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Buying for the Future: How Parental Generativity and Sociodemographics Bridge the 'Green Gap' Between Environmental Worldview and Green Purchasing

Metin TOPTAŞ

metin.toptas@gedik.edu.tr

Gedik University

Merve Nur EZER

Gedik University

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Buying for the Future: How Parental Generativity and Sociodemographics Bridge the 'Green Gap' Between Environmental Worldview and Green Purchasing

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Author Names & Affiliations:
Metin TOPTAŞ [1,*], Merve Nur EZER [1]
[1] Department of International Trade and Finance (Eng.), Kartal Campus, Istanbul Gedik University, 34876, İstanbul, Türkiye
*** Corresponding Author:**
Metin TOPTAŞ
Email: metin.toptas@gedik.edu.tr

ABSTRACT

As consumers become increasingly aware of environmental issues, the growing demand for green products compels businesses to adopt sustainable practices. This study examines how consumers' environmental worldviews shape their green purchasing behavior through the lens of sociodemographic differences. Data were collected from 328 adult consumers in Türkiye—a dynamic emerging market experiencing significant macroeconomic and inflationary pressures—via a survey utilizing convenience sampling. The data were analyzed using Partial Least Squares Structural Equation Modeling to evaluate direct and indirect effects, as well as Partial Least Squares Multi-Group Analysis to identify differences across sociodemographic groups. The findings indicate that environmental worldviews significantly influence green attitudes and purchase intentions, which, in turn, strongly drive actual green purchasing behavior. Furthermore, the study reveals that the "green gap"—the discrepancy between sustainable thinking and behavior—is significantly moderated by individual and household dynamics. Specifically, within our predominantly highly educated sample, having children in the household and higher-income levels act as key catalysts in bridging this gap. In contrast, gender, generation, marital status, and employment status did not moderate the structural relationships. Unlike previous studies, this research integrates the Theory of Reasoned Action with Generativity Theory to provide a novel explanation for how parental status and intergenerational altruism may bridge the "green gap". These findings offer strategic insights for businesses and policymakers, suggesting that marketing and circular economy practices must be tailored to specific sociodemographic consumer segments—such as educated, higher-income consumers and families with children—to foster a sustainable consumption and production ecosystem.

Keywords: New Ecological Paradigm (NEP), Theory of Reasoned Action (TRA), Generativity Theory, emerging markets, green gap

1. Introduction

Global ecosystems are currently threatened by serious environmental issues, such as pollution, climate change, deforestation, the depletion of natural resources, and the extinction of species. These challenges are fundamentally rooted in the tremendous scale of economic and industrial activities that often remain ecologically unsustainable (Schultz, 2011; Kumar, Manrai and Manrai, 2017; Rahnama and Rajabpour, 2017; Chen *et al.*, 2020). A comprehensive green transformation emerges as a pivotal solution to mitigate the damage caused by these activities (European Commission, 2019). In recent years, an increasing number of consumers have become aware of their direct impact on the natural environment and society (Zhao *et al.*, 2014; Kim and Lee, 2023; ISO, 2025). Consumers who integrate sustainability-oriented values into their consumption behaviors—namely, green, responsible, or environmentally conscious consumers—are emerging as the primary drivers of this much-needed green transformation (Saari *et al.*, 2021; Ziegler, 2021). The global rise in sustainable consumption patterns is both pressuring and incentivizing firms to adopt

circular economy practices, such as developing repairable goods and minimizing waste in production (Calkins, 2008; Lin and Chang, 2012; Govindan, 2015; Xu and Jeong, 2019).

Despite the extensive literature on the factors influencing green consumption, several research gaps persist. First, there is limited empirical evidence connecting consumers' environmental worldviews—comprising their fundamental beliefs regarding the natural environment—to the purchase of green products. Second, existing studies have largely focused on behavioral intentions rather than actual purchasing behavior (Maichum, Parichatnon and Peng, 2016; Kim and Lee, 2023). Furthermore, a significant body of literature highlights the "green gap", a phenomenon more commonly known as the attitude-behavior gap or value-action gap, which refers to the discrepancy between sustainable thinking and behavior due to a lack of affordances (Kaaronen, 2017). In this context, "thinking" serves as shorthand for the entirety of psychological determinants, encompassing not only cognitive processes but also emotional processes. These determinants include environmental values, beliefs, concerns, attitudes, and intentions. According to the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB), the "green gap" primarily manifests between attitudes and behavior (Tanner and Wölfing Kast, 2003; Vermeir and Verbeke, 2006), or alternatively, between intentions and behavior (Carrington, Neville and Whitwell, 2014; Gleim and Lawson, 2014). On the other hand, the Value-Belief-Norm (VBN) Theory positions this gap between the broader constellation of environmental values, beliefs, personal norms, and actual green behavior (Stern *et al.*, 1999; Gifford and Nilsson, 2014; Lind *et al.*, 2015). While these socio-cognitive models have historically advanced our understanding, an over-reliance on traditional paradigms has led to a perceived saturation in the literature, with critics frequently labeling conventional green consumer studies as incremental. This incrementalism often stems from an over-focus on individual intent rather than the broader structural and contextual enablers required to foster sustainable lifestyle changes (Elf, Isham and Gatersleben, 2021). To overcome this theoretical stagnation, research must move beyond purely individualistic cognitive loops and incorporate deep, relational mechanisms that explain the non-cognitive boundary conditions of sustainable action.

Against this backdrop, the research community has increasingly called for a comprehensive green-gap model that thoroughly accounts for the moderating role of sociodemographic characteristics (Diamantopoulos *et al.*, 2003; Gleim and Lawson, 2014; Chekima, Syed Khalid Wafa, *et al.*, 2016). Although research into the interaction between sociodemographics and environmental worldviews offers great potential for elucidating green consumer behavior, attempts to achieve a complete understanding of how to bridge the "green gap" remain inconclusive (Munerah, Koay and Thambiah, 2021). Furthermore, existing sustainable consumption literature remains heavily skewed toward stable, developed Western economies, creating a gap where dominant frameworks fail to address realities outside Global North contexts. This leaves a critical empirical blind spot regarding how green intentions translate into actual behavior within highly volatile macro-economic environments. To address both this geographic imbalance and the need for conceptual novelty, this study utilizes Türkiye not merely as a single-country case study, but as an ideal socio-economic laboratory. Characterized by intense macroeconomic fluctuations and deeply rooted, family-centric cultural values, this context provides a rigorous baseline to observe how financial constraints and relational motivations interact to narrow the value-action gap. To this end, the present study re-energizes the traditional green consumption discourse by integrating the New Ecological Paradigm (NEP) with the TRA framework and Erikson's Generativity Theory to achieve the following objectives:

- To investigate the effects of consumers' environmental worldviews on green attitudes, green behavioral intentions, and ultimately green purchasing behavior.
- To examine the moderating roles of key sociodemographic characteristics (i.e., gender, generation, income, marital status, parental status, and employment status) across different consumer groups.

2. Literature Review and Hypothesis Development

2.1. Green Products and Green Purchasing Behavior

Green consumption is a multidimensional set of environmentally friendly behaviors shaped by a complex interplay of internal and external influences. **Internal influences** include ***psychological and personal factors***. Psychological factors—such as *personal values* (e.g., biospheric, altruistic, and egoistic) (Neuman, 1986; Sivapalan *et al.*, 2021; Hua and Pang, 2024), *environmental beliefs and attitudes* (Olli, Grendstad and Wollebaek, 2001; Milfont and Duckitt, 2004; Gansser and Reich, 2023), *environmental consciousness* (e.g., environmental knowledge, awareness, and concern) (Lin and Huang, 2012; Buerke *et al.*, 2017; Saari *et al.*, 2021), *health consciousness* (Sun, Liu and Zhao, 2019; Hong *et al.*, 2022; Suhaeni *et al.*, 2024), *perceived responsibility* (Thøgersen, 1996; Piligrimienė *et al.*, 2020; Yue *et al.*, 2020), *personal norms* (Bamberg and

Möser, 2007; Hosta and Žabkar, 2020; Xueyun, Mamun and Hayat, 2024), *self-identity* (e.g., pro-environmentalist) (Lin and Huang, 2012; Buerke *et al.*, 2017; Sun, Sarfraz and Ozturk, 2024), *political ideology and party affiliation* (Buttel and Flinn, 1978; McCright and Dunlap, 2013; Davidovic, Harring and Jagers, 2020), *personality* (Balderjahn, 1988; Ahn, Koo and Chang, 2012; Gifford and Nilsson, 2014), and *perceived behavioral control* (Zhao *et al.*, 2014; Kautish, Paul and Sharma, 2019; Munerah, Koay and Thambiah, 2021)—exert a robust effect on green consumption behavior. Furthermore, personal factors—specifically *sociodemographic characteristics* (Van Liere and Dunlap, 1981; Diamantopoulos *et al.*, 2003; Witek and Kuźniar, 2020)—also play a significant role in motivating eco-friendly consumption.

External influences that further shape green consumption include ***marketing, contextual, and social factors***. *Marketing factors*—such as *product attributes, quality level, brand name, eco-labels, price, availability, and communications* (Zhao *et al.*, 2014; Yue *et al.*, 2020; Dangelico, Alvino and Fraccascia, 2022; Sharma, Aswal and Paul, 2023; Suhaeni *et al.*, 2024)—directly impact green consumption decisions. *Social factors*—such as *social norms* (Joshi and Rahman, 2017; White, Habib and Hardisty, 2019; Shin and Kang, 2021) and *cultural values* (Chekima, Chekima, *et al.*, 2016; Nguyen, Lobo and Greenland, 2017; Halder *et al.*, 2020)—encourage green choices. Finally, *contextual factors*—specifically *economic and educational development* (Çarkoğlu and Kentmen-Çin, 2015; Pisano and Lubell, 2017; Qadri *et al.*, 2025) and *government policies* (Johnstone and Hooper, 2016; Jiang and He, 2022; Yang *et al.*, 2023)—can either facilitate or hinder the transition to environmentally responsible consumption.

Green purchasing behavior (GPB) is the core component of the green consumption phenomenon. It involves a deliberate preference for products that minimize ecological damage throughout their life cycle, from production to disposal (Diamantopoulos *et al.*, 2003; Peattie and Peattie, 2009). This behavior reflects a heightened environmental concern and awareness among consumers striving to reduce their ecological footprint by selecting green, or at least "greener" alternatives (Garbie, 2015; Ritter *et al.*, 2015; Paul, Modi and Patel, 2016). At the heart of green purchasing are green goods and services characterized by eco-friendly features—including energy efficiency, biodegradability, recyclability, recycled content, minimal packaging—and low environmental toxicity (D'Souza, Taghian and Khosla, 2007; Maichum, Parichatnon and Peng, 2016; Jaiswal and Kant, 2018). To foster consumer trust, many of these products are endorsed by eco-labels and third-party certifications, which significantly enhance green purchase intentions (Chekima, Syed Khalid Wafa, *et al.*, 2016).

2.2. Theoretical Foundation

As a behavioral theory, the TRA focuses on predicting specific human behaviors through behavioral intentions, attitudes, and beliefs. According to the TRA, individuals who believe that performing a certain behavior will yield positive outcomes develop a positive attitude toward it, which subsequently leads to an intention to perform that behavior. Behavioral intention is considered not only a direct antecedent of behavior but also its most robust predictor (Fishbein and Ajzen, 1975; Ajzen, 2019).

While attitudes and intentions are relatively focused within the TRA framework, the belief component often represents a more expansive and open-ended construct that captures the complexity of human cognition. In operationalizing the belief component, the NEP offers a comprehensive and widely utilized framework and instrument for capturing fundamental environmental beliefs (Dunlap and Van Liere, 2008; Ogunbode, 2013; Ziegler, 2021). This psychometric alignment makes the NEP highly compatible with the TRA, as it provides a structured way to measure how environmental beliefs serve as the cognitive foundation for green consumer behavior (Chwialkowska, Bhatti and Glowik, 2020; Abeysekera *et al.*, 2022). Furthermore, a significant body of literature has validated the TRA as a robust theoretical basis for predicting green purchasing in various contexts (Liu *et al.*, 2017). By integrating these two frameworks, the present study establishes a solid theoretical foundation for examining the structural relationships between environmental worldviews and actual green purchasing.

However, while the synthesis of the TRA and the NEP effectively maps the cognitive-attitudinal trajectory of sustainable consumption, traditional socio-cognitive models often exhibit limitations in explaining the boundary conditions that dictate the conversion of green intentions into actual behavior. To overcome this theoretical limitation and provide a deeper explanation for the "green gap", this study integrates Generativity Theory as a critical complementary lens. Originally rooted in developmental psychology, Generativity Theory posits that adults possess an inherent psychological drive to care for, guide, and establish a viable

legacy for future generations (Erikson, 1950; McAdams and de St. Aubin, 1992). In environmental and consumer behavior research, this "generative concern" operates as an altruistic mechanism that extends an individual's temporal orientation, compelling them to align their current consumption decisions with the long-term ecological well-being of their descendants (Urien and Kilbourne, 2011; Carmi and Arnon, 2014). Consequently, by embedding Generativity Theory alongside the TRA and the NEP, this research builds a comprehensive, multi-theoretical framework capable of explaining how relational, household-level dynamics—such as parental status—act as crucial boundary conditions that catalyze the transition from sustainable intent to actual green purchasing behavior.

2.3. Environmental Worldview and Green Purchasing Attitudes

An individual's environmental worldview (ENW) encompasses fundamental—or what Dunlap (2008) terms "primitive"—beliefs about the human–nature relationship. Research has consistently confirmed that this worldview constitutes a core component of an individual's belief system (Xiao, Dunlap and Hong, 2019) and plays a central role in driving green consumption (Nguyen *et al.*, 2016; Saari *et al.*, 2021). Specifically, individuals with a robust pro-environmental worldview perceive the severity of environmental challenges more acutely, and are more likely to develop positive, solution-oriented attitudes toward sustainable options (Huang, 2016; Gansser and Reich, 2023). Consequently, the ENW held by consumers directly influences their attitudes toward green purchasing (Gadenne *et al.*, 2011; Gifford and Nilsson, 2014; Jaiswal and Kant, 2018). Beyond direct effects, ENW is expected to influence GPB through a sequential psychological process involving both green attitudes (GATT) and green intentions (GINT). Accordingly, the following hypotheses are proposed:

- **H1:** ENW significantly and positively affects GATT.
- **H2:** ENW significantly and positively affects GPB through the serial mediation of GATT and GINT.

2.4. Green Purchasing Attitudes and Intentions

The TRA suggests that attitudes toward a certain behavior are the primary drivers of behavioral intentions (Fishbein and Ajzen, 1975; Maichum, Parichatnon and Peng, 2016)**.** In the context of green consumer behavior, an attitude toward green purchasing represents a consumer's favorable or unfavorable evaluation of acquiring environmentally friendly products. Empirical evidence has shown that positive attitudes toward green consumption significantly drive the intention to purchase. When consumers believe that buying environmentally friendly products is beneficial, desirable or "the right thing to do"—that is, when they hold a positive attitude—both their intentions to purchase green products (Jaiswal and Kant, 2018; Witek and Kuźniar, 2020) and their actual purchasing behavior increase (Kollmuss and Agyeman, 2002; Haws, Winterich and Naylor, 2014). Considering the sequential influence of GATT on GINT and GPB, the following hypotheses are proposed:

- **H3:** GATT significantly and positively affects GINT.
- **H4:** GATT significantly and positively affects GPB through the mediation of GINT.

2.5. Green Purchasing Intentions and Actual Behavior

Behavioral intentions represent motivational factors for taking action and are generally considered the most immediate antecedent of actual behavior. The TRA framework posits that as the intention to perform a certain behavior increases, so does the likelihood of that behavior (Ajzen and Fishbein, 2000; Gansser and Reich, 2023). Research in the green marketing literature has shown that consumers' intentions to purchase eco-friendly products have a significant impact on their actual purchasing behavior (Chan, 2001; Tarkiainen and Sundqvist, 2005; Kautish, Paul and Sharma, 2019; Duong, 2022). Although extensive research highlights a "green gap", the prevailing perspective suggests that strong GINT increases the likelihood of actual GPB (Munerah, Koay and Thambiah, 2021; Sharma, Aswal and Paul, 2023). Accordingly, the following hypothesis is proposed:

- **H5:** GINT significantly and positively affects GPB.

2.6. Moderating Role of Sociodemographic Characteristics

In addition to psychological determinants, sociodemographic characteristics play a crucial role in green consumption behavior. Research has demonstrated that key sociodemographics—such as age, gender, education, income, marital status, parental status, and employment status—have a salient effect on consumers' green purchasing decisions (Schlegelmilch, Bohlen and Diamantopoulos, 1996; Pedrini and Ferri, 2014; Zhao *et al.*, 2014; Witek and Kuźniar, 2020). Specifically, by their very nature, these variables act as moderators rather than direct predictors of behavior. For instance, higher income levels can facilitate

the transition from strong intentions to actual purchases by mitigating the financial barriers associated with often premium-priced green products (Wang, Wong and Narayanan, 2020). Overall, key sociodemographic characteristics can moderate the relationships along the path from ENW to GPB (Ling-Yee, 1997; Chekima, Syed Khalid Wafa, *et al.*, 2016). In this context, the following hypotheses are proposed:

- **H6:** Key sociodemographic characteristics—namely, (1) gender, (2) generation, (3) income, (4) marital status, (5) parental status, and (6) employment status—moderate the relationships between ENW and GATT (H6a), GATT and GINT (H6b), GINT and GPB (H6c), ENW and GPB (H6d), and GATT and GPB (H6e).

Figure 1 illustrates the conceptual model and hypotheses of this study.

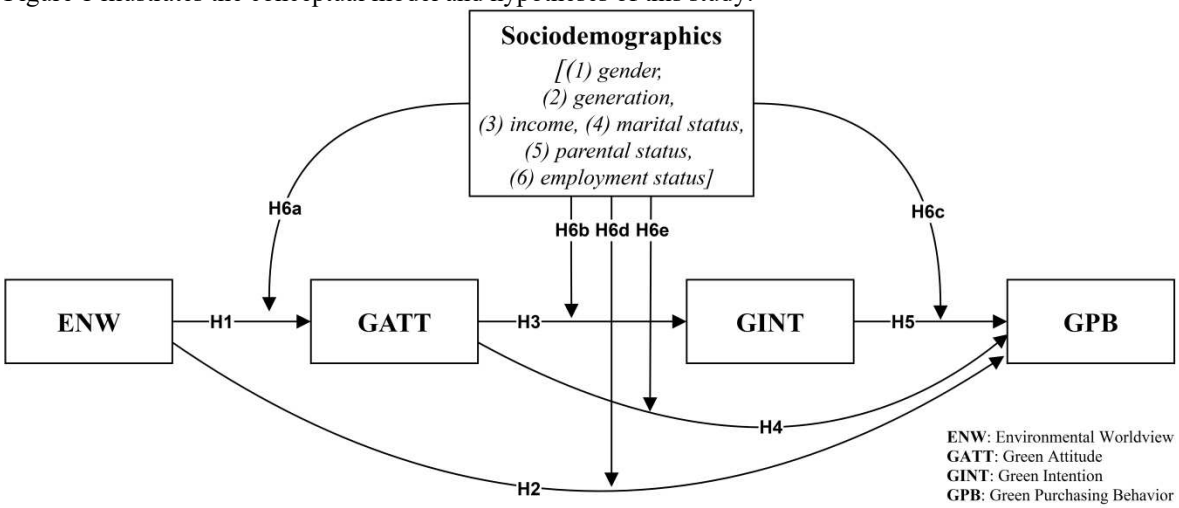


Figure 1 Conceptual Model

3. Methodology

3.1. Population and Sample

This study focuses on the general consumer population aged 18 years and older residing in Türkiye. Relying on a convenience sampling method, 328 valid responses were obtained after screening for missing values and respondent integrity. Sample adequacy was confirmed using a power analysis (desired power = 0.90, α = 0.05), which indicated that a minimum of 76 participants was required, based on the lowest effect size in the structural model (i.e., Cohen's $f^2 = 0.13$ for the ENW → GATT path). This validates that our sample size is more than sufficient for robust structural analysis.

As detailed in Table 1, the sample predominantly comprised female consumers (60.4%); young adults from Generations Z (58.2%) and Y (36.6%); middle-income earners (83.8% combined); and a highly educated cohort, with 92.4% holding a university or postgraduate degree. This demographic profile aligns with the characteristics of the potential green consumer segment identified in previous literature, thereby strengthening the external validity of our findings (Diamantopoulos *et al.*, 2003; Chekima, Syed Khalid Wafa, *et al.*, 2016; Wang *et al.*, 2020; Qadri *et al.*, 2025).

Table 1 Sociodemographic profile of the sample

Measure	Item		Frequency		Percentage (%)	
Gender	Female		198		60.4	
	Male		130		39.6	
Generation	Generation Z		191		58.2	
	Generation Y		120		36.6	
	Generation X		17		5.2	
Income level	Low	(Lower Income)	30	(152)	9.1	(46.4)
	Lower middle		122		37.2	
	Upper middle	(Higher Income)	153	(176)	46.6	(53.6)
	High		23		7	
Marital status	Married		68		20.7	

	Not married	260	79.3
Parental status	Yes	49	15.2
	No	273	84.8
Employment status	Working	209	63.7
	Not working	119	36.3
Education level	Primary school and below	2	0.6
	Secondary school	2	0.6
	High school	21	6.4
	University/college	231	70.4
	Postgraduate	72	22

Note(s): Generational cohorts were based on Twenge's (2023) classification—Silents 1925-1945; Baby Boomers 1946-1964; Generation X 1965-1979; Generation Y (Millennials) 1980-1994; Generation Z 1995-2012.

3.2. Data Collection Procedure

Data were collected through an online survey administered via Google Forms. The latent variables—ENW, GATT, GINT, and GPB—were operationalized using the psychometrically established scales detailed in Table 2.

To ensure linguistic accuracy, the original English scales were translated into Turkish following Brislin's (1970) back-translation method. Meticulous iterations of the translation process were performed until complete semantic and conceptual equivalence was achieved. Following the translation, a focus group study (N = 15) and a pilot study (N = 40) were conducted to ensure question clarity and to preliminarily test the model. Based on the pilot test results, minor linguistic adjustments were made to better align specific items with the Turkish cultural context. The final validated Turkish adaptations used for data collection are provided in Supplementary Table 1. All items were measured on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 2 Measurement model items

Construct	Item	Statement	Source(s)
ENW	NEP1	We are approaching the limit of the number of people the earth can support	Dunlap et al., (2000)
	NEP11	The earth is like a spaceship with very limited room and resources	
	NEP13	The balance of nature is very delicate and easily upset	
	NEP15	If things continue on their present course, we will soon experience a major ecological catastrophe	
	NEP3	When humans interfere with nature it often produces disastrous consequences	
	NEP5	Humans are severely abusing the environment	
	NEP7	Plants and animals have as much right as humans to exist	
GATT	GATT1	I think that purchasing green products is favorable	Maichum et al., (2016); Shin and Kang (2021)
	GATT2	I think that purchasing green products is a good idea	
	GATT3	I think that purchasing green products is safe	
	GATT4	I think that purchasing green products is useful for the environment	
GINT	GINT1	I will likely choose to buy green products if they are available in the store where I usually shop	Abeysekera et al., (2022); Duong (2022)
	GINT2	I am consistently considering buying green products to protect the environment	
	GINT3	I am willing to shift from nongreen to green products	
	GINT4	I am willing to pay more for a product which is healthy and helps protect the environment	
GPB	GPB1	Knowing a product can be recycled, reused or repaired after you use it, is it a reason for me to buy these particular products	Abeysekera et al., (2022)
	GPB2	I remain loyal to companies whose practices are environmentally friendly (decrease wastes, recycle materials, etc.)	
	GPB4	In case there is an alternative, I prefer products which cause less pollution	

	GPB5	Choosing between two products, I always buy the one which has the minimum impact on people and environment.
	GPB6	I change products when they do not comply with the ecological conditions/rules

3.3. Data Analysis Techniques

To empirically test the conceptual model, this study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) due to several methodological advantages. First, it provides the flexibility required to analyze our complex model, which includes multiple constructs and mediating paths. Additionally, as a nonparametric technique, PLS-SEM does not impose strict distributional assumptions, and is thus ideal for our data that may not follow a normal distribution. Moreover, compared to covariance-based SEM (CB-SEM), PLS-SEM achieves higher statistical power and demonstrates robust performance even with relatively smaller sample sizes (Hair *et al.*, 2019, 2021).

The moderating effects were analyzed utilizing the Partial Least Squares Multi-Group Analysis (PLS-MGA) procedure. This approach facilitates a global comparison of cross-group path differences across all structural relationships simultaneously, providing a comprehensive assessment of how various sociodemographic groups differ in their decision-making processes (Matthews, Hair and Matthews, 2018). Data analysis was conducted using SmartPLS 4 (Ringle, Wende and Becker, 2022).

4. Analysis Findings

4.1. Assessment of Measurement Model

Reflective measurement models were assessed for construct reliability, convergent validity, and discriminant validity following the guidelines suggested by Hair et al. (2022), with the results detailed in Table 3.

Construct reliability was established by assessing individual indicator reliability and internal consistency reliability. In terms of individual indicator reliability, as illustrated in Figure 2, all loadings for the GATT, GINT, and GPB constructs exceeded the .70 threshold, thereby demonstrating robust indicator reliability (Hulland, 1999). Regarding the ENW construct, although indicator loadings fell below this recommended threshold, they were intentionally retained in accordance with established literature suggesting that items with loadings between .40 and .70 should only be removed if their exclusion significantly increases composite reliability (Stevens, 2002; Hair *et al.*, 2022). This decision was further prioritized to maintain content validity, ensuring that the salient cultural and theoretical dimensions of the original NEP scale were fully represented (Dunlap, 2008; Ogunbode, 2013). Further, internal consistency reliability was evaluated by examining Cronbach's alpha (α) and composite reliability (ρ_C) coefficients against the .70 threshold. As shown in Table 3, the ρ_C values (ranging from .766 to .907) and α values (ranging from .652 to .864) successfully met or exceeded the .70 criterion for the GATT, GINT, and GPB constructs. In the case of the ENW construct, given the contextual sensitivity of the NEP scale, a threshold of .60 is deemed acceptable for exploratory research (Hair *et al.*, 2019)—specifically for the application of the NEP within the Turkish context. These results demonstrate that all four reflectively measured constructs possess adequate individual indicator reliability and internal consistency, thereby establishing construct reliability.

With respect to convergent validity, the average variance extracted (AVE) values for the GATT, GINT, and GPB constructs exceeded the recommended threshold of .50 (Fornell and Larcker, 1981). Although the ENW construct yielded a lower AVE, it was retained in accordance with established literature suggesting that if ρ_C remains above .60, the convergent validity of a construct can be deemed acceptable. This is particularly applicable in our exploratory setting, where the theoretical grounding is robust (Lam, 2012; Gao, Li and Zheng, 2024; Tsai *et al.*, 2025). Furthermore, ENW indicators were preserved again to maintain content validity, ensuring that all aspects of the NEP were represented as intended by the original scale.

Table 3 Reliability and convergent validity

Construct	Item	Indicator loading	α	ρ_C	AVE
ENW	NEP1	.488	.652	.766	.322
	NEP11	.465			
	NEP13	.543			
	NEP15	.591			

	NEP3	.570			
	NEP5	.621			
	NEP7	.665			
GATT	GATT1	.834	.864	.907	.710
	GATT2	.874			
	GATT3	.816			
	GATT4	.845			
GINT	GINT1	.818	.783	.860	.606
	GINT2	.807			
	GINT3	.783			
	GINT4	.701			
GPB	GPB1	.742	.767	.843	.521
	GPB2	.839			
	GPB4	.626			
	GPB5	.719			
	GPB6	.664			

Discriminant validity was evaluated using the Heterotrait-Monotrait (HTMT) ratio of correlations. As detailed in Table 4, none of the HTMT ratios exceeded the critical value of .90. Additionally, the 95% confidence intervals (CI_{HTMT}) for the HTMT ratios did not include the value of 1.0, further supporting discriminant validity (Henseler, Ringle and Sarstedt, 2015; Rasoolimanesh *et al.*, 2017). Finally, since all bivariate correlations remained below the .85 threshold (Garson, 2001; Cheung *et al.*, 2024), collectively, these results confirm the sufficient discriminant validity of the measurement model.

Table 4 Discriminant validity ($HTMT_{.90}$ criterion)

	ENW	**GATT**	**GINT**
GATT	.432 CI_{HTMT} = [0.306, 0.556] (.338*)		
GINT	.389 CI_{HTMT} = [0.283, 0.527] (.293*)	.595 CI_{HTMT} = [0.459, 0.722] (.497*)	
GPB	.584 CI_{HTMT} = [0.459, 0.707] (.414*)	.648 CI_{HTMT} = [0.502, 0.781] (.521*)	.900 CI_{HTMT} = [0.815, 0.973] (.707*)

Note(s): 1) *Significant at 5% level; 2) Bivariate correlations in parentheses

4.2. Assessment of Structural Model

To test the hypothesized paths, we applied PLS-SEM to the entire dataset using a bootstrapping procedure with 5,000 resamples, following the guidelines of Hair et al. (2022). As shown in Table 5, standardized path coefficients revealed that ENW significantly influences GATT ($\beta = .338$, $p < .001$), supporting H1. Subsequently, GATT was found to strongly impact GINT ($\beta = .497$, $p < .001$), which in turn functions as the primary driver of GPB ($\beta = .707$, $p < .001$), supporting H3 and H5, respectively. Overall, all direct effects were statistically significant and positive. Furthermore, the assessment of indirect effects confirmed that the relationship between ENW and GPB is sequentially mediated through GATT and GINT, providing empirical support for both H2 ($\beta = .119$, $p < .001$, 95% CI [0.076, 0.188]) and H4 ($\beta = .352$, $p < .001$, 95% CI [0.257, 0.453]).

The structural model was assessed based on its explanatory power, model fit, predictive relevance, collinearity, and common method bias. Explanatory power was evaluated using the coefficient of determination (R^2) and Cohen's (f^2) effect size.

Table 5 Results of path analysis

Hypothesis	**Path(s)**	***β***	***T*-value**	***p*-value**	**95% CI [*LL, UL*]**	f^2	**Test Result**
H1	ENW→GATT	.338	6.772	< .001	[0.257, 0.453]	0.13 (Small)	Sup
H2	ENW→ GATT→GINT→GPB	.119	4.122	< .001	[0.076, 0.188]		Sup

H3	GATT →GINT	.497	8.749	< .001	[0.387, 0.606]	0.33 (Medium)	Sup
H4	GATT→GINT→GPB	.352	7.032	< .001	[0.257, 0.453]		Sup
H5	GINT→GPB	.707	19.237	< .001	[0.606, 0.776]	1.00 (Large)	Sup.

Note(s): 1) CI: Confidence interval; 2) Sup: Supported, N/Sup: Not supported

As Figure 2 details, following the thresholds suggested by Hair et al. (2017), the R^2values were weak for GATT (.15) and GINT (.25), but reached a moderate level for GPB (.50). While the R^2 values for GATT and GINT appear relatively low, they are considered acceptable in behavioral studies where consumer intentions and attitudes are influenced by numerous extraneous factors, particularly as the model's ultimate endogenous construct (i.e., GPB) demonstrates a moderate explanatory power of .50 (Henseler, Ringle and Sinkovics, 2009; Hair *et al.*, 2019), indicating that the overall model provides a substantial understanding of green purchasing behavior. Regarding the effect sizes, according to Cohen's (1988) thresholds, f^2 values for the direct effects ranged from small for the ENW → GATT path (f^2= 0.13) to medium for the GATT → GINT path (f^2= 0.33), and large for the GINT → GPB path (f^2= 1.00), as detailed in Table 5. Additionally, the model fit was confirmed by the SRMR value for the saturated model (.076), which remained below the upper cutoff of .080 suggested by Hu and Bentler (1999) in the PLS-SEM context (Henseler, Hubona and Ray, 2016).

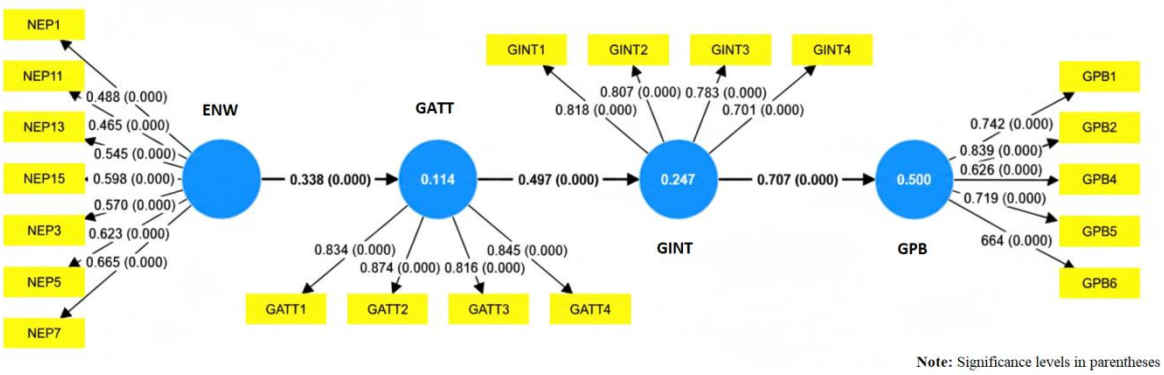


Figure 2 Baseline Structural Model

We further assessed the predictive power of the structural model following the guidelines of Shmueli et al. (2019). First, blindfolding results showed that all endogenous constructs had Q^2 values above zero (GPB = .252, GINT = .141, GATT = .070), confirming the in-sample predictive relevance of the model. Second, PLSpredict calculations (using 10-fold cross-validation with 10 repetitions) revealed that all indicators had Q^2_{predict} values greater than zero. Additionally, as the majority of indicators in the PLS-SEM model produced lower root mean square error (RMSE) values compared to the linear model benchmark, the model exhibited medium out-of-sample predictive power.

Regarding the collinearity assessment, all variance inflation factor (VIF) values for both indicators and latent constructs were below the conservative threshold of 3. For instance, the highest observed VIF was 2.412 (for GATT2), confirming that multicollinearity did not bias the results (Hair *et al.*, 2017). Furthermore, as all VIF values for the constructs remained below the 3.3 threshold, the model was considered free from common method bias (Kock, 2015).

4.3. Assessment of Group Differences

Following the measurement invariance of composite models (MICOM) procedure proposed by Henseler et al. (2016), measurement invariance was assessed using permutation-based PLS-MGA with 5,000 resamples. Consequently, partial measurement invariance was established by satisfying both configural invariance (Step 1) and compositional invariance (Step 2), thereby permitting the comparison of group-specific path coefficients. As detailed in Table 6, a series of PLS-MGA tests was conducted to compare path coefficient differences across the predefined sociodemographic groups. Notably, the analysis for education levels could not be performed due to a singular matrix problem, which frequently occurs in subgroup analysis when variance is insufficient within a specific category.

Table 6 Results of measurement invariance testing

		MICOM Step 1	**MICOM Step 2**			**MICOM Step 3**				
Socio-demographics	*Construct*	*Configural invariance?*	*Compositional invariance*		*Partial measurement invariance?*	*Equal mean value (Step 3a)*		*Equal variance (Step 3b)*		*Full measurement invariance?*
			Orig. corr. (c = 1)	Perm. p-value		Orig. diff.	Perm. p-value	Orig. diff.	Perm. p-value	
Gender *[(a) female; (b) male]*	ENW	Yes	.969	.772	Yes	0.255	.028*	-0.421	.099	No
	GATT	Yes	1.000	.870	Yes	0.289	.011*	-0.619	.005*	No
	GINT	Yes	.996	.060	Yes	0.320	.006*	-0.481	.008*	No
	GPB	Yes	.990	.062	Yes	0.299	.010*	-0.561	.018*	No
Generation *[(a) Gen Z; (b) non-Gen Z]*	ENW	Yes	.982	.918	Yes	-0.100	.384	0.263	.294	Yes
	GATT	Yes	.998	.296	Yes	-0.098	.385	0.235	.288	Yes
	GINT	Yes	.998	.300	Yes	-0.248	.029*	0.307	.089	No
	GPB	Yes	.991	.066	Yes	-0.128	.257	0.571	.015*	No
Income level *[(a) lower; (b) higher]*	ENW	Yes	.949	.495	Yes	0.005	.968	-0.013	.963	Yes
	GATT	Yes	.999	.646	Yes	-0.121	.284	0.210	.341	Yes
	GINT	Yes	.999	.375	Yes	0.066	.556	0.150	.401	Yes
	GPB	Yes	.998	.693	Yes	-0.152	.166	0.137	.573	Yes
Marital status *[(a) married; (b) unmarried]*	ENW	Yes	.983	.955	Yes	-0.056	.689	0.120	.693	Yes
	GATT	Yes	.995	.109	Yes	0.010	.942	-0.125	.651	Yes
	GINT	Yes	.997	.301	Yes	0.296	.029*	-0.354	.109	No
	GPB	Yes	.986	.083	Yes	0.136	.334	-0.573	.051	Yes
Parental status *[(a) yes; (b) no]*	ENW	Yes	.973	.912	Yes	-0.191	.260	0.594	.101	Yes
	GATT	Yes	.995	.201	Yes	-0.113	.504	0.155	.642	Yes
	GINT	Yes	.998	.370	Yes	0.273	.106	-0.204	.403	Yes
	GPB	Yes	.984	.158	Yes	0.024*	.892	-0.166	.647	No
Employment status *[(a) working; (b) not working]*	ENW	Yes	.939	.431	Yes	-0.047	.699	-0.092	.707	Yes
	GATT	Yes	.997	.173	Yes	0.047	.693	-.192	.409	Yes
	GINT	Yes	1.000	.822	Yes	-0.112	.345	0.051	.791	Yes
	GPB	Yes	.996	.441	Yes	-0.013	.914	.221	.398	Yes

Note(s): 1) Orig. corr.: Original correlation; 2) Perm. p-value: Permutation-based p-value; 3) Orig. diff.: Original difference; 4) *Significant at 5% level

As shown in Table 7, the bootstrap PLS-MGA results revealed that the structural relationship between ENW and GATT was moderated by income level (p = .040), providing support for H6a3. Specifically, the path coefficient was significantly stronger for the higher-income group (β = .430) than for the lower-income group (β = .263). Additionally, the GINT → GPB path was moderated by parental status (p = .007), supporting H6c5. In this case, the relationship was significantly stronger for households with children (β = .883) than for those without (β = .739). Other sociodemographic variables, such as gender and generation, did not exhibit significant moderating effects, consistent with the mixed findings observed in the current green consumption literature.

Table 7 Results of MGA

Hypotheses	**Path(s)**	**Moderator**	β_{GroupA}	β_{GroupB}	β_{diff}	**MGA p-value**	**Test Result**
H6a H6a1	ENW→GATT	Gender	β_{FEMALE} = .292	β_{MALE} = .351	-0.059	.280	N/Sup
H6a2		Generation	$\beta_{GEN\ Z}$ = .378	$\beta_{NON\text{-}GEN\ Z}$ = .285	0.093	.359	N/Sup
H6a3		Income	β_{LOWER} = .263	β_{HIGHER} = .430	-0.167	.040*	Sup
H6a4		Marital status	$\beta_{MARRIED}$ = .392	$\beta_{UNMARRIED}$ = .330	0.061	.650	N/Sup
H6a5		Parental status	β_{YES} = .492	β_{NO} = .321	0.170	.079	N/Sup

	H6a6		Employment status	$\beta_{EMPLOYED}$ = .370	$\beta_{UNEMPLOYED}$ = .352	0.018	.443	N/Sup
H6b	H6b1	GATT→GINT	Gender	β_{FEMALE} = .593	β_{MALE} = .456	0.137	.104	N/Sup
	H6b2		Generation	$\beta_{GEN\ Z}$ = .490	$\beta_{NON\text{-}GEN\ Z}$ = .515	-0.025	.825	N/Sup
	H6b3		Income	β_{LOWER} = .559	β_{HIGHER} = .467	0.092	.191	N/Sup
	H6b4		Marital status	$\beta_{MARRIED}$ = .558	$\beta_{UNMARRIED}$ = .497	0.060	.673	N/Sup
	H6b5		Parental status	β_{YES} = .599	β_{NO} = .478	0.120	.244	N/Sup
	H6b6		Employment status	$\beta_{EMPLOYED}$ = .495	$\beta_{UNEMPLOYED}$ = .524	-0.029	.391	N/Sup
H6c	H6c1	GINT→GPB	Gender	β_{FEMALE} = .695	β_{MALE} = .716	-0.021	.431	N/Sup
	H6c2		Generation	$\beta_{GEN\ Z}$ = .745	$\beta_{NON\text{-}GEN\ Z}$ = .654	0.092	.212	N/Sup
	H6c3		Income	β_{LOWER} = .660	β_{HIGHER} = .753	-0.093	.100	N/Sup
	H6c4		Marital status	$\beta_{MARRIED}$ = .769	$\beta_{UNMARRIED}$ = .708	0.060	.520	N/Sup
	H6c5		Parental status	β_{YES} = .883	β_{NO} = .739	0.144	.007*	Sup
	H6c6		Employment status	$\beta_{EMPLOYED}$ = .700	$\beta_{UNEMPLOYED}$ = .729	-0.028	.341	N/Sup
H6d	H6d1	ENW→GPB	Gender	β_{FEMALE} = .120	β_{MALE} = .115	0.006	.478	N/Sup
	H6d2		Generation	$\beta_{GEN\ Z}$ = .138	$\beta_{NON\text{-}GEN\ Z}$ = .096	0.042	.448	N/Sup
	H6d3		Income	β_{LOWER} = .097	β_{HIGHER} = .151	-0.054	.180	N/Sup
	H6d4		Marital status	$\beta_{MARRIED}$ = .168	$\beta_{UNMARRIED}$ = .116	0.052	.483	N/Sup
	H6d5		Parental status	β_{YES} = .260	β_{NO} = .113	0.146	.113	N/Sup
	H6d6		Employment status	$\beta_{EMPLOYED}$ = .128	$\beta_{UNEMPLOYED}$ = .134	-0.006	.469	N/Sup
H6e	H6e1	GATT→GPB	Gender	β_{FEMALE} = .413	β_{MALE} = .327	0.086	.188	N/Sup
	H6e2		Generation	$\beta_{GEN\ Z}$ = .366	$\beta_{NON\text{-}GEN\ Z}$ = .337	0.029	.762	N/Sup
	H6e3		Income	β_{LOWER} = .369	β_{HIGHER} = .352	0.017	.429	N/Sup
	H6e4		Marital status	$\beta_{MARRIED}$ = .429	$\beta_{UNMARRIED}$ = .352	0.076	.542	N/Sup
	H6e5		Parental status	β_{YES} = .528	β_{NO} = .353	0.175	.145	N/Sup
	H6e6		Employment status	$\beta_{EMPLOYED}$ = .347	$\beta_{UNEMPLOYED}$ = .382	-0.035	.360	N/Sup

Note(s): 1) $\boldsymbol{\beta_{diff}}$**:** Difference of path coefficients**; 2**) Sup: Supported, N/Sup: Not supported

5. Discussion and Conclusions

5.1. General Discussion

This study explored the effects of environmental worldview (ENW) on green attitudes (GATT), green intentions (GINT), and ultimately green purchasing behavior (GPB), while also examining the moderating role of key sociodemographic characteristics. Our results revealed that ENW has a considerable impact on the formation of GATT, thereby supporting H1. This finding aligns with previous research (Mostafa, 2007; Huang, 2016; Maichum, Parichatnon and Peng, 2016; e.g., Gansser and Reich, 2023), suggesting that as consumers become more environmentally minded, they develop more positive attitudes toward purchasing green products. Furthermore, the analysis confirmed that ENW significantly influences actual GPB through the sequential mediation of GATT and GINT, validating H2 in alignment with existing literature (e.g., Gadenne *et al.*, 2011; Gifford and Nilsson, 2014; Jaiswal and Kant, 2018).

Regarding the attitude–intention–behavior nexus, our results first demonstrated that GATT significantly drives GINT—confirming H3—a positive relationship that is well-documented in green marketing research (Jaiswal and Kant, 2018; Witek and Kuźniar, 2020; Munerah, Koay and Thambiah, 2021; e.g., Abeysekera *et al.*, 2022; Sharma, Aswal and Paul, 2023). Second, GATT exerted a significant indirect influence on GPB via

GINT, supporting H4 and reinforcing the role of intention as a critical bridge across the "green gap" (Kollmuss and Agyeman, 2002; e.g., Haws, Winterich and Naylor, 2014). Finally, our findings validated that GINT exerts a decisive influence on shaping GPB—thereby providing support for H5—consistent with the broader empirical evidence emphasizing the deterministic role of behavioral intention in sustainable consumption (Jaiswal and Kant, 2018; Kautish, Paul and Sharma, 2019; e.g., Abeysekera *et al.*, 2022; Duong, 2022).

The literature on sociodemographic influences on green purchasing often presents a complex landscape of divergent findings, likely due to cultural, social, and methodological variations. However, our findings regarding income level are highly consistent with the prevailing view. Specifically, higher income strengthened the relationship between ENW and GATT, lending support to H6a3 and reinforcing the notion that financial resource availability acts as an "enabler". This synergy allows environmental beliefs to manifest more effectively as positive attitudes, given that higher-income consumers possess the financial capacity to absorb the price premiums often associated with green products (Ott, 1990; Ling-Yee, 1997; Loureiro and Lotade, 2005; Gadenne *et al.*, 2011; Pagiaslis and Krontalis, 2014; Xiao, Dunlap and Hong, 2019; Wang, Wong and Narayanan, 2020; e.g., Berman Caggiano *et al.*, 2021).

Furthermore, our findings revealed that parental status serves as a strong driver of green purchasing. Specifically, the presence of children in the household moderated the relationship between GINT and GPB, providing empirical support for H6c5 and aligning with research conducted in various contexts (Grunert, 1993; Thompson and Kidwell, 1998; e.g., Frostling-Henningsson, Hedbom and Wilandh, 2014; Wan, Zhang and Ye, 2018; O'Neill and Buckley, 2019; Witek and Kuźniar, 2020). This phenomenon can be profoundly explained through the lens of Generativity Theory, which posits that individuals, particularly parents, are driven by a psychological need to establish and guide the next generation (Erikson, 1950). This result, aligning with McAdams and de St. Aubin (1992), indicates that parental status acts as a powerful motivational catalyst, significantly narrowing the "green gap" by strengthening the transition from intention to actual behavior. Within the Generativity Theory framework, green purchasing is no longer merely a cognitive decision but an expression of an "altruistic" drive to ensure a viable environment as a legacy for one's children (Urien and Kilbourne, 2011). This suggests that parental responsibility and altruistic concerns for the environmental well-being of future generations, frequently referred to as the "legacy effect", may outweigh the perceived barriers to green purchasing, such as higher costs or inconvenience. Nevertheless, the literature points to a nuanced reality; while the presence of children in the household generally encourages environmentally friendly choices, an increasing number of children may impose financial constraints that diminish this effect over time (Jackson, 1983; Zeynalova and Namazova, 2022). On the other hand, for high-income families, past research suggests that the number of children is less likely to diminish green purchasing patterns (Migheli, 2021), as financial resources may act as a buffer against the increased costs associated with sustainable consumption.

Conversely, gender, generation, marital status, and employment status did not exhibit significant moderating effects, reflecting the persistent lack of consensus in the field. For instance, while women often exhibit higher environmental concerns (Zelezny, Chua and Aldrich, 2000; Loureiro and Lotade, 2005; Lee, 2009; Chekima, Chekima, *et al.*, 2016; Witek and Kuźniar, 2020), this psychological predisposition does not reliably translate into actual green purchases (Singhal and Malik, 2021; Essiz *et al.*, 2023). Our findings align with this observed discrepancy. Similarly, although younger consumers (Generations Z and Y) often possess higher ecological consciousness (Bulut, Kökalan Çımrin and Doğan, 2017; Han, Yu and Kim, 2018), financial constraints or skepticism frequently hinder the translation of this mindset into behavior (Witek and Kuźniar, 2020; e.g., Shin and Kang, 2021). Consistent with prevailing evidence indicating that generational differences do not exert a consistent moderating effect on green purchasing, our study similarly found no such influence on the structural paths (e.g., Berenguer, Corraliza and Martín, 2005; Wiernik, Ones and Dilchert, 2013; Testa *et al.*, 2020). Finally, in line with established literature, marital and employment status did not exert significant moderating effects on the structural paths to green purchasing (Diamantopoulos *et al.*, 2003).

5.2. Theoretical Implications

This study provides several theoretical contributions by validating established models of green consumer behavior and extending the current understanding of sociodemographic influences on green purchasing. First, our findings corroborate the belief–attitude–intention–behavior pathway of the Theory of Reasoned Action (TRA).

Second, and perhaps most significantly, this research enhances conceptual novelty by integrating the TRA with Generativity Theory to explain the "intent-action" gap. While the TRA effectively maps the cognitive path to green consumption, it often falls short in explaining why some consumers act on their intentions while others do not. By identifying parental status as a significant moderator, we demonstrate that "generativity" serves as a vital boundary condition. This theoretical synthesis suggests that the transition from green intention to behavior is not purely driven by individual attitudes, but is deeply rooted in a consumer's perceived responsibility toward future generations. This contribution shifts the focus from a purely individualistic perspective of green behavior toward a more relational and intergenerational motivational framework.

Finally, the nonsignificant findings for gender, generation, marital status, and employment status reinforce the theoretical view that these sociodemographic characteristics are not universally consistent moderators; instead, their influence appears to be highly context-dependent and indirect, contingent upon the specific demographic and cultural setting. Consequently, researchers should exercise caution when generalizing sociodemographic impacts across diverse populations without accounting for these nuanced localized dynamics.

5.3. Practical Implications

Identifying the profile of the green consumer is essential for designing effective segmentation, targeting, and positioning (STP) strategies. Our findings reinforce the established link between green purchasing and socioeconomic status, demonstrating that sustainable behavior increases in tandem with social standing (Harry, Gale and Hendee, 1969; Devall, 1970; Tucker, 1978; Lyons and Breakwell, 1994; Pagiaslis and Krontalis, 2014; Gladstone and Bellezza, 2025). From a marketing perspective, these results suggest that targeting strategies should prioritize higher-income (i.e., upper-middle and high) customer segments, with a particular focus on parents.

In this regard, marketing communication strategies should capitalize on the altruistic motivations of parents, utilizing intergenerational messaging—such as "securing a sustainable future for your children"—to strengthen the psychological link between ENW and GPB. Market penetration strategies should emphasize quality, health, social acceptance, and prestige to resonate with these specific segments.

Green marketing mix strategies should be customized to bridge the "green gap", especially by translating intentions into actual purchase behavior. Our research corroborates that focusing on these environmentally minded segments can drive broader industry shifts toward cleaner production technologies. Consumers who prioritize product recyclability and a producer's environmental footprint act as catalysts, encouraging firms to invest in sustainable production systems and supply chains. Therefore, environmental policies should move beyond creating environmental awareness alone and provide targeted incentives that align consumer preferences with the United Nations Sustainable Development Goals (specifically SDG 12: Responsible Consumption and Production).

Furthermore, since higher income levels act as a critical enabler, the perceived "green price premium" remains a significant barrier for lower-income consumer segments. To foster market development and expand the consumer base beyond higher-income segments, companies should implement targeted incentive structures. Specifically, adopting tiered pricing models and loyalty reward programs can help mitigate financial barriers for less affluent consumers, making eco-friendly choices more accessible, and thus encouraging a broader transition to sustainable consumption. From a public policy standpoint, creating a more inclusive green market requires systemic support to lower the entry barriers for diverse socioeconomic segments. Policymakers should consider providing green subsidies or tax incentives that align green options with the purchasing power of all citizens. Such measures are essential to ensure that the environmental transition is equitable and that financial constraints do not exclude lower-income segments from participating in the green economy.

5.4. Limitations and Future Research

Despite its contributions, the present study has several limitations that offer pathways for future research. First, the predominance of highly educated participants within the sample may limit the generalizability of the findings to the broader population. However, it is important to note that highly educated, middle-to-high-

income consumer segments—those with favorable environmental worldviews and children in the household—constitute the primary driving force in the current green market (Wang *et al.*, 2020). Future studies could employ more heterogeneous samples to test whether these relationships hold across different educational and professional backgrounds, especially in the context of emerging economies, such as Türkiye.

Second, the limited representation of older generations (e.g., Baby Boomers and the Silent Generation) restricted the generational analysis to a comparison between Generation Z and Generation Y. While these cohorts represent the most active segments in the current green product market (Casalegno, Candelo and Santoro, 2022), including older cohorts in future longitudinal studies would provide a more holistic understanding of how aging and life stages influence green purchasing behavior. This approach would help determine whether the observed patterns are consistent across the entire life cycle.

Regarding future directions, understanding the factors influencing green consumer behavior remains critical for developing effective policies and marketing strategies that contribute to environmental sustainability. Studies conducted across diverse national contexts—such as China (Chan, 2001), Iran (Rahnama and Rajabpour, 2017), Nigeria (Ogunbode, 2013), the Philippines (Abeysekera *et al.*, 2022), Poland (Witek and Kuźniar, 2020; Jaciow *et al.*, 2022), India (Jaiswal and Kant, 2018), and the United States (McCright and Dunlap, 2013)—have indicated that cultural, political, economic, and sociodemographic differences influence ENW and GPB. Based on these insights, while our findings suggest that higher income levels and the presence of children have consistent effects on green purchasing, they also reinforce the notion that many sociodemographic impacts are highly context-dependent. This highlights a pressing need for more cross-cultural research focused on specific nations and diverse populations to further elucidate these complex relationships.

5.5. Conclusions

In conclusion, the present investigation confirms several established relationships in green purchasing behavior and provides fresh insights into the moderating roles of key sociodemographic factors. We found that a robust ENW significantly influences the formation of GATT. These attitudes, in turn, decisively shape GINT, which serves as the primary driver of actual GPB. This sequential pattern—extending from beliefs to behaviors—is consistently validated across our model, reinforcing the theoretical grounding of the TRA in sustainable consumer behavior research.

Additionally, our research indicates that two specific conditions act as powerful catalysts for GPB: (1) higher income levels and (2) the presence of children in the household. While a pro-environmental worldview is the starting point, its impact on behavior is significantly amplified by these sociodemographic moderators. Finally, since these findings were observed within a predominantly highly educated population, education likely functions as a contextual boundary rather than a standalone moderator in this study. Ultimately, by providing empirical evidence from the Turkish context, this research contributes to the broader understanding of green consumer behavior in emerging markets, where environmental awareness is rapidly evolving. Our findings underscore that bridging the "green gap" in such contexts requires addressing the practical socioeconomic facilitators that enable consumers to convert their beliefs and values into consistent, sustainable action. This localized insight offers a critical foundation for developing globally applicable yet culturally sensitive strategies to achieve the United Nations Sustainable Development Goals (SDGs).

Appendix A. Supplementary data

The following are the Supplementary data to this article: Supplementary Table 1.

Data Availability

The raw and processed data required to reproduce the findings of this study are openly available at Mendeley Data and can be accessed via the following link: [DOI: 10.17632/v33bjbn6s2.1].

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