

# Personality Assessment of Green Consumers using the Big Five Model (OCEAN)

## (A Correlational Approach for Assessing the Common Personality Traits in Individuals with Green Purchase Intentions)

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**Abstract:-** With the increasing awareness about climate crisis, the demand for sustainable goods commonly known as Eco-products have increased. This opens a new gateway for sustainability research that integrates consumer behaviour, more specifically green consumer behaviour. Personality traits are an important indicator for marketers and manufacturers to predict consumer behaviour related to various product categories. The main aim of this study was to gain insights about the personality traits shared by individuals with an intention to make a green purchase. Personality analysis was done using the Big 5 Test, with 60 items, that score on each of the Big Five (OCEAN) personality traits; 1. Agreeableness, 2. Conscientiousness 3. Extraversion, 4. Neuroticism, and 5. Openness to experience. Along with these five personality traits subject's Environmental concern and Green purchase intention (GPI) were assessed. Self assessment questionnaires based on 5 point likert scale were used to assess Environmental concern and Green purchase intentions. Collected data was analysed using JASP Descriptive analysis, t-test, ANOVA, and correlation. All personality traits of the Big Five (OCEAN) theory except Neuroticism, had a highly significant correlation with Green Purchase intention. Significant difference was seen between various socio-demographic groups with respect to Environmental concern. Results related to this study will be useful for marketers and product manufacturers in understanding their potential consumers who not only have high levels of environmental concern but also those who have intentions to make a green purchase. High levels of GPI also serves as an incentive for manufacturers to prioritise the production of Eco-friendly products.

**Keywords:-** Consumer Behaviour, Green Consumerism, Personality, Big 5 theory, Green Purchase intention.

### I. INTRODUCTION

Global warming can be defined as an increase of the average temperature throughout the earth's atmosphere. (Demir, 2016). Over the last 4,00,000 years the Earth's climate has been unstable, with very significant temperature changes, going from a warm climate to an ice age in as rapidly as a few decades. Among all factors, it is believed that human activities and natural factors contribute to an increase in average global temperatures prominently. (Jain, 2015).

If appropriate policy measures are not implemented throughout the world, it can also adversely impact food security for the population across the world, along with sustainability of livelihood. (IPCC, 2007; Ringler et al., 2011).

India is especially vulnerable to the advent of climate change and its effects, as it is facing problems of changing precipitation patterns and temperature, along with a regular recurrence of extreme natural hazards. (Meena et al., 2022) The average air temperature has soared in many regions across the country. (Garg et al., 2015) If not adapted to by farmers, climate change will cause crop yields to decrease by 4.5-9% in the short term (2010-2039) and an astounding 25% in the long term (2070-2099). (Guiteras, 2009).

Seeing the various effects of the ecosystem on human well-being, a concept called Ecosystem Services (ES) comes into play. It can be defined as "the benefits people obtain from ecosystems." (MEA, 2005). Ecosystem service quality increases on the basis of its complexity, species richness and level of intactness. (Díaz et al. 2006) Thus it comes as no surprise when over-exploitation and climate change have the potential to reduce the efficiency of ecosystem services and increase ecosystem degradation. (Staudinger et al. 2012; Bangash et al. 2013; Lorencová et al. 2013). Given the rapid deterioration of the environment and its concerns, Corporate Social Responsibility (CSR) has emerged as a strategic requirement for businesses to achieve ecological sustainability and maintain the efficiency of ecosystem services (Anser et al. 2018). The CSR works on the idea that companies that make the most profit should also take responsibility for their exploratory practices and social problems in a manner where managing their business maximises profit share and wealth. but also contributes towards solving social issues. (Bohidar, 2020) We can however extensively see the impact of excessive waste disposal by organisations on stakeholders, who have to face extreme consequences in the form of ecological vulnerabilities. Thus organisational regulatory practices which promote pollution protection through waste management help curb the waste materials from exacerbating ecological decline, and are fruitful towards protection of the environment. (Sarfray et al., 2023).

However just as there are organisations who are committed towards protection of the environment and fulfilment of their CSR, there are others that are not at all committed towards protection, resulting in greater effects of pollution on ecological systems (El-Mallah et al., 2019) Due

to such actions, consumers may respond either temporarily, by withholding consumption to force a corporate change with the intention to continue consumption afterwards, or permanently, by withholding consumption altogether while also voicing out against the organisations to influence other consumers. (Romani et al. 2013). When consumers ally together to fight against such organisations together, the market is forced to take notice of the infractions and the firms can experience heavy penalties for their failure, either through anti-brand communication or extreme actions such as a community takeover of the firm's service/product offering. (Russell et al., 2015) Thus this increased awareness amongst the consumers, fuelled primarily by media as found by Trivedi et al. (2018), has paved the way for socially-responsible companies to be welcomed by such consumers. Gosselt et al. (2017).

Companies are working to create new product lines that are ethical, renewable and sustainable packaging. This requires investing in new innovation that is more environmentally-friendly, reusable, recyclable and sustainable. It can also include the establishment of a joint collaboration with packaging suppliers. (Walmart Highlights Sustainability Efforts, 2014) Green packaging aims to balance out the relationship between environment, resources, energy consumption, disposal of waste, people's health and packaging. (Wang & Min, 2015) This results in greater levels of safety for the health of the consumer, a minimisation of package waste, greater efficiency in the supply chain for companies and an overall improvement of the society's well-being. (Sustainable Packaging Alliance, 2002). New laws, regulations, taxations and other actions promoted by the government also encourage firms to promote sustainable packaging to make them more environmentally friendly. (Wei et al., 2018) For example, new directives given by the European Union demand member countries to introduce new legislative initiatives on packaging waste management. (Da Cruz et al., 2014).

Depending on their requirements and preferences, customers may avoid or favour one sort of material over another, according to Lindh et al. (2016). Consumers have generally demonstrated a preference to biodegradable green packaging over conventional packaging like plastic and glass. (Carvalho et al., 2022).

The food business also uses cellulosic packaging, such as cardboard and paper packaging. This material has benefits like the capacity to be presented in a variety of thicknesses and shapes, the potential to be mixed with other materials, the ease of printing, the low weight, resilience to low temperatures, and the ability to be recycled. (Carvalho et al., 2022) In contrast, the shape of glass packaging makes it very recyclable; as a result, glass is the material that is recycled and reused the most. (Carvalho et al., 2022) Although plastics and glasses take the longest to decompose, consumers assert that plastics have more negative environmental effects than metals do. (Licciardello, 2017).

Consumers claim that green packaging has a big impact on green logistics. Most consumers think recycling will lessen the amount of plastic packaging waste generated.

(Bhujbal & Shafiqhi, 2022) Moreover, labels frequently serve as consumers' first indication of a product's environmental benefits. (Herbes et al., 2020) Consumers are becoming more environmentally conscious, which encourages them to purchase products that are environmentally friendly. (Rajnikanth & Bannerjee, 2021).

Sustainable development is preserved in the future thanks to green consumerism. Using green items is an aspect of pro-environmental behaviour that is crucial for resource conservation, sustainable development, and waste reduction. (Lim et al., 2022) Environmental marketing tactics that emphasise influencing consumer behaviour and exerting pressure on businesses are centred on green consumers, who want to lessen their influence on the environment. (Kumar and Ghodeswar, 2015).

Collective "green" consumer activity can reduce pollution, increase social welfare, and boost business profits, thereby positively impacting climate change. (Chander, 2015) When seen from a free market viewpoint, buying "greener" goods may allow customers to make a statement through their purchase decisions, resulting in systemic policy changes that have a significant positive impact on the environment. (Shaw et al., 2006).

Companies that follow sustainable packaging; Eg: Seed probiotics, PVA Bags (Examples, Impact, Drawback) The nano-Chitopack project is one instance of this. It aims to utilise chitin waste, a byproduct of the fish industry that is predominantly used in the cosmetic sector due to its bacteriostatic qualities. As they are completely biodegradable and have greater UV and heat resistance, the idea is to employ them in the food business to produce packaging and useful bacteriostatic films. By incorporating chitin nanowiskers into biodegradable thermoplastics now in use, it is hoped to enhance already-existing biodegradable materials. (Cinelli et al., 2013).

Another illustration is the 2020 Packaging Goals programme from Dell, which aspires to create a packaging stream without any waste. The company decreased the size of desktop and notebook packaging by more than 12% in 2012, used nearly 40% more recycled and renewable materials in its packaging, used curbside recyclable packaging up to 75% of the time, and eliminated about 20 million pounds of packing. The company made the decision to invest in agricultural waste in order to generate zero-waste packaging materials for its bulky items and reduce greenhouse gas emissions. For this reason, Dell produces pillows from mushrooms that are then composted. The finished product has the appearance of Styrofoam and is organic, sustainable, and durable. (Dellis, 2017).

With advances in organic waste, the company Ainia strives to manufacture environmentally friendly packaging materials, thereby reducing its reliance on fossil raw materials. By anaerobic fermentation (bioproduction) of food waste in this context, biopolymers were generated. One illustration of this work is the creation of Succipack, a brand-new bioplastic made entirely of renewable resources. Another illustration is the European initiative pHbottle,

which was created utilizing food waste fermentation methods.(Ainia, 2022).

#### A. Packaging

A product's essence is encapsulated in its packaging, an integral component in the consumer's decision-making process and the representation of a company's brand, extending across a spectrum of items from televisions to everyday medications. The diversity of products necessitates a range of packaging techniques, yet certain elements, such as colour, imagery, typography, and format, exhibit a commonality. These elements serve a more expressive role than a practical one across all products.

The multifunctional role of packaging affects brand image, loyalty, consumer intention, marketing, overall design and the position of the product in the market. Packaging is sometimes referred to as 'the fifth P' of the marketing mix, beside product, price, place and promotion (Kotler, 2003). The marketing of any product is impossible without visuals, and that is what the packaging of any product offers. It is related to both the logistics and the marketing of any product. The packaging material and its design are dependent on each other and they would speak a lot about the business's position in the sustainable movement going on these and would in turn affect the demand and supply of the product as well.

The visuals of any packaged materials are the first touchpoint between the consumers and the manufacturers, thus the packaging must be unique, creative as well as sustainable for it to make a sale. It is important that the packaging must be consistent for the consumers so that they do not lose interest or trust.

There are a number of studies that focus on psychological factors that come in play when it comes to packaging, for example; Kano's theory of attractive quality and packaging that focuses on how packaging should be designed to be competitive and associated with high quality from a customer perspective. The traditional role of packaging in consumer products has been to store and protect the content. Current consumer and industry trends, however, suggest an increasingly important role for packaging as a strategic tool as well as a marketing vehicle. In today's day and age packaging is taken into consideration in terms of marketing, logistical, communicative, and technical purpose.

Products encompass a broad spectrum, including consumer goods like convenience, specialised, shopping, and unsought items, as well as industrial goods. While the functional role of packaging varies according to product type, the expressive elements such as colour, images, typography, and format remain consistent. Packaging incorporates all materials utilised to safeguard, control, and distribute food products. The packaging of food products holds considerable importance as it serves the dual purpose of shielding the items from adverse environmental conditions during transportation and ensuring the maintenance of quality throughout the entire process, from loading various products to delivering them to the consumer's doorstep. Effective packaging prevents damage to the products and plays a crucial role in preserving their quality. Maintaining product

quality is of paramount significance for a company in establishing and sustaining brand loyalty.

In our contemporary society characterised by daily shopping routines, we are intimately acquainted with a myriad of packaging styles. Various products leverage distinctive packaging characteristics to convey their inherent value and provide practical information (Lin & Lin, 2022). Packaging design functions as the face of the product, representing its identity. The design a product adopts becomes its defining feature, influencing consumer choices based on what the product symbolises. The design of a product's packaging plays a crucial role in driving its sales. Modern consumers are not only drawn to products based on their quality but also on the design that signifies a certain value, whether personal or aesthetically pleasing. Sustainable products with environmentally friendly packaging, for instance, attract consumers who align with the ideology of environmental conservation, fostering brand loyalty through their contribution to a shared cause.

The multifaceted impact of packaging extends to brand image, consumer loyalty, purchase intention, marketing strategy, overall design, and the product's market positioning. Effective marketing hinges on visuals, and the packaging of a product serves as a vital visual component. It is intricately connected to both the logistics and marketing aspects of any product. The choice of packaging material and its design are interdependent, reflecting a business's stance in the ongoing sustainability movement, consequently influencing product demand and supply. Chind and Sahachaisaeree (2012) emphasise that visual elements, especially the packaging image, are pivotal in expressing product value and instilling confidence to persuade consumers to make a purchase.

The visuals of packaged materials represent the initial interaction between consumers and manufacturers, underscoring the need for packaging to be not only unique and creative but also sustainable to facilitate successful sales. Consistency in packaging is essential for maintaining consumer interest and trust. In the contemporary landscape, packaging is integral to considerations spanning marketing, logistics, communication, and technical functionality.

The role of packaging can significantly influence the success or failure of a product, with its effectiveness largely contingent on the design created by its developers. While some view packaging merely as a protective measure for products, others contend that the essence and identity of the product are embedded in its package design.

Meyers and Gerstman (2005) assert that the sixth 'P' in the marketing mix is represented by packaging. In an increasingly competitive market (Mininni, 2008), packaging has emerged as a crucial point-of-purchase merchandising tool, reflecting the growing expertise of designers and marketers. Given that a product typically has a mere one-seventeenth of a second to capture attention on a supermarket shelf (Kotler, 2008), packaging must stand out quickly and possess an appeal that prompts consumers to pick it up. A brand's personality comes to life when a consumer interacts

with the product in-store, necessitating a strong connection between the brand and its packaging. The design should not necessarily project the 'best' personality but should align with the brand's identity to maintain consistency and convey the intended message. Consumer decision-making involves identifying needs and desires, followed by the purchase process, which includes pre-purchase, purchase, and post-purchase activities. The perception and evaluation of the product, including its packaging, play crucial roles in guiding customers toward a purchasing decision.

Despite numerous studies in the field of packaging, Holmes and Paswan (2012) highlight a gap in understanding the impact of a consumer's experience with the package on the evaluation of the product itself. For businesses, ensuring efficient and sustainable packaging is vital in the dynamic contemporary landscape. Packaging plays a role in product selection, with visually appealing packaging more likely to attract consumers and shape their attitudes toward both the product and the company.

#### *B. Green Purchase intention and Green Consumerism*

Previous research has established that consumers' decision-making processes are intricately shaped by their level of knowledge. The extent of customer awareness and their position regarding environmentally friendly products are intimately connected to their inclination to make a purchase. Perceived consumer efficacy, a term denoting an individual's perception of the effectiveness of their actions in addressing environmental concerns, is a pivotal aspect. Moreover, consumers' purchasing intentions are notably swayed by the perceived value derived from consumption, serving as a pivotal impetus for their buying behaviour. The pricing of goods emerges as a critical factor influencing consumers' choices, as it reflects the perceived value of the products. The provision of consumer-friendly prices is positioned to dispel the misconception that environmentally friendly products are more costly than their counterparts. Undoubtedly, this strategic pricing approach is anticipated to expand the customer base of eco-friendly companies. The act of acquiring environmentally conscious or "green" products is commonly known as "green purchasing." In essence, green purchasing involves making choices that reduce the impact of consumer goods on the environment. The terms "eco-friendly product," "environmental product," and "ecological product" (Kawitkar, 2013) can be used interchangeably with "green product" (Chen & Chai, 2010). Green purchasing fundamentally entails the procurement of products that contribute to the preservation of the environment, combating its ongoing degradation.

Numerous businesses rely on the concept of purchase intention to forecast the sales of new products and the repeat purchases of existing ones, with purchase intention being a pivotal term in marketing literature (Ali et al., 2011). In contemporary times, the inclination towards purchase intention varies across companies and their customer bases, with higher levels of willingness to purchase green products correlating to increased purchase intention. A growing societal awareness underscores the imperative to conserve resources, reduce greenhouse gas emissions, and minimize landfill contributions due to pressing waste disposal

challenges. In response to these environmental threats, consumers are increasingly feeling compelled to engage in sustainable practices related to product disposal, including product reuse and life extension. This heightened awareness about waste disposal is becoming a significant factor influencing consumer choices, steering many towards a preference for green products.

Extensive research on consumer behaviour regarding environmentally friendly products dates back to the 1970s. Studies have demonstrated that various factors, encompassing values, attitudes, needs, motivations, beliefs, knowledge, and demographics, collectively shape consumer decisions when it comes to purchasing environmentally friendly items (Bui & Loyola, 2005). The decision-making process regarding environmentally friendly products is influenced by a combination of psychological and psychosocial factors. Green purchase intention is characterised as an individual's likelihood and inclination to prioritise environmentally friendly products over conventional ones when making a purchasing decision (Nik Abdul Rashid, 2009). Businesses in the United States and Europe have observed that customers increasingly consider the environment in their future buying choices, a phenomenon referred to as green marketing (Lampe and Gazdat, 1995). Over the past decade, environmental concerns have escalated due to heightened media coverage, increased awareness of environmental issues, the aftermath of significant industrial disasters, and the rise of environmental activist groups (Kalafatis et al., 1999). Consequently, a growing number of consumers have started giving precedence to environmental preservation when making purchasing decisions, emphasising that the responsibility for environmental protection extends beyond governmental institutions or organisations and is a shared responsibility for everyone (Fraj and Martinez, 2006). The internet's influence has facilitated global connections over the last two decades, allowing people to unite globally for environmental causes and advocate for the significance of mindful choices in daily life.

In a cross-cultural research project surveying customers in Shanghai and Los Angeles, Chan and Lau (2002) concluded that further research is needed to comprehensively understand the asymmetric impact of green purchase intention on green purchasing behaviour. Following a survey of customers in Shanghai and Los Angeles as part of a cross-cultural research initiative, Chan and Lau (2002) concluded that further investigation is necessary to comprehensively grasp the asymmetric impact of green purchasing intention on green purchasing behaviour. Advocates for environmental sustainability posit that adopting environmentally friendly and ecologically sensitive business practices can confer a competitive advantage and lead to improved financial outcomes (Engardio, 2007; Esty and Winston, 2006). Fueled by the growing support for environmental causes, businesses are increasingly addressing the market demand for eco-friendly products, strategically positioning themselves in dynamic markets. Customers wield the power to either support or condemn enterprises based on their environmental practices, prompting the suggestion that consumer pressure can drive firms to prioritise environmental considerations.

Contemporary theories propose an increasing preference among customers for businesses embracing environmentally conscious practices while offering ecologically friendly products, underscoring the significance of these environmentally aware consumers (Sisodia et al., 2007). The heightened environmental awareness in the 21st century has empowered consumers to contribute positively to the environment through conscious choices in product selection and the companies they endorse.

Laskova (2007) asserts that individuals who perceive themselves as unable to protect the environment are less likely to engage in pro-environmental activities, while those with strong environmental concerns exhibit a more favourable attitude toward environmental issues. Pickett-Baker and Ozaki's research (2008) reveals that purchasing products from environmentally friendly companies is perceived as a wise choice, albeit recognizing the challenge of identifying green products. Participants noted a lack of engaging and relevant advertising for such products, emphasising the need for marketers to highlight product benefits and changes effectively. Advertising and green marketing, leveraging visuals and audio, emerge as crucial elements for successfully promoting green products.

Joshi and Rahman (2016) contend that the inclination to make green purchases reflects a sophisticated ethical decision-making approach, signalling a specific type of action embodying social responsibility. Examples of eco-friendly consumer behaviour include purchasing goods made from recycled materials and opting for organic foods. Trends, often influencing consumer choices, can significantly influence a large segment of the population towards environmentally friendly options. In the realm of marketing, influencer marketing plays a pivotal role in promoting green products. Influencers, particularly influential among the youth, possess the ability to encourage sustainable purchasing habits. Given the strong connection of young consumers with social media influencers, who are also the most environmentally concerned generation, leveraging social media's influential power becomes crucial for fostering environmental empathy. Kates (2000) identifies overpopulation and overuse as the primary causes of current ecological and environmental crises. Present-day ecological challenges encompass eutrophication, acid rain, diminishing flora and fauna, water and air pollution, global warming, and ozone depletion. Excessive population growth in both developed and developing nations has strained the environment, prompting a reconsideration of the relationship between humans and the environment.

### C. Environmental Concern

The statement that respondents wish to purchase an environmentally friendly product is accepted by 61.3% of respondents. The respondents' agreement is also indicated by the mean value of 1.95, and the standard deviation of 0.810 indicates that there are few differences in the respondents' opinions of the statement. (Zulfiqar, 2015) 56.3% of respondents concur with the assertion that environmental concern can be cultivated through green promotion. In addition to demonstrating the respondents' agreement with the statement, the mean value of 1.86 and the standard

deviation of 0.828 both demonstrate the respondents' agreement with the statement. (Zulfiqar, 2015) According to the findings, school (65.3%), television (48.3%), and the internet (43.8%) provided children with the majority of their information. On the other hand, pupils learned the least from governmental organisations (10.1), radio (10.1%), and billboards (4.3%). School (56.2%), books (47.4%), and the Internet (37.8%) were seen by young people as the sources of environmental information that are most trustworthy. However, radio (14.1%), billboards (13%) and friends (7.6%) were considered to be the sources of environmental information that were least dependable. (Mifsud, n.d.)

According to the study, students in the Maltese Islands had an average score of 12.14 out of a possible 24 for their general knowledge concerning the environment. (Mifsud, n.d.)

Consumers prefer recyclable packaging, but non-recyclable packaging negatively affects their perceptions of utilising such products. (Harjadi & Gunardi, 2022). A higher price for environmentally friendly products was acceptable to 13.1% of respondents. (Laroche et al., 2001)

Green packaged food purchases are greatly aided by consumers' supportive attitudes towards environmental preservation. (Tanner & Kast, 2003) Additionally, because it is an unnecessary hardship to dispose of waste, consumers often choose environmentally friendly packaging that is designed to make it easy for them to do so. (Jayasinghe, 2022)

In order to instill a favourable attitude and behaviour towards the environment in the populous, extra focus must be paid to boosting public awareness. (Erhabora & Don, 2018) Environmental education is defined as the process of incorporating environmental content into the educational system in order to raise public knowledge of environmental issues at all educational levels. It's an educational strategy that aims to improve the interaction between people and the environment, which is deteriorating. (Erhabora & Don, 2018)

Raising environmental knowledge in vulnerable groups can be accomplished by fostering ethical and environmental consciousness. (Bonnett, n.d.) In order to raise awareness and concern for the environment, it can be helpful to highlight the potential environmental safety issues caused by natural toxins, such as phytotoxins, in anthropogenically managed ecosystems. (Bucheli, 2014)

Environmental concern is significantly impacted by social media. Social media platforms have been proven to be useful for promoting environmental initiatives, bringing people together to discuss environmental issues, and tracking and sharing environmental data. (Bires & Raj, 2020) Students studying engineering and business have shown a strong correlation between social media use and moral reasoning and environmental awareness, especially among the younger age. (Barrera-Verdugo, 2023) Exposure to social media, environmental awareness, and arbitrary norms have all been recognised as key factors in determining consumers' intentions to buy green items in the context of consumption. (Mallick & Bajpai, 2019) It has been discovered that social

media marketing has a favourable effect on environmental sustainability in businesses that provide food and beverages, with consumer trust, perceived value, and persistence intention influencing sustainability activities. (Martínez-Navalón et al., 2019)

Studies have looked into the crucial topic of environmental concern among low-income people. According to research, people with low incomes frequently underestimate their environmental concerns and are mistakenly thought to care less about the environment than people with higher incomes. (Pearson et al., 2018) This implies that while low-income groups might have environmental concerns, these concerns might not be the same as conventional ecological ones. Additionally, research has refuted the idea that customers' intent to purchase green items and actual green consumption are related to their income categories. (Song et al., 2020) According to research, non-White and lower-income respondents actually perceive human-oriented issues as being more "environmental" than do White and higher-SES respondents. (Akhtar et al., 2021)

Consumer personality characteristics influence consumer ethics, and some aspects of these consumers' ethics influence their inclination to purchase green products. (Chang, 2015) Personality traits affect environmental concern. According to studies, those with higher levels of neuroticism, openness to new things, and possibly agreeableness have a tendency to develop more environmental worries over time. (Francis et al., 2022) Positive attitudes towards Christianity account for more variation in environmental concern and behaviour than religious behaviours like church attendance and private prayer, according to research on religious affect and attitudes towards Christianity. (Degnet et al., 2022) In order to effectively promote environmental issues in diverse situations, such as private forest management, it can be helpful to understand the relationship between personality qualities and environmental care. (Chen et al., 2020).

#### D. Personality

D. W. Fiske first proposed the Big Five Personality Traits theory in 1949. Five general personality traits are described by the Big Five Personality Traits Model. They are neuroticism, agreeableness, extraversion, conscientiousness, and openness. The acronym OCEAN makes it simple to remember these. Between the extremes of the range is a continuum represented by each personality attribute. People are assumed to remain somewhere around the middle of the range in real life. The degree of curiosity, inventiveness, willingness, and originality is known as openness to experience. Individuals with high attribute scores are typically curious and receptive to novel concepts and advancements.

The degree of self-control in organising and planning that is known as conscientiousness. This characteristic is linked to organisation, mindfulness, goal-direction, and thinking. A person with a high trait score is methodical, goal-oriented, peaceful, and well-organized. The level of friendliness, positive emotionality, and general activity is known as extraversion. characterised by sociability and

talkativeness. Being agreeable promotes kindness, generosity, and trust. Individuals that score well on this characteristic are cooperative and empathetic. The propensity to feel bad and feel distressed psychologically when faced with pressures is what defines neuroticism. connected to worry, stress, mood swings, and emotional instability (McCrae & Costa, 1985). To gain access to the Big Five Model's five domains, Costa and McCrae (1989, 1992) created the NEO-Five Factor Inventory (NEO-FFI).

#### E. Theoretical Framework

Emekci (2019) concurred that personality traits are a more accurate indicator of environmentally conscious consumers than socioeconomic factors. According to Fraj and Matinez's (2006) analysis of the association between personality traits and ecological concern, those who are more tolerant, comprehensive, and security-seeking will exhibit higher levels of ecological worry. Finding consumers that care about the environment has yielded inconsistent outcomes when it comes to feeling cut off from one's community, society, and/or culture (Hindmarsh & Alidoust, 2019). One could argue that alienated people are less motivated to buy environmentally friendly products and are less aware of their community or society. Therefore, it stands to reason that those who avoid social situations because they feel alone or alienated care less about the environment. Customers that are socially conscious and laboriously partake in society embrace consumption practises that align with their norms of responsibility (Schwepker & Cornwell, 1991). As a result, individuals might express their dislike of conduct that hurt the environment and be more inclined to buy environmentally friendly goods. According to Hirsh and Dolderman (2007), being agreeable is linked to having evolved degrees of empathy, and people who are sympathetic are more likely to be environmentally conscious. A favourable link with openness to experiences may exist given the relationship between environmentalism and a more extensive self-concept (Chen et al., 2019). People that have high degrees of openness may have further experiences with nature because of their aesthetic sensibility, which in turn may boost their appreciation of the natural world (Hirsh & Dolderman, 2007). Experience with nature is therefore a powerful indicator of attitudes and actions related to the environment (Kil, 2016).

- **Openness:** Research from Hirsh (2010), Milfont & Sibley (2012), Markowitz et al. (2012), and Sun et al. (2018) indicates that being receptive to new experiences encourages environmentally conscious behaviour and the use of green products. On the other hand, Kvatova (2015) finds a statistically significant inverse link between eco-friendly tourism behaviour and openness to experience. Nonetheless, those who are very receptive to new experiences typically have a keen interest in thought and a deep respect for the natural world.
- **Conscientiousness:** Regarding the impact of conscientiousness on pro-environmental behaviour, empirical results are equivocal. When it comes to conscientiousness and environmentalism, Hirsh & Dolderman (2007) discover a strong negative relationship, while Markowitz et al. (2012) find an insignificant but favourable relationship. Nonetheless, research by Sun et al. (2018), Kvatova (2015), and

Milfont & Sibley (2012) supports a strong positive correlation between multiple measures of environmentalism and conscientiousness. High conscientiousness people are interested in the long term consequences of their actions on the environment and have a forward-thinking mindset, claim Milfont and Sibley (2012).

- **Extroversion:** The association between extraversion and pro-environmental behaviour has not been conclusively demonstrated by empirical research. While Markowitz et al. (2012) and Milfont & Sibley (2012) find a significant positive relationship between extraversion and environmental engagement and pro-environmental behaviour, Hirsh & Dolderman (2007) and Hirsh (2010) did not find an association between extraversion and environmental concern. High extraversion is typically linked to care for the environment, subjective well-being, and self-expression.
- **Agreeableness:** According to Sun et al. (2018), agreeableness and green purchase intention have a substantial positive link because agreeable people are more inclined to be nice and altruistic as well as to take

other people and the environment into consideration. A favourable correlation has also been shown in studies by Hirsh (2010) and Kvatova (2015) between agreeableness and pro-environmental behaviour, environmental participation, and eco-friendly tourism practises.

- **Neuroticism:** According to Hirsh & Dolderman (2007), neuroticism and environmentalism are negatively correlated. According to Hirsh (2010), a high degree of neuroticism is positively correlated with environmental concern. This result can be explained by the fact that people with high neuroticism tend to worry more about negative outcomes in general. Therefore, anxiety about the detrimental effects of ecological degradation may be reflected in concerns about the environment, whereas people who are emotionally secure may experience less emotional distress when considering the environment. According to Kvasova (2015), there is a strong correlation between tourists' eco-friendly behaviour and neuroticism. High neuroticism individuals will be more concerned about actions that could have detrimental effects on the environment. This could encourage people to buy eco-friendly goods.

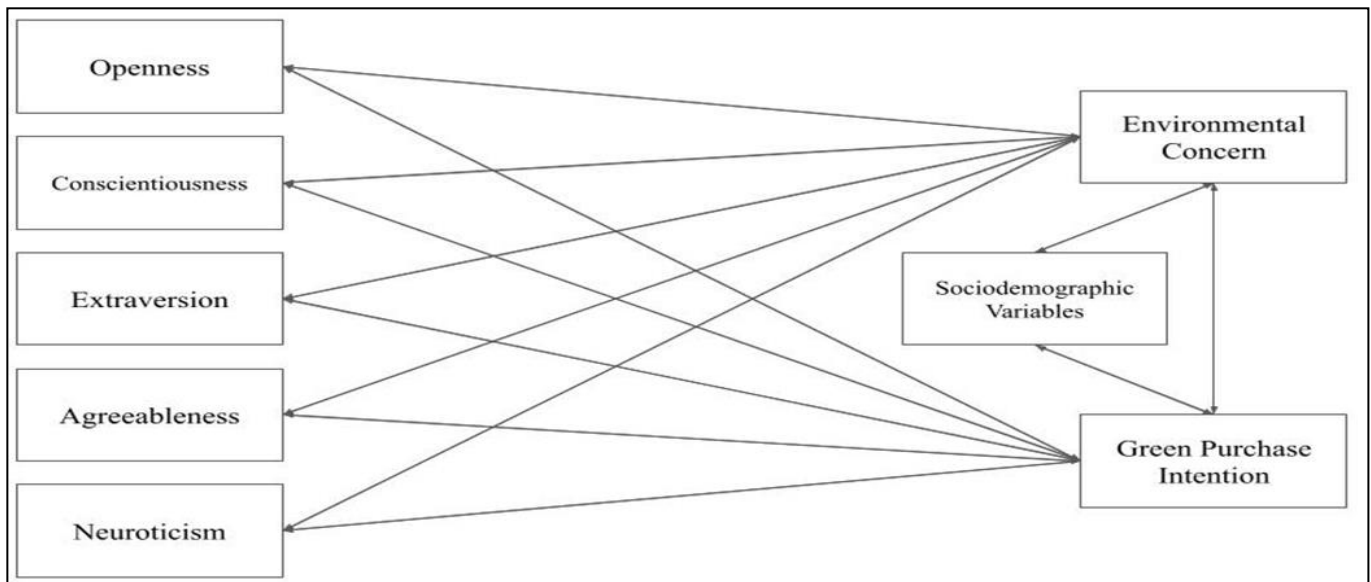


Fig 1 Theoretical framework

**II. METHODOLOGY**

*A. Hypothesis*

- There will be no significant correlation between “Openness” and “Green Purchase Intention”(H 1)
- There will be no significant correlation between “Conscientiousness” and “Green Purchase Intention”(H 2)
- There will be no significant correlation between “Extraversion” and “Green Purchase Intention”(H 3)
- There will be no significant correlation between “Agreeableness” and “Green Purchase Intention”(H 4)
- There will be no significant correlation between “Neuroticism” and “Green Purchase Intention”(H 5)
- There will be no significant correlation between “Openness” and “Environmental Concern”(H 6)
- There will be no significant correlation between “Conscientiousness” and “Environmental Concern”(H 7)
- There will be no significant correlation between “Extraversion” and “Environmental Concern”(H 8)
- There will be no significant correlation between “Agreeableness” and “Environmental Concern”(H 9)
- There will be no significant correlation between “Neuroticism” and “Environmental Concern”(H 10)
- Social Demographics with Green Purchase Intention(H 11)
- ✓ There will be no significant difference in “Green Purchase Intention” between “Genders”
- ✓ There will be no significant difference in “Green Purchase Intention” between “Age groups”
- ✓ There will be no significant difference in “Green Purchase Intention” between “Education Level”

- ✓ There will be no significant difference in “Green Purchase Intention” between “Occupation”
- ✓ There will be no significant difference in “Green Purchase Intention” between “Family Income Groups”
- ✓ There will be no significant difference in “Green Purchase Intention” between “Rural and Urban Residence.”
- Social Demographics with Environmental Concern(H 12)
- ✓ There will be no significant difference in “Environmental Concern” between “Genders”
- ✓ There will be no significant difference in “Environmental Concern” between “Age groups”
- ✓ There will be no significant difference in “Environmental Concern” between “Education Level”
- ✓ There will be no significant difference in “Environmental Concern” between “Occupation”
- ✓ There will be no significant difference in “Environmental Concern” between “Family Income Groups”
- ✓ There will be no significant difference in “Environmental Concern” between “Rural and Urban Residence”
- There will be no significant correlation between “Green Purchase Intention” and “Environmental Concern”(H 13)

*B. Measuring Scales*

The scales and measures used for the constructs were adapted from:

Garcia & Campos (2022) consisting of 5 items for Green Purchase Intention.

Singh & Sahadev (2023) consisting of 5 items for Environmental Concern.

Chouhan & Kacker (2016) consisting of 60 items for OCEAN Personality, adapted from NEO-FFI 3 by Costa and Macrae (1991).

All the adapted scales, (except for the NEO-FFI 3 used to assess OCEAN Personality) used a five-point Likert scale. The Likert scale ranges from 1 to 5, where 1 represents strongly disagree and 5 represents strongly agree.

A pilot study involving 25 participants was carried out to evaluate the internal consistency of chosen scales. A metric called Cronbach's alpha was employed to evaluate internal consistency. The analysis's findings are presented in Table 1.

Table 1: Cronbach’s Alpha value of a pilot with 25 subjects

Sr. No.	Variable	Cronbach’s Alpha value
<b>A.</b>	<b>Green Purchase Intention</b>	<b>0.840</b>
	I will pay attention to the eco-friendly aspects of the packaging of the products I buy.	
	I will consider switching to eco friendly brands for ecological reasons	
	I will consider buying eco-friendly packaging because it is less polluting.	
	I plan to spend more on products packaged in eco-friendly materials rather than those that are not.	
	I want to purchase eco-friendly packaged products in the near future.	
<b>B.</b>	<b>Environmental Concern</b>	<b>0.906</b>
	I am concerned about environmental problems.	
	I am concerned about global warming.	
	I am concerned about the effect of harmful industrial substances on health.	
	I am concerned about waste problem.	
	I believe that conserving the environment is more important than life convenience.	

*C. Research Design*

The correlational research design is the one used for this investigation. The purpose of correlation research design is often to determine whether two or more variables are related. Finding a statistically significant link or correlation between the variables under study is the aim of correlation research. Under this study design, the variables of interest are the subjects of data collection, which is subsequently analysed using statistical techniques to ascertain the direction and

strength of the relationship between the variables. Snowball sampling, convenience, and online questionnaires. The questionnaire was composed of previously developed, valid, and reliable scales for the study's constructs that were contextually adjusted for this investigation.



**D. Participants**

The following criteria was set for sampling.

➤ *Inclusion criteria :*

- Minimum 18 years of age
- Female & Male Gender.

➤ *Exclusion criteria :*

- Anyone under 18 years of age.
- LGBTQ+ Gender

➤ *Demographic Details of the Participants:*

- Demographic Details of the Participants: Of the 302 participants, 140 were male (46.2%), 162 female (53.5%)
- Majority of the sample lied in the age range of 18-24 (158, 52.5%), followed by 45 and above (116, 38.3%), 35-44 (18, 5.9%), and 25-34 (10, 3.3%) 1 participant (0.3%) was educated upto 8 years,
- 14 (4.6%) were educated between 8 and 13 years, with 144 (47.9%) undergraduates (pursuing as well as graduates), and 143 (47.2%) pursuing or having completed post-graduation or above, and 1, educated upto 8 years.
- 150 participants (49.8%) were students, 6 (2%) were unemployed, and 146 (48.2%) were employed (Salaried, Self-employed and/or by other means)
- 54 participants (17.8%) reported family income below 3 lakhs, 61 (20.1%) between 3 and 8 lakhs, 67 (22.1%) between 8 and 12 lakhs, and 120 (39.9%) above 12 lakhs.
- 271 (89.8%) participants resided in urban areas, while 31 (10.2%) resided in rural areas.

**III. PROCEDURE**

The purpose of this study was to investigate the relationship between the following variables: 1. Green Purchase Intention; 2. Environmental Concern; 3. Openness; 4. Consciousness; 5. Extraversion; 6. Agreeableness; and 7. Neuroticism; as well as the differences in these variables across different sociodemographic groups.

An online Google form was used to collect data in order to increase the reach. It was a consent form that asked about people's desire to take part in the study and guaranteed the privacy of their personal information. Gender, Age Groups, Education Level, Employment Status, Income Groups, and Area of Residence are among the demographic characteristics. instructions for using a likert scale to label the data and the scales, with the ability to provide suggestions if any.

On the several scales, participants are asked to rate each topic according to how relatable and relevant it is to them. A five-point Likert scale was utilised in scales and measurements. The Likert scale goes from 1 to 5, with 5 denoting strong agreement and 1 denoting extreme disagreement. There were six questions about social demographics out of the total seventy items in the questionnaire.

**IV. RESULTS**

Descriptive statistics were conducted for the scores of “Green Purchase Intention,” “Environmental concern” and personality traits of 1. Openness, 2. Conscientiousness, 3. Extraversion, 4. Agreeableness, and 5. Neuroticism in a sample of 302 participants. Table 2 shows that the mean and standard deviation for the mentioned variables. They are as followed: “Green Purchase Intention” (M = 20.209, SD = 3.093), “Environmental concern” (M = 21.596, SD = 2.987), “Neuroticism” (M = 23.450, SD = 7.260), “Extraversion” (M = 28.281, SD = 5.811), “Openness” (M = 28.593, SD = 4.108), “Agreeableness” (M = 27.248, SD = 4.281), “Conscientiousness” (M = 31.371, SD = 6.935) Refer hypothesis statements for a better understanding about variables under examination.

Shapiro-Wilk test was performed to examine the normality assumption of the data.

Table 2: Descriptive Statistics for Variables(N = 302)

	Env Concern	GPI	N	E	O	A	C
Valid	302	302	302	302	302	302	302
Missing	0	0	0	0	0	0	0
Mean	21.59	20.21	23.45	28.28	28.59	27.25	31.37
Std. Deviation	2.98	3.09	7.26	5.81	4.11	4.28	6.93
Shapiro-Wilk	0.88	0.95	0.99	0.99	0.98	0.99	0.98
P-value of Shapiro-Wilk	< .001	< .001	0.71	0.04	0.002	0.05	0.01

**A. Correlation**

Table 3 shows Spearman’s Rho, which indicates the correlation between the following variables “Green Purchase Intention,” “Environmental concern” and personality traits of 1. Openness, 2. Conscientiousness, 3. Extraversion, 4. Agreeableness, and 5. Neuroticism.

We are taking into consideration three levels of significance from .05 .01 and .001, results pertaining to our hypothesis under consideration, indicated that:

‘GPI ’(Green Purchase intention) and ‘O ’(Openness) have a correlation with,  $p < 0.001$  and  $\rho = 0.303$  . (H1)

‘GPI ’(Green Purchase intention) and ‘C ’(Conscientiousness) have a correlation with,  $p < 0.001$  and  $\rho = 0.354$  . (H2)

‘GPI ’(Green Purchase intention) and ‘E ’(Extraversion) have a correlation with,  $p < 0.001$  and  $\rho = 0.246$  . (H3)

‘GPI ’(Green Purchase intention) and ‘A ’(Agreeableness) have a correlation with,  $p < 0.001$  and  $\rho = 0.255$  . (H4)

'GPI '(Green Purchase intention) and 'N '(Neuroticism) do not have a significant correlation with,  $p > 0.071$  and  $\rho = -0.104$ .(H5)

'EC '(Environmental concern) and 'O '(Openness) have a correlation with,  $p < 0.001$  and  $\rho = 0.240$ . (H6)

'EC '(Environmental concern) and 'C '(Conscientiousness) have a correlation with,  $p < 0.001$  and  $\rho = 0.254$ . (H7)

'EC '(Environmental concern) and 'E '(Extraversion) have a correlation with,  $p < 0.001$  and  $\rho = 0.243$ . (H8)

'EC '(Environmental concern) and 'A '(Agreeableness) have a correlation with,  $p < 0.001$  and  $\rho = 0.206$ . (H9)

'EC '(Environmental concern) and 'N '(Neuroticism) do not have a significant correlation with,  $p > 0.430$  and  $\rho = -0.046$ . (H10)

'GPI '(Green Purchase intention) and 'EC '(Environmental concern) have a correlation with,  $p < 0.001$  and  $\rho = 0.626$ . (H13)

Table 3: Spearman's Correlations between 'O,' 'C,' 'E,' 'A,' 'N,' 'GPI' & 'Environmental Concern'

			Spearman's rho		p
N	-	GPI	-0.104		0.071
N	-	Env Concern	-0.046		0.430
E	-	GPI	0.246	***	< .001
E	-	Env Concern	0.243	***	< .001
O	-	GPI	0.303	***	< .001
O	-	Env Concern	0.240	***	< .001
A	-	GPI	0.255	***	< .001
A	-	Env Concern	0.206	***	< .001
C	-	GPI	0.354	***	< .001
C	-	Env Concern	0.254	***	< .001
GPI	-	Env Concern	0.626	***	< .001

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

**B. T - Test**

A Mann-Whitney Score was conducted to examine if there exists a difference in "Green Purchase Intention" between genders. (Group 1 = Female) (Group 2 = Male) (H 11.1)

As shown in Table 4, there is no significant difference between Group 1's score in "Green Purchase Intention"(M = 20.099, SD = 2.913) and Group 2's score (M = 20.336, SD = 3.295)

Table 4: Descriptive Statistics for "Green Purchase Intention" Scores by Genders

	Group	N	Mean	SD	SE	Coefficient of variation
GPI	1	162	20.099	2.913	0.229	0.145
	2	140	20.336	3.295	0.278	0.162

Mann-Whitney Score = 10552.000,  $p = 0.293$

A Mann-Whitney Score was conducted to examine if there exists a difference in "Green Purchase Intention" between people residing in rural and urban area. (Group 21 = Rural) (Group 22 = Urban) (H 11.6) As shown in Table 5,

there is no significant difference between Group 21's score in "Green Purchase Intention"(M = 20.516, SD = 2.657) and Group 22's score (M = 20.173, SD = 3.142)

Table 5 Descriptive Statistics for "Green Purchase Intention" Scores by people residing in rural and urban area

	Group	N	Mean	SD	SE	Coefficient of variation
GPI	21	31	20.516	2.657	0.477	0.129
	22	271	20.173	3.142	0.191	0.156

Mann-Whitney Score = 4466.00,  $p = 0.561$

A Mann-Whitney Score was conducted to examine if there exists a difference in "Environmental Concern"

between genders. (Group 1 = Female) (Group 2 = Male) (H 12.1)

As shown in Table 6, there is no significant difference between Group 1’s score in “Environmental Concern”(M = 21.660, SD = 2.525) and Group 2’s score (M = 21.521, SD = 3.453).

Table 6: Descriptive Statistics for “Environmental Concern” Scores by Genders

	Group	N	Mean	SD	SE	Coefficient of variation
Env Concern	1	162	21.660	2.525	0.198	0.117
	2	140	21.521	3.453	0.292	0.160
Mann-Whitney Score = 10938.500, p = 0.589						

A Mann-Whitney Score was conducted to examine if there exists a difference in “Environmental Concern” between people residing in rural and urban area. (Group 21 = Rural) (Group 22 = Urban) (H 12.6) As shown in Table 7,

there is no significant difference between Group 21’s score in “Environmental Concern”(M = 20.516, SD = 2.657) and Group 22’s score (M = 20.173, SD = 3.142).

Table 7: Descriptive Statistics for “Environmental Concern” Scores by people residing in rural and urban area

	Group	N	Mean	SD	SE	Coefficient of variation
Env Concern	21	31	21.484	2.719	0.488	0.127
	22	271	21.609	3.020	0.183	0.140
Mann-Whitney Score = 3854.500, p = 0.587						

C. ANOVA

One way ANOVA was conducted to examine if there exists a difference in “Green Purchase Intention” between different Age group (Group 3 = 18 - 24) (Group 4 = 25 - 34)

(Group 5 = 35 - 44) (Group 6 = 45 and above) (H11.2) As shown in Table 8, p value for the conducted One Way ANOVA is 0.013. Therefore there is a significant difference in Green Purchase Intention score between Age group.

Table 8: Descriptive Statistics for “Green Purchase Intention” Scores by people in different age group

Age Code	N	Mean	SD	SE	Coefficient of variation
3	158	19.658	3.241	0.258	0.165
4	10	20.600	3.062	0.968	0.149
5	18	21.000	3.290	0.775	0.157
6	116	20.802	2.735	0.254	0.131
P = 0.013					

One way ANOVA was conducted to examine if there exists a difference in “Green Purchase Intention” between different Level of Education groups (Group 7 = upto-8 years) (Group 8 = 8 - 13 years) (Group 9 = Under Graduation)

(Group 10 = Post Graduation and Above)(H11.3)As shown in Table 9, p value for the conducted One Way ANOVA is 0.014. Therefore there is a significant difference in Green Purchase Intention score between level of Education groups.

Table 9 Descriptive Statistics for “Green Purchase Intention” Scores by people with different levels of education

Education Code	N	Mean	SD	SE	Coefficient of variation
10	143	20.762	2.836	0.237	0.137
8	14	19.714	2.867	0.766	0.145
7	1	-	-	-	-
9	144	19.722	3.287	0.274	0.167
P = 0.014					

One way ANOVA was conducted to examine if there exists a difference in “Green Purchase Intention” between different Occupation groups (Group 11 = Student) (Group 12 = Unemployed) (Group 13 = Employed - Salaried/Self-

Employed/Other) (H11.4)As shown in Table 10, p value for the conducted One Way ANOVA is 0.005. Therefore there is a significant difference in Green Purchase Intention score between Occupation Groups.

Table 10: Descriptive Statistics for “Green Purchase Intention” Scores by people with different occupation

Occupation Code	N	Mean	SD	SE	Coefficient of variation
11	150	19.627	3.311	0.270	0.169
12	6	21.000	2.280	0.931	0.109
13	146	20.774	2.779	0.230	0.134
P = 0.005					

One way ANOVA was conducted to examine if there exists a difference in “Green Purchase Intention” between different Family Income groups (Group 14 = Below 3 Lakhs) (Group 15 = 3 – 8 Lakhs) (Group 16 = 8 - 12) (Group 17 =

Above 12 Lakhs)(H11.5)As shown in Table 11, p value for the conducted One Way ANOVA is 0.940. Therefore there is no significant difference in Green Purchase Intention score between Family Income Groups.

Table 11: Descriptive Statistics for “Green Purchase Intention” Scores by people in different income group

Income Code	N	Mean	SD	SE	Coefficient of variation
14	54	20.019	3.123	0.425	0.156
15	61	20.361	2.739	0.351	0.135
16	67	20.284	2.938	0.359	0.145
17	120	20.175	3.355	0.306	0.166

P = 0.940

One way ANOVA was conducted to examine if there exists a difference in “Environmental Concern” between different Age group (Group 3 = 18 - 24) (Group 4 = 25 - 34) (Group 5 = 35 - 44) (Group 6 = 45 and above) (H 12.2) As

shown in Table 12, p value for the conducted One Way ANOVA is 0.058. Therefore there is no significant difference in Environmental Concern score between Age group.

Table 12: Descriptive Statistics for “Environmental Concern” Scores by people in different age group

Age Code	N	Mean	SD	SE	Coefficient of variation
3	158	21.177	3.322	0.264	0.157
4	10	21.200	3.011	0.952	0.142
5	18	21.944	2.796	0.659	0.127
6	116	22.147	2.415	0.224	0.109

P = 0.058

One way ANOVA was conducted to examine if there exists a difference in “Environmental Concern” between different Level of Education groups (Group 7 = upto-8 years) (Group 8 = 8 - 13 years) (Group 9 = Under Graduation) (Group 10 = Post Graduation and Above)(H 12.3)As shown

in Table 13, p value for the conducted One Way ANOVA is 0.084. Therefore there is no significant difference in Environmental Concern score between level of Education groups.

Table 13: Descriptive Statistics for “Environmental Concern” Scores by people with different level of education

Education Code	N	Mean	SD	SE	Coefficient of variation
10	143	21.993	2.881	0.241	0.131
7	1	-	-	-	-
8	14	21.643	2.530	0.676	0.117
9	144	21.208	3.102	0.258	0.146

P = 0.084

One way ANOVA was conducted to examine if there exists a difference in “Environmental Concern” between different Occupation groups (Group 11 = Student) (Group 12 = Unemployed) (Group 13 = Employed - Salaried/Self-Employed/Other)(H 12.4).

As shown in Table 14, p value for the conducted One Way ANOVA is 0.064. Therefore there is no significant difference in Environmental Concern score between Occupation Groups.

Table 14: Descriptive Statistics for “Environmental Concern” Scores by people with different occupation

Occupation Code	N	Mean	SD	SE	Coefficient of variation
11	150	21.193	3.393	0.277	0.160
12	6	22.333	2.338	0.955	0.105
13	146	21.979	2.482	0.205	0.113

P = 0.064

One way ANOVA was conducted to examine if there exists a difference in “Environmental Concern” between different Family Income groups (Group 14 = Below 3 Lakhs) (Group 15 = 3 – 8 Lakhs) (Group 16 = 8 - 12) (Group 17 =

Above 12 Lakhs)(H 12.5)As shown in Table 15, p value for the conducted One Way ANOVA is 0.317. Therefore there is no significant difference in Environmental Concern score between Family Income Groups.

Table 15: Descriptive Statistics for “Environmental Concern” Scores by people from different income group

Income Code	N	Mean	SD	SE	Coefficient of variation
14	54	21.019	3.673	0.500	0.175
15	61	21.623	2.934	0.376	0.136
16	67	21.463	2.787	0.340	0.130
17	120	21.917	2.764	0.252	0.126
p = 0.317					

## V. DISCUSSION

With the increasing awareness about the importance of making an environmentally responsible decision, it's important to have a better understanding about this section of consumers. Insights about an individual's personality can help one predicts one's buying behaviour. Emekci (2019) agreed that personality variables predict ecologically concerned consumers better than socioeconomic variables. In terms of the relationship between personal characteristics and ecological concern, Fraj and Matinez (2006) argued that individuals with more tolerant and comprehensive personality and seeking security would perform higher ecological concern. This study explored a series of hypothesis that help us gain a better insights about personality traits of consumers who expressed an intention to make a green purchase, and consumers who are concerned about the environment.

The first hypothesis suggested no significant correlation between “Openness” and "Green Purchase Intention." However, the rejection of this hypothesis reveals a significant positive correlation between “Openness” and “Green Purchase intention”. This implies individuals who scored high on openness also tend to score high on Green purchase intention.

The second hypothesis suggested no significant correlation between “Conscientiousness” and "Green Purchase Intention." However, the rejection of this hypothesis reveals a significant positive correlation between “Conscientiousness” and “Green Purchase intention”. This implies individuals who scored high on Conscientiousness also tend to score high on Green purchase intention.

The third hypothesis suggested no significant correlation between “Extraversion” and "Green Purchase Intention." However, the rejection of this hypothesis reveals a significant positive correlation between “Extraversion” and “Green Purchase intention”. This implies individuals who scored high on Extraversion also tend to score high on Green purchase intention.

The fourth hypothesis suggested no significant correlation between “Agreeableness” and "Green Purchase Intention." However, the rejection of this hypothesis reveals a significant positive correlation between “Agreeableness” and “Green Purchase intention”. This implies individuals who scored high on Agreeableness also tend to score high on Green purchase intention.

The fifth hypothesis suggested no significant correlation between “Neuroticism” and "Green Purchase Intention." We failed to reject this hypothesis, thus there is no significant

correlation between “Neuroticism” and “Green Purchase intention”. This implies that individuals who scored high on Neuroticism will not necessarily score high on Green Purchase intention.

The sixth hypothesis suggested no significant correlation between “Openness” and "Environmental Concern." However, the rejection of this hypothesis reveals a significant positive correlation between “Openness” and “Environmental Concern”. This implies individuals who scored high on Openness also tend to score high on Environmental Concern.

The seventh hypothesis suggested no significant correlation between “Conscientiousness” and "Environmental Concern." However, the rejection of this hypothesis reveals a significant positive correlation between “Conscientiousness” and “Environmental Concern”. This implies individuals who scored high on Conscientiousness also tend to score high on Environmental Concern.

The eight hypothesis suggested no significant correlation between “Extraversion” and "Environmental Concern." However, the rejection of this hypothesis reveals a significant positive correlation between “Extraversion” and “Environmental Concern”. This implies individuals who scored high on Extraversion also tend to score high on Environmental Concern.

The ninth hypothesis suggested no significant correlation between “Agreeableness” and "Environmental Concern." However, the rejection of this hypothesis reveals a significant positive correlation between “Agreeableness” and “Environmental Concern”. This implies individuals who scored high on Agreeableness also tend to score high on Environmental Concern.

The tenth hypothesis suggested no significant correlation between “Neuroticism” and "Environmental Concern." We failed to reject this hypothesis, thus there is no significant correlation between “Neuroticism” and “Environmental Concern”. This implies that individuals who scored high on Neuroticism will not necessarily score high on Environmental Concern.

The hypothesis H11.1 suggested that there would be no significant difference in "Green Purchase Intention" between genders. We failed to reject this hypothesis which indicates that there is no significant difference in green purchase intention between females and males. This implies that gender do not play a role in influencing individuals' intentions to make eco-friendly purchases.

The hypothesis H11.2 suggested that there would be no significant difference in "Green Purchase Intention" between age groups. However, the rejection of this hypothesis reveals a significant difference in green purchase intention between different age groups. This implies that age do play a role in influencing individuals' intentions to make eco-friendly purchases.

The hypothesis H11.3 suggested that there would be no significant difference in "Green Purchase Intention" between level of education group. However, the rejection of this hypothesis reveals a significant difference in green purchase intention between different level of education group. This implies that education level do play a role in influencing individuals' intentions to make eco-friendly purchases.

The hypothesis H11.4 suggested that there would be no significant difference in "Green Purchase Intention" between occupation group. However, the rejection of this hypothesis reveals a significant difference in green purchase intention between different occupation group. This implies that occupation do play a role in influencing individuals' intentions to make eco-friendly purchases.

The hypothesis H11.5 suggested that there would be no significant difference in "Green Purchase Intention" between different family income group. We failed to reject this hypothesis reveals no significant difference in green purchase intention between different family income group. This implies that family income do not play a role in influencing individuals' intentions to make eco-friendly purchases.

The hypothesis H11.6 suggested that there would be no significant difference in "Green Purchase Intention" between people from rural and urban area. We failed to reject this hypothesis reveals no significant difference in green purchase intention between people from rural and urban areas. This implies that residence do not play a role in influencing individuals' intentions to make eco-friendly purchases.

The hypothesis H12.1 suggested that there would be no significant difference in "Environmental Concern" between genders. We failed to reject this hypothesis which indicates that there is no significant difference in Environmental Concern between females and males. This implies that gender do not play a role in influencing individuals' Environmental Concern.

The hypothesis H12.2 suggested that there would be no significant difference in "Environmental Concern" between age groups. However, we failed to reject this hypothesis, reveals no significant difference in Environmental Concern between different age groups. This implies that age do not play a role in influencing individuals' Environmental Concern.

The hypothesis H12.3 suggested that there would be no significant difference in "Environmental Concern" between level of education group. However, we failed to reject this hypothesis, that reveals no significant difference in Environmental Concern between different level of education group. This implies that education level do not play a role in influencing individuals' Environmental Concern.

The hypothesis H12.4 suggested that there would be no significant difference in "Environmental Concern" between occupation group. We failed to reject this hypothesis, that reveals no significant difference in Environmental Concern between different occupation group. This implies that occupation do not play a role in influencing individuals' Environmental Concern.

The hypothesis H12.5 suggested that there would be no significant difference in "Environmental Concern" between different family income group. We failed to reject this hypothesis, reveals no significant difference in Environmental Concern between different family income group. This implies that family income do not play a role in influencing individuals' Environmental Concern.

The hypothesis H12.6 suggested that there would be no significant difference in "Environmental Concern" between people from rural and urban area. We failed to reject this hypothesis that reveals no significant difference in green purchase intention between people from rural and urban areas. This implies that residence do not play a role in influencing individuals' intentions to make eco-friendly purchases.

The 13th hypothesis suggested no significant correlation between "Environmental Concern" and "Green Purchase Intention." However, the rejection of this hypothesis reveals a significant positive correlation between "Environmental Concern" and "Green Purchase intention". This implies individuals who scored high on Green Purchase intention also tend to score high on Environmental Concern.

## VI. CONCLUSION

According to the study it was found that people who had high levels of green purchase intention also scored significantly high on 'Openness,' 'Conscientiousness,' 'Extraversion,' and 'Agreeableness' amongst personality traits in OCEAN. However such a correlation was not observed between people with high score in Green purchase intention and people who had high levels of Neuroticism personality traits.

A similar trend was followed with Environmental concern and Big 5 personality traits, it was found that people who scored high on environmental concern also scored significantly high on 'Openness,' 'Conscientiousness,' 'Extraversion,' and 'Agreeableness' amongst personality traits in OCEAN. However such a correlation was not observed between people with high score in Environmental concern and people who had high levels of Neuroticism personality traits. People who expressed an intention to make a green purchase also had high levels of environmental concern. Both female and male showed a similar level of Green purchase intention and environmental concern with no significant difference between genders.

Both residence of rural and urban areas showed a similar level of Green purchase intention and environmental concern with no significant difference between residence. Between different age groups, people from the age group of 35-44 had significantly higher green purchase intention

compared to people of other age groups. Between different level of education groups, people with a post graduation had significantly higher green purchase intention compared to people with lower level of education.

## VII. LIMITATIONS

Individual differences may have an impact on how well one comprehends the questions and the different responses. For instance, the response choice "somewhat agree" could imply different things to different respondents and signify different things to different subjects.

Owing to accessible sampling, students from Vadodara make up a sizeable percentage of the sample. Because a higher percentage of the sample lived in an urban location than in a rural one, there is less diversity in the sample. People under the age of 18 and members of the LGBTQ+ community were excluded due to the inclusion criteria's limitations, making it impossible to examine this group of people.

Since the majority of participants are Indian nationals, it will only be possible to generalise the results after more research.

The Google form technique of data collecting and the use of English as the instruction medium restricted the number of participants to those having an internet-connected electronic device and functional competence of the English language. Out of 302, 5 participants complained that the questionnaire was excessively long, suggesting that the 70+ items may have contributed to questionnaire fatigue and affected the results.

Respondent's bias, which is common in studies where participants provide a self-report, may have been present because replies were gathered in person by a research intern, who was also in charge of data collection.

## VIII. IMPLICATIONS

Insights about purchase intention has been an important concept in marketing literature and most companies are using purchase intention as the predictor of the sales of new products and the repeat purchases of existing products

The research results can incentivise product manufacturers to produce greener alternatives of an existing products catalogue. This study can help marketers to focus on a consumer niche with higher green purchase intention and environmental concern, and curate marketing campaigns such that it assures a higher conversion rate amongst consumers with a particular personality traits.

A growing number of environmentally conscious messaging and commercials will raise consumer understanding of sustainability.

People from a variety of sociodemographic backgrounds participated in this study, and the data it contains is useful for forecasting the intention to make green purchases as well as for creating policies or other initiatives that may encourage participants to make green purchases.

Direct environmental benefits from consumer-accessible, more environmentally friendly product options that will support the ongoing effort to combat the climate catastrophe.

## IX. FUTURE SUGGESTIONS

Since the scale for assessing subject's green purchase intention did not give us any idea if the purchase intention had or will lead to green buying behaviour, additional variables could be added such that this limitation is eliminated.

Concerns about the questionnaire's length were raised, thus in order to prevent questionnaire fatigue, additional research can concentrate on alternate methods of gathering data. A significant number of participants are Indian citizens, hence there is potential to test these results internationally.

There is scope in this domain, such that other psychological assessments could be used in relation with green consumer behaviour.

It would be possible to obtain insights from the population that was left out owing to technological and linguistic barriers if alternate approaches to data gathering were investigated, given the constraints of Google Form and the English language.

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