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Income and green purchase intention nexus: A systematic literature review

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Abstract

This study addresses the intricate causality between income and green purchase intention, aiming to understand how income-green purchase is influenced by demographic factors, including age, gender, environmental consciousness, and sociocultural influences. Through a systematic literature review, theoretical frameworks such as the Theory of Planned Behavior, Value-Belief-Norm Theory, and Behavioral Reasoning Theory are explored to elucidate the multifaceted nature of this relationship. The study examines whether income influences environmentally friendly purchasing behaviors positively, negatively, or non-linearly and identifies potential moderating factors (demographic factors) that may affect this relationship. Findings reveal a complex interplay among various factors, challenging simplistic assumptions about income's role as the sole determinant of green purchasing behavior. While income significantly influences attitudes and behavioral intentions towards green products, its impact is shaped by other demographic variables and contextual factors. Therefore, this study underscores the importance of considering a range of demographic, attitudinal, and cultural factors in promoting sustainable consumption and green product adoption. Practical insights and managerial implications are synthesized to guide businesses and policymakers in developing effective strategies. Overall, this study contributes to advancing knowledge in the field of environmentally conscious consumer behavior, emphasizing the complex interplay of income and demographic influences in shaping green purchase intentions.

Keywords: Income; Green Purchase Intention; Friendly products; Environmental-friendly; Green products; sustainable consumption; Environmental consciousness

1. Introduction

1.1. Background and significance of green purchase intentions

Green buying intentions refer to consumers' desire and commitment to choose environmentally friendly or sustainable items over conventional ones (Xu, Hua, Wang, & Xu, 2020). The fundamental drive behind this behavioral objective is based on the growing global concern for environmental sustainability, the problem of climate change, and the necessity to reduce the ecological impact. Individuals' growing awareness of environmental issues has prompted them to strive for coherence between their purchasing choices and their commitment to sustainability. Green buying intentions refer to the proactive behaviour of consumers who actively seek out products or services that have a minimal detrimental impact on the environment (Wang, Tao, & Chu, 2020). The act signifies a conscious choice to positively influence the environment through one's regular spending patterns. The importance of understanding green purchasing intentions is underscored by Wang, Ma, and Bai (2019), as it is relevant to multiple stakeholders. Comprehending consumers' inclination towards eco-friendly products is essential for businesses as it facilitates the creation of sustainable offers that correspond to the requirements and aspirations of the target market. Organizations can adapt their strategy, product designs, marketing tactics, and branding efforts to target consumers who prioritize environmental conscience. Understanding individuals' motivations to participate in environmentally-friendly purchases is crucial for

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policymakers, since it allows them to create legislation and policies that effectively promote sustainable behaviors. Additionally, it offers support in the creation of marketing and educational initiatives designed to improve public awareness and encourage sustainable consumption habits. To foster a more sustainable and responsible consumer culture worldwide, it is imperative to carefully scrutinize the motivations underlying environmentally friendly purchases (Sharma and Foropon, 2019).

Lately, there has been a notable increase in scholarly focus on understanding the factors that influence people's intentions to participate in environmentally-friendly purchases. The increased interest can be due to the growing awareness of environmental issues and the necessity for sustainable consumption. This phenomenon has been documented in the publications of Yen (2023), Tian (2022), Zahan (2020), Zhuang et al., (2021), Ahmed (2022), Akbar (2020), Walia (2020), Chen (2020), Feng (2021), and Zheng (2023). Several academic studies have identified various factors that impact individuals' intentions to participate in environmentally friendly purchasing. These characteristics include attitudes towards the environment, levels of health consciousness, ethical decision-making processes, perceptions of quality and pricing, the components of the green marketing mix, and the development of social identity. Based on the research conducted by Yen (2023), Tian (2022), Zhuang et al. (2021), Ahmed (2022), Akbar (2020), Walia (2020), Chen (2020), and Zheng (2023), it is clear that the understanding of individuals' intentions to make environmentally-friendly purchases is highly significant for various reasons. Primarily, this assists firms and marketers in developing effective strategies to promote and increase the demand for environmentally friendly products. By comprehending the factors that influence consumers' intent to purchase environmentally friendly products, as emphasized by Yen (2023), Ahmed (2022), and Walia (2020), companies can tailor their marketing tactics to target specific consumer demographics and successfully communicate the environmental benefits of their products. Furthermore, understanding the goals behind environmentally-friendly purchasing can have a substantial impact.

The field of green purchasing is of great academic importance as it tackles the increasing awareness about environmental issues and the urgent need for sustainable consumption practices. Several academic studies have been carried out to analyze the factors that influence people's intentions to participate in environmentally conscious buying habits. Nath (2017) conducted a study in India which identified several important predictors of individuals' intentions to engage in green purchases. These predictors include environmental awareness, perceived consumer effectiveness, and peer group impact. A recent study conducted in China has shown a significant relationship between moral intensity, moral judgment, and intentions to engage in environmentally friendly purchasing. Furthermore, it has been discovered that the perception of quality and price has a positive influence on both moral intensity and moral judgment (Tian, 2022). Moreover, a thorough analysis of 54 empirical studies demonstrated that several factors, such as the perceived value of environmental friendliness, attitude, trust in environmentally friendly products, perceived control over one's behaviour, belief in one's ability to make environmentally friendly choices, subjective social influence, and collectivism, had a statistically significant and positive effect on individuals' intentions to participate in environmentally friendly purchasing (Zhuang et al., 2021). Furthermore, a study has been undertaken to examine the influence of green marketing strategies on individuals' inclination to make environmentally conscious purchases. In developing nations, Arshad (2014) conducted a study highlighting the importance of firms adopting green branding, eco-labeling, and green packaging techniques to encourage consumers to engage in more environmentally friendly consumption habits. A recent study conducted by Majeed (2022) shown a significant and positive influence of green marketing tactics on customers' inclination to participate in environmentally conscious buying. Furthermore, the research unveiled that the causality between green marketing strategies and intentions to make environmentally-friendly purchases was impacted by both the reputation of the eco-friendly business and the environmental attitudes of the customers. The primary significance of green purchasing intentions lies in understanding the factors that influence consumers' tendency to purchase environmentally conscious products. This knowledge has the potential to assist marketers and policymakers in developing effective strategies and activities to promote the adoption of environmentally friendly products and encourage sustainable consumption behaviors.

1.2. Role of income as a potential driver of green purchase intentions

The role of income can be influential in shaping individuals' inclinations to engage in green purchasing behaviors. Numerous research has shown consistent findings indicating a positive relationship between income levels and the propensity to exhibit intents towards green purchases. These findings suggest that persons with higher incomes tend to demonstrate a greater inclination towards engaging in consumption behaviors that are environmentally conscious. An investigation conducted by Chen (2014) in mainland China examined the relationship between income and purchase intentions of organic food. The findings of this study revealed a substantial link, albeit modest to moderate, between income and individuals' intentions to purchase organic food. In a study conducted in Bangladesh, Zahan (2020) discovered that customers' inclination to acquire green housing was significantly influenced by their perceived behavioral control, a factor that may be shaped by income. Moreover, a study conducted by Rylannabila (2021)

examined the impact of income as a moderator on the association between attitudes and purchase intentions in the skin care business in Indonesia. This finding implies that individuals with higher levels of income are more inclined to convert their good opinions towards environmentally friendly firms into tangible purchasing actions. Moreover, research conducted by Tong (2020) in China revealed that customers' inclination to purchase environmentally-friendly food, specifically rice with environmental qualities, was influenced by their income levels. This finding suggests that persons with higher levels of income exhibit a greater propensity to allocate their resources towards the purchase of ecologically sustainable products. Nevertheless, it is crucial to acknowledge that income alone does not exclusively determine individuals' intentions to engage in green purchasing. Additional variables, such as individuals' level of environmental education, their degree of environmental care, and their perceived value of green products, are also influential in determining their inclination to participate in green consumption behaviors (Kumar, 2019). Hence, it is imperative to acknowledge that although money can influence individuals' inclination towards green purchasing, it is crucial to examine additional variables in order to comprehensively understand customers' underlying motivations for participating in environmentally conscious consuming practices.

1.3. Direction of relationship in the income-green purchase study: Correlation Vs causality

Previous research has indicated a correlation between income and green purchase intention (Mahesh, 2012, Rahim, 2017, Masud, 2018, Nguyen, 2019). However, further studies have revealed a more complex relationship, showing that income is significantly influenced by several determinants such as age and gender (Wang, 2020). Additionally, environmental consciousness has been found to have a significant impact on green purchase intention, independent of income (Zhuang, 2021). This suggests that income is just one of several drivers of green purchase intention, and its causality with other factors such as age, gender, and environmental consciousness should be considered in a more comprehensive understanding of consumer behavior towards environmentally friendly products. However, this study examines how income influences green purchase. It is important to consider the causality between income and other variables such as age, gender, environmental consciousness, and socio-cultural influences in the context of green purchase intention than just examining their correlation because understanding the causal relationships can provide insights into the underlying mechanisms driving consumer behavior (Mahesh, 2012). For example, examining the causal relationship between income and green purchase intention can help identify whether higher income individuals are more likely to be concerned about the environment and therefore tend to purchase green products as has been previously believed (Mahesh, 2012).

Contradicting the dominant narrative on the causality between income and drivers such as age, gender, environmental consciousness, and sociocultural influences involves challenging the commonly accepted relationships established in existing research. For instance, one could argue that while income is often considered a significant determinant, its impact on age may not be universally straightforward. Instead of assuming a direct correlation, it might be suggested that certain age groups, regardless of income levels, display comparable patterns in green purchase intentions due to shared values or access to information. Similarly, challenging the mainstream narrative on the influence of income and gender might involve proposing alternative explanations. For example, the dominant view might suggest that higher income correlates with greater eco-friendly behavior, but an alternative perspective could argue that specific gender roles and societal expectations play a more decisive role in shaping green purchase intentions. To contradict the prevailing discourse on the relationship between income and environmental consciousness, one might propose that heightened environmental awareness can exist independently of income levels. It could be argued that individuals from diverse economic backgrounds can exhibit similar levels of environmental consciousness due to educational initiatives or personal values. In the case of sociocultural influences, a contrary perspective might challenge the assumption that income is the primary driver. An alternative view could propose that cultural factors, irrespective of income, exert a more dominant influence on green purchase intentions within certain communities. In essence, questioning the mainstream narrative entails offering alternative explanations that scrutinize the presumed cause-and-effect link between income and these influential factors, so promoting a more sophisticated and varied comprehension of the interconnections involved.

The complexity surrounding the influence of income on consumers' environmentally conscious purchasing behaviors is evidenced by diverse empirical studies across different regions suggesting demographic factors that influence income in the income-green purchase intention study. The findings reveal a lack of consistent patterns, with studies in Tamil Nadu and Poland suggesting that income may not be a decisive factor in determining eco-friendly purchasing intentions (Khare, 2015, Nirmala, 2022). In contrast, research in China and India presents varying perspectives, emphasizing the role of personality factors and income levels, respectively, in shaping consumers' pro-environmental behaviors (He (2019, Apaydin, 2017). The conflicting findings of these studies suggest that a thorough comprehension of the relationship between income and green purchasing necessitates a careful examination of supplementary factors, including cultural, attitudinal, and personality aspects. This underscores the importance of adopting a multifaceted

approach when investigating the complex dynamics of environmentally conscious consumer behaviour. This study examines the causal relationship between the variables of the study. Causality is preferred over correlation in exploring the relationship between income and demographic factors due to its ability to unveil the direction and mechanism of influence. While correlation reveals statistical associations, causality establishes a cause-and-effect link, providing a deeper understanding of how income impacts variables like age, gender, environmental consciousness, and sociocultural influences. This distinction is crucial for discerning whether income drives changes in these factors or vice versa, contributing to more informed insights for policymaking, targeted interventions, and comprehensive strategies in understanding consumer behavior.

When analyzing the impact of income on environmentally friendly purchase intentions, it is crucial to take into account the precise context and demographic attributes of the consumer groups under investigation. Hence, this study will delve into understanding these intricate webs of relationship from the account of previous empirical studies. The findings of income and green purchase intention in extant literature from the background to this study shows mixed results. These mixed results shows that this is an area to explore and get more insight. Following on from previous researches on income-purchase intention nexus, this paper proposes the following specific objective:

- Examines the role demographic factors such as age, gender, environmental consciousness, and sociocultural influences play in income-green purchase intention
- Investigates whether income positively, negatively, or non-linearly influences individuals' propensity to engage in environmentally friendly purchasing behaviors.
- Identifies and analyze potential moderating factors (demographic variables) that may influence the income-green purchase intention relationship.
- Identifies gaps in the existing literature on the income-green purchase intention nexus while highlighting areas where further research is needed.
- Synthesizes the findings to offer practical insights and managerial implications for businesses and policymakers.

1.4. Significance of understanding of the role of income as a driver in green purchase intention

Income plays a significant role in influencing green purchase intention, as evidenced by several studies. The demographic impact of consumer green purchase intention toward Green Hotel Selection in China found that income significantly influences green purchase attitudes and behavioral intention (Wang, 2020). Similarly, a study on materialistic values and green apparel purchase intention among young Vietnamese consumers revealed that income was positively related to purchase intention toward green apparel products (Nguyen, 2019). Furthermore, a study on intention and behavior towards green consumption among low-income households in Malaysia found that income had a positive effect on the consumption of green products (Mamun, 2018). These findings suggest that higher income levels are associated with a greater propensity to engage in green purchasing behavior. Wijekoon's (2021) comprehensive scholarly evaluation indicates that income significantly influences green purchase intention, emphasizing its role as a key determinant. According to Munasinghe (2021), higher-income individuals often exhibit a heightened awareness of environmental consequences, fostering a pronounced inclination towards eco-friendly goods. Wang (2020) and Situmorang (2022) highlight the substantial consequences of the income-green purchase intention, emphasizing its role in promoting sustainable consumer behavior. The relationship is essential for businesses seeking to align sustainability efforts with consumer behavior, enabling tailored strategies, pricing, and marketing campaigns (Rahim, 2017; Uddin, 2019). This understanding is crucial for fostering brand loyalty and competitiveness in the marketplace.

Moreover, the theory of planned behavior (TPB) model has been employed in studies to better predict eco-friendly purchase intention, with income being a significant factor. The study on pro-environmental purchase intention towards eco-friendly apparel among educated Indian youths found that perceived behavioral control, which includes income as a factor, has a strong positive influence on purchase intention (Kumar, 2022). This suggests that individuals with higher income levels may feel more empowered to make environmentally friendly purchasing decisions. Overall, the evidence from these studies underscores the importance of income as a driver of green purchase intention. Higher income levels are associated with more positive attitudes and behavioral intentions towards green products, potentially due to increased financial capacity and awareness of environmental issues. These findings have implications for marketers and policymakers aiming to promote sustainable consumption, as they highlight the need to consider income levels when developing strategies to encourage green purchasing behavior.

The popular belief that income alone is the sole driver of green purchase intention is not supported by empirical evidence. Several studies have shown that age, gender, environmental consciousness, and sociocultural influences income as a significant determinants of green purchase intention (Wang, 2020, Chekima, 2015, Xu, 2019, Rahim, 2017). For instance, research has indicated that age and income both significantly influence green purchase attitudes, while

education and income both significantly influence green behavioral intention (Wang, 2020). Additionally, environmental awareness has been found to positively affect attitude, subjective norm, perceived behavioral control, and willingness to pay for green products, ultimately influencing purchase intention (Xu, 2019). Furthermore, gender has been shown to have a significant difference in influencing green purchase attitudes and behavioral intention (Wang, 2020, Rahim, 2017).

Moreover, the influence of income on green purchase intention is not as straightforward as commonly assumed. While higher income levels may lead to higher perceived value and purchase intention towards green products, it is not the sole determinant (Mahesh, 2013). Other factors such as environmental consciousness and health consciousness have been found to positively affect consumers' intention to purchase green products, indicating that income is not the only driver of green purchase intention (Xu, 2019). Additionally, the influence of income on green purchase intention may vary across different demographic groups, as evidenced by the lack of significant differences between income and green product purchase intention in certain demographic profiles (Rahim, 2017). This study therefore provides a comprehensive understanding of the various demographic factors affecting income as a determinant of green purchase intention. The finding is essential for marketers and policymakers to develop effective strategies to promote the adoption of green products.

The present study is structured in the following manner: The initial section provides an introduction that contextualizes the research challenge within the current body of literature on income-green purchase intention. It also formulates the research question to define the parameters of this study. The next section presents a comprehensive examination of the systematic literature review technique, which entails a sequential process for identifying, selecting, reviewing, and evaluating the existing body of literature on the relationship between income and green purchasing intention. Section three of this paper offers the findings derived from a systematic literature review and subsequent discussion, which are aligned with the precise objectives outlined earlier in the study. Subsequently, the practical implications and managerial ramifications of the findings for organizations and policymakers are presented. The present study also includes a discussion on the limits and potential areas for further investigation. Finally, the study concludes by providing an overall summary and analysis of the findings.

2. Methodology

This study employs a systematic literature review (SLR) to investigate the relationship between income and the intention to make green purchases. Compared to conventional literature reviews, systematic reviews are characterized by a higher level of rigor and the provision of more substantive evidence. The latter form of review typically offers the author's own insights and interpretations (Moher, Liberati, Tetzlaff, Altman, and the PRISMA Group, 2009). The process of SLR data extraction is characterized by a high degree of precision, as it employs a controlled and systematic methodology to identify, select, and evaluate relevant research papers using predetermined inclusion and exclusion criteria (Higgins & Green, 2011). Systematic literature review (SLR) methodologies have been acknowledged for their well-structured nature, extensive coverage of relevant literature (Kitchenham & Charters, 2007), synthesis of evidence, mitigation of bias, identification of research gaps (Borenstein, Hedges, Higgins, & Rothstein, 2009), and provision of decision-making guidance. In the context of evidence-based research and practices in a variety of academic and professional fields, these characteristics are crucial. This section offered a summary of the procedure for selecting the most suitable papers for analysis. This study's systematic literature review (SLR) included 106 relevant studies published over a period of 24 years.

2.1. Search strategy

The search strategy includes the utilization of certain keywords, search engines or databases, as well as the application of inclusion and exclusion criteria. The identified keywords for this systematic literature review (SLR) encompass the following concepts: green purchases intentions, income, eco-friendly items, environmental-friendly products, green products, sustainable consumption, and environmental consciousness. The search engines/databases commonly utilized in academic research include Web of Science, Scopus, and Google Scholar. The exclusion criteria encompass articles that lack keywords in their title or abstract. Excluded from the study are articles written in languages other than English and those that fall beyond the scope of the investigation on green buying intentions. The articles included in this study are those that have keywords in their title and abstract, are classified as journal articles, have been published in the selected databases, and are written in the English language.

2.2. Inclusion and exclusion criteria

The articles underwent a screening process subsequent to undergoing classic reviews, as indicated by the works of Billore and Anisimova (2021), Chakma et al., (2021), Khatoon and Rehman (2021), Mishra et al., (2021), Södergren

(2021) Paul and Mas (2020), Gilal et al., (2019), Hao et al., (2019), Paul and Benito (2018), Paul and Rosado-Serrano (2019) and Rosado-Serrano et al. (2018). The screening criteria encompassed studies on consumer green purchase intention that were connected to income. The article selection criteria for systematic literature review (SLR) proposed by Keupp and Gassmann (2009) focused on the impact factor of journals. This approach ensured that only high-quality publications, with a minimum yearly impact factor of 1.0, were included in the review. The selection of high-impact factor journals was based on two primary rationales. These periodicals disseminate scholarly research that critically investigates, evaluates, and advances conceptual frameworks. Furthermore, the aforementioned studies (Cheng *et al.*, 2017; Podsakoff et al., 2005; Shabbir, 2020; Tahai & Meyer, 1999) offer scientific proof and contribute to the field. According to the Paul and Criado (2020) technique, a total of 47 systematic literature review (SLR) research papers were excluded from consideration because they were published in journals with little or no impact factors. We carefully reviewed each of the 259 scientific articles to ensure that there are no research included in the review that are unrelated to the subject at hand. A total of 106 research publications were judged pertinent and used for examination after an additional 153 research publications were disregarded.

2.3. Study Selection Process

Upon conducting an analysis of three databases, the researchers identified a total of 259 papers that were deemed relevant to the study. Given that the majority of scholarly journals have an impact factor exceeding two, it can be inferred that only papers of high caliber are utilized. Additional papers on green purchase intention have been identified in high-impact academic publications. The time frame of 1999-2023 was chosen for our study due to the significant developments in "green marketing" and "green purchase intention" that occurred during this period. These advancements were influenced by the progress in technology, the implementation of government regulations, and the increasing global awareness of environmental issues (Peattie, 2001). Since the turn of the millennium, there has been a growing scholarly interest in the subject of green product challenges, as shown by the work of Chamorro et al. (2009).

2.4. Data Extraction and Synthesis Method

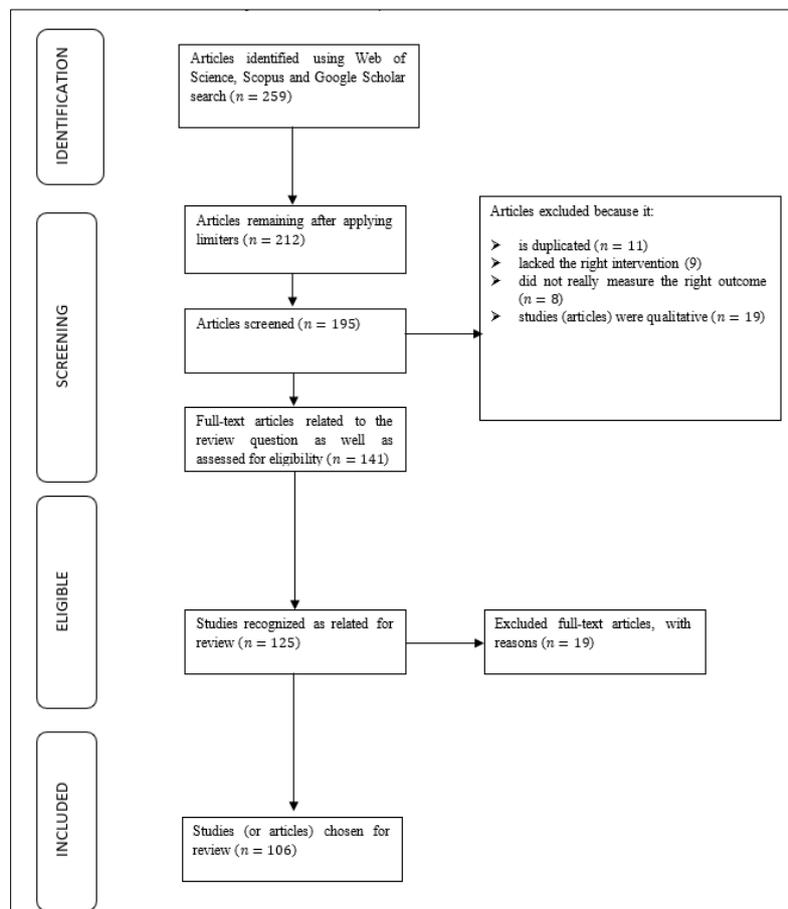


Figure 1 Search strategy (keywords, databases, and inclusion/exclusion criteria)

3. Theoretical Perspectives on Income and Green Purchase Intentions

The income-green purchase nexus has been extensively studied using the Theory of Planned Behavior (TPB), the Value-Belief-Norm (VBN) theory, and the Behavioral Reasoning Theory (BRT). The non-linear link between income and green purchase intentions has been extensively explored by several writers, who have put out several hypotheses to explain this phenomenon from different perspectives. According to Wang, Zhang, Wong, and Wang (2023), the Theory of Planned Behavior (TPB) posits that the association between income and green purchasing intentions may exhibit a non-linear pattern, which can be attributed to the impact of subjective norms and attitudes towards green items. Individuals with higher incomes may exhibit greater subjective norms and more favorable attitudes towards environmentally friendly products, hence resulting in increased intentions to make green purchases. Nevertheless, it is possible that individuals with higher incomes may reach a point when they prioritize issues other than environmental concerns, leading to a decrease in their intentions to make green purchases.

The VBN theory posits that the relationship between income and green purchase intentions can be influenced by personal values and beliefs. According to Wang, Zhang, Wong, and Wang (2023), individuals with higher incomes tend to place greater importance on altruistic and biosphere values, which are closely linked to environmental concerns. Consequently, this inclination towards such values is likely to result in increased intents to engage in green purchasing behaviors. Nevertheless, it is possible for the connection to exhibit non-linearity when considering the influence of other factors, such as materialistic ideals, on individuals with higher wealth. This might result in a decrease in their intentions to make environmentally friendly purchases. The BRT posits that income can potentially impact the cognitive processes and situational circumstances that contribute to individuals' intentions to engage in environmentally-friendly purchasing behaviors. According to Nguyen and Dang (2022), individuals with higher income levels possess greater access to resources and expertise, enabling them to employ context-based reasoning. This form of reasoning involves taking into account several elements, including product features, marketing methods, and trust. The reasoning method employed in this study may lead to the identification of a non-linear association between income and intentions to engage in green purchase. It is plausible that persons with higher income levels exhibit a greater degree of selectivity in their green purchasing selections, influenced by various contextual and situational elements. In general, the aforementioned theories propose that the association between income and intentions to engage in environmentally friendly purchases may not follow a linear pattern. This deviation can be attributed to the impact of subjective norms, personal values, beliefs, and context-specific reasoning mechanisms.

4. Findings and discussion

4.1. Influence of demographic drivers on Income - green purchase nexus

The relationship between income and age in the context of green purchase intention is a complex and multifaceted issue, as evidenced by several studies. For instance, a study on green product purchase intention in Malaysia found that there was a statistically significant difference between gender on consumers' green product purchase intention, but no significant differences between age, income, education background, and occupation on consumers' green product purchase intention (Rahim, 2017). On the other hand, a study in China revealed that age and income were shown to significantly influence green purchase attitudes, with higher income individuals having higher perceived value towards green products (Mahesh, 2013). These findings suggest that while income and age may have varying impacts on green purchase intention in different contexts, there is evidence to support the notion that higher income individuals may have a greater propensity for green purchase intention. However, it is important to note that the relationship between income and age in the context of green purchase intention may not be universally applicable. For example, a study in India found that environmental knowledge significantly influences the green purchase intention of Generation Y, but not Generation X, while perceived risk insignificantly affects the purchase intention of both age groups (Kumar, 2024). This suggests that the influence of demographic factors such as income and age on green purchase intention may vary across different age groups and cultural contexts. Therefore, while there may be evidence to suggest a relationship between income and age in the context of green purchase intention, it is essential to consider the specific demographic and cultural factors at play in each context.

The relationship between income and gender in the context of green purchase intention is a complex and multifaceted one, as evidenced by several studies. The findings of a study on green product purchase intention among Malaysian consumers suggest that there is a statistically significant difference between gender and green product purchase intention, indicating that gender plays a role in influencing consumers' intention to purchase green products (Rahim, 2017). Additionally, another study focusing on young consumers' intention to repurchase green plastic products found that gender did not moderate the formation of green repurchase intentions, suggesting that gender may not have a

significant impact on green purchase intention in certain contexts (Suhartanto, 2021). However, the influence of income on green purchase intention is also evident in the literature. For instance, a study on consumer intention to purchase green consumer chemicals found that the degree of influence of antecedents of green purchase intention, including income, depends on the gender, age, and level of education of consumers ^[4]. This suggests that income may play a role in shaping green purchase intention, particularly in conjunction with other demographic factors.

Overall, the relationship between income and gender in the context of green purchase intention appears to be influenced by various factors and may vary across different consumer segments and product categories. While some studies indicate a significant difference between gender and green purchase intention, others suggest that gender may not necessarily moderate the formation of green purchase intentions. Similarly, the influence of income on green purchase intention is evident, with findings indicating that income, along with other demographic factors, may shape consumers' intention to purchase green products. Therefore, further research is needed to fully understand the nuanced interplay between income and gender in influencing green purchase intention, taking into account the specific context and characteristics of the target consumer population (Salam, 2021, Nguyen. 2019, Yang, 2022).

The relationship between income and environmental consciousness in the context of green purchase intention is a complex and multifaceted one. While some studies suggest that income does not significantly affect the regularity of organic food consumption (Kriwy, 2012), others indicate that income influences individual expenditure on organic food (Kriwy, 2012). Additionally, research has shown that higher income levels may lead to a greater intention to pay a premium for environmentally certified hotels, particularly among consumers with higher environmental consciousness (Leaniz, 2018). These findings suggest that the relationship between income and environmental consciousness in the context of green purchase intention may vary depending on the specific product or service being considered, as well as the individual's level of environmental consciousness.

Furthermore, it is important to consider the mediating role of environmental consciousness in the relationship between income and green purchase intention. For example, in the context of green purchase intention in Nigeria, it was found that environmental consciousness plays a significant mediating role in influencing the relationship between green price sensitivity and green purchase intention (Masi and Karatu, 2015). This suggests that individuals with higher income levels may be more likely to prioritize environmental concerns and demonstrate a stronger intention to engage in green purchasing behaviors, particularly when they perceive environmental consciousness as a significant factor in their decision-making process (Leaniz, 2018). Overall, the relationship between income and environmental consciousness in the context of green purchase intention is influenced by various factors, including the specific product or service, individual perceptions of environmental consciousness, and the mediating effects of environmental consciousness on purchasing intentions.

The relationship between income and socio-cultural influences in the context of green purchase intention is complex and multifaceted. Several studies have highlighted the significant impact of socio-demographic factors, including income, on green purchase behavior. For instance, a study on Canadian households found that higher income was associated with purchasing more of all food groups, with the strongest effects observed at lower income levels (Ricciuto, 2006). Similarly, a study in Chennai indicated that consumers with higher monthly income and educational qualifications were more likely to be concerned about the environment and, therefore, tended to purchase green products (Mahesh, 2012). These findings suggest that income plays a role in shaping consumers' attitudes and behaviors towards green products, potentially influencing their purchase intention.

However, it is important to note that socio-cultural influences also play a significant role in shaping green purchase intention. Research in Indonesia identified the role of personal, social, cultural, and psychological factors as driving forces for the intention to purchase organic food by middle-income class consumers (Najib, 2021). Additionally, a study in Vietnam and Poland revealed that cultural dimensions significantly affected green consumption in the collectivist culture of Vietnam, while these relationships were not significant in Poland (Doanh, 2021). These findings suggest that cultural values and norms can influence consumers' attitudes and behaviors towards green products, potentially mediating the impact of income on purchase intention. Overall, the relationship between income and socio-cultural influences in the context of green purchase intention is dynamic and influenced by a range of factors, including cultural values, social norms, and individual attitudes.

- **Objective Two:** Studies reporting mixed findings or non-linear relationship between income and green purchase intentions

The extant literature examining the association between income and intentions to engage in environmentally conscious consumption has yielded inconclusive results. The findings of a study conducted by Wang, Wong, and Narayanan (2019)

demonstrated a significant and positive association between individuals' income levels and their propensity to participate in environmentally conscious consumer behavior. The study carried out in China examined the demographic consequences of customer desire to participate in environmentally-friendly shopping with regards to the choice of eco-friendly hotels. The findings of the study indicated that income exerted a noteworthy influence on individuals' views towards green purchasing and their inclination to participate in environmentally conscious actions. However, a distinct research investigation produced equivocal findings about the association between individuals' income levels and their intents to participate in environmentally conscious purchasing practices. A study was conducted by Lee, Lim, Batul, Sharma, Singh, Khor, Raveendran, Kong, Kooli, Pradhan, and Kee (2023). The primary objective of this study, conducted in Malaysia, was to investigate the relationship between consumer awareness of environmental sustainability and their intentions to engage in green purchasing behavior, with a specific focus on the Starbucks brand. The results of this study suggest that there is no statistically significant relationship between income levels and the inclination to participate in environmentally conscious shopping practices. The results of this study suggest that the relationship between income and the desire to make environmentally conscious purchases may vary depending on specific contextual factors and individual factors that influence consumer behavior. The researchers suggest that further work is necessary to improve understanding of the complex relationship between wealth and the desire to participate in environmentally friendly purchasing behaviors.

In the same vein, researchers have conducted investigations into several facets to gain a comprehensive understanding of customer behavior and the decision-making process for environmentally sustainable products. Prior research has sought to examine the associations between socio-demographic variables and individuals' preferences for environmentally sustainable items. The findings, however, demonstrate a significant level of diversity, especially in relation to income. Prior studies have shown inconclusive findings, since they have documented varying links between income and green consumer choices, including both positive and negative causality's, as well as statistically insignificant relationships. The study by Sang-June and Sungchul (2012) examines the factors contributing to the contrasting results observed in previous empirical studies on income. The authors employ an empirical analysis to demonstrate that the inconsistent outcomes in previous research might be attributable to the non-linear relationship between income characteristics and environmental concern.

Zhang and Dong (2020) conducted a comprehensive study to investigate the causality between income levels and individuals' aspirations to engage in environmentally conscious purchasing behaviors. It was determined that the relationship between these variables exhibits a non-linear pattern. The findings of the study indicate that individuals with moderate income levels demonstrate a greater inclination towards participating in environmentally conscious consumption when compared to individuals with either extremely low or extremely high-income levels. Numerous experts have explicated the presence of a non-linear relationship between income and the inclination to partake in environmentally conscious shopping. The research undertaken by Zou, Peng, Zhao, Ma, and Chang (2023) demonstrates a curvilinear relationship, specifically an inverted U-shaped connection, between income inequality and the production of green innovation. This suggests the presence of an optimal degree of wealth inequality that enhances the stimulation of environmentally conscious innovation. Zou et al. (2023) did a study which also found that the non-linear relationship varies across different samples. Specifically, they noticed that the U-shaped association is more prominent in countries characterized by lower income levels, higher levels of corruption, and inferior government performance. In their study, Zhuang, Luo, and Riaz (2021) investigated the cognitive factors that influence individuals' desire to engage in green purchasing. Notably, the researchers found income as a crucial variable that has an impact on this intention. The study conducted by Zhuang, Luo, and Riaz (2021) revealed that perceived behavior control, perceived consumer efficacy, and subjective norm have a significant positive impact on individuals' intention to participate in environmentally friendly purchasing behaviors. In contrast, it was seen that the perception of green danger had a significant adverse impact. The findings of this research suggest the existence of a plausible relationship between income levels and the inclination to engage in environmentally conscious consumer behavior. This association may be influenced by cognitive factors.

Zheng, Tang, & Xu, (2023), suggest that a viable method for understanding the complex relationship between income and pro-environmental purchasing behavior is to investigate the impact of both subjective and objective information. There is a suggestion that individuals with higher income levels may have greater access to information and resources, leading to increased levels of subjective and objective awareness of green products. Zheng, Tang, and Xu (2023) claim that the augmentation of knowledge has the capacity to yield advantageous effects on the perception of product quality and trust. As a result, this heightened impression can subsequently contribute to an enhancement in purchasing intentions. Nevertheless, Zheng, Tang, and Xu (2023) admit that the relationship between wealth and individuals' intentions to participate in environmentally conscious purchasing might be influenced by other factors such as age, education, and gender. Therefore, it is crucial to consider these variables when examining the relationship between income and individuals' intentions to participate in environmentally conscious purchasing. The study conducted by Witek and Kuźniar (2021) disclosed a significant relationship between the consumption of environmentally friendly

products and income levels in developing nations. Nevertheless, it is crucial to acknowledge that this association does not adhere to a linear trajectory. The findings of the study indicate that persons who own moderate to high levels of income display an increased level of environmental awareness and are more inclined to participate in environmentally-conscious consumption.

According to the findings of Zhuang et al. (2021) findings, a significant positive relationship exists between the perceived value of green products, individuals' attitudes towards these products, their level of faith in green practices, and their inclination to participate in green purchasing activities. On the other hand, it has been observed that the perception of green risk has a significant negative impact on these intentions (Zhuang et al., 2021). This discovery suggests that individuals with higher incomes exhibit a greater tendency to perceive higher value, trust, and positive attitudes towards environmentally friendly products. Consequently, this leads to an increased inclination to engage in green purchasing behaviors. On the other hand, those with lower socioeconomic level may exhibit an increased awareness of the risks associated with green products, which therefore results in a reduced inclination to purchase such goods. These hypotheses aim to clarify the complex relationship between income and intentions to engage in environmentally friendly purchasing behavior. They emphasize the importance of having access to green spaces and the perceived value and risk associated with green products. Ahmed (2020), provide a comprehensive analysis of the role of environmental consciousness in the association between income and intentions to engage in green purchasing, highlighting its crucial role as a moderating variable. According to Ahmed (2020), there is a significant influence of environmentalism on persons' inclination to participate in environmentally-friendly purchases. This impact is further influenced by the level of knowledge individuals possess regarding green products. Sharma (2017) provides further support for this concept, since the author posits that the spiritual inclination of consumers significantly impacts their intentions to participate in environmentally conscious purchasing. Moreover, Martínez García de Leaniz (2018) conducted research that demonstrates the influence of customers' environmental consciousness on the relationship between their perception of a hotel's green image and their behavioral intentions to select certified hotels. The findings of this study suggest that individuals with a greater degree of environmental awareness are more likely to have stronger intentions to participate in environmentally-friendly purchases, regardless of their income level.

Budijati (2016) establishes a significant association between the income levels of individuals and their inclination to participate in environmentally conscious consumption. According to Budijati (2016), the research conducted in China demonstrated that income was the only demographic factor that had a notable impact on consumers' willingness to participate in a mobile phone take-back initiative. A second test carried out in China demonstrated that the amount of income exerted a noticeable influence on the tendency of clients to acquire products tagged with carbon information. Nevertheless, Duan (2023) observed that there were no statistically significant differences observed in relation to gender, occupation, and education level. Moreover, a recent empirical study conducted in China sought to explore the impact of income level on the purchasing intentions of low-income consumers regarding personal activities targeted at reducing climate change. According to He's (2022) findings, it was observed that the influence of positive predicted emotion on consumer intentions was notably stronger. The findings of this research demonstrate that there exists a causality between individuals' income levels and their propensity to partake in environmentally conscious buying behaviors. Individuals with lower socioeconomic status may exhibit more vulnerability to the impact of specific factors, such as emotions, while making decisions pertaining to environmentally friendly purchases.

- Objective Three: Identifies and analyze potential moderating factors/demographic variables that may influence the income-green purchase intention relationship

A considerable body of scholarly literature has been devoted to analyzing the separate effects of age and money on individuals' inclination to engage in environmentally conscious purchasing. Kishore (2022) examines the impact of wealth and age as moderating variables on customer purchase intention of environmentally-friendly cosmetics in the urban setting of Bangalore. The findings of the study indicate that both wealth and age have a significant influence on individuals' inclination to participate in environmentally friendly shopping behaviors. Nevertheless, this study does not directly examine the potential causality between these two characteristics. The study, done by Wang (2020), investigates the relationship between age, gender, education, income, green buying attitudes, and green behavioral intention within the specific context of choosing green hotels. The findings of the study indicate that age and income have a significant impact on individuals' attitudes towards green purchasing, whereas education and income have a substantial influence on individuals' behavioral intentions towards green consumption. However, the analysis does not consider the relationship between age and income. The research conducted by Shrestha (2018) examines the impact of green marketing strategies on consumer decision-making regarding product selection, as well as the influence of environmentally friendly initiatives on customers' desire to make a purchase. The investigation lacks a specific examination of the impact of age on the association between income and the intention to participate in environmentally conscious purchasing. The existing body of research lacks sufficient empirical information to explicitly clarify the impact

of age on the relationship between income and the inclination to participate in environmentally conscious consumption. Further research is necessary to explore the complexities of this specific relationship (Kishore, 2022; Wang, 2020; Shrestha, 2018).

According to Xue (2020), there exists a mediating effect of gender on the connection between income and propensity to engage in green purchases. According to Wang (2020), empirical studies have demonstrated a notable disparity in green purchase attitudes and green behavioral intention between genders. Furthermore, it has been shown that gender has a moderating role in the impact of brand perception on purchase intention, as indicated by Wang's (2020) study. Nevertheless, it is crucial to acknowledge that the supplied sources have not directly examined the precise mediating influence of gender on the causality between income and green purchase intention. Additional investigation is required to go into the intricacies of this particular association and its potential influence via the lens of gender. The examination of the causality between gender, income, and intention to engage in environmentally friendly purchases has been the subject of numerous scholarly investigations. Yada (2021) posits that gender serves as a substantial moderating element in the relationship between restricted psychometric characteristics and the inclination to engage in environmentally friendly purchasing. The research indicates that male customers exhibit a higher inclination towards environmentally-friendly behaviors, so implying that gender does indeed have a role in influencing the intention to make green purchases. Furthermore, the study conducted by Gundala (2022) revealed that gender has a moderating role in the association between subjective norm and attitude, as well as attitude and purchase intention, among the population of organic food consumers. This finding suggests that gender does really influence individuals' inclination to purchase environmentally friendly products. Nevertheless, it is crucial to acknowledge that certain research do not explicitly examine the causality between gender, income, and the intention to engage in environmentally friendly purchases. Hence, it is apparent that gender plays a moderating role in the association between specific elements and the intention to engage in environmentally friendly purchases. However, additional investigation is required to comprehensively understand the degree to which gender moderates the connection between income and the desire to engage in environmentally friendly purchases.

Numerous studies have been conducted to examine the influence of age on the causality between income and environmentally conscious consumer behavior. According to a research study conducted in the Slovak Republic, Dzurikova (2023) found that several characteristics, including age and income group, exert an influence on customer purchase behaviour for ecological items. In a similar manner, a research study conducted in China demonstrated that age significantly influenced attitudes towards green purchasing, whereas income had a notable impact on behavioral intentions towards green consuming (Wang, 2020). However, a distinct investigation conducted among university students in Hungary produced equivocal findings about the influence of demographic variables, such as age, on the inclination to participate in environmentally conscious purchasing behaviour (Naz, 2020). Therefore, it is crucial to recognize that the relationship between age, income, and green purchasing behaviour may demonstrate diversity depending on the specific context and demographic being studied. Further research is necessary to fully understand the complex relationship between age, income, and consumer behaviour in relation to environmentally conscious buying decisions. A multitude of academic inquiries have been undertaken to examine the association between age, income, and consumer behaviour in regard to environmentally-conscious choices. Rawat (2015) posits that there is a positive association between age, income, and green consumer behaviour, indicating that older individuals tend to demonstrate a higher level of environmental consciousness. In a supplementary investigation, Çakmakçı (2021) discovered that persons aged 36 and older exhibited a higher propensity for engaging in ecologically sustainable behaviors. Furthermore, the research revealed that those with greater educational attainment had an elevated level of consciousness and interest in matters pertaining to the environment.

A study conducted by Park (2012) investigated the consumption habits of avocados in Germany, focusing on the relationship between age and the inclination to consume environmentally-conscious food, particularly avocados. The findings of the study revealed a positive association between age and the propensity to consume avocados as a means of promoting environmental sustainability. The results suggest that there is a positive relationship between age and avocado consumption, with older persons demonstrating higher levels of consumption. However, it is imperative to recognize that there is a dearth of consistency in the results obtained from different studies about the relationship between age and environmentally conscious consumer behaviour. Multiple studies have produced diverse results about the relationship between income and environmentally conscious consumer decisions. These findings have indicated the presence of negative, positive, or inconsequential connections (Ohlau, 2023). Therefore, it is crucial to do further research in order to acquire a full comprehension of the relationship between age, income, and environmentally-conscious consumer behaviour. Yim (2017) posits that age plays a significant role in regulating the relationship between income and environmentally-conscious consumer behaviour. Yim (2017) conducted a study in Japan and Korea, which revealed a significant inverse relationship between age and the frequency of eco-friendly automotive purchases. This consumer behaviour might be interpreted as a conscious choice to support environmental sustainability. The

aforementioned study suggests the presence of a negative link between age and the inclination to acquire vehicles that are ecologically friendly. However, it is imperative to recognize that the scope of the study was confined to the examination of next-generation environmentally friendly vehicles, hence potentially constraining its applicability to other environmentally concerned consumer choices. Further research is necessary to explore the specific role of age in influencing the relationship between income and different types of environmentally-conscious consumer choices.

The relationship between income and environmentally-conscious consumer behaviour is partially contingent upon age. Numerous studies have demonstrated that age is a significant factor in influencing consumers' environmental awareness and their propensity to engage in environmentally beneficial behaviors (Çakmakçı (2021), Zeynalova (2022), and Ohlau (2023)). According to a study conducted by Çakmakçı (2021), it was shown that persons who were 36 years old and older demonstrated a greater degree of environmental sensitivity in comparison to younger consumers. A study conducted by Ohlau (2023) demonstrated a positive link between higher age and the consumption of avocados, a plant-based item that is well recognized as a highly nutritious dietary option. Nevertheless, it is crucial to acknowledge that avocados also have the potential to cause negative environmental impacts. However, there is variation in the research findings about the relationship between income and environmentally-conscious consumer behaviour. Numerous studies have produced divergent results about the relationship between income and environmentally conscious consumer behaviour. Zeynalova (2022) identified a positive association between income and environmentally conscious customer behaviour, while Park (2012) did not observe a statistically significant relationship. Therefore, conducting further research is necessary to get a thorough comprehension of the complex interplay among age, income, and environmentally-conscious consumer behaviour, as age may serve as a mediator in this relationship. The significance of the degree to which demographic parameters, such as age, mediate the association between income and environmentally-conscious consumer decisions suggests that demographic factors exert a substantial influence on consumer behaviour with regards to environmental considerations. The research conducted on consumer decision-making processes within the setting of indoor smart farm restaurants by Joo (2022), indicates that the influence of age was found to moderate the associations between subjective norm and attitude, as well as personal norm and behavioral intention. This implies that the age of individuals has an impact on their perception and assimilation of social standards and personal views, thus influencing their decisions as consumers. Furthermore, Tong (2020) conducted a study examining the factors that influence Chinese consumers' purchasing intentions and willingness to pay for green rice. The research revealed that socio-demographic features, such as age, have a significant role in shaping consumer preferences towards environmentally-friendly products. Hence, the variable of age can be regarded as a determinant that interacts with income in influencing consumer decision-making, underscoring the need of incorporating demographic factors in comprehending environmentally-conscious consumer behaviour.

The current body of literature lacks comprehensive research that particularly examines the mediating influence of social factors on the association between income levels and individuals' intentions to engage in environmentally friendly purchasing behaviors. Nevertheless, numerous research offers valuable insights into the determinants that could potentially impact individuals' intention to engage in green purchasing, as well as the significance of social influence within this particular domain. A study conducted by Sun (2022) examined the influence of social media information sharing on the intention of Generation Z to make green purchases. The findings of the study indicated a favorable relationship between social media information sharing and green buy intention. This implies that social media can have an impact on consumers' inclination to participate in environmentally-friendly purchases, through the effect of social factors. A recent scholarly investigation examining the impact of customer perceived values on the behavior of consuming organic food discovered that various perceived values, including health, hedonic, and social aspects, exert a favorable influence on customers' attitude towards green purchases. This, in turn, affects their desire to engage in green purchasing activities (Kamboj, 2022). This suggests that the connection between income and intention to make environmentally-friendly purchases may be influenced by individuals' values and attitudes, which can be shaped by social circumstances. Moreover, a meta-analysis conducted by Zhuang et al. (2021) revealed that subjective norm emerged as a robust and significant predictor of green buying intention. Subjective norm pertains to the individual's perception of the societal pressure exerted upon them to partake in a specific behaviour. This implies that the association between income and intention to make environmentally-friendly purchases may be influenced by social factors such as societal norms and beliefs. Although the studies mentioned do not specifically examine the relationship between income and the intention to make environmentally friendly purchases, they do offer support for the notion that various factors such as social influence, as observed in social media, values and attitudes, and subjective norms, can act as mediators in shaping individuals' inclination to engage in green consumption. Hence, it is reasonable to propose that the association between income and green purchase intention could be influenced by social factors. However, additional study focused on investigating this mediation is required.

The association between individuals' income levels and their inclination to participate in environmentally friendly purchase behaviors could potentially be influenced by their level of environmental consciousness. The notion of

environmental consciousness refers to an individual's degree of awareness and concern for environmental issues (Kim, 2023). According to the findings of Haider (2020), there exists empirical information indicating a positive relationship between the income levels of consumers and their ability to acquire environmentally friendly products. This relationship, in turn, influences their propensity to participate in green purchasing activities. However, the influence of income on the inclination to engage in environmentally conscious consumption may vary depending on an individual's level of environmental consciousness. When individuals exhibit a high level of environmental awareness, their inclination to prioritize the environment may outweigh the influence of income on their intention to engage in environmentally responsible consumption. Kim (2023) posits that individuals' commitment to environmental sustainability might lead to a preference for eco-friendly choices, regardless of their financial situation. On the other hand, individuals who demonstrate lower levels of environmental awareness may be more prone to the impact of their financial status when participating in consumer activities. Haider (2020) posits that individuals may demonstrate a predilection for prioritizing price over environmental factors, and their propensity to engage in environmentally conscious purchasing decisions may be notably influenced by their socioeconomic status. Typically, the causality between income and the inclination to participate in environmentally-friendly purchasing might be contingent upon an individual's level of environmental awareness. The relationship between income and green purchasing intention may be influenced by the level of environmental consciousness, with higher levels of environmental consciousness potentially weakening this impact, while lower levels of environmental consciousness may strengthen this relationship.

In a study conducted by Xin, Huaming, and Ploeger (2020), various factors were identified that have a significant role in the non-linear relationship between income and individuals' propensity to participate in environmentally friendly purchasing behaviors. Xin et al. (2020) have found several factors contributing to the high costs of environmentally-friendly food, including issues connected to its availability, concerns over trust, and insufficient awareness. In addition, Khandelwal and Bajpai (2011) posit that multiple dimensions of green advertising, such as viewers' attitudes, brand image, media platforms, environmental education, influence from reference groups, and perceived effectiveness of environmental behaviour, may exert an impact on consumers' purchase intentions (Khandelwal & Bajpai, 2011). Furthermore, the research conducted by Susanty, Puspitasari, Prastawa, Listyawardhani, and Tjahjono (2021) posits that the inclination and tangible actions of individuals can be impacted by various factors, including educational background, social cognitive aspects, and the implementation of environmentally conscious marketing strategies. The features listed above contribute to the complex relationship between wealth and the desire to make environmentally-friendly purchases, highlighting the importance of considering several contextual and individual factors while studying this connection.

The mediation effect of education level and gender on the relationship between income level and customers' dispositions to engage in green purchasing was revealed by the research conducted by Chekima (2016). According to Chekima (2016), individuals with higher levels of education, particularly females, demonstrate a greater propensity to engage in environmentally conscious purchasing behaviors. However, the study conducted by Chekima (2016) did not produce significant findings to substantiate the claim that income level plays a moderating role in influencing consumers' propensity to participate in environmentally conscious buying behaviors. This discovery suggests that the sole determinant of income level does not exert a direct influence on consumers' propensity to participate in environmentally conscious buying behaviors. Nevertheless, it is important to acknowledge that the educational attainment and gender of individuals exert a more significant influence on shaping the incentives driving consumers' intentions to participate in environmentally conscious purchases. Zhuang (2021) did a comprehensive meta-analysis of 54 empirical papers to ascertain the principal determinants that impact the relationship between income and aspirations to engage in environmentally conscious purchasing. The influencing factors can be classified into three distinct categories: cognitive factors, consumer individual attributes, and societal aspects. The findings of the study indicate that there is a significant positive influence of perceived value, attitude, and trust towards environmentally friendly products on the desire to make green purchases. The variables of perceived behavior control, perceived consumer efficacy, and subjective norm demonstrate a noteworthy and favorable impact on the intention to participate in environmentally-friendly shopping. There is a positive relationship between the adoption of collectivist beliefs and individuals' inclination to participate in green shopping behaviour. The negative impact on the inclination to purchase green products is significantly influenced by the impression of danger associated with them.

According to Visser (2021), there is a significant causality between individuals' economic level, their level of environmental consciousness, and their inclination to participate in ecologically responsible shopping practices. According to a study conducted in Poland, it was found that income level plays a partially mediating role in the relationship between environmental attitude and green shopping behaviour (Visser, 2021). This suggests that individuals who hold a positive attitude towards the environment are more likely to engage in green consumerism, especially those with greater levels of income. However, it is imperative to recognize that the aforementioned study did not detect a statistically significant association between individuals' income levels and their inclination to participate

in environmentally conscious buying behaviour (Visser, 2021). This discovery implies that the impact of income level on intentions to make environmentally friendly purchases may not be statistically significant when considered independently, as other variables such as environmental consciousness and attitude may also play a role in the decision-making process. Therefore, while the level of income may have some impact on individuals' inclination to participate in environmentally friendly buying, it is important to acknowledge that it is not the sole determining factor. Individuals with lower socioeconomic status can nevertheless engage in environmentally friendly consumer behaviour provided they possess a strong environmental awareness and a positive disposition towards sustainable practices.

A number of recent research conducted by Abeysekera (2022), Zameer (2022), and Shamsi (2022) have demonstrated that environmental consciousness has a positive influence on individuals' inclination to participate in environmentally-friendly shopping practices, irrespective of their economic levels. Numerous studies have demonstrated that individuals with a heightened level of environmental awareness are more likely to express intentions to purchase products that are ecologically friendly (Abeysekera, 2022; Zameer, 2022; Shamsi, 2022). The proposition mentioned above is substantiated by the theory of planned behaviour, which suggests that attitudes, norms, and perceived behavioural control, all influenced by environmental awareness, contribute to the formation of intentions to participate in environmentally conscious purchasing behaviour according to Abeysekera (2022). Furthermore, Zameer (2022) conducted a study which revealed that the level of environmental consciousness has a significant impact on individuals' inclination to engage in environmentally friendly consumer behaviour, specifically in terms of making green purchases. The aforementioned phenomenon is facilitated by factors such as familiarity with environmentally friendly items and conscientiousness towards ecological matters. The findings of this study suggest that individuals with a higher level of environmental awareness are more likely to show a desire to purchase ecologically friendly products, regardless of their income levels.

Researchers investigate numerous variables while examining the relationship between income and individuals' inclination to participate in environmentally conscious shopping behaviour. The objectives pertaining to environmentally conscious purchases are subject to human factors, including demographic characteristics (Susanty, 2021). Zhuang et al. (2021) posits that cognitive elements, including perceived value, attitude, and trust, exert an influence on individuals' green buying intentions. The purchase intentions pertaining to environmentally friendly products are additionally influenced by ethical considerations, including moral intensity and judgment (Tian, 2022). Siyal (2021) posits that the existence of green brand knowledge influences the relationship between positioning, attitude, environmental concern, and green purchasing intentions. Qi (2020) suggests that researchers have also examined the impact of health consciousness, perceived qualities, environmental consciousness, social influence, family structure, and positive shopping experiences on individuals' intentions to participate in environmentally-friendly purchasing behaviour. Chen (2020) conducted a recent study to examine the influence of green brands on consumer associations, attitudes, and intentions to participate in environmentally conscious shopping.

Empirical evidence suggests that cultural differences may play a role in shaping the relationship between income levels and individuals' propensity to engage in environmentally conscious purchase behaviour. A research conducted in Qingdao, China, showcased the efficacy of the Theory of Planned Behaviour (TPB) framework in predicting consumers' intentions to engage in the purchase of environmentally friendly food products. The model presented in the study integrates cultural attributes, such as face consciousness and group conformity, as discussed by Qi (2019). This suggests that cultural factors play a significant role in shaping consumers' propensity to purchase ecologically sustainable items. A distinct research study conducted in Taiwan discovered that the influence of green brands on intentions to engage in green purchasing is mediated by both attitudes towards green brands and associations with green brands (Ahmed, 2022). This suggests that cultural factors, such as the manner in which consumers perceive and experience ecologically sustainable items, could potentially serve as an intermediary in the relationship between emotions and the inclination to engage in a purchase. Furthermore, a study conducted in the United States discovered that the concept of green customer value, which includes factors such as environmental image and perceived value, has a positive influence on consumers' intents to engage in green purchasing (Chen, 2020). While the present study does not directly investigate cultural variances, it suggests that customers' purchasing intentions are influenced by their ideas and perceptions, which can be influenced by cultural influences. In brief, the findings of this study suggest that cultural factors may influence the relationship between income levels and individuals' propensity to participate in environmentally conscious consumer behaviour. However, it is imperative to recognize that the aforementioned research was conducted in different cultural contexts, specifically China, Taiwan, and the United States. Therefore, further investigation is necessary in order to extend the implications of these findings to different cultural settings.

4.2. Objective Four: Identifies gaps in the existing literature on the income-green purchase intention nexus while highlighting areas where further research is needed

The research conducted by Kishore (2022) and Wang (2020) provides insights into the distinct influences of age and income as moderating variables on consumers' propensity to engage in environmentally-friendly purchases. Nevertheless, it is important to note that both studies exhibit a deficiency in conducting a comprehensive examination of the interplay between age and income, which are considered essential demographic factors. Kishore's research, which centers on the green cosmetics industry in Bangalore, places significant emphasis on the role of income and age. However, it fails to thoroughly investigate the potential interactions or combined effects of these characteristics on green purchasing intention. In contrast, Wang's research focuses on the selection of green hotels and emphasizes the distinct impact of age and wealth on attitudes and behavioral intentions towards green consumption. However, the study does not explore the potential relationship or combined effect of these two factors. As a result, there is a lack of comprehension of the combined impact and potential interaction between age and income as factors that moderate green purchase intention. This is a crucial feature in understanding consumer behavior when it comes to environmentally conscious buying. The study conducted by Shrestha (2018) provides an analysis of the influence of green marketing strategies and activities on customers' desire to make environmentally friendly purchases. However, it fails to consider an important variable, namely age, in comprehending the relationship between income and intention to engage in green purchasing. The study conducted by Shrestha lacks clear investigation of the moderating role of age in the relationship between income and the propensity to engage in environmentally friendly purchases. The significance of this study gap lies in the potential influence of age on individuals' views and behaviour towards environmentally conscious consumption. Further work is required in order to gain a full understanding and effectively integrate age as a moderating factor in the relationship between income and green buying intention (Wang, 2020; Shrestha, 2018).

The scholarly works conducted by Dzurikova (2023) and Wang (2020) provide a substantial body of information about the impact of age and income on consumer behavior in relation to environmentally conscious shopping. Nonetheless, there exists a significant lacuna in the scholarly literature on the thorough comprehension of the complex interplay among age, income, and environmentally conscious consumer behavior, especially in diverse contexts and among various demographic groups. According to Dzurikova (2023), the research conducted in the Slovak Republic emphasizes that customer purchase behavior for ecological products is significantly influenced by age and income group. In contrast, a study conducted in China places emphasis on age as a notable factor in shaping individuals' views towards green shopping, although income predominantly influences their behavioral intentions (Wang, 2020). However, research conducted in Hungary involving university students produces equivocal findings on the influence of demographic variables, such as age, on the inclination towards engaging in environmentally friendly shopping behavior (Naz, 2020). The diverse outcomes presented herein underscore the necessity for more investigation in order to comprehend the interrelationships between age, income, and consumer behavior pertaining to the purchase of environmentally sustainable products. We aim to enhance our comprehension of this relationship across diverse demographics and geographical locations. There exists a body of research investigating the causality between income and the intention to engage in environmentally conscious purchases, with gender serving as a mediating factor. The studies conducted by Wang (2020) and Xue (2020) have recognized the influence of gender as a moderator in shaping attitudes towards green purchases and behavioral intentions. Additionally, these studies have acknowledged the mediating effect of gender in the relationship between brand perception and purchase intention. However, there is a notable gap in the literature regarding the specific mechanisms through which gender mediates the association between income and green purchase intention. While previous research has recognized the existence of gender disparities in attitudes and intentions towards environmentally friendly purchases, the precise function of gender as a mediator in the relationship between income and intentions to engage in such purchases has not yet been investigated in existing studies. Hence, it is imperative to do additional research in order to gain a thorough understanding of how gender functions as a mediating factor, thereby illuminating the intricate dynamics of the relationship between income and green purchasing intention.

The scholarly investigations conducted by Yada (2021) and Gundala (2022) shed light on the moderating influence of gender on many dimensions of green purchasing intention. These studies bring attention to a significant gap in knowledge pertaining to the complex interplay between gender, income, and green purchase intention. The studies do not explicitly investigate the potential moderating role of gender in the link between income and green buying intention. The available information indicates that gender has a role in shaping individuals' intention to engage in environmentally friendly purchases, as it interacts with elements such as psychological characteristics and the relationship between subjective norms and attitudes. Nevertheless, the existing literature has yet to examine the specific relationship between income, gender, and intention to engage in environmentally friendly purchasing. Therefore, it is imperative to conduct additional research in order to gain a full understanding of how gender functions as a moderator in the

relationship between income and green purchasing intention. This research will provide insights into the specific impact of gender and its potential interaction with income in influencing decisions related to environmentally conscious consumption. It is crucial to gain a clear understanding of this relationship in order to develop successful strategies that take into account the interplay between gender and income in fostering sustainable consumer behavior. The current body of research examining the relationship between age, income, and environmentally conscious consumer behavior presents intricate findings and identifies several areas that require further investigation. The research conducted by Rawat (2015) and Çakmakçı (2021) highlights a positive association between age and environmental awareness, namely among older adults and persons aged 36 years and older. However, it is important to note that the findings are not uniformly consistent across all studies. The research conducted by Park (2012) examines the trends of avocado consumption in Germany, highlighting a parallel trend wherein older persons demonstrate a greater inclination towards environmentally-conscious food consumption. Nevertheless, the absence of consistency in research outcomes concerning the relationship between age and environmental consciousness indicates the want for additional inquiry in order to comprehend the intricacies of this connection. Furthermore, the existence of diverse research findings regarding the relationship between income and environmentally-friendly consumer decisions, as emphasized by Ohlau (2023), emphasizes the need for further extensive research in order to acquire a comprehensive comprehension of the interplay between age, income, and environmentally-conscious consumer behavior. The presence of inconsistent findings in various studies necessitates a more comprehensive investigation of moderating factors in order to develop a unified comprehension of the relationship between income and green buying intention.

Yim's (2017) study provides significant contributions to the understanding of how age moderates the association between income and environmentally-conscious consumer behavior, with a specific emphasis on the acquisition of eco-friendly vehicles. Nevertheless, it is important to acknowledge that there is a significant research void in relation to the narrow focus of this study, which exclusively examines the impact of next-generation environmentally friendly vehicles on customer choices in favor of environmental sustainability. The imposition of this limitation gives rise to apprehensions over the applicability of the results to alternative manifestations of environmentally concerned consumer choices. Therefore, it is imperative to do further study in order to gain a thorough understanding and determine the exact role of age as a moderating variable in the relationship between income and green purchase intention, including a wider range of environmentally-conscious consumer preferences. Additional research examining a wide range of environmentally-friendly items and behaviors is necessary to gain a comprehensive understanding of how age impacts the relationship between income and environmentally-conscious consumption, extending beyond the domain of eco-friendly automobiles. The existing body of research pertaining to the relationship between income, age, and environmentally-conscious consumer behavior underscores the imperative for additional inquiry in order to gain a comprehensive understanding of the intricate mechanisms involved. Multiple studies, conducted by Çakmakçı (2021), Zeynalova (2022), and Ohlau (2023), have emphasized the influence of age on the development of consumers' environmental consciousness and actions. These studies have found that older individuals tend to display a greater level of environmental sensitivity. Nevertheless, the breadth of the research is relatively constrained, particularly with regards to the precise eco-friendly behaviors under investigation, as exemplified by Ohlau's (2023) study on avocado consumption. Moreover, the variability in research findings about the association between income and environmentally-conscious consumer behavior, as indicated by Zeynalova (2022) and Park (2012), suggests the possibility of diverse factors influencing this relationship. Further investigation is needed to examine the potential role of age as a mediator in the relationship between income and green purchasing intentions. This is important due to the various and potentially intricate ways in which age could influence the connection between income and environmentally-conscious consumer choices. Therefore, it is recommended that further investigation should encompass a broader range of environmentally friendly behaviors and products, in order to obtain a comprehensive knowledge of how age functions as a mediator in the relationship between income and intention to purchase green products. Additionally, it is important to examine how this relationship varies across different environmental contexts and consumer demographics.

The current collection of scholarly literature emphasizes a notable deficiency in investigating the mediating influence of social factors on the connection between income and the intention to engage in environmentally friendly purchasing. The works of Sun (2022), Kamboj (2022), and Zhuang et al. (2021) provide significant contributions to the understanding of the determinants of green purchase intention and the influence of social factors. However, these studies do not directly examine the relationship between income and green purchase intention, although they indirectly suggest the potential mediating role of social influence in this relationship. The research indicates that social influence, as demonstrated by the use of social media, perceived values, attitudes, and subjective standards, has the potential to impact individuals' inclination to participate in environmentally-friendly shopping. Nevertheless, there is a dearth of research specifically examining the role of social influence in mediating the association between income and intention to engage in environmentally friendly purchasing. Therefore, it is evident that there exists a significant vacuum in the existing research, which calls for additional targeted investigations in order to gain a thorough understanding of how

social influence, in its several manifestations, serves as a mediator in the relationship between income levels and the inclination to participate in environmentally conscious consumer behavior. Further elucidating this mediation would augment our comprehension of the intricate dynamics that underpin the relationship between income and the intention to make environmentally friendly purchases within the context of environmentally aware consumerism. The research on the income-green purchasing intention relationship, as connected to environmental consciousness, shows a major research gap. The research conducted by Kim (2023) and Haider (2020) offers significant contributions to the comprehension of the relationship between income, environmental consciousness, and green purchasing behavior. However, there exists a gap in the literature regarding the intricate interplay between income and environmental consciousness as moderating variables, which has yet to be explored. The extant literature suggests that persons with greater levels of income possess the financial means to acquire environmentally friendly products, hence potentially affecting their intention to engage in green consumption. However, it is imperative to investigate the extent to which environmental consciousness serves as a moderating factor in this relationship. For example, what is the influence of a robust environmental consciousness on the relationship between income and the intention to make green purchases, and how does this influence differ in comparison to those with lesser levels of environmental consciousness? Exploring these complexities is crucial for gaining a thorough understanding of the factors that impact the relationship between income and the intention to make environmentally-friendly purchases. This is particularly important when considering the potential mediating influence of environmental consciousness and its implications for promoting sustainable consumer behavior. Additional research investigating these connections has the potential to offer a more intricate and comprehensive insight on the relationship between income and green purchase intention, specifically within the framework of environmental consciousness.

Numerous empirical investigations have identified significant research deficiencies in fully comprehending the relationship between income and green buying intention, particularly in the presence of numerous moderating factors. Xin, Huaming, and Ploeger (2020) highlight the significance of factors such as the cost and accessibility of environmentally-friendly products, trust-related concerns, and consumer awareness. On the other hand, Khandelwal and Bajpai (2011) examine the impact of green advertising and different consumer-related factors. However, neither study explores the specific interaction between these factors and income in shaping intentions to engage in green purchases. Furthermore, the study conducted by Susanty, Puspitasari, Prastawa, Listyawardhani, and Tjahjono (2021) addresses the impact of learning experience, social cognitive factors, and green marketing on individuals' purchase intentions. However, the examination of how income interacts with these factors in relation to environmentally-friendly purchases is not explicitly investigated. Hence, the existing gap in research pertains to the necessity of conducting comprehensive studies that examine the intricate interaction between income and other moderating factors. These studies should take into account numerous contextual and individual elements in order to gain a better understanding of the complex dynamics that influence the relationship between income and the intention to make environmentally-friendly purchases. Comprehending these connections is crucial in order to formulate efficacious tactics aimed at promoting environmentally-conscious consumption among diverse income segments. The study done by Chekima (2016) addresses a significant gap in the existing literature by examining the moderating factors that impact the association between income and green purchase intention. Although Chekima's study examines the mediating influence of education level and gender on the association between income and green purchasing behavior, it does not specifically investigate or present substantial empirical support for income as a direct moderating factor. The existence of this gap in the literature indicates a necessity for additional study that especially concentrates on examining income as a potential moderator of individuals' intentions to engage in green purchasing. Understanding how income interacts with other characteristics, such as education and gender, in influencing environmentally friendly purchasing behavior is vital for establishing targeted policies that effectively promote sustainability across varied customer groups. Hence, it is imperative to conduct further investigation in order to fully elucidate the complex dynamics and interplay among income, education, gender, and green buying intents. This will enable the formulation of well-informed policy and marketing strategies aimed at boosting sustainable consumption.

The research conducted by Zhuang (2021) offers a comprehensive analysis of the factors that influence the relationship between income and green purchase intention. However, there is a significant research vacuum that arises from the necessity to further investigate the precise mediating or moderating function of wealth in relation to these factors. Although the study identifies significant characteristics such as green perceived value, attitude, trust, and perceived behavior control, it does not clearly explore the potential interaction between income and these factors in influencing green purchasing intentions. Gaining a deeper understanding of how money functions as a moderating or mediating factor in the relationship between determinants and green purchasing intention will greatly expand our comprehension of this relationship. This knowledge can provide valuable insights into the complex mechanisms through which income influences environmentally conscious consumption. Hence, it is imperative to conduct additional study in order to address this disparity and gain a holistic comprehension of the role of income in the intricate mechanisms that influence individuals' intentions to engage in environmentally friendly purchasing, as elucidated by Zhuang (2021). Visser's

(2021) study sheds light on a knowledge deficit pertaining to the direct impact of income on individuals' willingness to engage in environmentally friendly purchasing behaviors. The study admits that money somewhat mediates the relationship between environmental attitude and green shopping behavior. However, it does not establish a statistically significant relationship between income levels and the inclination to participate in environmentally conscious buying behaviors. This finding suggests that the level of income alone may not have a substantial impact on individuals' desire to engage in environmentally friendly purchasing behaviors. The existing research gap pertains to the necessity of investigating the interplay between income and various characteristics, including environmental consciousness and attitude, in order to comprehend their impact on green shopping behavior. Gaining a comprehensive understanding of the collective impact and potential interaction between income and these elements is crucial in order to comprehend the relationship between income and the intention to make environmentally-friendly purchases. This understanding facilitates the development of focused initiatives aimed at promoting sustainable consumption among various income demographics. Additional investigation in this particular area is needed in order to fully elucidate the intricate processes at play.

The scholarly investigations conducted by Abeysekera (2022), Zameer (2022), and Shamsi (2022) shed light on a significant lacuna in research pertaining to the potential moderating influence of income on the link between income and green buying intention. Abeysekera (2022), Zameer (2022), and Shamsi (2022) highlight the significance of environmental awareness in influencing green shopping intentions. However, the potential moderating effect of money on this relationship remains unexplored in their studies. The research papers offer significant contributions to understanding the impact of environmental consciousness on intentions to make green purchases. The findings indicate that persons who possess a greater level of awareness regarding environmental issues are more inclined to declare their desire to engage in environmentally friendly purchasing behaviors, irrespective of their income levels. In order to have a thorough understanding of the underlying dynamics, it is imperative to investigate the interaction between income and environmental consciousness, and how this interaction may potentially moderate the impact on intentions to make green purchases. Examining the interaction between income and environmental consciousness can provide a more comprehensive knowledge of how socio-economic variables may impact or determine the connection between environmental awareness and aspirations to engage in environmentally friendly purchases. Additional investigation in this particular area is required in order to establish a connection and offer a thorough understanding of the relationship between income and the intention to engage in environmentally-friendly purchasing. Previous research conducted in Qingdao, China (Qi, 2019), Taiwan (Ahmed, 2022), and the United States (Chen, 2020) has indicated that cultural factors play a significant role in shaping individuals' intentions to engage in green purchasing. However, it is important to note that these studies have not explicitly investigated the potential interplay between income levels and these cultural characteristics. The findings of these research suggest that cultural factors, including individuals' views, attitudes, and beliefs towards environmentally sustainable items, may serve as mediators in the relationship between emotions and the intention to engage in environmentally conscious purchasing. Nevertheless, the lack of a comprehensive investigation of the moderating effect of income in different cultural contexts highlights a significant gap in the existing research. Additionally, these studies were done in distinct cultural settings, and therefore, further study is needed to generalize and understand how cultural variances may affect the income-green purchase intention association in diverse cultural contexts.

- Objective Five: Practical insights and managerial implications of findings for businesses and policymakers and theory

The findings of this study offer numerous practical insights and managerial implications that can be derived for organizations and policymakers. The literature continually emphasizes the substantial impact of age and income on individuals' intentions to engage in environmentally friendly purchasing behaviors. In order to effectively reach environmentally conscious consumers, businesses should customize their marketing methods and product offerings according to age groups and income levels. For example, focusing on older demographics with greater socioeconomic status through the introduction of environmentally sustainable product offerings could potentially result in more favorable reactions. The influence of gender on green buy intention is found to be significant, indicating its importance as a determining factor. Moreover, gender also plays a moderating role in the relationship between income and green purchasing. It is imperative for policymakers and businesses to acknowledge the existence of gender-based disparities and adapt their marketing strategies accordingly in order to promote greater adoption of sustainable practices. This approach has the ability to mitigate the gender gap observed in green consumerism. The level of environmental consciousness plays a crucial role in shaping the relationship between income and individuals' intentions to engage in green purchases. It is recommended that businesses prioritize environmental education and awareness programs in order to enhance consumer knowledge. Policymakers have the ability to provide incentives for individuals to make sustainable choices and purchase eco-friendly items, so promoting more awareness and concern for the environment.

Research indicates that there is a causality between income levels and green purchasing, which is influenced by cultural variances. It is imperative for policymakers to take into account cultural nuances while advocating for the adoption of ecologically sustainable habits. Businesses have the opportunity to tailor their marketing strategies in order to correspond with particular cultural values and perceptions that are associated with sustainability. The noteworthy influence of social factors, such as social media and perceived values, on individuals' willingness to engage in environmentally friendly purchasing is evident. Policymakers and corporations ought to utilize these data in order to develop campaigns that promote sustainable choices, utilizing social platforms and appealing to individual values. The researchers additionally highlight disparities in results observed in other studies about the correlation between income, age, and environmentally conscious consumer behavior. It is recommended that policymakers facilitate additional research endeavors aimed at investigating these discrepancies, so facilitating a more comprehensive comprehension of these associations. This enhanced understanding can then inform the development of more precise legislation and marketing tactics. Comprehending the intricate dynamics of age, income, gender, environmental consciousness, and cultural factors is vital for firms and governments in order to proficiently foster sustainable customer behavior. The implementation of tailored methods, informed by these insights, has the potential to augment the acceptance and utilization of environmentally conscious habits and products, thereby making a significant contribution towards the attainment of a more sustainable future.

The implications of the findings from the systematic literature review on the relationship between income and purchase intention have significant ramifications for several behavioral theories. The findings of this study indicate that wealth plays a significant role in shaping behavioral intentions towards green purchases within the framework of the Theory of Planned Behavior (TPB). Furthermore, it is suggested that income may interact with other components of the TPB, such as attitudes and subjective norms. The presence of a positive link between income and green buy intentions in some circumstances suggests that higher income levels can enhance favorable attitudes and perceived societal pressures, hence potentially increasing the likelihood of individuals intending to participate in eco-friendly purchases. The mediating function of environmental consciousness and the influence of socio-demographic characteristics are significant aspects within the framework of the Value-Belief-Norm (VBN) theory. These elements provide light on the complex interconnections between human values, beliefs regarding environmental matters, and the norms that shape intentions to engage in environmentally-friendly purchasing behaviors. This implies that variations in income have the potential to impact cognitive factors, which in turn can shape the development of environmentally conscious behavioral norms. The complexity of behavioral decision-making is shown by the non-linear relationship between income and green purchase intentions, as posited by the Behavioral Reasoning Theory (BRT). The emphasis of BRT on cognitive processes and reasoning suggests that income could potentially influence the way individuals evaluate various motivations and factors when making decisions to engage in environmentally friendly purchases. It is crucial to comprehend these implications in order to enhance and progress behavioral theories, enabling a more comprehensive understanding and prediction of consumer behavior in the realm of sustainable purchasing.

5. Limitations, and future research trajectory

5.1. Limitations

The current body of scholarly research examining the relationship between income and intentions to engage in environmentally conscious purchases has yielded equivocal results (Wang, Wong, & Narayanan, 2019). Several studies have demonstrated a positive association between income levels and the propensity to participate in environmentally conscious consumption (Lee et al., 2023). However, it is important to note that other research has yielded ambiguous findings in this regard. Furthermore, it has been observed that the association between income and intents to engage in green purchasing exhibits a non-linear pattern (Zhang & Dong, 2020), which may be influenced by cognitive factors and knowledge (Zhuang, Luo, & Riaz, 2021). According to Sang-June and Sungchul (2012), it is possible that cultural differences play a role in the observed discrepancies in the link between income and green purchasing. Furthermore, it should be noted that the causality between income and environmentally friendly aspirations might be influenced by contextual factors and individual characteristics that impact consumer behavior (Zou et al., 2023). Hence, the indeterminate and non-linear characteristics of the association, potential moderating influences, and cultural discrepancies emphasize the necessity for additional investigation to augment understanding of the complex connection between income and intentions to participate in environmentally responsible consumer behavior.

The empirical research included in this systematic literature review exhibit a range of limitations. Numerous scholarly investigations have been conducted to explore the distinct effects of age and wealth on consumer behavior with regard to environmentally conscious purchasing. This research have examined each element in isolation, as evidenced by the works of Kishore (2022), Wang (2020), and Shrestha (2018). Nevertheless, these studies frequently neglect to clearly examine the potential connections and interplay among these variables. Furthermore, it is important to recognize the

mediating role of gender in the context of the link between income and green purchase intention. However, it is worth noting that the direct mediation effect of gender on this relationship has not been explicitly examined in the studies conducted by Xue (2020), Yada (2021), and Gundala (2022). In a similar vein, although the impact of age is acknowledged as a significant determinant, its possible moderating effect on the relationship between income and environmentally conscious consumer behavior has not been extensively investigated (Dzurikova, 2023). Moreover, it is important to recognize the intricate nature of the relationship, which encompasses the moderating influence of environmental consciousness, socio-demographic factors, cognitive variables, and societal influences (Kim, 2023; Xin et al., 2020). However, there is a dearth of comprehensive integration of these factors and their respective mediating effects. Furthermore, it is important to acknowledge the existence of cultural variations and their possible impact on the association between income and intentions to engage in environmentally friendly purchases. However, it is worth noting that the current body of research on this topic is constrained by its focus on specific cultural contexts, as evidenced by studies conducted by Qi (2019), Ahmed (2022), and Chen (2020). In general, the existing body of literature offers valuable perspectives on the intricate dynamics between income and various factors such as age, gender, environmental consciousness, and cultural influences. However, to gain a complete understanding of the intricate relationship between income and intentions to engage in environmentally-friendly purchases, it is necessary to undertake a more comprehensive and integrated investigation of how these factors interact with one another.

5.2. Future research trajectory

Based on the empirical research conducted on the causality between income and aspirations to engage in environmentally friendly purchases, numerous significant areas for further investigation become apparent. A comprehensive examination of mediating characteristics, specifically age and gender, is necessary to better understand their interplay with income in influencing individuals' intentions to engage in environmentally friendly purchasing behaviors. Although several studies have recognized these characteristics, it is important to conduct a more extensive analysis of the complex relationship between income, age, and gender in order to obtain a good understanding (Kishore, 2022; Wang, 2020; Yada, 2021). Furthermore, the implementation of longitudinal studies that observe individuals over an extended period might yield significant knowledge regarding the progression of income and green buying intentions throughout various phases of life. In a similar vein, the examination of cross-cultural research can provide valuable insights into the influence of cultural differences on the causality between income levels and environmentally conscious consumer behavior (Qi, 2019; Ahmed, 2022).

Moreover, it is imperative to acquire a comprehensive knowledge of the manner in which environmental awareness serves as a mediator in the association between income and intents to engage in environmentally-friendly purchases. The examination of human attitudes, beliefs, and knowledge pertaining to environmental concerns might provide insights into the potential differential impact of income on intentions to engage in environmentally friendly purchases, contingent upon varied degrees of environmental consciousness (Kim, 2023; Rebecca, 2021). Moreover, it is imperative to investigate the mediating influence of social factors, particularly through the utilization of social media platforms, on the association between individuals' income levels and their intentions to engage in environmentally friendly purchasing behaviors. An examination of the influence of societal norms and attitudes on individuals' purchasing decisions can offer a comprehensive perspective on the relationship between income and environmentally conscious consumer behavior (Sun, 2022; Zhuang et al., 2021). It is imperative to examine the ramifications of income and green purchase intentions in order to inform the formulation and execution of policies. This comprehension can assist policymakers in devising specific interventions aimed at promoting sustainable consumption behaviors and cultivating an environmentally friendly economy (Khandelwal & Bajpai, 2011). By addressing these study gaps, there will be a substantial advancement in the comprehension of the complex interplay among income, individual traits, societal factors, and green buy intents. This will make a valuable contribution to the field of sustainable consumption research.

Future empirical studies examining the causality between income and green purchase intentions should prioritize resolving the significant research gaps revealed in the systematic literature review. The existing gaps in the literature encompass several areas that require further exploration. These areas include conducting thorough investigations into moderating factors such as age and gender, gaining a more profound comprehension of how environmental consciousness influences the relationship between income and green purchase intentions, examining the impact of social influence and media, and considering the implications of income and green purchase intentions for the development and implementation of policies (Kishore, 2022; Wang, 2020; Shrestha, 2018). Furthermore, it is imperative to conduct research that investigates the intricate relationship between age, income, and environmentally conscious consumer behavior in various contexts and among different demographic groups (Dzurikova, 2023; Naz, 2020). An additional topic of research that warrants attention in the future is the examination of the mediating function of gender in the relationship between income and green buying intention (Wang, 2020; Xue, 2020). Further investigation should explore the intricate interplay between age, income, and environmental awareness, encompassing

a diverse range of environmentally friendly behaviors and items (Çakmakçı, 2021; Zeynalova, 2022). Further research might be conducted to investigate the role of social influence in mediating the relationship between income and green buy intention. Additionally, it would be beneficial to explore how income moderates the drivers of green purchasing intention. These areas of study have been identified by Sun (2022) and Wencan (2021). The act of bridging these gaps will serve to enhance our overall comprehension of the relationship between income and green purchase intention, while also providing valuable insights to guide the development of programs aimed at boosting sustainable consumption

6. Conclusion

The present study conducts a systematic literature review to examine the association between income levels and individuals' intentions to engage in green purchasing. The research reveals a wide array of findings reported in various studies. The causality between income and environmentally conscious purchasing is intricate and frequently exhibits nonlinearity. The study conducted by Wang, Wong, and Narayanan (2019) provided evidence supporting a favorable association between income levels and individuals' intentions to engage in green purchasing. Conversely, Lee et al. (2023) discovered no statistically significant causality between income and green purchasing intentions within the confines of a particular brand. Various research have emphasized the significance of cognitive factors, contextual factors, cultural factors, and environmental awareness as potential mediators or moderators in this association. Furthermore, empirical studies have demonstrated a non-linear relationship, indicating that there exists an optimal threshold of income that can potentially maximize the generation of environmentally beneficial innovations. The impact of income on individuals' intentions to make green purchases is subject to several conditions, indicating the need for additional research to fully understand the complex dynamics of this association.

Furthermore, the aforementioned empirical studies conducted by Kishore (2022), Wang (2020), Dzurikova (2023), Yada (2021), and other scholars have shed light on significant research deficiencies. The research that has been evaluated provide insights into the influence of age, gender, environmental consciousness, social influence, and cultural factors on the relationship between income and green purchase intention. Nevertheless, there is a significant gap in extensive research regarding the interaction and possible influence of income in these dynamics, including its potential role as a mediator or moderator. The current body of research lacks sufficient exploration of the complex interplay between age and income, the potential mediating effect of gender, the influence of social factors, and the differential effects of income across many cultural contexts. Furthermore, the aforementioned studies reveal discrepancies in their conclusions, underscoring the need for additional study to elucidate intricate connections and develop a comprehensive nexus of how income intersects with diverse variables in influencing environmentally conscious consumer behavior. It is imperative to acknowledge and address these areas of research deficiency in order to formulate precise approaches that promote sustainable consumption throughout a wide range of demographic and cultural contexts.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

- [1] Abeysekera, I. (2022). Accounting for environmental awareness on green purchase intention and behavior: Evidence from the Philippines. *Sustainability*, 14(19), 12565. <https://doi.org/10.3390/su141912565>
- [2] Ahmed, M. (2020). Role of Environmentalism in the Development of Green Purchase Intentions: A Moderating Role of Green Product Knowledge. *International Journal of Sustainable Development & Planning*, 15(7), 14. <https://doi.org/10.18280/ijstdp.150714>
- [3] Ahmed, R. R. (2022). Effect of Green Marketing Mix, Green Customer Value, and Attitude on Green Purchase Intention: Evidence from the USA. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-022-22944-7>
- [4] Akbar, K. (2020). Impact of Green Practices on Consumers' Sustainable Purchase Intentions: Humans' Management Adopting Green Strategies in Pakistan. *Human Systems Management*, 39(4), 481-495. <https://doi.org/10.3233/hsm-190856>

- [5] Apaydın, F. (2017). Analyzing the Profile and Purchase Intentions of Green Consumers in Poland. *Equilibrium. Quarterly Journal of Economics and Economic Policy*, 12(1):133-148. <https://doi.org/10.24136/eq.v12i1.8>
- [6] Arshad, R. (2014). An Empirical Study about Green Purchase Intentions. *Journal of Sociological Research*, 5(1). <https://doi.org/10.5296/JSR.V5I1.6567>
- [7] Billore, S., & Anisimova, T. (2021). Panic buying research: A systematic literature review and future research agenda. *International Journal of Consumer Studies*, 45, 777–804. <https://doi.org/10.1111/ijcs.12669>.
- [8] Borenstein, M., Hedges, L. V., Higgins, J. P. T., and Rothstein, H. R. (2009). *Introduction to Meta-Analysis*. West Sussex: Wiley. doi: 10.1002/9780470743386
- [9] Budijati, S. M. (2016). Influence of government and economic drivers on consumers' intentions to participate in a take-back program. *International Journal of Logistics Systems and Management*, 23(2), 164-179. <https://doi.org/10.1504/ijlsm.2016.074716>
- [10] Çakmakçı, Y. (2021). The Relationship Between Socio-economic Qualities and Environmental Awareness Levels of Consumers and Factors Affecting Their Purchase of Environmentally Friendly Food Products. DOI: 10.24925/turjaf.v9i7.1297-1303.4439
- [11] Chakma, R., Paul, J., & Dhir, S. (2021). Organizational ambidexterity: A review and research agenda. *IEEE Transactions on Engineering Management*, 68,1–17. <https://doi.org/10.1109/TEM.2021.3114609>.
- [12] Chamorro A, Rubio S, and Miranda, F.J. (2009). Characteristics of research on green marketing. *Bus Strateg Environ*, 18(4):223–239
- [13] Chekima, B. (2015). Determinant Factors of Consumers' Green Purchase Intention: The Moderating Role of Environmental Advertising. *Asian Social Science*, 11(10), 318. <https://doi.org/10.5539/ass.v11n10p318>
- [14] Chekima, B. (2016). Sustainable consumption: The effects of knowledge, cultural values, environmental advertising, and demographics. *Journal of Sustainable Tourism*, 24(8-9), 1190-1212. <https://doi.org/10.1080/13504509.2015.1114043>
- [15] Chen, J. (2014). Drivers of organic food purchase intentions in mainland China – evaluating potential customers' attitudes, demographics, and segmentation. *International Journal of Consumer Studies*, 38(6), 628-636. <https://doi.org/10.1111/IJCS.12095>
- [16] Chen, Y. S. (2020). The Influence of Green Brand Affect on Green Purchase Intentions: The Mediation Effects of Green Brand Associations and Green Brand Attitude. *International Journal of Environmental Research and Public Health*, 17(11), 4089. <https://doi.org/10.3390/ijerph17114089>
- [17] Cheng, W., Appolloni, A., D'Amato, A., & Zhu, Q. (2017). Green public procurement, missing concepts and future trends—A critical review. *Journal of Cleaner Production*, 176,1–37.
- [18] Doanh, D. C. (2021). Antecedents of green purchase intention: a cross-cultural empirical evidence from Vietnam and Poland. *Oeconomia Copernicana*, 12(3), 361-385. <https://doi.org/10.24136/oc.2021.031>
- [19] Duan, J. (2023). Study on Consumers' Purchase Intentions for Carbon-Labeled Products. *Sustainability*, 15(2), 1116. <https://doi.org/10.3390/su15021116>
- [20] Dzurikova, S. (2023). Do Age Cohort and Personal Income Matter in Green Marketing? The Case of the Slovak Republic. DOI: 10.26552/ems.2023.1.54-62
- [21] Feng, Q. (2021). Effect of Homebuyer Comment on Green Housing Purchase Intention—Mediation Role of Psychological Distance. *Frontiers in Psychology*, 12, 568451. <https://doi.org/10.3389/fpsyg.2021.568451>
- [22] Gilal, F. G., Zhang, J., Paul, J., & Gilal, N. G. (2019). The role of self-determination theory in marketing science: An integrative review and agenda for research. *European Management Journal*, 37(1), 29–44. <https://doi.org/10.1016/j.emj.2018.10.004>.
- [23] Gundala, R. (2022). Does gender moderate the purchase intention of organic foods? Theory of reasoned action. *Heliyon*, 8(3), e10478. <https://doi.org/10.1016/j.heliyon.2022.e10478>
- [24] Haider, A. (2020). Impact of Green Product Knowledge and Perception on Green Purchase Intention: Moderating Role of Price Consciousness. DOI: 10.30543/9-4(2020)-38
- [25] Hao, A. W., Paul, J., Trott, S., Guo, C., & Wu, H.-H. (2019). Two decades of research on nation branding: A review and future research agenda. *International Marketing Review*. <https://doi.org/10.1108/IMR-01-2019-0028>.

- [26] He, Q. (2019). Factors affecting consumers' purchase intention of eco-friendly food in China: The evidence from respondents in Beijing. *International Journal of Consumer Studies*, 43(3), 232-242. <https://doi.org/10.1111/IJCS.12525>
- [27] He, Z. (2022). Influence of emotion on the purchase intention of electric vehicles: A comparative study of consumers with different income levels. *Current Psychology*. <https://doi.org/10.1007/s12144-022-03253-1>
- [28] Higgins, J. P. T., and Green, S. (2011). *Cochrane Handbook for Systematic Reviews of Interventions* (Vol. 5.1.0). The Cochrane Collaboration. Available at: www.handbook.cochrane.org.
- [29] Joo, K. (2022). NAM and TPB Approach to Consumers' Decision-Making Framework in the Context of Indoor Smart Farm Restaurants. *International Journal of Environmental Research and Public Health*, 19(21), 14604. <https://doi.org/10.3390/ijerph192114604>
- [30] Kamboj, K. (2022). Influence of Customer Perceived Values on Organic Food Consumption Behaviour: Mediating Role of Green Purchase Intention. DOI: 10.1177/23197145221125283
- [31] Keupp, M. M., & Gassmann, O. (2009). The past and the future of international entrepreneurship: A review and suggestions for developing the field. *Journal of Management*, 35(3), 600–633.
- [32] Khandelwal, U., & Bajpai, N. (2011). A Study on Green Advertisement and its Impact on Consumer Purchase Intention. *Journal of Creative Communications*, 6(3), 259-276. <https://doi.org/10.1177/0973258613491661>
- [33] Khare, A. (2015). Influence of green self-identity, past environmental behaviour and income on Indian consumers' environmentally friendly behaviour. *Journal of Sustainable Development*, 8(9), 112-127. <https://doi.org/10.1080/21639159.2015.1073423>
- [34] Khatoun, S., & Rehman, V. (2021). Negative emotions in consumer brand relationship: A review and future research agenda. *International Journal of Consumer Studies*, 45(4), 719–749.
- [35] Kim, N. (2023). Environmental Consciousness, Purchase Intention, and Actual Purchase Behavior of Eco-Friendly Products: The Moderating Impact of Situational Context. DOI: 10.3390/ijerph20075312
- [36] Kishore, S. V. K. (2022). Moderation of Income and Age on Customer Purchase Intention of Green Cosmetics in Bangalore. In N. P. Kumar (Ed.), *Sustainable Marketing Strategies: Business Transformation for Green Economy* (pp. 147-156). Springer. DOI: 10.1007/978-981-16-7818-9_11
- [37] Kitchenham, B., & Charters, S. (2007). Guidelines for performing systematic literature reviews in software engineering.
- [38] Kriwy, P. (2012). Health and environmental consciousness, costs of behaviour and the purchase of organic food. *International Journal of Consumer Studies*, 36(1), 30-37. <https://doi.org/10.1111/j.1470-6431.2011.01004.x>
- [39] Kumar, N. P. (2022). Pro-environmental purchase intention towards eco-friendly apparel: Augmenting the theory of planned behavior with perceived consumer effectiveness and environmental concern. *Journal of Textile and Apparel, Technology and Management*, 12(1), 1-18. <https://doi.org/10.1080/20932685.2021.2016062>
- [40] Kumar, R. (2019). Examining the role of external factors in influencing green behaviour among young Indian consumers. *Young Consumers*, 20(4), 364-382. <https://doi.org/10.1108/yc-12-2018-0921>
- [41] Lee, J., Lim, S. H., Batul, A., Sharma, B., Singh, K., Khor, W., Raveendran, K. D. A., Kong, M. C., Kooli, S., Pradhan, S., & Kee, D. M. H. (2023). Greening Starbucks: Investigating the Relationship between Consumer Green Awareness and Purchase Intentions in Malaysia. *Journal of The Community Development in Asia*, 6(3), 1-16.
- [42] Lei, W. (2020). The demographic impact of consumer green purchase intention toward Green Hotel Selection in China. *Journal of Travel Research*, 59(8), 1668-1683. <https://doi.org/10.1177/1467358419848129>
- [43] Mahesh, N. (2012). Influence of Consumers' Socio-Economic Characteristics and Attitude on Purchase Intention of Green Products. *International Journal of Economic Sciences*, 1(2), 31-43.
- [44] Majeed, M. U. (2022). Green Marketing Approaches and Their Impact on Green Purchase Intentions: Mediating Role of Green Brand Image and Consumer Beliefs towards the Environment. *Sustainability*, 14(18), 11703. <https://doi.org/10.3390/su141811703>
- [45] Martínez García de Leaniz, P. (2018). Customer responses to environmentally certified hotels: The moderating effect of environmental consciousness on the formation of behavioral intentions. *Journal of Sustainable Tourism*, 26(2), 191-213. <https://doi.org/10.1080/09669582.2017.1349775>

- [46] Martínez García de Leaniz, P. (2018). Customer responses to environmentally certified hotels: the moderating effect of environmental consciousness on the formation of behavioral intentions. *Journal of Sustainable Tourism*, 26(10), 1679-1702. <https://doi.org/10.1080/09669582.2017.1349775>
- [47] Mishra, R., Singh, R. K., & Koles, B. (2021). Consumer decision-making in Omni channel retailing: Literature review and future research agenda. *International Journal of Consumer Studies*, 45(2), 147–174.
- [48] Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., and Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS Med.* 6:e1000097. doi: 10.1371/journal.pmed.1000097
- [49] Munasinghe, P. (2021). Factors influencing the Purchase Intention of Green Packaging among Millennials in Gampaha District of Sri Lanka. *Sri Lankan Journal of Marketing and Management*, 7(1), 65-80. <https://doi.org/10.4038/sljmuok.v7i1.59>.
- [50] Nath, V. (2017). Antecedents of green purchase intentions: A review and testing of hypothesis on Indian consumers. *International Journal of Environmental Science and Development*, 8(5), 375-379. <https://doi.org/10.18178/ijesd.2017.8.5.990>
- [51] Naz, F. (2020). Green Purchase Behavior of University Students in Hungary: An Empirical Study. DOI: 10.3390/su122310077
- [52] Nguyen, M. (2019). Materialistic values and green apparel purchase intention among young Vietnamese consumers. *Young Consumers*, 20(4), 469-485. <https://doi.org/10.1108/YC-10-2018-0859>
- [53] Nguyen, N. P. T., & Dang, H. D. (2022). Organic Food Purchase Decisions from a Context-Based Behavioral Reasoning Approach. *Appetite*, 173, 105975.
- [54] Nirmala, K. (2022). A study on customer attitude towards eco-friendly products and the factors influencing it. *International Journal of Humanities and Social Science*, 6(3), 5264.
- [55] Ohlau, M. (2023). Sustainable Choices of Plant-Based ('Super') Foods: Examining the Consumption Patterns of German Consumers on Avocados. DOI: 10.3389/fnut.2023.1187626
- [56] Park, S. (2012). The Relationships between Socio-demographic Variables and Concerns about Environmental Sustainability. DOI: 10.1002/CSR.284
- [57] Paul, J., & Benito, G. R. (2018). A review of research on outward foreign direct investment from emerging countries, including China: what do we know, how do we know and where should we be heading? *Asia Pacific Business Review*, 24(1), 90–115.
- [58] Paul, J., & Criado, A. (2020). The art of writing literature review: What do we know and what do we need to know? *International Business Review*. 29, 101717.
- [59] Paul, J., & Mas, E. (2020). Toward a 7-P framework for international marketing. *Journal of Strategic Marketing*, 28(8), 681–701.
- [60] Paul, J., & Rosado-Serrano, A. (2019). Gradual internationalization vs born-global/international new venture models: A review and research agenda. *International Marketing Review*, 36(6): 830–858.
- [61] Peattie, K. (2001). Golden Goose or Wild Goose? The Hunt for the Green Consumer. *Business Strategy and the Environment*, 10, 187-199. <http://dx.doi.org/10.1002/bse.292>
- [62] Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2016). Recommendations for creating better concept definitions in the organizational, behavioral, and social sciences. *Organizational Research Methods*, 19(2), 159–203.
- [63] Podsakoff, P. M., MacKenzie, S. B., Bachrach, D. G., & Podsakoff, N. P. (2005). The influence of management journals in the 1980s and 1990s. *Strategic Management Journal*, 26(5), 473–488.
- [64] Qi, X. (2019). Explaining Consumers' Intentions towards Purchasing Green Food in Qingdao, China: The Amendment and Extension of the Theory of Planned Behavior. DOI: 10.1016/j.appet.2018.12.004
- [65] Qi, X. (2020). Exploring Influential Factors Including COVID-19 on Green Food Purchase Intentions and the Intention–Behaviour Gap: A Qualitative Study among Consumers in a Chinese Context. DOI: 10.3390/ijerph17197106

- [66] Rahim, R. A. (2017). E-WOM Review Adoption: Consumers' Demographic Profile Influence on Green Purchase Intention. *IOP Conference Series: Materials Science and Engineering*, 215(1), 012020. <https://doi.org/10.1088/1757-899X/215/1/012020>
- [67] Rahim, R. A. (2017). E-WOM Review Adoption: Consumers' Demographic Profile Influence on Green Purchase Intention. In *IOP Conference Series: Materials Science and Engineering* 215(1), 012020. IOP Publishing. <https://doi.org/10.1088/1757-899X/215/1/012020>
- [68] Rawat, S. R. (2015). Impact of Age and Income on Green Consumer Behavior. *Indian Journal of Science and Technology*, 8(S4), 13-22.
- [69] Rosado-Serrano, A., Paul, J., & Dikova, D. (2018). International franchising: A literature review and research agenda. *Journal of Business Research*, 85, 238–257.
- [70] Ryliannabila, A. S. (2021). An Examination of The Relationship of Green Brand Affect and Other Determinant Factors Towards Green Purchase Intention in Skin Care Industry. *Mediterranean Journal of Social Sciences*, 6(8), 65-72. <https://doi.org/10.47405/mjssh.v6i8.965>
- [71] Shabbir, R. V. (2020). Review of literature on green consumer behaviour over 25 years (1994–2018). *The Marketing Review*, 20(1-2), 45–61.
- [72] Shamsi, M. S. (2022). Does environmental awareness via SNS create sustainable consumption intention among the millennials? *Journal of Contemporary Commerce and Culture*, 6(22/08), 10-19. <https://doi.org/10.31620/jccc.06.22/08>
- [73] Sharma, A., & Foropon, C. (2019). Green Product Attributes and Green Purchase Behavior: A Theory of Planned Behavior Perspective with Implications for Circular Economy. *Management Decision*, 57(5), 1018-1042. <https://doi.org/10.1108/MD-10-2018-1092>
- [74] Sharma, C. (2017). Relationship between Consumers' Spirituality and Green Purchasing Intentions: The Mediation Effect of Perceived Consumer Effectiveness. *Journal of Relationship Marketing*, 16(4), 328-343. <https://doi.org/10.1177/2277975216665694>
- [75] Shrestha, S. (2018). Analysis of Green Marketing Tools towards Consumer Purchase Intention in Kathmandu. DOI: 10.3126/JBSSR.V1I1.20948
- [76] Situmorang, R. (2022). Purchase Intention on Sustainable products: A Case study on Free-Range Eggs in Taiwan. *Asian Economic and Financial Review*, 12(1), 1-11. <https://doi.org/10.1080/00036846.2021.2001423>
- [77] Siyal, S. (2021). Factors Influencing Green Purchase Intention: Moderating Role of Green Brand Knowledge. DOI: 10.3390/ijerph182010762
- [78] Södergren, J. (2021). Brand authenticity: 25 Years of research. *International Journal of Consumer Studies*, 45(4), 645–663.
- [79] Sun, Y. (2022). The Impact of Social Media Information Sharing on the Green Purchase Intention among Generation Z. DOI: 10.3390/su14116879
- [80] Susanty, A. (2021). Antecedent Factors of Green Purchasing Behavior: Learning Experiences, Social Cognitive Factors, and Green Marketing. DOI: 10.3389/fpsyg.2021.777531
- [81] Susanty, A., Puspitasari, N. B., Prastawa, H., Listyawardhani, P., & Tjahjono, B. (2021). Antecedent Factors of Green Purchasing Behavior: Learning Experiences, Social Cognitive Factors, and Green Marketing. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.777531>
- [82] Tahai, A., & Meyer, M. J. (1999). A revealed preference study of management journals' direct influences. *Strategic Management Journal*, 20(3), 279–296.
- [83] Tian, Z. (2022). Factors Affecting Green Purchase Intention: A Perspective of Ethical Decision Making. *International Journal of Environmental Research and Public Health*, 19(18), 11151. <https://doi.org/10.3390/ijerph191811151>
- [84] Tong, Q. (2020). The Roles of Pollution Concerns and Environmental Knowledge in Making Green Food Choices: Evidence from Chinese Consumers. *Food Research International*, 127, 108881. <https://doi.org/10.1016/j.foodres.2019.108881>
- [85] Uddin, I. (2019). The Influence of Age on Purchase Intention of Eco-Friendly Products: Evidence from Hyderabad, Sindh. *International Journal of Economics and Research*, 10(3), 455-464. <https://doi.org/10.31580/ijer.v2i3.887>

- [86] Visser, R. (2021). Green purchasing behavior towards compostable coffee pods. *Sustainability*, 13(12), 6558. <https://doi.org/10.3390/SU13126558>
- [87] Walia, S. B. (2020). Impact of Brand Consciousness, Perceived Quality of Products, Price Sensitivity, and Product Availability on Purchase Intention towards 'Green' Products. *The Marketing Society*, 4(1), 18-39. https://doi.org/10.1386/tmsd_00018_1
- [88] Wang, C. P., Zhang, Q., Wong, P. P. W., & Wang, L. (2023). Consumers' green purchase intention to visit green hotels: A value-belief norm theory perspective. *Frontiers in Psychology*, 14, 1139116. <https://doi.org/10.3389/fpsyg.2023.1139116>
- [89] Wang, H., Ma, B., & Bai, R. (2019). How does green product knowledge effectively promote green purchase intention? *Sustainability*, 11(4), 1193. <https://doi.org/10.3390/su11041193>
- [90] Wang, J., Tao, J., & Chu, M. (2020). Behind the label: Chinese consumers' trust in food certification and the effect of perceived quality on purchase intention. *Food Control*, 108, 106825. <https://doi.org/10.1016/j.foodcont.2019.106825>
- [91] Wang, L. (2020). The demographic impact of consumer green purchase intention toward Green Hotel Selection in China. *Tourism and Hospitality Research*, 1-18. <https://doi.org/10.1177/1467358419848129>
- [92] Wang, L. (2020). The demographic impact of consumer green purchase intention toward Green Hotel Selection in China. *Journal of Travel Research*, 59(8), 1668-1683. <https://doi.org/10.1177/1467358419848129>
- [93] Wang, L., Wong, P. P., & Narayanan, E. A. (2019). The demographic impact of consumer green purchase intention toward Green Hotel Selection in China. *Tourism and Hospitality Research*, 1467358419848129. <https://doi.org/10.1177/1467358419848129>
- [94] Wijekoon, R. (2021). Determinants That Influence Green Product Purchase Intention and Behavior: A Literature Review and Guiding Framework. *Sustainability*, 13(11), 6219. <https://doi.org/10.3390/SU13116219>
- [95] Witek, L., & Kuźniar, W. (2021). Green Purchase Behavior: The Effectiveness of Sociodemographic Variables for Explaining Green Purchases in Emerging Markets. *Sustainability*, 13(1), 209. <https://doi.org/10.3390/su13010209>
- [96] Xin, Q., Huaming, Y., & Ploeger, A. (2020). Exploring Influential Factors Including COVID-19 on Green Food Purchase Intentions and the Intention-Behaviour Gap: A Qualitative Study among Consumers in a Chinese Context. *International Journal of Environmental Research and Public Health*, 17(19), 7106. <https://doi.org/10.3390/ijerph17197106>
- [97] Xu, X., Hua, Y., Wang, S., & Xu, G. (2020). Determinants of consumer's intention to purchase authentic green furniture. *Resources, Conservation and Recycling*, 156, 104721. <https://doi.org/10.1016/j.resconrec.2020.104721>
- [98] Xue, J. (2020). Do Brand Competence and Warmth Always Influence Purchase Intention? The Moderating Role of Gender. *Frontiers in Psychology*, 11, 248. <https://doi.org/10.3389/fpsyg.2020.00248>
- [99] Yada, L. A. (2021). Demographic Controversies and Green Buying Intention: The Moderating Effects of Gender, Age, Income, and Education. *Cross-Cultural Human Values and Management*, 27(2), 610. <https://doi.org/10.47750/CIBG.2021.27.02.610>
- [100] Yen, T. H. N. (2023). The formation of attitudes and intention towards green purchase: An analysis of internal and external mechanisms. *Journal of Sustainable Research*, 3(1). <https://doi.org/10.1080/23311975.2023.2192844>
- [101] Yim, K. (2017). A Study on the Influence of Consumer Type on the Choice of Next-Generation Eco-Friendly Vehicle and Consumer Purchase Intention - Comparative Study on Japan and Korea. DOI: 10.14400/JDC.2017.15.11.133
- [102] Zahan, I. (2020). Green purchase behavior towards green housing: An investigation of Bangladeshi consumers. *Environmental Science and Pollution Research*, 27(11), 12152-12163. <https://doi.org/10.1007/s11356-020-09926-3>
- [103] Zameer, H. (2022). Green innovation and environmental awareness driven green purchase intentions. *Management Decision*, 60(10), 2496-2514. <https://doi.org/10.1108/MIP-12-2021-0457>
- [104] Zeynalova, Z. Z. (2022). Revealing Consumer Behavior toward Green Consumption. DOI: 10.3390/su14105806

- [105] Zhang X. and Dong, F. (2020) Why do consumers make green purchase decisions? Insights from a systematic review. *Int J Environ Res Public Health* 17:6607. <https://doi.org/10.3390/ijerph17186607>.
- [106] Zhang, C. (2023). Using Social Network Analysis to Identify the Critical Factors Influencing Residents' Green Consumption Behavior. DOI: 10.3390/systems11050254
- [107] Zheng, C. (2023). How Social Identity Affects Green Food Purchase Intention: The Serial Mediation Effect of Green Perceived Value and Psychological Distance. *Behavioral Sciences*, 13(8), 664. <https://doi.org/10.3390/bs13080664>
- [108] Zheng, M., Tang, D., & Xu, A. (2023). Attribute-Driven or Green-Driven: The Impact of Subjective and Objective Knowledge on Sustainable Tea Consumption. *Foods*, 12, 152. <https://doi.org/10.3390/foods12010152>
- [109] Zhuang, W. (2021). On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach. DOI: 10.3389/fpsyg.2021.644020
- [110] Zhuang, W. (2021). On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach. *Frontiers in Psychology*, 12, 644020. <https://doi.org/10.3389/fpsyg.2021.644020>
- [111] Zhuang, W., Luo, X. and Riaz, M.U. (2021). On the factors influencing green purchase intention: a meta-analysis approach. *Frontiers in Psychology*, 12, 644020. <https://doi.org/10.3389/fpsyg.2021.644020>