyzes (Hirsh and Dolderman, 2007; Swami et al., 2010) show a strong and positive relationship between adaptability and climate concern and environmental goals. In this study we see, while people with higher levels of adaptability are ready to embrace green consumption, they are not ready to make sustainable investments. This situation requires an analysis in which green consumption attitude should be used as a tool to reveal how compliance indirectly affects sustainable investments.

5.2.3. Mediation Analysis

Using mediation analysis, the link between personality traits and the decision to make sustainable investments was examined in order to ascertain the mediating role of green consumption. Following the previous binary logistic regression, the outcome variable was the desire to make sustainable investments, the predictor variable was agreeableness as a personality attribute and the mediator was a green consumption attitude. To investigate the mediating function of green consumption attitude in the relationship between agreeableness and sustainable investment, a simple mediation

analysis was conducted.

Total Effect Model

Path
C

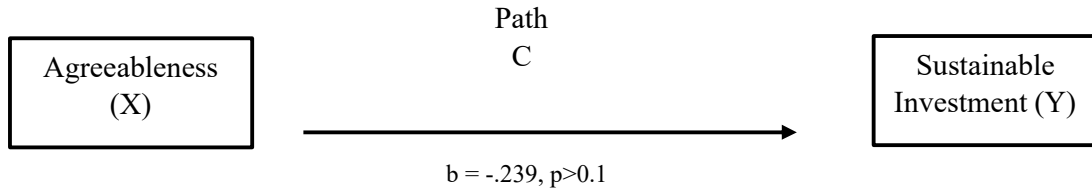| Agreeableness (X) | | Sustainable Investment (Y) |

b = -.239, p>0.1

Figure 3. Total effect of agreeableness on sustainable investment decision.

Overall Agreeableness Effect on Sustainable Investment Decision (b = -0.239, p > 0.1), shows that, when mediators are excluded, agreeableness has a negative but not statistically significant direct impact on sustainable investment.

Mediation Model

Green Consumption Attitude (M)

$b= .702, p<.001$

$b= .387, p<.001$

Path
A

Path
B

Personality Traits (X)

Path
C'

Sustainable Investment (Y)

Direct Effect, $b = -.519, p <.05$

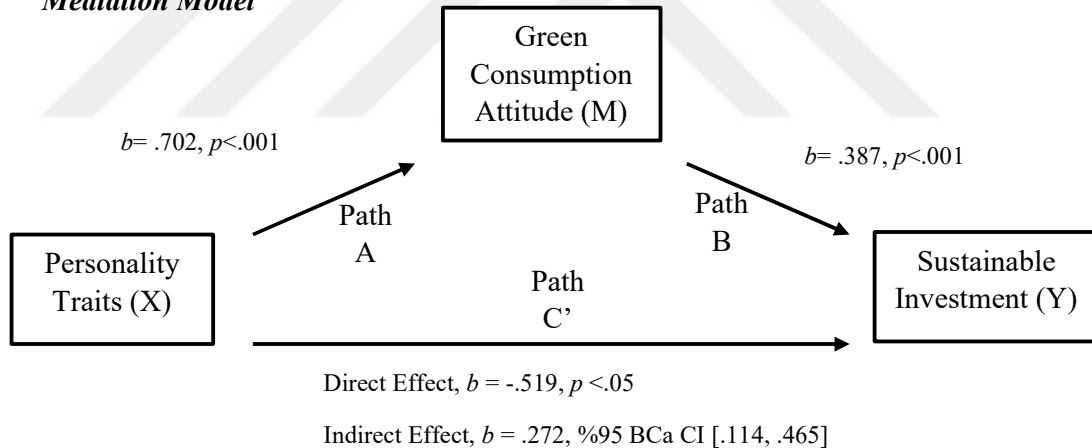Indirect Effect, $b = .272$, %95 BCa CI [.114, .465]

Figure 4. Mediation pathway of relationship between agreeableness on sustainable investment decision through green consumption attitude.

Agreeableness's direct impact on sustainable investment is (b = -0.519, p < 0.05). Agreeableness has a significant and negative impact on sustainable investment when the mediator is taken into consideration, suggesting that increased agreeableness lowers sustainable investment. Green consumption attitude has an Indirect Effect (b = 0.272, 95% BCA CI [0.114, 0.465]), demonstrates how being agreeable dramatically raises one's attitude toward green consumption, which greatly boosts sustainable

investment decision.

According to our hypothesis, we argue that green consumption attitude has indirect effect on the relationship between agreeableness and sustainable investment decision. Path C revealed that the impact of agreeableness on sustainable investment decision was insignificant. (See. Figure 3) However, according to Zhao et al., 2010 insignificant total effect may be due to a suppressor effect and it does not mean there is no mediation relationship between the variables. Despite varying interpretations in the literature, Maassen and Bakker (2001) believe that Conger's (1974) definition of suppressor effect is the most accurate. Conger (1974) defined the suppressor variable as a variable that, when added to the regression equation, boosts the predictive validity of another variable or variables. This variable can be regarded as the dominant variable for variables with rising regression loads. Thus, it is continued to run the mediation analysis.

Consequently, the mediation analysis reveals that the initially non-significant total effect of agreeableness on sustainable investment becomes significant when decomposed into direct and indirect effects. In particular, when green consumption attitude is not present, there is a large and negative direct influence of agreeableness on sustainable investment decision, suggesting that increased agreeableness is linked to a decline in sustainable investment. On the other hand, agreeableness has a positive and significant indirect effect on green consumption attitude, which in turn promotes sustainable investment positively. This suggests that agreeableness positively influences green consumption attitude and actually indirectly influence the sustainable investment through green consumption attitude. In order to ensure a more dependable interval estimate, the Bias-Corrected and Accelerated (BCA) confidence interval offers a modified range that takes into consideration possible bias and skewness in the estimation process.

Table 14. Direct and Indirect Effects of Agreeableness on Sustainable Investment Decision

Direct Effect of Agreeableness on SID (Path C')	Unstand.	SE	LLCI	ULCI
	-.519	.220	-.950	-.088

Indirect Effect of Agreeableness on SID via Green Consumption Attitude (GCA)
(Path A x Path B)

Predictor	Mediator	Outcome	Unstand.	SE	LLCI	ULCI
AGG >	GCA >	SID	.272	.089	.113	.465

Notes. AGG: Agreeableness, GCA: Green Consumption Attitude, SID: Sustainable Investment Decision

To obtain the mediation analysis outcomes in the study, initial direct regression analyses were conducted among the variables and are presented in Binary Logistic Regression (Table 12 and Table 13). According to path A, the impact of Agreeableness on green consumption attitude, the mediator variable and the influence of green consumption attitude on sustainable investment decision (B path) were both significant.

In Path A x Path B (See: indirect effect in Figure 4), it was observed that the effects of green consumption attitude, along with the independent variable agreeableness on sustainable investment decision were significant. Hence, the essential relationships for the occurrence of the mediator effect were identified. As demonstrated in Table 14, which illustrates the mediation analysis, the mediating effect of green consumption attitude was determined to be statistically significant. In this sense, the reducing role of green consumption attitude as a mediator in the negative effect of Agreeableness on sustainable investment decision has been observed.

Table 14 displays the results of the mediation study, which indicate that agreeableness, through green consumption attitude (GCA), has a strong indirect effect on sustainable investment intention (SID). According to the results, those who are more agreeable are also more likely to make sustainable investment decisions and have a favorable attitude toward environmentally friendly consumption. Furthermore, agreeableness has a

negative direct effect on the desire to make sustainable investments, indicating that agreeableness predominantly influences sustainable investment through attitudes toward green consumption.

Utilizing Hayes' (2013) Macro Process with the bootstrapping method, mediation is established when the indirect effect (IE) of agreeableness on sustainable investment decision through green consumption attitude is significant (i.e., IE = path a x path b; where a = the effect of agreeableness on the mediator, green consumption attitude; b = the effect of green consumption attitude on sustainable investment decision) and when the bias-corrected 95% confidence interval (CI) around the IE, generated from 5000 bootstrap re-samples, does not encompass zero. A statistically significant IE was acknowledged only if its bias-corrected 95% CI excluded zero. The findings demonstrated significant effects in path a (between Agreeableness and green consumption attitude, B = .70, p < .001), path b (green consumption attitude on sustainable investment decision, B = 0.39, p < .001), as well as in direct effect, path c, (between agreeableness and sustainable investment decision, B = -.52, p < .05). Consequently, with the inclusion of green consumption attitude in the relationship between agreeableness and sustainable investment decision, the indirect effect (B = .27) remained significant. Furthermore, the bias-corrected 95% CI was .89, with CI 95% = .11 to .47, excluding zero. Therefore, green consumption attitude is confirmed as a mediator between agreeableness and sustainable investment decision.

5.3. Discussion and Future Suggestions

First and most interesting result of this study is the negative relationship between agreeableness and sustainable investment decision while relationship between agreeableness and green consumption attitude is strongly positive. This difference may be due to the different motivations underlying environmental behavior in consumption and investment. In the literature there are studies which explain this. For instance, the relationship between ethical investors' financial ideas and wants and their ethical principles was studied by Mackenzie and Lewis (1999). The study found that while the individuals expressed ethical reservations, they were not prepared to forgo their basic financial necessities in order to allay these worries. Four strategies have been put out to get out of this predicament. These strategies include breaking down the capital

into primary capital and spare capital that can be used for investments; determining that it would be sufficient to make some ethical investments rather than all of them; neglecting a thorough analysis of the costs associated with making ethical investments; and eschewing a strict ethical mindset. According to the investors' responses, the study suggests an ethical approach portfolio wherein traditional investment instruments account for the majority of the capital and just a small portion is allocated to ethical investments, thereby allaying investors' fears.

It has been discovered that there is a positive correlation between risk aversion and agreeableness, a personality attribute that is defined by warmth, friendliness and cooperation. There is evidence of this association from several studies. For instance, Kipman et al. (2021) discovered that people with high agreeableness ratings have a tendency to steer clear of financial risks, indicating a cautious attitude in financial situations. Aumeboonsuke and Caplanova's (2021) findings, which indicate that agreeableness has a negative impact on risk aversion—that is, that agreeable people are more prone to avoid risks—support this. These results imply that agreeable people can shy away from risky situations because they value stability and security. Furthermore, research has demonstrated that agreeable people value social harmony and other people's well-being, which may further explain why they avoid risks. All things considered, research has repeatedly shown that agreeableness and risk aversion are positively correlated, underscoring the prudent and conservative character of agreeable people.

According to a study by Singh et al., (2022) individuals with agreeableness have also been found to be prone to herd behavior. This personality trait leads individuals to not have their own opinions and follow the advice of others. Cooperative and peaceful by nature, agreeable people are more prone to adopt the beliefs and behaviors of others while making financial judgments. Their propensity to follow the herd is a result of their drive to uphold social peace and prevent confrontations. This result is consistent with earlier studies showing that high agreeableness is associated with a higher degree of social influence on decision-making (John and Srivastava, 1999). Thus, negative relationship between agreeableness and sustainable investment might because of the herding behavior and risk aversion level of the agreeable investors as suggested by the literature.

In accordance with the literature, our results overlap with the previous research. People with higher agreeableness have positive attitude towards green consumption. The most important reason for this is the strong relationship between agreeableness and pro-environmental behavior. Agreeable people are willing to put community's benefit in front of their own interest. They give importance more for others than themselves'. However, the risk aversion and herding behavior of agreeable people does not allow them to forego from the return on an investment for the sake of others or for sustainable investment. In our study, participants are mostly belonging to the generation Z and this generation is used to spent and consume faster. Moreover, there are several factors affecting pro-environmental behavior. Ecological theories offer valuable perspectives for making sustainable investing choices. Investors want comparable or greater returns from sustainable investments, according to traditional financial theory (Friedman, 1970). The profitability of sustainable investments is a topic of discussion. While Wins and Zwergel (2016) show comparable returns for sustainable and unsustainable enterprises, Hong and Kacperczyk (2009) contend that sin stocks beat the market. The significance of comprehending reasons for sustainable investing is emphasized by this argument.

The other interesting result of this study is the significant indirect effect of agreeableness on sustainable investment decision through green consumption attitude. Investors who are socially conscious as well as traditional investors think that businesses that perform well on the corporate front would do well financially. When building their portfolios, typical investors, however, do not take these viewpoints into account. According to Williams' (2005) research, people might still be socially conscious consumers even if they haven't attained the status of socially conscious investors. In this instance, the conduct of the socially conscious consumer-customer mass—which can comprise both groups—should also be considered when making the distinction between socially conscious conventional investors. To what degree socially conscious consumers pressure businesses to follow socially conscious business practices is crucial, particularly in nations where the investor profile is either undefined or not yet completely developed. So, our results support the idea of promoting green consumers who has the potential to invest in sustainability in the future.

i. *Future Suggestions and Limitations*

Despite being extensive, this study has certain drawbacks. A notable limitation was the restricted availability of individuals from a range of socioeconomic backgrounds, which impeded our capacity to conduct income group comparisons. Another drawback is the reliance on self-reported survey data, which is prone to biases and mistakes. Direct observation and peer-report techniques should be used in future studies to get a more accurate and neutral picture of participants' actions and personalities. If we had budget or grant we would like to conduct this research with real- case studies and collecting data by observing the participant's actual choices as it has done in a study before in Germany (Brunen and Laubach, 2022). Furthermore, the study's participant pool may not accurately reflect the general community because it was mostly done among university students from Izmir University of Economics. Compared to those whose income is self-generated, these participants' spending and investment habits may differ depending on their income level and financial sources. Also, it would be more representative if we could reach all students in İzmir. Since most of the student from İzmir University of Economics spending and investment pattern of other students could have chance us to compare groups from different income level and income sources.

Furthermore, the study was constrained by national characteristics. One major obstacle that keeps Turkish consumers from prioritizing green consumption and sustainable investments as much as they would want to be the country's high rate of inflation. The results may not apply to nations with more stable economic environments due to this economic limitation. In order to compare the findings and evaluate the influence of economic circumstances on sustainable behaviors, future research endeavors ought to contemplate reproducing this study in nations with less inflation and more advantageous economic landscapes. Comparative research of this kind may shed more light on the relationship between economic stability and sustainable investment strategies and green consumption.

CHAPTER 6: CONCLUSION

The literature contains a wealth of research examining the impact of personality traits on green consumption and sustainable investment. While some researchers have criticized the Big Five variables (Block, 1995; Boyle, 2008), more recent research has considerably supported the method's overall validity and stability (DeYoung et al.,2007). Therefore, this study expands on the Big Five model's applicability as a valuable method for analyzing the investing and consuming behavior of the younger generation.

A significant portion of studies that examine the impact of personality on consumption and investment have found a noteworthy relationship between personality traits and both consumption and investment. Our study corroborates that the attitude towards green consumption significantly influences sustainable investment decisions. According to both the literature and our findings, it is evident that there is a pressing need to encourage and promote sustainable behavior in both consumption and investment, especially among the younger generation who will be most affected by the climate crisis in the near future. Our study provides important insights into the literature and has policy implications, such as the positive indirect effect of agreeableness on sustainable investment, particularly for those with high levels of green consumption among young people.

Results highlight how important green consumption attitudes are in mediating the link between sustainable investing actions and personality factors. This has important policy ramifications since it implies that initiatives to improve attitudes toward green consumption may also indirectly increase intentions to make sustainable investments. Practically speaking, companies and marketers can take use of these insights by focusing their marketing and sustainability campaigns on people who score well on agreeableness. Businesses can also enhance the effect of their sustainability efforts by collaborating with trustworthy community leaders and influencers who are backed by amiable people.

Furthermore, the literature notes that companies that implement corporate social responsibility (CSR) policies may incur higher expenses. However, these businesses tend to be favored by investors and consumers, increasing the risk for companies with poor social responsibility. Consequently, businesses that engage in activities that defy societal moral and ethical standards and exhibit a lack of social responsibility will face higher costs. This will lead to higher expected profits, especially for businesses involved in potentially socially taboo activities (Uyanık, 2020).

Encouraging students, who are the potential investors of the future, towards green consumption will shape their sustainability preferences in their investments as well. This is crucial not only for individual investors but also for companies. By fostering a culture of sustainability among the younger generation, we can ensure that their investment decisions align with broader environmental goals, benefiting both society and the economy.

The study's conclusions have important policy ramifications for encouraging sustainable behavior in the next generation. Policymakers should concentrate on educational and promotional initiatives that encourage environmental awareness and responsible consumption practices among young people, given the demonstrated connection between personality traits, green consumption and sustainable investment. We may influence the tastes and behaviors of future investors toward more sustainable decisions by including sustainability into educational curricula and promoting green practices in schools and universities.

Additionally, the government and pertinent organizations can encourage environmentally friendly consumption and sustainable investment in a number of ways, including tax breaks, product subsidies and assistance for eco-friendly companies. Young investors and consumers may find sustainable solutions more appealing and accessible as a result of these incentives, which may increase their engagement with eco-friendly practices.

Furthermore, legislators ought to think about enacting laws requiring companies to have corporate social responsibility (CSR) programs. In addition to increasing a company's appeal to socially conscious investors, such restrictions can assist ensure

that it makes constructive contributions to society and the environment. We can lessen the risks connected to businesses that don't prioritize social responsibility by encouraging an environment in business that values morality and sustainability.

Lastly, public awareness initiatives emphasizing the value of environmentally friendly consumption and sustainable investment can be extremely effective in influencing cultural norms and attitudes. The long-term advantages of sustainability for the environment, social cohesion and economic stability should be the main emphasis of these initiatives. Policymakers can make sure that the next generation is prepared to take on environmental concerns and help create a more sustainable society by fostering a culture of sustainability.

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APPENDICES

APPENDIX A. ETHIC COMMITTEE APPROVAL

Sayın Dr. Öğr. Üyesi S. Değer Eryar ve Elif Tokgöz,

"DO PERSONALITY TRAITS AFFECT SUSTAINABLE INVESTMENT DECISION: THE MEDIATOR ROLE OF GREEN CONSUMPTION– CASE STUDY OF COLLEGE STUDENTS IN IZMIR" başlıklı projenizin etik uygunluğu konusundaki başvurunuz sonuçlanmıştır.

Etik Kurulumuz 27.11.2023 tarihinde sizin başvurunuzun da içinde bulunduğu bir gündemle toplanmış ve Etik Kurul üyeleri projeleri incelemiştir.

Sonuçta 27.11.2023 tarihinde **"DO PERSONALITY TRAITS AFFECT SUSTAINABLE INVESTMENT DECISION: THE MEDIATOR ROLE OF GREEN CONSUMPTION– CASE STUDY OF COLLEGE STUDENTS IN IZMIR"** konulu projenizin etik açıdan uygun olduğuna oy birliğiyle karar verilmiştir.

Gereği için bilgilerinize sunarım.

Saygılarımla,

Prof. Dr. Murat Bengisu
Etik Kurul Başkan

APPENDIX B. BÜYÜK BEŞ KİŞİLİK TESTİ

Büyük Beş Kişilik Testi-50 (B5KT-50, Big Five Questionnaire-50)

1. Toplantıların gözdesiyimdir. (I+)

2. Başkalarına pek ilgi duymam. (II-)

3. Her zaman hazırlıklıyımdır. (III+)

4. Kolayca kendimi baskı altında hissederim. (IV-)

5. Kelime hazinem zengindir. (V+)

6. Çok konuşmam. (I-)

7. İnsanlarla ilgilenirim. (II+)

8. Kişisel eşyalarımı etrafta bırakırım. (III-)

9. Genelde rahatımdır. (IV+)

10. Soyut fikirleri kavramakta zorlanırım. (V-)

11. İnsanların arasında kendimi rahat hissederim. (I+)

12. İnsanlara hakaret ederim. (II-)

13. Detaylara dikkat ederim. (III+)

14. Her şeye endişelenirim. (IV-)

15. Olayları zihnimde canlandırırım. (V+)

16. Arka planda kalmayı tercih ederim. (I-)

17. Başkalarının duygularını anlayıp paylaşırım. (II+)

18. İşleri karmakarışık yaparım. (III-)

19. Nadiren kendimi keyifsiz hissederim. (IV+)

20. Soyut fikirlerle ilgilenmem. (V-)

21. Konuşmayı genelde ben başlatırım. (I+)

22. Başka insanların problemleriyle ilgilenmem. (II-)

23. İşleri hemen hallederim. (III+)

24. Kolayca huzursuz olurum. (IV-)

25. Mükemmel fikirlerim vardır. (V+)

26. Söyleyecek çok şeyim yoktur. (I-)

27. Yumuşak kalpliyim. (II+)

28. Genellikle eşyaları yerlerine koymayı unuturum. (III-)

29. Moralim çabuk bozulur. (IV-)

30. Hayal gücüm kuvvetli değildir. (V-)

31. Toplantılarda değişik insanlarla konuşabilirim. (I+)

32. Aslında başkalarıyla pek ilgilenmem. (II-)

33. Düzeni severim. (III+)

34. Ruh halim çok sık değişir. (IV-)

35. Olayları anlamada hızlıyımdır. (V+)

36. Dikkat kendi üzerime çekmekten hoşlanmam. (I-)

37. Başkalarına zaman ayırırım. (II+)

38. Görevlerimden kaçarım. (III-)

39. Ruhsal dengem sık değişir. (IV-)

40. Zor kelimeler kullanırım. (V+)

41. İlgi odağı olmaktan rahatsızlık duymam. (I+)

42. Başkalarının duygularını hissederim. (II+)

43. Bir plan takip ederim. (III+)

44. Çabuk rahatsız olurum. (IV-)

45. Olaylar üzerinde düşünerek vakit geçiririm. (V+)

46. Yabancıların arasında genelde sessizimdir. (I-)

47. İnsanları rahatlatırım. (II+)

48. İşimde titizimdir. (III+)

49. Çoğu zaman kendimi keyifsiz hissederim. (IV-)

50. Fikirlerle doluyumdur. (V+)

+ : Hiç uygun değil=1, Uygun değil=2, Orta/kararsız=3, Biraz uygun=4, Çok uygun=5-

- : Hiç uygun değil=5, Uygun değil=4, Orta/kararsız=3, Biraz uygun=2, Çok uygun=1.

I) Dışa dönüklük, II) Uyumluluk, III) Sorumluluk, IV) Duygusal dengelilik, V) Zeka/hayal gücü

APPENDIX C. GREEN PURCHASE INTENTION- ATTITUDE-BEHAVIOR GAP QUESTIONS

(15 Items- 5 point Likert scale)

Green Purchase Behavior (GBP- 4 items)

GPB1- When I want to buy a product, I look at ingredient label to see if it contains things that are environmentally-damaging.

(Bir ürün satın almak istediğimde içerik etiketine bakarak çevreye zarar veren maddeler içerip içermediğini kontrol ederim.)

GPB2- I prefer green products over non-green products when their product qualities are similar.

(Ürün kaliteleri benzer olduğunda, çevre dostu ürünleri çevre dostu olmayan ürünlere tercih ederim.)

GPB3- I choose to buy products that are environmentally-friendly.

(Çevre dostu ürünler satın almayı seçerim.)

GPB4- I buy green products even if they are more expensive than non-green ones.

(Çevre dostu ürünleri, çevre dostu olmayanlara göre daha pahalı olsa bile satın alırım.)

Green Purchase Intention (GPI- 5 items)

GPI1- I will consider buying green product because they are less polluting.

(Çevreyi daha az kirlettiği için çevre dostu ürünü satın almayı düşüneceğim.)

GPI2- I will consider switching to other brands for ecological reasons.

(Ekolojik nedenlerden dolayı başka markalara geçmeyi düşüneceğim.)

GPI3- I plan to switch to a green version of a product.

(Bir ürünün çevre dostu bir versiyonuna geçmeyi planlıyorum.)

GPI4- I am willing to pay more for a product which is healthy and helps protect the environment.

(Sağlıklı ve çevrenin korunmasına yardımcı olan bir ürün için daha fazla ödemeye hazırım.)

GPI5- I intend to buy green products in the coming time.

(Gelecek zamanlarda çevre dostu ürünler satın almayı niyet ediyorum.)

Attitude towards Green Purchase (GPA- 6 items)

GPA1- Environmental protection is important to me when making product purchase.

(Ürün satın alırken çevrenin korunması benim için önemlidir.)

GPA2- I believe that green products help to reduce pollution (water, air, etc.).

(Yeşil ürünlerin çevre kirliliğinin (su, hava vb.) azaltılmasına yardımcı olduğuna inanıyorum.)

GPA3- I believe that green products help to save nature and its resources.

(Yeşil ürünlerin doğayı ve doğal kaynakları korumaya yardımcı olduğuna inanıyorum.)

GPA4- Given a choice, I will prefer a green product over a conventional product.

(Bir seçenek verildiğinde, geleneksel bir ürün yerine yeşil bir ürünü tercih ederim.)

GPA5- Purchase of green products is smart choice.

(Yeşil ürünlerin satın alınması akıllıca bir seçimdir.)

GPA6- Purchase of green products bring many benefits.

(Yeşil ürünlerin satın alınması birçok fayda sağlar.)

APPENDIX D. DEFINITION OF STOCK, CONVENTIONAL STOCK, SUSTAINABLE STOCK AND RISK

Hisse Senedi: Yatırımcıların borsada işlem gören şirketlerin hisselerine ortak olarak ve sonucunda kar elde etme olanağı ile birikimlerini değerlendirmelerinin bir yoludur. Hisse senetleri, şirketlerin finansal durumlarına göre kar payı (temettü) ve/veya hisse senedi fiyatının artması üzeriden getiri sağlayabileceği gibi, şirketlerin zarara yol açmış faaliyetleri ve/veya hisse senedi fiyatındaki düşüşler sonucunda yatırımcının zarara uğramasına da sebep olabilir. Dolayısı ile risk barındıran bir yatırım aracıdır.

Geleneksel Hisse Senedi: Faaliyetlerinde karlılığı ön planda tutan ve en yüksek getiriyi elde etmeyi amaçlayan şirketlerin hisseleridir. Asıl amaç karın maksimum değere ulaşmasını sağlamaktır, bu amaçla yapılan faaliyetlerin çevreye zararlı olması ihtimali de vardır. Bu şirketler için çevreye zarar veren faaliyetler yalnızca yasal düzenlemeler yoluyla kontrol edilebilir. Bu hisse senedine yatırım yapacak olan yatırımcılar en yüksek getiriye ulaşma şansını yakalar.

Sürdürülebilir Hisse Senedi: Faaliyetlerinde uzun vadeli değer yaratmak amacıyla çevresel faktörleri ön planda tutan şirketlerin hisseleridir. Amaç yalnızca parasal anlamda en yüksek getiriyi elde etmek değildir, hatta; faaliyetlerinde çevreyi korumak adına daha fazla maliyetten de kaçınmamaktır. Bu hisse senedine yatırım yapacak olan yatırımcılar ise birikimlerini iklim değişikliği, doğal kaynaklar ve çevrenin korunması gibi konulara duyarlılık gösteren şirketlerin hisse senetlerinde değerlendirebilecek ve böylelikle çevreye sorumlu yatırımlar yapabilecektir.

Hisse senetleri risk barındıran yatırım araçları olduğundan aynı vadede (ör: 6 ay) risk barındırmayan yatırım araçlarına göre daha yüksek getiri sunması beklenir. Ayrıca; paranın zaman değeri dikkate alındığında enflasyon (malların fiyatlarının genel seviyede sürekli artması) oranı dikkate alınmalıdır. Ülkemizde son 6 aylık enflasyon yaklaşık %38 oranındadır. Hisse senedi piyasalarına 6 ay vade ile yatırım yapacak olan bir yatırımcının getiri hedefinin bu oranın üzerinde olması beklenir.