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Predicting the value-based determinants of sustainable luxury consumption: A multi-analytical approach and pathway to sustainable development in the luxury industry

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Abstract

Concern for the environment is prevalent among luxury consumers, and sustainable development has become a pervasive theme in the luxury industry. However, there has been limited empirical research on the burgeoning area of sustainable luxury to profile the characteristics of sustainable luxury consumers. In this research, we explore how value perceptions impact consumers' purchase intentions for sustainable luxury products by building an integrated predictive framework based on the theory of consumption values. We deploy a hybrid partial least squares structural equation modeling-artificial neural network approach with additional importance-performance map analyses to study a sample of 894 luxury consumers in the United States. The empirical findings show that sustainable luxury is profoundly value-driven. After accounting for linear and nonlinear patterns, functional, emotional, epistemic, conditional, and green consumption values exhibit significant positive impacts on purchase intention, with the exception of social value. Further, we elucidate a theoretically grounded mediator (conspicuous ethical self-identity) and a moderator (green advertising receptivity) that buffer the link between consumption values and purchase intention. We also uncover cross-generational disparities, in which millennialscompared to Gen X-display greater conspicuous ethical self-identity as well as higher levels of green advertising receptivity and purchase intention. From a theoretical perspective, this research contributes to sustainability marketing literature and advances our understanding of the psychographic, behavioral, and demographic factors that influence sustainable luxury consumption. On a managerial basis, this research offers insights for luxury brand practitioners on how to leverage multidimensional value perceptions in their sustainable product positioning and communication strategies.

Abbreviations: ANN, artificial neural network; ANOVA, analysis of variance; AVE, average variance extracted; CES, conspicuous ethical self-identity; CFA, confirmatory factor analysis; CMV, common method variance; COV, conditional value; CR, composite reliability; CSR, corporate social responsibility; EMV, emotional value; EPV, epistemic value; FMCG, fast-moving consumer good; FUV, functional value; GAR, green advertising receptivity; GRV, green value; HTMT, heterotrait-monotrait ratio of correlations; IPMA, importance-performance map analysis; MGA, multigroup analysis; MICOM, measurement invariance of composite models; MLP, multilayer perceptron; MSV, maximum shared variance; PLS-SEM, partial least squares structural equation modeling; PUI, sustainable luxury (fashion) purchase intention; RMSE, root mean square errors; RQ, research question; SDG, sustainable development goal; SFL, standardized factor loading; SLFPs, sustainable luxury fashion products; SOV, social value; TCV, theory of consumption values; US, United States; VIF, variance inflation factor.

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KEYWORDS

ethical self-identity, generational cohorts, green advertising receptivity, purchase intention, sustainable consumer behavior, sustainable development, sustainable luxury, theory of consumption values

1 | INTRODUCTION

Luxury and sustainability are one and the same. We create for the long run. That's what luxury is.

-Laurent Claquin, President of Kering Americas

Sustainable production and consumption have become important value-added cornerstones of business and marketing strategies at the epicenter of consumers' growing awareness concerning the detrimental environmental impacts of overconsumption patterns (Peattie, 2010; White et al., 2019). The mounting research on sustainable consumption has recurrently focused on purchase determinants of low-involvement and low-indulgence fast-moving consumer goods (FMCGs) such as natural foods (Chakraborty & Dash, 2023), fair-trade drinks (Gohary et al., 2023), eco-labeled household cleaning products (Lin & Huang, 2012), and energy-saving lightbulbs (Yan et al., 2021), among others. This ongoing interest in FMCGs inhibits our understanding of how sustainability influences the decision-making process of consumers for a wide spectrum of high-end goods and services reckoning that our knowledge of FMCGs cannot readily be transferred to luxury consumption settings (Osburg et al., 2021). Although research has expanded the scope of sustainable consumption across numerous industrial contexts, including but not limited to travel (Bhutto et al., 2022), tourism (Apak & Gürbüz, 2023), and digital technologies (Laukkanen et al., 2022), the luxury landscape has been surprisingly understudied.

Hitherto, equivocal connotations between the concepts of luxury and sustainability have inevitably constrained the study of sustainable luxury consumption, in which luxury is long coupled with ostentation and beyond-necessity consumption habits, whereas sustainability is linked to moderation, ethics, and the conservation of natural resources (e.g., Achabou & Dekhili, 2013). Yet, if both terminologies were mutually exclusive constructs, there would be no demand for sustainable luxury brands today (Vanhamme et al., 2023). In essence, the early thematic symposium (Osburg et al., 2021) and growing empirical base (e.g., Carranza et al., 2023; Pai et al., 2022) corroborate the optimistic view that luxury and sustainability go hand in hand as both concepts emphasize several common rudiments (e.g., craftsmanship, durability, rarity, and heritage). This development is accompanied by real-world practices; for instance, Louis Vuitton uses eco-friendly materials (e.g., organic cotton) and develops sustainable product lines to reduce its carbon footprint by 55%, during which Gucci has publicized making 100% of its raw materials traceable by 2025, juxtaposing luxury with sustainability in their business strategies (Park et al., 2022). In this regard, the term "sustainable luxury" is understood to encompass ethically and socially conscious design, production, and consumption. This concept focuses on rectifying several

perceived wrongs within the luxury industry, such as environmental degradation, human exploitation, and animal cruelty (Athwal et al., 2019; Bendell & Kleanthous, 2007). Sustainable luxury consumption thus signifies a meaningful intersection of luxury and sustainability, underscoring the transformation of luxury consumer behavior in response to the increasing global emphasis on sustainability. From a consumer's perspective, we define sustainable luxury consumption as the ability of individuals to consume luxury goods and services with sustainable attributes so as to enhance their social-environmental well-being without jeopardizing the ability of future generations to fulfill their own needs. This definition is congruent with the holistic perspective of sustainable development (United Nations, 2015) and past generic operationalizations of the construct (e.g., Amatulli et al., 2021; Pai et al., 2022).

As sustainable luxury practices are gaining traction in the marketplace, it becomes imperative for researchers to comprehend the reasons why consumers purchase sustainable luxury and what they think sustainable luxury is. This delineates the aim of the present research. Understanding these questions is important for multiple stakeholders. For consumers, the allure of luxury has traditionally been associated with indulgence and a demonstration of socio-economic status (Kim et al., 2022). This research is beneficial for them to align their status motives with growing environmental awareness, ensuring a balanced relationship between consumption aspirations and ecological imperatives. For luxury brands, the luxury market battle has transitioned from merely economic and financial factors (e.g., sales and profits) to embracing sustainable measures that meet the expectations of consumers (Shashi et al., 2021). This research is crucial for them to effectively hunt sustainable luxury consumers' evolving mindset (Peattie, 2001). Armed with this knowledge, luxury brands can adjust their strategies to improve green brand equity and ensure mutual benefit, aligning their products with consumer beliefs. For governmental bodies, sustainable luxury consumption extends beyond market dynamics, representing a notable shift in societal practices (Kunz et al., 2020). This research is essential for them to recalibrate policies and propel the society towards a future where luxury and sustainability are not antithetical but symbiotic. Such a shift may uphold the feasibility of the United Nation's 2030 Sustainable Development Goal (SDG-12) in the global luxury industry (United Nations, 2015). In summation, the conjoined stakes of these parties emphasize the essentiality of probing into the core values shaping sustainable luxury consumption.

At this juncture, the contemporary debate on sustainable luxury has revolved around the perceived fit of the two concepts (Osburg et al., 2021) and corporate social responsibility (CSR) communication practices (Amatulli et al., 2021); hence, individual-level factors guiding sustainable luxury engagement have received comparatively scant

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attention (see Athwal et al., 2019; Kunz et al., 2020; Shashi et al., 2021 for systematic reviews). This does not, however, negate the fact that behavioral responses towards luxury and sustainable goods can be strongly influenced by consumption value disciplines encompassing personal and social-adjustive components (White et al., 2019; Wiedmann et al., 2009). Accordingly, the question at stake is whether value perceptions motivate or demotivate consumers to purchase sustainable luxury. Past research on this question has predominantly remained exploratory and conceptual (Cervellon & Shammas, 2013; Hennigs et al., 2013; Jain, 2019; Kelleci, 2022). While some studies have provided preliminary empirical insights (Ali et al., 2019; Wang et al., 2021; Yang et al., 2022), they have only tested a small subset of value dimensions (e.g., exclusivity, hedonic, materialistic, and social values), and others seldom used a unified value-driven theoretical framework (e.g., Sun et al., 2022). Decisively, the direction and magnitude of focal effects in these former works are distorted and subject to measurement errors, as they utterly presume linear interactions between value perceptions and sustainable luxury purchases with simple regressions, thereby failing to account for other extraneous effects with nonlinear predictive modeling methods (e.g., neural networks) (for further reflection on this critique, see Wiedmann et al., 2009, p. 644). Besides, this past literature has left largely unmapped questions pertaining to the roles of boundary mechanisms (mediators and moderators) influencing consumers' ability to translate perceived values into actual usage of sustainable luxury products, which, in turn, could aid in bridging the salient value-action gap (Essiz et al., 2023). A final void to note is the paucity of sustainable luxury research probing cross-generational differences. Han and Kim (2020) noted significant variations between millennials (Gen Y) and Gen X in consumption behaviors of luxury brands: nevertheless. much less is known in the ambit of sustainable luxury (Kapferer & Michaut-Denizeau, 2020; Rolling & Sadachar, 2018), making it indispensable to consolidate opinions of these two cohorts, as they are expected to make up 88% of the global luxury sales by 2025 (Statista, 2023a). These gaps in the literature are tackled in this paper.

Drawing upon the preceding discourse, this research explores the roles of six consumption values (functional [FUV], social [SOV], emotional [EMV], epistemic [EPV], conditional [COV], and green [GRV]) on sustainable luxury purchase intention (PUI). The theory of consumption values (TCV) of Sheth et al. (1991) is used to empirically lay out how sustainable luxury choice behavior is a permutation of multiple value orientations. The TCV is a parsimonious micro-lens to quantify the multifaceted nature of sustainable luxury consumer behavior, reasoning that sustainable luxury products are often used to signal consumption value systems (Wang et al., 2021). Prior research aligned with the TCV underscores that the foundation of consumers' context-specific behavioral responses is elucidated with mediation and moderation processes (Chakraborty & Dash, 2023). In this paper, the TCV is scrutinized in conjunction with conspicuous ethical selfidentity (CES) as mediating and green advertising receptivity (GAR) as moderating factors to explicate the individual-level variables impacting the value-intention consistency. Examining the mediating effect of CES holds theoretical significance, cogitating that CES has been

recognized as a behavioral motivator (White et al., 2019) and is instrumental in understanding the determinants of (un)sustainable consumption patterns (Lavuri et al., 2023). Grounded in self-congruity and extended self-views, consumers typically choose products that align with their CES and that self-identity is a reflection of their attitudes, beliefs, and values (Belk, 1988; Sirgy, 1986). Prior research underscores the importance of linking consumption values to inner psychographic mechanisms (ethical self-conceptions) to encourage tangible sustainable behaviors (Van der Werff et al., 2013). This suggests that CES is an essential locus in the development of sustainable luxury behavioral patterns as well as can be amplified by consumer value judgments. Furthermore, GAR stands as a prominent boundary condition in the nexus between consumption values and PUI, given that green luxury advertising has a potent impact on consumers' purchase intentions (Dai & Sheng, 2022). Fundamentally, green advertising assists consumers in recognizing perceived utilities of sustainable luxury products (Sun et al., 2021). However, the extent to which consumers are receptive to this varies. Such variation gives rise to the question of what factors lead some consumers to be more greenreceptive than others? For green luxury communication to effectively influence behavior, it is imperative to decode both the process by which green ads are translated into sustainable actions and their interplay with consumers' intrinsic motivations (Apaolaza et al., 2022). Thus, variations in consumers' GAR, arising from value-based brand communication signals, accentuate the need to demonstrate the moderating effect of this construct within the TCV's nomological network. Finally, the paper seeks to shed light on the sensitivity of two generational cohorts (Gen Y vs. X) to sustainable luxury purchases in consort with CES and GAR.

The present research makes several unique theoretical, methodological, and managerial contributions to the existing literature. Theoretically, we provide a conclusive understanding of value perceptions and choice behavior in relation to sustainable luxury consumption within the empirical context of the United States (US). We do this by building an integrated theoretical model grounded in the TCV and demonstrating its predictive validity in the domain of sustainable luxury. Methodologically, we employ the partial least squares structural equation modeling (PLS-SEM) approach and substantiate its predictions with importance-performance map analyses (IPMAs) and deep learning-driven artificial neural network (ANN) models to present a more rigorous testing method that captures linear and nonlinear effects of behavioral responses vis-à-vis sustainable luxury choices. Our choice of a hybrid PLS-SEM-ANN approach is motivated by both the theoretical need to capture the complexity and multidimensionality of sustainable luxury consumption more accurately and the methodological advantages of predictive accuracy, interpretability, fault tolerance, and validation offered by ANNs over other machine learning methods (e.g., cluster analysis and support vector machines) (Haykin, 2009). Managerially, we offer practical actions for luxury brands seeking to optimize their sustainable business strategies, containing enhanced sustainable product positioning and effective management of green communication through segmentation based on multiple value perceptions, CES, advertising receptivity, and

demographic differences. In the remaining parts, we consecutively provide literature review/theoretical background (Section 2) and conceptual grounds (Section 3) for our hypotheses. Next, we report the methodological design (Section 4) and analysis (Section 5) of the empirical study, followed by the discussion of findings (Section 6) along with their implications, limitations, and future research avenues (Section 7). In the end, we deliver concluding remarks (Section 8).

2 | LITERATURE REVIEW AND THEORETICAL BACKGROUND

2.1 | Current perspectives on sustainable luxury consumption

At first glance, the principles and objectives of luxury consumption might appear to clash with those of sustainability. Ever since Bendell and Kleanthous (2007) pointed out the concept of sustainable luxury as a separate construct, scholarly research has been actively debating whether luxury consumption ideologically aligns with sustainability. The ongoing discourse presents two contrasting philosophical viewpoints: (1) an old school-negative perspective portraying luxury and sustainability as two incongruent concepts (e.g., Achabou & Dekhili, 2013)—and (2) a new school—positive perspective showing their compatibility (e.g., Pai et al., 2022). On the one side, the negative perspective of sustainable luxury is rooted in the simplistic postulation that this contradiction relates to their DNA: Luxury consumption is predominantly linked to materialism, personal gratification, and conspicuousness, while sustainability centers around ethics, altruism, restraint, and sobriety (Bendell & Kleanthous, 2007), From this perspective, Davies et al. (2012) showed that if luxury consumers think a non-sustainable luxury product offers more prestige, they might choose it over a sustainable alternative. Further, Achabou and Dekhili (2013) found that using sustainability elements (e.g., recycled materials) in luxury products can adversely influence how consumers view them. This finding argues that when a luxury brand emphasizes the concept of sustainability, it counteracts some of the traditional values or needs linked to luxury consumption. Later on, Kapferer and Michaut-Denizeau (2014) contended that luxury consumption goes against the tenets of sustainable development, especially when consumers view luxury as superficial and a source of societal discord.

On the other side, the positive perspective of sustainable luxury offers a more optimistic outlook by suggesting that sustainability features can enhance the appeal of luxury brands when it comes to consumer evaluations. A linchpin of this view is that luxury serves as the ideal basis for products upholding environmental and social values (Amatulli et al., 2021). In backing up this view, recent studies have broken down the concept of sustainability into sub-dimensions, demonstrating that certain sustainability elements align with luxury values. Drawing from this contextualization, Pai et al. (2022) argued for the compatibility of sustainable and luxury consumption, as they both anchored in the key values of craftsmanship, rarity, and durability. Embracing these luxury values might indirectly suggest a more

sustainable consumption approach through the preservation of natural resources. This view is further reinforced by Park et al. (2022), who demonstrated that perceived product scarcity can effectively enhance luxury-sustainability fit and strengthen the attitude-willingness to pay relationship. Likewise, Alghanim and Ndubisi (2022) emphasized that consumers often observe less disparity between luxury and sustainability, noting that luxury goods are frequently viewed as superior-quality and long-lasting. These traits complement the features of sustainable consumption. Additionally, premium prices and timelessness associated with luxury goods suggest a lower frequency of consumption and prolonged utility over time, allying once again with notions of sustainability and self-transcendence (i.e., enhanced affinity for the environment and the well-being of others) (Carranza et al., 2023; Shashi et al., 2021). While no clear consensus has been achieved regarding these two controversial viewpoints, the negative perspective is mostly embodied in earlier stream of studies (e.g., Kapferer & Michaut-Denizeau, 2014). Promisingly, more recent works have repeatedly found empirical evidence to advocate the positive perspective, as they investigate the factors motivating consumers to gravitate towards sustainable luxury (Kim et al., 2022; Vanhamme et al., 2023; Wang et al., 2021). This is sensible considering that the global sustainable luxury market is witnessing a surge in interest, which is positively shifting new luxury consumers' social and environmental attitudes.

Putting aside the philosophical disputes surrounding sustainable luxury, the guestion of whether consumers perceive a match between these two concepts also hinges on their intrinsic motivations and identities (e.g., Athwal et al., 2019; Vanhamme et al., 2023). Table 1 offers a contextualized snapshot of the nascent research stream that addresses this topic and positions the present research. To delve into this conundrum, Cervellon and Shammas (2013) employed the visual elicitation method with participants from Canada, the United Kingdom, France, and Italy. Their findings indicated that sustainable luxury value could be divided into three main categories: socio-cultural, ego-centered, and eco-centered. In a conceptual study, Hennigs et al. (2013) classified luxury sustainability values into four segments: financial, functional, individual, and interpersonal. Building on the self-determination theory, Ki and Kim (2016) demonstrated that two intrinsic values, specifically seeking personal style and social consciousness, were positive predictors of sustainable luxury purchases. Using Hofstede's cultural dimensions, Wang et al. (2021) found that hedonic needs augmented the propensity of UK and Chinese consumers to purchase sustainable luxury. Collectively, this past literature espouses that consumers may prioritize different value motives when purchasing sustainable luxury. While some may desire social recognition for their engagement, others may seek personal benefits. As we navigate through this discourse, it is evident that the relationship between luxury and sustainability is multidimensional, and inconclusive preliminary findings detailed in Table 1 left the door open for other value-based determinants of sustainable luxury consumption. By seeing luxury and sustainability as harmonious, it becomes possible to realize the cohesive value-driven proposition of sustainable luxury brands. To move this debate forward, we thus

Sustainable luxury literature on value perceptions: positioning the present research. **TABLE 1**

| Author(s) and year | Value perceptions guiding sustainable luxury preferences | Product category domain | Theoretical background | Methodological choices | Research origin | Mediator(s) and moderator(s) | Control variables |
|---------------------------------|--|-------------------------------|---|---|---|--|--|
| Cervellon and Shammas (2013) | (•) Ego-centered values (np) (•) Socio-cultural values (np) (•) Eco-centered values (np) | S/N | Grounded theory. An inductive framework. | Qualitative exploratory study conducting interviews: Zaltman metaphor elicitation technique (ZMET). Snowball sampling: 32 clients of luxury brands. | United Kingdom, Canada, France, and Italy | Υ V | V/A |
| Hennigs et al. (2013) | (*) Financial value (np) (*) Functional value (np) (*) Individual value (np) (*) Social value (np) | S/Z | Conscientious consumption and perceived consumer value typologies. | Conceptual study developing a framework on value-based sustainability excellence. | ∀ /Z | X/A | V/A |
| Ki and Kim (2016) | (*) Seeking personal style (+) (*) Environmental consciousness (ns) (*) Social consciousness (+) | SLFPs. | Self-determination theory. | (•) Quantitative study utilizing the online survey method: CB-SEM. (•) Judgmental sampling: 452 luxury consumers. | Caucasian (70.8%) | N/A | N/A |
| Ali et al. (2019) | (*) Happiness (ns) (*) Social recognition (ns) (*) Uniqueness (+) (*) Horizontal/vertical individualism and collectivism (+) | Green luxury sports car. | Costly signaling theory. | Quantitative study utilizing the online survey method: CB-SEM. Purposive sampling: 507 potential BMW customers. | China and Germany | Moderators: Materialism and cultural values. | (*) Age (*) Gender (*) Education (*) Income (*) Marital status (*) Country of origin |
| Jain (2019) | (•) Self-oriented values (self-directed, stimulation, hedonic, universalistic) (np) (•) Others-oriented values (power, achievement, security, conformity, tradition, benevolence) (np) (•) Economic value (np) | SLFPs. | Theory of planned behavior and Schwartz's theory of basic human values. | Conceptual study developing a framework to classify value-based factors related to purchase behavior of sustainable luxury. | ∀ /Z | N/A | N/A |
| Wang et al. (2021) | (•) Exclusivity value (ns) (•) Conformity value (ns) (•) Hedonic value (+) | S/N | Hofstede's cultural framework. | Quantitative study utilizing the online survey method: CB-SEM. Quota sampling: 677 luxury consumers. | China and the United Kingdom | Ψ' Z | (*) Age (*) Gender (*) Education (*) Income (*) Employment status (*) Price sensitivity |
| | | | | | | | (Continues) |

(Continues)

TABLE 1 (Continued)

| Author(s) and year | Value perceptions guiding sustainable luxury preferences | Product category domain | Theoretical background | Methodological choices | Research origin | Mediator(s) and moderator(s) | Control variables |
|--------------------------------|---|--------------------------------------|--|--|-----------------|---|---|
| Sun et al. (2022) | (•) Conspicuous value (+) (•) Esthetics value (+) (•) Quality value (+) | Luxury vegan leather products. | Theory: N/S. | Quantitative study based on an online survey and linear regression analyses. Non-probability sampling: 270 millennial consumers. | United Kingdom | A/N | X X |
| Yang et al. (2022) | (•) Value for money (+) (•) Hedonic value (ns) (•) Social value (+) | SLFPs. | The theory of perceived value. | (*) Quantitative study utilizing the online survey method: PLS-SEM. (*) Convenience and snowball sampling: 935 luxury consumers. | China | ∀ X | ₹ Ž |
| Alghanim and Ndubisi (2022) | (•) Conspicuous value (+) (•) Unique value (+) (•) Quality value (+) (•) Social value (+) (•) Emotional value (-) | SLFPs. | Luxury-seeking consumer behavior framework. | Quantitative study based on an online survey: Hierarchical regression and stepwise discriminant analyses. Onvenience sampling: 348 luxury consumers. | Qatar | Moderator: Monthly income. | X, X |
| The present research | (•) Functional value (+) (•) Social value (ns) (•) Emotional value (+) (•) Epistemic value (+) (•) Conditional value (+) (•) Green value (+) | SLFPs. | Theory of consumption values. | (*) Quantitative study utilizing the online survey method: PLS-SEM-ANN-IPMA approaches. (*) Purposive and quota sampling: 894 luxury fashion consumers. | United States | (•) Mediator: conspicuous ethical self- identity. (•) Moderator: green advertising receptivity. | (•) Age (generational disparities) (•) Gender (•) Education (•) Income (•) Employment status (•) Perceived social class |

Abbreviations: CB-SEM, covariance-based structural equation modeling; N/A, not available; N/S, not specified; ns, not significant; np, no prediction on the direction of influence; SLFPs, sustainable luxury fashion products; +/-, positive/negative effect. coincide with the positive perspective and aim to find a common ground between luxury and sustainability by predicting the pertinence of six value perceptions based on the TCV.

2.2 | Theory of consumption values (TCV)

Values have traditionally been regarded as quintessential, higherorder constructs in understanding the motivations behind behavioral responses and conceptualized as trans-situational goals that function as guiding doctrines in an individual's life, with varying degrees of importance and performance (Schwartz & Bilsky, 1987). Shifting consumers to behave sustainably necessitates cultivating their foundational value systems, as the choice to engage in philanthropic actions epitomizes the embodiment of consumption values (White et al., 2019). Sheth et al. (1991) introduced the TCV, which elucidates the rationale behind consumers' decisions to purchase or abstain from a specific product, product category, brand, or service. The TCV posits that consumer preferences revolve around five generic value typologies: (1) functional, (2) social, (3) emotional, (4) epistemic, and (5) conditional. These values indicate the degree to which consumer needs are fulfilled through the comprehensive evaluation of net utility or satisfaction related to a consumption situation.

Fundamentally, the TCV is grounded in three core propositions: (1) Consumer choice is influenced by multiple consumption values, (2) the impact of each value varies significantly in any given consumption context, and (3) consumption values are independent of one another (Sheth et al., 1991). In agreement with the second proposition, this study focuses on the luxury fashion context. Indeed, sustainability practices are pertinent in luxury fashion, as evidenced by the assortment of its products, services, and movements (e.g., slow fashion) (Bendell & Kleanthous, 2007). However, the central emphasis of this paper is not to argue whether the luxury fashion sector can genuinely attain sustainability. What is of interest to this paper is to undertake a systematic examination of consumers' values towards sustainable luxury for fashion products, aligning with the relevant research trajectory to offer a more targeted measurement approach (see Table 1, product category domain). Concerning the third proposition, research suggests that incorporating additional context-specific values can bolster the explanatory capacity of the TCV in sustainable consumption (Khan & Mohsin, 2017; Tanrikulu, 2021). As such, this study integrates Haws et al.'s (2014) green consumption value within the framework of the TCV, aiming to amplify its predictive validity. The inclusion of GRV as a sixth value dimension is theoretically rigorous since Haws et al. (2014) position GRV within a broader nomological net that encompasses not only the preservation of environmental resources but also financial, psychological, and physical resources (e.g., sustainable luxury items). It is a conceptually distinct value from the other five values in the TCV and facilitates a more in-depth comprehension of luxury consumers' moral responsibilities and environmental concerns. We will fold up this construct in Section 3.6. Cogently, all consumption values will serve as independent variables in this study.

Taken together, we choose the TCV as a fitting theoretical lens for three reasons. First, luxury is a fuzzy concept that is often aggregated by multiple value dimensions: individual (e.g., emotional and hedonic), functional (e.g., quality and utilitarian), social (e.g., prestige and conspicuous), and financial (e.g., price) aspects (Apaolaza et al., 2022; Wiedmann et al., 2009). The value-based dimensions of the TCV largely encompass these aspects, capturing the perceived utility derived from both self and social considerations. Reflecting on the personal and interpersonal motivations for sustainable luxury consumption (e.g., Ali et al., 2019), it is reasonable to posit that different consumer groups would have varying perspectives on the consumption value of sustainable luxury brands and products. In this regard, the TCV allows us to thoroughly comprehend the differences in cognitive and affective behavioral responses to sustainable luxury choices. Second, the TCV is applicable to decisions involving a broad spectrum of product types (e.g., consumer durables and nondurables) (Sheth et al., 1991). It has proven its ability to predict choice behavior in over 200 consumption contexts, including low-and highinvolvement sustainable product categories such as organic foods (Chakraborty & Dash, 2023), plant-based meat alternatives (Bhattacharyya et al., 2023), green information technology products (Biswas & Roy, 2015), and green electric vehicles (Bhutto et al., 2022), among others. While the TCV predominantly predicts consumers' behavioral patterns, it would be an oversimplification to assert that the effects of value dimensions are consistent across all types of sustainable product categories. This demonstrates the relevance of applying the TCV to context-specific (high-end) sustainable consumption settings, thus motivating the current study to contextualize the value components of sustainable luxury fashion products (SLFPs). Third, albeit TCV constructs may act as precursors to sustainable consumption behaviors (e.g., Chakraborty & Dash, 2023; Srivastava & Gupta, 2023), researchers have not previously incorporated the TCV to predict sustainable luxury consumption. The preceding discourse suggests that the role of each value may undergo positive or negative alterations within the context of sustainable luxury. Therefore, it is imperative to discern their changing roles to understand the characteristics of sustainable luxury consumers. While other generic value typologies (e.g., Schwartz's theory of basic human values and Hofstede's cultural dimensions) (see Table 1) can be useful in understanding sustainable luxury consumer behavior from a broad perspective, they may not fully capture the nuances of product-based consumption values. This provides an additional rationale for employing the TCV as the foundational framework of our study.

2.3 | Inclusion of additional constructs in the TCV

Strictly speaking, TCV posits that the relationship between consumption values and behavioral intentions follows a causal chain

 $^{^1}$ With our definition of sustainable luxury consumption in mind (see Section 1), we refer to SLFPs as luxury fashion goods that utilize eco-friendly raw materials and/or are created through socially responsible processes.

(i.e., a direct link), in which consumers seek to maximize their utility during the decision-making process (Sheth et al., 1991). From this perspective, some sustainable consumption theorists view consumer values as closely correlated, if not wholly conterminous with behaviors (e.g., Peattie, 2010). However, it is also evident that sustainable purchase decisions are not solely determined by consumption values, which highlights the ubiquitous yet elusive value-behavior discrepancy (i.e., green gap phenomenon) (Chaihanchanchai & Anantachart, 2023). In the context of sustainable luxury consumption, this discrepancy transforms into an even more intricate valuebehavior paradox. For instance, past research indicates that while many luxury consumers profess a staunch belief in sustainability, their purchase behaviors do not consistently mirror this commitment (Park et al., 2022). This inconsistency can largely be attributed to ideological distinctions in the notions of luxury and sustainability (see Section 2.1), resulting in situations where other factors (e.g., psychographic, contextual, social, and cultural) act in conjunction with consumers' intrinsic values.

Given this backdrop, TCV's linear interpretation does not encompass processing and boundary conditions, which might alter the value-action link. To push the frontiers of TCV and understand psychographic factors by which value perceptions shape purchase intention, this study incorporates CES and GAR. These constructs may not only enrich the TCV framework but also help to navigate the complexities of sustainable luxury purchasing. While TCV rationalizes the question of "why" consumers opt for sustainable luxury, CES and GAR shed light on the "how" aspect, unraveling the interplay between conspicuous ethical stances, receptivity to external marketing stimulus, and value perceptions that guide purchasing decisions (Bailey et al., 2016a; Van der Werff et al., 2013). Therefore, this dual integration sets the stage for a more behaviorally precise model of sustainable luxury consumption.

2.3.1 | Conceptualization of CES

From a cognitive perspective, self-identity is a multifaceted concept that reflects an individual's self-perception and awareness (Sharma et al., 2020). It is per se contingent on aspects such as possessions, feelings, goals, and habits, among others (see Belk, 1988 for extended self-formulation). As seminally argued by the identity theory, consumers can possess multiple identities varying in scope and abstraction levels (e.g., behavior-specific vs. generic), depending on the consumption context (see Burke et al., 2003, Chapter 13). Focusing on behavior-specific identities (e.g., being an ethical luxury consumer) allows for a more nuanced understanding of identity-relevant sustainable actions (Chen, 2020). To wit, our conceptualization of CES is context-specific rather than generic identity, akin to Van der Werff et al.'s (2013) operationalization. We refer to it as the extent to which ethical considerations and environmental issues are part of consumers' self while making luxury consumption choices and/or the degree to which luxury consumers consider themselves to be ethically responsible.

Building on early TCV-based suppositions, we concur with Qasim et al. (2019) that consumption values are closely tied to consumers' sense of self, creating a foundation for understanding enduring ethical self-perception. Following the value-identity-behavior hierarchical pathway, research supports that consumers' ethical selves regarding the environment partially or fully mediate the influence of consumption values on sustainable behavior, as these ethical selves embody self-driven motivations and beliefs underlying such actions (Bhutto et al., 2022). Therefore, it is compelling to test CES as both a precursor to consumption values and a mediator between consumption values and PUI. We will open up this rationale in Section 3.7.

2.3.2 | Conceptualization of GAR

Marketers use green advertising strategies to engage in meaningful conversations with consumers and sustain brand loyalty (Rizomyliotis et al., 2021). Operating as an individual difference factor, GAR is conceptualized as "the extent to which consumers pay attention to and are favorably disposed and responsive to advertising that uses green messages in the marketing of products or a company itself" (Bailey et al., 2016a, p. 334). From an epistemological perspective, Sun et al. (2021) postulate that signaling theory enriches our comprehension of GAR. Grounded in the information economics literature, signals are used by one party to convey information to another, aiming to mitigate information asymmetry (Spence, 1973). When applied to green advertising, factors such as value-based green appeals or messages serve as signals, conveying information on a product's environmentally friendly attributes and helping consumers to form inferences about the value of the product. These could potentially minimize product risk and lessen consumer ignorance if signals are deemed credible (Atkinson & Rosenthal, 2014). Upon encountering green advertising cues (e.g., slogans), consumers are expected to form or activate feelings and judgments that shape their receptivity and behavioral reactions to the luxury brand (Mo et al., 2018; Rahman & Nguyen-Viet, 2023; Septianto et al., 2023). This receptivity, however, is not uniform across all consumers. To some, such signals represent authentic sustainability efforts, while to others, they might appear as mere corporate greenwashing. This subjectivity in consumer perspectives makes the epistemological grounding of GAR both vibrant and captivating, driving our interest to explore its significance in sustainable luxury consumption.

Transitioning to a methodological viewpoint, it is thus imperative to understand individual factors that GAR interacts with to encourage sustainable luxury purchases. Each consumer navigates the luxury market with a unique set of values and experiences that heavily shape their buying decisions (Shashi et al., 2021). Considering that not all advertising signals or cues are perceived uniformly (Atkinson & Rosenthal, 2014), their resonance might differ depending on consumption values. For instance, a consumer who places a strong emphasis on environmental conservation might react differently to the same advertising than someone who prioritizes immediate functional utility or emotional benefits. To reiterate, individual differences

in affective and cognitive elaborations due to green luxury advertising are expected to shape the relationship between value perceptions and attitudinal responses to sustainable purchasing (Bailey et al., 2016b; Tewari et al., 2022). This points to GAR's propensity to moderate the link between consumption values and PUI, which will be revisited in Section 3.8.

3 | CONCEPTUAL MODEL AND HYPOTHESES DEVELOPMENT

Drawing on the background outlined above, the theoretical rationale for our conceptual framework is envisaged (see Figure 1). It builds on the TCV in the context of sustainable luxury fashion. In what follows, we propound the details of the constructs and the conceptual/empirical reasoning underlying their interconnections.

3.1 | Functional value (FUV)

FUV relates to a consumer's perception of a product's or service's utilitarian (i.e., performance) and functional benefits (Sweeney & Soutar, 2001). It directly influences market demand and operates as the principal benchmark for consumers when evaluating sustainable

product choices (Bhattacharyya et al., 2023). Within the luxury consumption literature, utilitarian factors such as superior quality, durability, craftsmanship, and rarity are identified as integral to luxury products, ultimately determining FUV (Jain, 2019; Wiedmann et al., 2009). Regarding sustainable luxury fashion, Hennigs et al. (2013) elucidated that sustainability excellence in luxury brands predominantly arises from consumers' subjective expectations of FUV. There is also evidence suggesting that exceptional quality in luxury goods can improve the perception of the luxury-sustainability fit. For instance, Park et al. (2022) recently demonstrated the positive influence of exclusiveness and perceived quality on the attitude-behavior relationship for sustainable luxury goods. Likewise, durability is a core component of both luxury consumption and sustainable development (Cervellon & Shammas, 2013). Matching this sentiment, Kelleci (2022) conceived that sustainable luxury fashion hinges on emotional durability, inheritability, and the vintage trend, emphasizing more contemplative processes that counteract "planned obsolescence"-a concept premeditated to make products less appealing over time or with a certain level of use.

Moreover, FUV impacts consumers' self-brand connection in luxury consumption, whereby consumers have sought to associate the importance of product quality with their self-identity (Lu & Ahn, 2022). From this perspective, we argue that consumers may utilize sustainable luxury fashion to integrate symbolic meaning into their

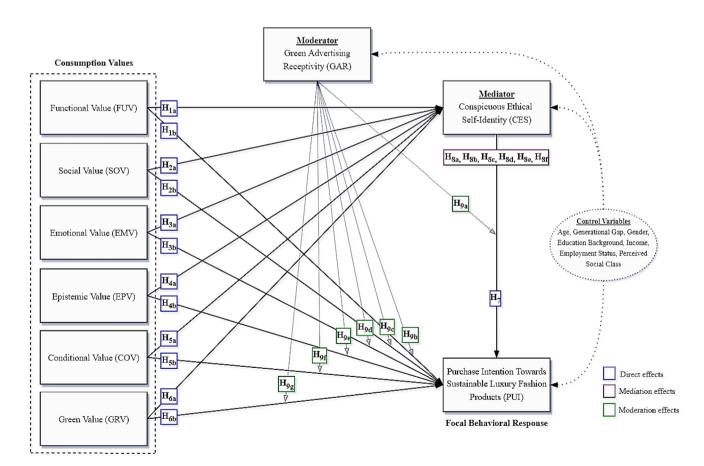


FIGURE 1 The theoretical conceptual framework and hypotheses.

CES. This is consistent with past research suggesting that the functional attributes of sustainable products enable consumers to express their ethical selves and mirror their belief systems (Bhutto et al., 2022). This conjecture is plausible since sustainable luxury fashion incorporates premium craftsmanship, employs traceable materials, and adheres to sustainable development principles (Kunz et al., 2020). Such practices can resonate with consumers' self-appraisal and conspicuous ethical selves. Building on this past research, we extrapolate that as consumers value the functional utility of SLFPs, they will be more predisposed to nurture their ethical selves and exhibit favorable behavior towards purchasing sustainable luxury fashion. In sum, we formulate:

H_{1(a-b)}. FUV positively relates to (a) CES and (b) PUI.

3.2 | Social value (SOV)

SOV pertains to the perceived utility that consumers derive from their affiliations with social, demographic, and cultural groups (Sheth et al., 1991). It is connected to the maintenance of a positive social image (i.e., prestige), and the degree to which a product enhances social image significantly impacts sustainable consumer behavior (Peattie, 2010; Yang et al., 2022). Prior research advocates that social groups routinely influence aspirations and behavioral norms, with luxury consumers driven by the bandwagon effect often emulating the opinions of their reference groups or displaying collective actions to be recognized as part of the group (Alghanim & Ndubisi, 2022; Bearden & Etzel, 1982). In support of this contention, SOV can promote a shift towards more sustainable practices through processes of peer conformity and overt interpersonal interactions, which sustain reciprocal environmental consumer socialization (Essiz & Mandrik, 2022).

Within the context of this research, purchasing sustainable luxury is deemed socially acceptable and indivisibly allied to social well-being (Pai et al., 2022), conceivably motivating consumers to adhere to societal norms and seek social endorsement. Accordingly, when a specific social group adopts SLFPs, its members may be more prone to embrace the group's ethical stance on sustainability. By openly purchasing SLFPs as valued material possessions, consumers can carve an extension of their selves, fostering their connection with the desired reference group (Belk, 1988). We deduce that this reference group effect could influence the choice of attributes (e.g., sustainable features) primarily attached to the luxury product and subsequently transferred to the consumer, ultimately helping to derive a socially constructed, conspicuous ethical self-concept that gives precedence to sustainable luxury consumption. In this manner, reference group expertise may aid consumers in acquiring product knowledge and mitigating the perceived risk associated with their impressions and acceptance of SLFPs (Essiz et al., 2023). Previous research in the general sustainable fashion domain reinforces this stance, documenting the positive correlation between social norm identification and consumer buying behavior (McNeill & Moore, 2015). In light of the

preceding review, SOV has the potential to cultivate a collective mindset that supports the development of CES and the acquisition of sustainable luxury fashion. Hence, we propose:

H_{2(a-b)}. SOV positively relates to (a) CES and (b) PUI.

3.3 | Emotional value (EMV)

EMV designates the perceived utility gained from a product's or service's capacity to evoke feelings of elation or induce satisfaction in affective states (Sheth et al., 1991). It is linked to hedonic needs and serves as a powerful driving force for consumers to engage in sustainable consumption, as previous studies have demonstrated its positive influence on the choice of sustainable products (Chakraborty & Dash, 2023; Khan & Mohsin, 2017). Concurrently, prior luxury research has shown that consumers mostly seek affective benefits (e.g., hedonic motives) and sensory pleasures in luxury experiences (Han & Kim, 2020). Sustainable luxury fashion consumption ratifies these utilities. Within the framework of this study, it is predicated that SLFPs cause less harm to the environment and are often perceived as more authentic compared to traditional luxury fashion alternatives (Athwal et al., 2019). Therefore, the moral satisfaction of protecting the environment by purchasing SLFPs can assist consumers in deriving EMV. In parallel with this argument, past literature suggests that sustainable luxury fashion has the licensing power to absolve consumers from psychological costs (e.g., the feeling of guilt) (Wang et al., 2021) and provide added intangible emotional benefits (e.g., pride, gratitude, and joy) (Septianto et al., 2021).

Building on this discussion, we conceive that these emotional utilities have the capacity to enhance consumers' CES and PUI. By adopting SLFPs, consumers may be involved in a positive feedback loop that ties their EMV with CES and PUI. This effect is plausible to anticipate given that sustainable luxury brand communication often incorporates distinctive narratives and storytelling to craft emotional attachments between the product and the consumer (Kim et al., 2022). Arguably, EMV can play a role in alleviating pre-purchase dissonance and contribute to a deeper sense of conspicuous ethical identity, aiding consumers to more readily associate SLFPs with their favorable affective responses. Overall, sustainable luxury fashion purchases tend to promote positive emotions linked to self-appraisal and self-esteem (Pai et al., 2022), as consumers believe they contribute to mindful change by endorsing sustainable luxury brands. This feeling of empowerment should predispose consumers with a higher degree of EMV to hold stronger levels of CES and PUI. We thus hypothesize:

H_{3(a-b)}. EMV positively relates to (a) CES and (b) PUI.

3.4 | Epistemic value (EPV)

EPV is inextricably linked to the perceived utility that consumers gain from a product's or service's ability to stimulate curiosity, offer

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novelty, and satisfy knowledge-seeking tendencies (Sheth et al., 1991; Tanrikulu, 2021). The inclination of consumers to fulfill their knowledge-seeking needs vis-à-vis product attributes, compatibility, and novelty has been demonstrated to positively influence their behavioral intentions to pay a green price premium (Biswas & Roy, 2015; Chakraborty & Dash, 2023). In recent studies, sustainable luxury consumption is positively correlated with uniqueness (Alghanim & Ndubisi, 2022) and innovativeness (Park et al., 2022). Intriguingly, Amatulli et al. (2021) found robust evidence that sustainable luxury products are perceived as more atypical (i.e., unusual) options versus mass-market luxury products. This atypicality, associated with design features and sustainability-oriented communication, enhances consumers' perceived uniqueness and encourages high uptake of sustainable luxury. Accordingly, we deduce that consumers can derive a sense of novelty (i.e., EPV) from SLFPs by valuing their atypical characteristics (e.g., sustainable fabrics and non-toxic dyes) and communication aspects.

In a similar vein, inquisitiveness arises from consumers' interest in learning about the features of SLFPs. Luxury brands that emphasize sustainability provide details about the product's history, manufacturing methods, and packaging in both digital and physical stores (Kelleci, 2022), which may foster high EPV among consumers, particularly when the information provided is perceived as transparent. In turn, this could result in an overlap between knowledge acquisition and ethical self-awareness, where concrete signals associated with sustainable luxury fashion can play a part in activating CES (Carranza et al., 2023). Spotting that CES is partially shaped by consumers' subjective knowledge with reference to morally acceptable, just, and right consumption habits (Essiz et al., 2023), the lack of sustainable luxury product information may result in value-behavior inconsistency. Concurring with White et al. (2019), we argue that the pursuit of new knowledge about sustainable luxury fashion can allow consumers to comprehend the self-benefits of SLFPs and offset self-threatening information, thereby narrowing the discrepancy between EPV and PUI. Simultaneously, this knowledge-seeking tendency may shape the cohesive core of CES, enabling self-congruent and self-reflective decisions. In light of this chain of reasoning, we put forth the ensuing postulates:

H_{4(a-b)}. EPV positively relates to (a) CES and (b) PUI.

3.5 Conditional value (COV)

COV represents the perceived utility obtained in specific situations circumstances confronted by the decision-maker (Sheth et al., 1991). Consumer research has long recognized that situational variables can significantly influence behavioral acts (Belk, 1975). Sustainable products exhibit subtle conditional associations (see Biswas & Roy, 2015; Khan & Mohsin, 2017 for details). Added benefits of SLFPs (e.g., well-being and positive environmental impact) over general luxury alternatives are likely to enhance their perceived COV (Kunz et al., 2020). In parallel with past conceptualizations of COV (Bhutto

et al., 2022; Lin & Huang, 2012), we contend that multiple situational factors (i.e., product availability, promotional incentives, regulatory shifts, and deteriorating environmental conditions) can encourage sustainable luxury fashion consumption. This is reasonable to anticipate since SLFPs are often purchased for special occasions (e.g., to support the slow fashion movement) (McNeill & Moore, 2015). Similarly, consumers may sensitize conditional benefits in accessing limited-edition, sustainably produced luxury fashion items. This limited availability can cater to their longing for rarity (Park et al., 2022). In recent research, COV has been shown to have a considerable positive effect on purchase intention for environmentally friendly products (Chakraborty & Dash, 2023). Since SLFPs broadly fall under the environmentally friendly product category, they are subject to similar buyer perceptions.

While there is a scarcity of literature examining the connection between conditional factors and ethical self-identities, we argue that the aforementioned situational dynamics promoting COV will ultimately support consumers' CES in sustainable luxury fashion. This aligns with past research on moral identity centrality, which suggests that situational cues can activate or prime the ethical self-schema and modify identity functioning, as consumers typically react to external stimuli (e.g., promotions), in accordance with their overall selfconception (Aguino et al., 2009). Owing to the fact that regulations and subsidies evolve to promote sustainable practices in the US luxury fashion industry (Vanhamme et al., 2023), consumers may also gain COV by aligning their purchase decisions with such changes. This can enhance their sense of social responsibility, thereby having a direct impact on CES. In a similar vein, opting for SLFPs in reaction to unsustainable circumstances (e.g., fast fashion conundrum) may bolster consumers' CES, as making responsible trade-offs in these situations can restore self-worth and provide means to facilitate self-improvement (Rustagi & Shrum, 2019). Based on these grounds, we posit:

H_{5(a-b)}. COV positively relates to (a) CES and (b) PUI.

3.6 Green value (GRV)

GRV herein captures consumers' inclination to express the value of environmental commitment and protection through their luxury fashion consumption habits-akin to the operationalization of Haws et al. (2014). Previous research has shown that GRV aligns positively with overarching ethical principles such as environmental stewardship, intergenerational equity, and generativity, all of which are strongly linked to one's ethical self-perception (Essiz & Mandrik, 2022; Shiel et al., 2020). Additionally, consumers with a high level of GRV tend to be more conscientious users of physical resources and have a higher propensity to purchase sustainable products and services (Haws et al., 2014). These consumers demonstrate greater green value-behavior consistency, enhanced green brand trust, and communication responsiveness (Bailey et al., 2016b; Essiz et al., 2023). Upon closer examination, the positive effects of GRV are expected to persist in the setting of sustainable luxury fashion. A stronger GRV can

lead consumers to process information about SLFPs at a more concrete level using motivated reasoning and signaling an active engagement in shaping a more sustainable world, which may stimulate self-growth and a sense of agency among luxury consumers—a supposition in parallel with Haws et al. (2014).

In the relevant literature, Cervellon and Shammas (2013) have conjectured that eco-centric values and doing good for the environment, society, employees, and consumers are critical prerequisites for sustainable luxury fashion. Likewise, Ki and Kim (2016) stressed the importance of environmental consciousness in sustainable luxury fashion decisions. Vanhamme et al. (2023) contributed to the ongoing dialog, highlighting that sustainable luxury purchases among US consumers are primarily driven by altruistic motives and a genuine concern for resource conservation. These efforts give us the motivation to quantify the relative significance of GRV in the taxonomy of sustainable luxury fashion. Building on this review, we anticipate that GRV can both constitute a substantial component of consumers' conspicuous ethical identities and reinforce their decision to purchase SLFPs. Specifically, we advocate that if environmental protection is a guiding principle in a luxury consumer's life (i.e., the stronger one's GRV), the individual will be more driven to act upon his/her GRV in sustainable luxury fashion consumption. In turn, one should perceive himself/herself as a more ethically responsible consumer and predispose a higher likelihood of purchasing SLFPs. This leads to the following hypotheses:

H_{6(a-b)}. GRV positively relates to (a) CES and (b) PUI.

3.7 Roles of CES in sustainable luxury

Prior research suggests that CES is a crucial determinant of sustainable actions, occasionally eclipsing the predictive power of the original elements of the TCV model (Bhutto et al., 2022; Sharma et al., 2020). In the fashion domain, Carranza et al. (2023) have recently confirmed the impact of so-called "green identity" as the central enabling factor of sustainability-luxury fit. This concurs with the identity theory (Burke et al., 2003), reckoning that consumers can utilize sustainable luxury purchasing as a means to articulate their self-defining principles. In this way, CES can be viewed as a behavioral stimulant, leading us to envisage that individuals with a stronger CES will likely have a positive inclination towards SLFPs.

Fundamentally, we next anticipate that CES will play an anchoring role in sparking PUI. To wit, consumption values are more likely to result in sustainable luxury consumption when they align with the consumers' conspicuous ethical self-image. Qasim et al. (2019) and Bhutto et al. (2022) provide some preliminary support for our reasoning by documenting the mediating role of CES within the TCV framework, although they mainly focused on less indulgent green choices (e.g., organic foods). Such interconnection between value perceptions, conspicuous ethical self, and sustainable luxury purchasing can be more broadly envisioned within the theoretical frame of value-identity-behavior consistency (Lavuri et al., 2023). Delving into this

logic in more detail, our argument for the mediation effect of CES draws from relevant works concerning the psychological understanding of the self (e.g., Chen, 2020; Sharma et al., 2020). This past research shows that our CES, or how we label ourselves, allows us to reflect on our individual and product-related beliefs, which, in turn, influences sustainable purchasing decisions. Therefore, it is plausible that choosing a sustainable luxury product over a non-sustainable luxury alternative could enhance conspicuous ethical self-worth and heighten the impact of consumption values on PUI. The selfaffirmation hypothesis provides supporting evidence for this expectation (Sherman & Cohen, 2006). In tandem, White et al. (2019) indicate that the affirmation of significant value perceptions translates into a greater endorsement of sustainable actions when self-integrity is guarded. This occurs because consumers seek to reinforce values that confirm their preexisting product-related views. In this regard, CES can be seen as a crucial mechanism of the value-behavior translation process

It is also understood that if consumers perceive a strong correlation between a brand/product and their values, this alignment would lead to a more favorable self-view and actions towards that particular brand or product (see Sirgy, 1986 for the self-congruity theory). Supporting this perspective, our conceptual debate from Section 3.1 to 3.6 has previously highlighted how CES functions as a lens through which we evaluate SLFPs based on our consumption values. At its core, when SLFPs fulfill value perceptions—whether by providing functional advantages, bestowing social prestige, satisfying inherent curiosity, evoking positive feelings, presenting situational advantages, or resonating with environmental protection motives—people are more likely to identify themselves as ethically conscious consumers. Based on the preceding discourse, we further propose that this heightened CES will serve as a mediator between consumption values and PUI.

H₇. CES positively relates to PUI.

 $H_{8(a-f)}$. CES positively mediates the relationship between consumption values ((a) FUV, (b) SOV, (c) EMV, (d) EPV, (e) COV, (f) GRV), and PUI.

3.8 | Roles of GAR in sustainable luxury

Earlier, research has delved into the impact of GAR as a direct determinant of sustainable consumption attitudes and behaviors (Tewari et al., 2022). In addition to directly encouraging sustainable purchasing, GAR may also serve as a moderator in the relationship between consumption values and purchase intention. Prior studies corroborate this argument by demonstrating that highly receptive consumers tend to be more attentive to green ad messages, leading to a positive shift in their values towards taking sustainable actions (Bailey et al., 2016a; Sun et al., 2021). However, the moderating influence of GAR in the sustainable luxury domain remains unexplored. It is evident that effective green advertising campaigns can assist luxury firms in molding the

way their brands are perceived and the perceptions they create, fostering consumers' predisposition to think and act sustainably (Atkinson & Rosenthal, 2014). GAR can reduce promotion uncertainty and more effectively sway consumers' purchasing decisions by helping them to recognize the focal attributes of sustainable luxury goods when forming a consideration set. Supporting this sentiment, recent research indicates that consumers with higher GAR are more likely to show green brand trust and perceive credible market signals (Rahman & Nguyen-Viet, 2023). In concert with this perspective, we foresee that green advertising should improve the perceived value of SLFPs, particularly for individuals with a high level of green receptivity, leading them to perceive a stronger alignment between sustainability and luxury. This is a reasonable prospect, considering that individuals with higher GAR (vs. lower GAR counterparts) may easily access and activate value-based product information stored in their memory (Essiz et al., 2023), thereby more readily translating their consumption values into PUI

Moreover, previous research demonstrates that consumers' selfperception can be augmented through green advertising activities (Mo et al., 2018). In fact, consumers with a high level of GAR may be more likely to engage with luxury brand initiatives and gather more detailed information on sustainable luxury, as they hold higher brand trust and reflect more on their ethical selves—a postulation aligned with Bailey et al. (2016b) and Septianto et al. (2023). In contrast, consumers with low green receptivity may struggle to differentiate SLFPs from general luxury offerings, which could result in perceptions of greenwashing (Apaolaza et al., 2022; Chen, 2020). This may consequently lead to high green-receptive luxury consumers being better equipped to manage self-threatening risks in sustainable luxury choices, reinforcing the congruence between their CES and PUI. Based on the foregoing discussion, the strength of value perceptions and CES will be contingent upon the level of GAR, where amplified receptivity to sustainable luxury brand advertising should expedite the conversion of consumption values and conspicuous ethical selfperception into PUI. Formally:

 $H_{9(a-g)}$. GAR positively moderates the relationship between (a) CES, (b) FUV, (c) SOV, (d) EMV, (e) EPV, (f) COV, (g) GRV, and PUI.

3.9 | Differences between Gen Y and Gen X: A research question

Prior research underscores that Gen Y (born between 1980 and 1996) and Gen X (born between 1965 and 1979) display discrete consumption patterns towards luxury brands, prompting us to explore the differences between these cohorts in sustainable luxury fashion (e.g., Han & Kim, 2020). From the standpoint of cultural transformation (Hofstede, 1984), our decision to concentrate on Gen Y and Gen X is grounded in the following rationale. Gen X grew up during a period of economic recession marked by a stronger emphasis on individualistic aspirations, traditional values, high uncertainty avoidance,

and modest environmental protectionism (Lissitsa & Kol, 2016). Accordingly, Han and Kim (2020) demonstrate that this generation's luxury consumption behaviors could originate from the desire for functional reliability and be seen as a symbol of personal achievement and prestige. In contrast, Gen Y, growing up in the digital age, prioritizes collective experiences and shared cultural values, involving environmental sustainability (Essiz & Mandrik, 2022). While they continue to value conventional luxury, their consumption tendencies lean towards long-term idealistic values more than materialistic ones, with a heightened interest in ethical experiences rather than in unsustainable possessions (Vanhamme et al., 2023). Hence, they might favor luxury brands that are deeply engaged in sustainable initiatives, viewing such choices as a way to counteract potential environmental risks (Sun et al., 2022).

Against this backdrop and considering that individuals from separate periods and environments exhibit dissimilar patterns of perception, cognition, and behavior (see Casalegno et al., 2022 for the generational cohort theory). Gen Y. compared to Gen X. is anticipated to respond in a different way to green advertising messages and demonstrate distinct ethical self-concepts as well as purchase patterns. Ivanova et al. (2018) corroborate this line of reasoning by revealing specific cohort effects, in which Gen Y (vs. Gen X) demonstrated greater receptiveness to green communication and a willingness to pay more for sustainable products that resonate with their ethical selves. Nonetheless, would such expectations hold true in the domain of sustainable luxury? Only a handful of empirical research has delved into this topic and produced fragmented findings. In the United States (from which our sample is drawn), one research shows a negative correlation between age and sustainable luxury consumption, suggesting that Gen Y retains greater sustainability knowledge and is more concerned about sustainability in luxury purchases compared to older cohorts (Rolling & Sadachar, 2018). Conversely, other research points out that Gen Y's sensitivity to the sustainability of luxury brands does not significantly differ from Gen X's (Kapferer & Michaut-Denizeau, 2020). Although no consensus has yet emerged regarding generational differences, it is palpable that age carries significant conceptual weight from the lens of evolutionary consumption, functioning as a biological driver for sustainable luxury engagement (Vanhamme et al., 2023). To reconcile these incongruent findings across two generations, we raise the following research question (RQ):

RQ. How do PUI, CES, and GAR vary between Gen Y and Gen X consumers?

4 | RESEARCH DESIGN AND METHODOLOGY

4.1 | Research context

Regarding the research context, past sustainable luxury research has primarily focused on specific countries such as the United Kingdom,

China, Italy, and France (see Table 1). As underlined by Athwal et al. (2019), the nationality and country base of researchers are possible reasons behind this constrained geographical representation. Needless to say, excluding other major luxury markets represents a research bias given that the behaviors of sustainable luxury consumers are wide-ranging, depending on cultural and institutional ecosystems. Against this backdrop, we chose to obtain data from the United States because it surprisingly remains an under-investigated country in the sustainable luxury sphere, as evidenced by Table 1.

Currently, the United States as the largest economy has an SDG achievement score of 74.55/100 and is ranked 41 out of 193 countries, raising awareness of accountable stakeholders on responsible consumption and cleaner production (Sustainable Development Report, 2023). Moreover, the US luxury goods industry is at the forefront of all other countries, generating more than 69 billion USD in yearly revenue with a large market potential for sustainable luxury goods (Statista, 2023b). Hence, the United States offers an intriguing setting for understanding the key components of sustainable luxury fashion patterns, which may cumulatively help to decelerate the overuse of natural resources.

4.2 | Survey designs and operationalization of measures

In parallel with the method adopted by early research on the interplay of sustainable luxury and value perceptions (see Table 1), we adopted a deductive approach (quantitative-based method), including a structured online survey to empirically test the hypothesized relationships. The survey method was appropriate, considering the complexity of our proposed model, which demands a simultaneous assessment of the interactions between several constructs. It helped us to concur with the theoretical underpinnings of the consumption values paradigm, analogous to the early survey-based TCV research (e.g., Khan & Mohsin, 2017).

We developed a screener survey and a main survey on Qualtrics[®]. Our screener survey was used to validate the eligibility of participants for the main survey by asking them if they had ever purchased luxury fashion products in the last 2 years, per the suggestion of Vanhamme et al. (2023). Only those who responded "yes" were able to qualify their most recent purchase based on purchase history, category, and price range. The screener survey served as a cross-filter to target only actual consumers of luxury fashion. Our main survey contained questions pertaining to participants' opinions of sustainable luxury, their value perceptions, GAR, conspicuous CES, purchase intention, and demographic information. Following the approach of De Barnier et al. (2012), we explained the research agenda to help participants differentiate between several accessible, intermediate, and inaccessible luxury products and brand names at the beginning. To ensure that all participants understood the concept of sustainable luxury consumption by the same token, we further offered conceptual clarity in parallel with the definition provided in Section 1.

Overall, we measured responses for nine focal constructs and captured them with 33 manifest variables, satisfying conditions for latent construct measurement (Sarstedt et al., 2022). To preserve the psychometric properties of constructs, all measures were operationalized from validated multi-item metrics. Appendix A provided information regarding the operational descriptions and roles of each construct, along with the source of adoption and its relevant items. Notably, we measured our main dependent variable-PUI-with the purchase intention scale of Dodds et al. (1991). Our independent variables (six consumption values) were measured based on the perceived value scales of Sweeney and Soutar (2001) and Lin and Huang (2012) as well as the "GREEN" scale of Haws et al. (2014). Finally, our mediator variable—CES—was based on the environmental self-identity scale of Van der Werff et al. (2013), and the moderator variable-GAR-was adapted from the receptivity to green advertising scale of Bailey et al. (2016a). All parsimonious measures were rated by participants based on a five-point Likert scale, ranging from strongly disagree (1) to strongly agree (5).

4.2.1 | Socio-demographics as control measures

Existing research has benignly neglected to operationalize the potential effects of socio-demographics on endogenous factors (see Table 1). Only a handful of studies have considered them as control parameters and reported a significant variance in sustainable luxury choices (e.g., Vanhamme et al., 2023). Early literature suggested that consumers' CES and receptivity to green advertising may vary based on socio-demographics (Bailey et al., 2016a; Van der Werff et al., 2013). Against this backdrop, we controlled the effects of key variables (age, gender, educational background, individual income, and employment status) on three endogenous factors, per Figure 1. Furthermore, past research documented the impact of perceived social class (lower vs. middle vs. upper) on general green choices (Yan et al., 2021) as well as showed its specific effect on preferences for sustainable (vs. regular) luxury (Kim et al., 2022). Consequently, we incorporated it as a final control measure and operationalized it based on the single-item subjective social class indicator of Yan et al. (2021) (see Appendix A).

4.3 | Pilot study

Prior to the main study, we carried out a pilot study to safeguard the face and content validity of measures. In line with the recommendation of Haws et al. (2023) for pilot testing, the initial draft of the survey was cross judged by two marketing faculty, two luxury industry professionals, and eight marketing PhD scholars. They were invited to assess the quality of the survey and take note of potential issues related to conceptual representations of items, clarity of phrasings, instrument length, and format. Based on their feedback, we improved the understandability of items, making them more concise to avoid terminology errors. Besides, we activated the Qualtrics[®]

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force-response function to rule out item nonresponse and inserted two attention-check questions (see Appendix A) in the different parts of the questionnaire to detect careless response patterns.

After the questionnaire was finalized, we conducted a pilot study on the crowdsourcing platform, Prolific®, and recruited a purposive gender-balanced sample of 60 luxury fashion consumers 2 ($M_{\rm age}=29.65$, $SD_{\rm age}=8.71$), located in the U.S. to assess the preliminary internal consistency among measures. To select the right audience, we only admitted participants who passed our screener survey. The pilot testing yielded satisfactory reliability coefficients for all constructs, ranging from .76 to .91 (Hair et al., 2017); hence, it was deemed appropriate to launch the main investigation.

4.4 | Sampling strategy, main data collection, and participants

We used Prolific® for the main study as well, targeting US-based participants through nonprobability purposive and quota sampling methods. Prolific® has been recognized as a reliable data collection platform in recent sustainable luxury research (Carranza et al., 2023), allowing researchers to prescreen participants who have regular shopping habits related to fashion and luxury. To circumvent threats to external validity, purposive sampling was a suitable approach as it assisted us to draw a homogeneous sample based on the existing consumers of luxury fashion. The rationale for the quota sampling was to disseminate our study evenly between males/females and avoid female-dominated self-selection bias from which early research has suffered (Yang et al., 2022). To determine our lower bound requisite sample size, we performed an a priori power analysis utilizing Westland's (2010) software. The analysis yielded a minimum required sample of 829 participants and was based on an effect size of .30 (Cohen, 1988), an alpha of .05, a statistical power of 90%, and 9 latent variables. To meet this baseline, we recruited 920 participants in exchange for the remuneration of \$8.18/h.

All participants were over 18 years of age, and only those who passed our screener survey and did not enroll in the early pilot were qualified. Following this, we checked the IP addresses of participants to make sure that no one enrolled in the study more than once. Twelve participants were filtered out for failing one or two attention checks, and nine of them were excluded as potential "mischievous respondents" (Griffin et al., 2022) since they either spent less than 2 min (the average completion time was ≈ 6.05 min) or provided pattern answers. After further removing five outliers based on the Mahalanobis distance (D²/df) analysis (Hair et al., 2017), the final sample consisted of 894 valid responses. As a follow-up test, we ran a post hoc power analysis using the G*Power 3.1 (Faul et al., 2009) to observe whether we attained the predetermined power level of .90. The analysis generated a power of .98 for correlations, confirming that our sample size was satisfactory to obtain high statistical power. The

demographics and luxury fashion consumption habits of our sample are detailed in Table 2. Our sample characteristics appear to be fairly representative of the US population³ and bear similarities with the recent US-based sustainable luxury research that employed online panel data (Vanhamme et al., 2023), giving us further confidence in the validity of our sample.

4.5 | Social desirability bias

Self-administrated online surveys (as in this study) tend to yield less social desirability concerns than interviewer-administrated surveys as they reduce the salience of interviewer bias to some extent (Kreuter et al., 2008). Compared to other platforms (such as MTurk), a recent work confirmed that Prolific[®] participants were found to be more attentive to instructions, displaying more honest responses (Peer et al., 2022). Given that sustainable luxury fashion is an ethical consumption domain, participants might still exaggerate their responses to form a socially desirable image irrespective of the surveying technique or platform's reliability.

Against this possibility, we implemented several ex ante strategies. First, we prescreened participants with at least a 99% Prolific® approval rate to recruit reliable members and allowed them to run the study only on desktop devices in a more private setting. Next, participants read the informed consent form and were aware of anonymity/confidentiality ethics, along with the rights of withdrawal and the estimated completion time (Podsakoff et al., 2012). Participants were also informed that there were no right or wrong answers. As a more sophisticated practice, we counterbalanced the order of scale items by positioning dependent and independent variables on different sections. This helped us to eliminate the order effect, inhibiting participants from extrapolating direct causal reasonings among constructs. Wholly, these practices minimized the risk of receiving socially desirable responses.

5 | DATA ANALYSIS AND RESULTS

The data were analyzed using SPSS®_{28.0} and SmartPLS®_{4.0.8.3}. The PLS-SEM approach estimates inter-relationships between constructs through a bootstrapping procedure to determine significant path coefficients (Hair et al., 2017). PLS-SEM was a better fit for this research due to two reasons—akin to Sarstedt et al. (2022). First, it is a more robust choice for the evaluation of highly complex structural models with large samples and non-normal distribution. Second, it performs better while testing theoretical extensions to the prevailing structural theory (TCV herein) thanks to its causal-predictive orientation, all of which characterize this study. Based on this tangent, the complexity of our prediction-oriented model emanates from its number of constructs (9) and the estimation of direct, indirect, and interaction effects among

 $^{^{2}}N = 60$ surpassed the lower bound of N = 50 for performing Cronbach's α analysis (Haws et al., 2023).

TABLE 2 Sample characteristics and consumption habits.

| | mucteristics and consumption | |
|------------------------|------------------------------|---------------------|
| Variable | Category | Participants (%) |
| Gender | Male | 49.9 |
| | Female | 50.1 |
| Age | 18-29 | 39.9 |
| | 30-39 | 30.8 |
| | 40-49 | 14.5 |
| | 50-59 | 8.4 |
| | 60 and over | 6.4 |
| Education background | High school | 23.9 |
| | Trade certificate/vocational | 8.7 |
| | Bachelor's | 42.9 |
| | Master's | 15.6 |
| | PhD | 3.2 |
| | Other | 5.7 |
| Employment status | Full-time employed | 65.0 |
| | Part-time employed | 17.4 |
| | Homemaker | 4.8 |
| | Retired | 3.8 |
| | Seeking work | 3.2 |
| | College student | 2.9 |
| | Other | 2.9 |
| Annual personal | Less than \$25,000 | 26.0 |
| income | \$25,000-\$49,999 | 27.1 |
| | \$50,000-\$74,999 | 18.5 |
| | \$75,000-\$99,999 | 13.7 |
| | \$100,000 or more | 14.7 |
| Perceived social class | Lower class | 10.3 |
| | Lower-middle class | 25.2 |
| | Middle class | 45.0 |
| | Upper-middle class | 15.5 |
| | Upper class | 4.0 |
| Purchase category | Apparel | 25.4 |
| <i></i> | Footwear | 22.2 |
| | Accessories | 18.3 |
| | Wristwatches | 17.3 |
| | Handbags | 14.7 |
| | Other | 2.1 |
| Last purchase | In the last year | 65.7 |
| experience | In the last 1–2 years | 34.3 |
| Product price range | \$200-\$500 | 49.6 |
| | \$500-\$999 | 35.1 |
| | \$1000-\$4999 | 13.1 |
| | Above \$5000 | 2.2 |
| Familiarity with | More than a year | 55.3 |
| sustainable luxury | Less than a year | 38.9 |
| fashion | Not familiar | 5.8 |
| | oc rammar | 3.3 |

Note: The ethnicity of our sample is as follows: White (69%), Black or African American (11%), Hispanic (17%), and Asian (3%).

latent variables. It is notable that we triangulated linear PLS-SEM outputs with the IPMA and the nonlinear ANN models in the final stage of analysis to reconcile the predictive accuracy of Figure 1 and determine the relative importance of each predictor variable.

5.1 | Descriptive analysis

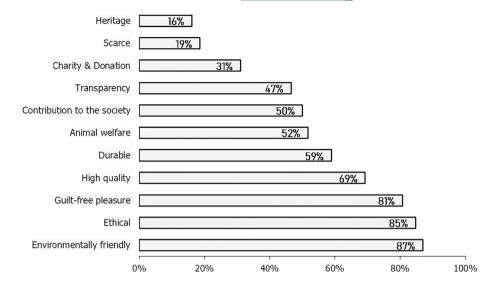
We first performed a descriptive analysis analogous to that of Wang et al. (2021), intending to offer an initial outlook into participants' understanding of sustainable luxury, wherein we asked participants to select five from a list of 11 keywords. As reported in Figure 2 via frequency analysis, the top five keywords chosen by participants were (1) environmentally friendly, (2) ethical, (3) guilt-free pleasure, (4) high quality, and (5) durable. Comparable to Wang et al. (2021), this outcome signified that the perceived meaning of sustainable luxury for our sample primarily derived from environmental, emotional, and functional aspects. Next, participants rated the importance of several sustainable practices employed by luxury brands. As presented in Figure 3, (1) fair treatment of stakeholders, (2) the use of no child labor, and (3) greenhouse gas reduction were some of the most advocated topics by our sample.

Participants were also asked to name a luxury brand that they purchased earlier and indicated their belief in the sustainability of the purchased brand. In total, 87 different valid brand names were specified. Among those, 65 brands fell on the "Global Powers of Luxury Goods" list of Deloitte (2023). In Table 3, we reported the most purchased luxury brands and their perceived sustainability. Based on the opinions of our sample, Stella McCartney, Louis Vuitton, Chanel, Coach, and Gucci were the top five sustainable luxury brands. This result is sensible for the US market given that these brands have introduced eco-friendly versions of their products and built robust sustainability programs in recent years (Park et al., 2022), leading to some degree of awareness among consumers. These rankings also show similarities with the sustainable luxury brand index released by Altiant GLAM (2021). Keeping these descriptive insights in mind, we turn our focus to preliminary assessments.

5.2 Common method variance (CMV)

CMV may possibly lead to Types I and II measurement errors since our research design is cross-sectional. To statistically control this possibility, we conducted a post hoc Harman's single factor test through exploratory factor analysis by loading all variables into a single solution, in which the single unrotated factor accounted for only 37.83% of the observed variance. This was significantly below the cutoff value of 50% (Podsakoff et al., 2012), providing evidence for the absence of CMV.

To achieve a more robust assessment, we employed a common latent factor technique, where we ran confirmatory factor analysis (CFA) with and without the presence of common latent factors and evaluated differences in standardized regression weights. A single factor CFA did not present acceptable fit index results $(\chi^2/df = 5.79;$



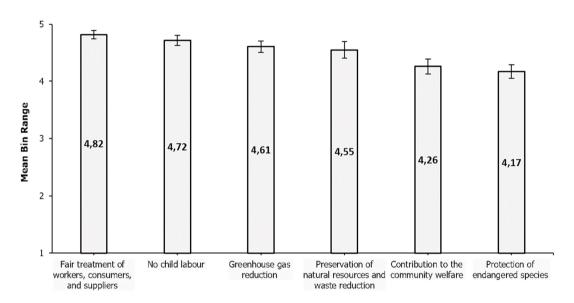


FIGURE 3 Participants' perceived importance of sustainable practices (±error bars: standard deviations).

 TABLE 3
 Perceived sustainability of top 10 luxury brands.

| Top 10 | Brand name | Purchased brand (%) | Sustainable (%) | Not sustainable (%) | Not sure (%) |
|--------|------------------|---------------------|-----------------|---------------------|--------------|
| 1 | Gucci | 17.1 | 52.4 | 24.2 | 23.4 |
| 2 | Michael Kors | 10.8 | 32.7 | 20.0 | 47.3 |
| 3 | Coach | 9.2 | 59.1 | 22.8 | 18.1 |
| 4 | Louis Vuitton | 7.3 | 62.8 | 21.6 | 15.6 |
| 5 | Ralph Lauren | 6.1 | 22.2 | 16.7 | 61.1 |
| 6 | Chanel | 5.5 | 61.2 | 20.3 | 18.5 |
| 7 | Stella McCartney | 4.4 | 83.3 | 2.5 | 14.2 |
| 8 | Prada | 3.9 | 23.5 | 11.8 | 64.7 |
| 9 | Calvin Klein | 3.0 | 40.1 | 22.1 | 37.8 |
| 10 | Burberry | 2.6 | 23.1 | 15.4 | 61.5 |

Note: Out of 894 participants, 624 of them purchased one of the above-listed luxury brands. The top 5 sustainable brands are highlighted with a descending green color. The top 10 rankings are based on the percentage of participants (%) purchasing the specified brand. Green colour is used to show top 5 sustainable brands in an order. This logic is explained in Note of Table 3.

GFI = .72; CFI/IFI = .76; RMSEA = .14). Likewise, all differences in regression weights remained insignificant and were below the threshold of .20 (Cohen, 1988), thus posing no risk of CMV.

5.3 | Multivariate statistical assumptions

PLS-SEM relaxes the demands pertaining to the data distribution as it is a nonparametric approach; however, four assumptions (normality, multi-collinearity, homoscedasticity, and linearity) must still be checked to ensure data rigor (Sarstedt et al., 2022). First, we conducted the Kolmogorov–Smirnov test and noted that the data were non-normally distributed since *p* values for all constructs were lower than .05 and skewness/kurtosis indices did not stay within acceptable limits of normality: ±1 (Kline, 2011), rendering it well-suited for the PLS-SEM examination. Second, constructs were not suffering from multi-collinearity given that all the variance inflation factor (VIF) values varied between 1.76 and 2.69, not violating the set value of 3.3 (Hair et al., 2020). Appendix A documented descriptive statistics of constructs along with normality and multi-collinearity assessments.

Third, we established homoscedasticity by examining standardized residual scatter plots and noticed that all residuals were scattered around a diagonal line, designating no major concerns. Later, we performed an analysis of variance (ANOVA) test of linearity and found that some factorial relationships between constructs exhibited significant deviation from the linearity (see Appendix B). This outcome justifies the utilization of the non-linear ANN in the following parts. Aside from that, no anomalies were observed with respect to multivariate assumptions.

5.4 | The outer measurement model analysis

We assessed the unidimensionality of the measurement model along with reliability and validity indices. Internal reliability was evaluated based on Cronbach's α , composite reliability (CR), and Dijkstra Henseler's rho (ρ_A). Table 4 demonstrated that all α , CR, and rho (ρ_A) values satisfied the minimum tolerance of .70 (Hair et al., 2017), safeguarding internal reliability. We then judged the convergent validity via standardized factor loadings (SFLs) and average variance extracted (AVE) scores. As presented in Appendix A, SFLs for 33 indicators ranged from .74 to .92, exceeding the lower bound of .708 (Hair et al., 2017). Meanwhile, AVE values were above the .50 cap (Sarstedt et al., 2022) for all constructs, ascertaining the convergent validity.

To determine that measurement constructs are discrete from each other, we next evaluated the discriminant validity. Using Fornell and Larcker's (1981) criterion, Table 4 showed that the square roots of AVE for each construct were higher than the inter-constructed correlations, and maximum shared variance (MSV) scores remained lower than the AVE values, supporting the discriminant validity. We further confirmed discriminant validity through an improved criterion, the heterotrait-monotrait ratio of correlations (HTMT) analysis, and verified that all HTMT ratios were below the upper limit of .90 (Henseler et al., 2015). Overall, our measurement model is represented with satisfactory reliability and validity.

5.5 | The analysis of the inner structural model and its comparison with early descriptive results

Following the primer of Sarstedt et al. (2022), we performed a path analysis by running 10,000 bias-corrected bootstrap iterations (two-tailed) to explore direct, indirect, and interaction effects. Figure 4 reported standardized effect sizes along with coefficients of determination (R^2) and predictive relevance (Q^2) values, while Table 5 detailed the results of hypotheses testing. The structural model explained 59% of the variance in CES and 68% of the variance in PUI, displaying moderate to high explanatory power. Both Q^2 values were substantially higher than zero $\left(Q_{\text{CES}}^2 = .45; Q_{\text{PUI}}^2 = .52\right)$, indicating a large predictive relevance of the model (Hair et al., 2017). The standardized

| TABLE 4 | Reliability | / and | validity | v anal | vses. |
|---------|--------------|-------|----------|--------|-------|
| | recinability | una | vanaic | , ana | , |

| | | | | | | Forne | II-Larcke | · & HTM1 | criterion | s | | | | |
|-----------|-----|------------------|-----|-----|-----|-------|-----------|----------|-----------|-----|-----|-----|-----|-----|
| Construct | α | Rho (ρ_A) | CR | AVE | MSV | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
| (1). FUV | .88 | .90 | .92 | .74 | .36 | .86 | .36 | .47 | .44 | .51 | .39 | .53 | .54 | .51 |
| (2). SOV | .89 | .91 | .93 | .83 | .22 | .31 | .91 | .57 | .37 | .33 | .25 | .42 | .41 | .35 |
| (3). EMV | .90 | .91 | .94 | .83 | .29 | .42 | .52 | .92 | .49 | .71 | .53 | .62 | .61 | .62 |
| (4). EPV | .87 | .89 | .92 | .79 | .26 | .39 | .33 | .44 | .89 | .52 | .46 | .56 | .59 | .55 |
| (5). COV | .82 | .84 | .89 | .73 | .42 | .43 | .29 | .62 | .45 | .85 | .57 | .58 | .50 | .68 |
| (6). GRV | .87 | .89 | .91 | .73 | .37 | .35 | .31 | .47 | .41 | .48 | .86 | .73 | .79 | .81 |
| (7). GAR | .84 | .86 | .91 | .77 | .41 | .45 | .37 | .54 | .48 | .49 | .63 | .88 | .80 | .78 |
| (8). CES | .84 | .87 | .90 | .75 | .36 | .46 | .37 | .54 | .51 | .43 | .62 | .67 | .87 | .73 |
| (9). PUI | .86 | .88 | .91 | .78 | .48 | .44 | .31 | .55 | .48 | .58 | .69 | .64 | .62 | .89 |

Note: The diagonal values represent the square root of AVE; while values below the diagonal are inter-construct correlations. The above diagonal values are HTMT ratios. All correlations are significant at p < .01. Grey shades are used to indicate diagonal values, representing the square root of AVE. This logic is explained in Note of Table 4.

FIGURE 4 Results of the predicted model with path coefficients.

root mean square residual value of .043 (<.08) and normed fit index of .94 (>.90) verified the estimated model fit (Hair et al., 2020).

As simultaneously presented in Figure 4 and Table 5, all six consumption values had a direct positive influence on CES with the following effect sizes: FUV (H_{1a}: $\beta=.19$), SOV (H_{2a}: $\beta=.14$), EMV (H_{3a}: $\beta=.35$), EPV (H_{4a}: $\beta=.31$), COV (H_{5a}: $\beta=.17$), and GRV (H_{6a}: $\beta=.53$). Regarding the PUI, FUV (H_{1b}: $\beta=.16$), EMV (H_{3b}: $\beta=.30$), EPV (H_{4b}: $\beta=.25$), COV (H_{5b}: $\beta=.13$), and GRV (H_{6b}: $\beta=.41$) had a direct positive influence, yet the effect of SOV (H_{2b}: $\beta=.05$) remained insignificant. Besides, CES (H₇: $\beta=.20$) was positively associated with PUI. All 1st cluster hypotheses contemplating direct effects⁴ were supported, except for H_{2b}.

Upon closer examination, these empirical results demonstrate a marked alignment with our descriptive keyword analysis (see Figure 2) concerning participants' perception of sustainable luxury. Notably, the two predominant keywords, "environmentally friendly" and "ethical," mirror the significant relationship of $GRV \rightarrow PUI$, highlighting participants' commitment to environmental and ethical practices when determining PUI. Similarly, the keyword "guilt-free pleasure" resonates with the heightened path relationship of $EMV \rightarrow PUI$,

underscoring the importance of emotional satisfaction in purchasing SLFPs. Concomitantly, the keywords ("high quality" and "durable") associate with the salient FUV \rightarrow PUI path, reinforcing the value of functional attributes of SLFPs in the decision-making process.

5.6 | Mediation and moderation effects

Two variants of mediation are partial and full. Partial mediation occurs when both direct and indirect effects are significant, whereas full mediation takes place if only indirect effects are significant (Rucker et al., 2011). Concentrating solely on direct effects might lead to an oversimplification of the relationships between constructs, thereby omitting a more thorough interpretation of the structural model (Hair et al., 2017). As such, it is essential to carry out a mediating analysis of CES, which can illuminate the partial or full pathway through which consumption values exert influence on the PUI. As shown in Table 5, CES partially mediated the relationship between FUV and PUI (H8a: $\beta=.14$), EMV and PUI (H8c: $\beta=.25$), EPV and PUI (H8d: $\beta=.19$), COV and PUI (H8e: $\beta=.12$), and GRV and PUI (H8f: $\beta=.35$); moreover, it fully mediated the relationship between SOV and PUI (H8b: $\beta=.13$). All 2nd cluster hypotheses (H8(a-f)) on indirect effects were supported.

⁴Although not hypothesized earlier, GAR ($\beta=.18,p<.001$) was positively associated with PUI during the path analysis. Hence, it is further included as a predictor in the ANN and IPMA modeling.

TABLE 5 Hypotheses testing results.

| Structural paths | Standardized estimates | LLCI | ULCI | t values | Sig | Remarks |
|---|------------------------|------|------|----------|----------------------|-------------------|
| 1st cluster (direct effects) | Stanuaruized estimates | LLCI | OLCI | t values | Sig. | Supported (🗸/💢) |
| | 10 (02) | 15 | 22 | 0.75 | *** | |
| H_{1a} : FUV \rightarrow CES | .19 (.02) | .15 | .23 | 9.75 | *** | √ |
| H_{1b} : $FUV \rightarrow PUI$ | .16 (.02) | .12 | .20 | 8.40 | *** | <i>,</i> |
| H_{2a} : SOV \rightarrow CES | .14 (.03) | .08 | .19 | 4.97 | | / |
| H_{2b} : SOV \rightarrow PUI | .05 (.03) | .00 | .10 | 1.61 | 0.17 ^{n.s.} | * |
| H_{3a} : EMV \rightarrow CES | .35 (.02) | .31 | .39 | 17.60 | *** | <i>,</i> |
| H_{3b} : EMV \rightarrow PUI | .30 (.02) | .24 | .36 | 14.57 | *** | / |
| H_{4a} : EPV \rightarrow CES | .31 (.02) | .27 | .35 | 15.85 | *** | / |
| H_{4b} : EPV \rightarrow PUI | .25 (.02) | .19 | .30 | 12.14 | | / |
| H_{5a} : $COV \rightarrow CES$ | .17 (.01) | .13 | .21 | 8.85 | *** | ✓ |
| $H_{5b}\!\!: COV \to PUI$ | .13 (.02) | .09 | .17 | 6.80 | *** | ✓ |
| $H_{6a}\text{: }GRV\toCES$ | .53 (.04) | .46 | .60 | 25.67 | *** | ✓ |
| H_{6b} : GRV \rightarrow PUI | .41 (.02) | .35 | .47 | 16.72 | *** | 1 |
| H_7 : CES \rightarrow PUI | .20 (.02) | .16 | .24 | 10.25 | *** | 1 |
| 2nd cluster (indirect effects) | | | | | | Mediation (✓/४) |
| $\text{H}_{8a}\text{: FUV} \to \text{CES} \to \text{PUI}$ | .14 (.01) | .10 | .18 | 6.13 | *** | √ (partial) |
| $H_{8b}\text{: SOV} \to CES \to PUI$ | .13 (.02) | .09 | .17 | 5.74 | *** | ✓ (full) |
| $H_{8c}\text{: EMV} \to CES \to PUI$ | .25 (.02) | .21 | .29 | 10.91 | *** | √ (partial) |
| $H_{8d}\text{: EPV} \to \text{CES} \to \text{PUI}$ | .19 (.03) | .13 | .25 | 5.85 | *** | √ (partial) |
| $H_{8e}\text{: COV} \to \text{CES} \to \text{PUI}$ | .12 (.03) | .06 | .18 | 4.13 | *** | √ (partial) |
| $H_{8f}\text{: }GRV \to CES \to PUI$ | .35 (.02) | .31 | .39 | 14.08 | *** | ✓ (partial) |
| 3rd cluster (interaction effects) | | | | | | Moderation (✓/✗) |
| $\text{H}_{9a}\text{: CES}\times\text{GAR}\rightarrow\text{PUI}$ | .10 (.02) | .06 | .14 | 5.15 | *** | ✓ |
| $H_{9b}\!\!:FUV\times GAR\to PUI$ | .05 (.04) | 02 | .12 | 1.28 | 0.27 ^{n.s.} | × |
| $H_{9c}\text{: SOV} \times GAR \to PUI$ | .04 (.03) | 01 | .09 | 1.40 | 0.23 ^{n.s.} | × |
| $\text{H}_{\text{9d}}\text{:}\;\text{EMV}\times\text{GAR}\rightarrow\text{PUI}$ | .12 (.01) | .10 | .14 | 12.30 | *** | ✓ |
| $H_{9e}\text{: EPV} \times GAR \to PUI$ | .16 (.02) | .12 | .20 | 8.21 | *** | ✓ |
| $\text{H}_{\text{9f}}\text{: COV} \times \text{GAR} \rightarrow \text{PUI}$ | .03 (.02) | .00 | .06 | 1.54 | 0.19 ^{n.s.} | × |
| $H_{9g}\text{:}\;GRV\timesGAR\toPUI$ | .14 (.02) | .10 | .18 | 7.15 | *** | ✓ |
| Significant effects of control variable | es | | | | | Direction $(+/-)$ |
| $Age \to CES$ | 11 (.02) | 15 | 07 | -5.60 | *** | _ |
| $Age \to PUI$ | 06 (.02) | 10 | 02 | -2.33 | * | _ |
| $Age \to GAR$ | 06 (.02) | 09 | 02 | -2.38 | * | _ |
| $Gender \to CES$ | .09 (.02) | .05 | .13 | 4.60 | *** | + |
| $Gender \to PUI$ | .06 (.02) | .04 | .08 | 2.56 | * | + |
| $Gender \to GAR$ | .07 (.02) | .05 | .09 | 3.12 | ** | + |

Note: LLCI/ULCI = 95% lower (upper) limit confidence intervals. Standard errors are presented in parentheses. Gender (male = 0, female = 1), in which positive direction signifies higher female influence on three endogenous variables.

Abbreviation: n.s., not significant.

The moderator determines the strength of the relationship between independent and dependent variables (Baron & Kenny, 1986). GAR positively moderated the relationship between CES and PUI (H_{9a}: $\beta=.10$), EMV and PUI (H_{9d}: $\beta=.12$), EPV and PUI (H_{9e}: $\beta=.16$), and GRV and PUI (H_{9g}: $\beta=.14$). However, it did not

significantly interact with FUV (H_{9b}), SOV (H_{9c}), and COV (H_{9f}) in explaining PUI (see Table 5). Among the 3rd cluster hypotheses on interaction effects, H_{9a} , H_{9d} , H_{9e} , and H_{9g} were supported, while H_{9b} , H_{9c} , and H_{9f} were rejected. Following the simple slope approach (Dawson, 2014), we plotted significant two-way interaction effects.

^{***}p < .001 (t value ± 3.29), **p < .01 (t value ± 2.58), and *p < .05 (t value ± 1.96).

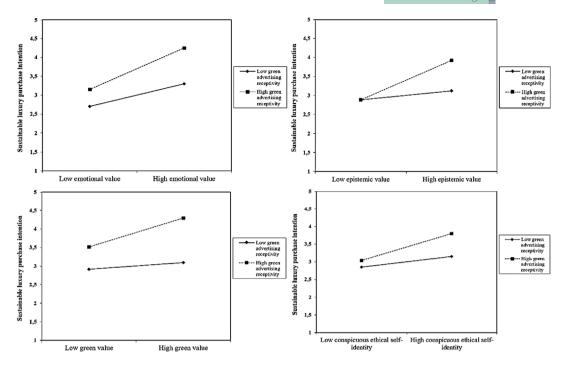


FIGURE 5 Multiple moderation effects of green advertising receptivity.

Figure 5 demonstrated that consumers with higher GAR more swiftly translated their three values (EMV, EPV, and GRV) as well as CES into PUI versus their low receptive counterparts.

5.7 | Control variables and generational discrepancies: Gen Y vs. Gen X

To fully dissect our structural model, four dummy-coded (gender, education, employment status, perceived social class) and two continuous (age, income) indicators were incorporated into the analysis, per the advice of Sarstedt et al. (2022). Significantly, age was negatively related to CES ($\beta=-.11$), GAR ($\beta=-.06$), and PUI ($\beta=-.06$) while gender was positively associated with CES ($\beta=.09$), GAR ($\beta=.07$), and PUI ($\beta=.06$). This indicates that younger consumers, especially females, are more sensitive to sustainable luxury fashion and hold higher levels of CES as well as advertising receptivity. However, perceived social class, income, education, and employment status posed no significant confounding effects.

To test our RQ concerning discrepancies between Gen Y and X, non-parametric ANOVAs with Games-Howell post-hoc tests were performed by splitting our data based on specific age boundaries. As visualized in Figure 6, we found consistent differences between Gen Y and X appertaining to their CES $(F(1,751) = 11.74, p < .001, \eta_p^2 = .08)$, GAR $(F(1,751) = 8.71, p < .003, \eta_p^2 = .04)$, and PUI $(F(1,751) = 9.11, p < .003, \eta_p^2 = .05)$. Gen Y consumers (vs. Gen X) showed a higher level of sensitivity to these constructs, providing support to

RQ. To expand upon our findings in a post-hoc manner, we conducted an alternate non-parametric significance test, the PLS permutation multigroup analysis (PLS-MGA). Our goal was to probe potential variations in path coefficients among two generational groups. After establishing the partial measurement invariance of composites (MICOM) (Henseler et al., 2016) (see Appendix C), the PLS-MGA findings indicated that there were significant differences in the relationships among (GRV \rightarrow PUI), (EMV \rightarrow PUI), (SOV \rightarrow CES), and (EMV \rightarrow CES), with Gen Y holding higher path coefficients. On the other hand, Gen X manifested stronger effect sizes in the associations between (FUV \rightarrow PUI) and (FUV \rightarrow CES) (see Appendix D). Overall, the structural model accounted for 71.8% (vs. 62.4%) of the PUI and 64.5% (vs. 54.3%) of the CES for Gen Y (vs. Gen X) consumers.

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5.8 | ANN and IPMA models

PLS-SEM can only evaluate linear relationships that may result in the oversimplification of sustainable luxury fashion decisions (Hair et al., 2017). To rule out this concern and achieve the twin goals of hypothesis testing and prediction, we employed the complementary ANN technique. ANN was originally depicted as a computational network consisting of simple processing units, namely, nodes that are numerical replicas of the biological neurons in the human brain (Haykin, 2009). It outperforms conventional regressions thanks to its robust deep learning ability from the data, enabling us to diagnose complex linear and non-compensatory associations (e.g., Dadhich & Hiran, 2022).

We quantified the relationship between constructs by deploying two multilayer perceptron (MLP) feed-forward ANN models with

⁵In line with Kapferer and Michaut-Denizeau (2020), Gen Y participants were constructed from participants who were between 18 and 34 years old. Gen X participants were between 35 and 49 years old; 85.2% of participants in our sample fall within these two cohorts.

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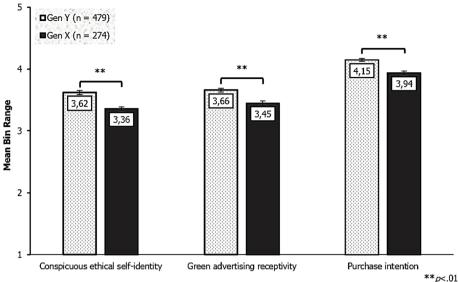


FIGURE 6 A comparison among cohorts: Gen Y vs. Gen X (±error bars: standard errors).

backpropagation algorithms. The MLP architecture is one of the most commonly employed ANN classes in literature, offering high structural flexibility (Dadhich & Hiran, 2022). Both ANN models⁶ (see Figure 7) consisted of three hierarchical layers (an input, a hidden, and an output) as well as synaptic weights, representing connections between neurons. Hidden neurons were produced automatically by SPSS[®], and the sigmoid function was used to activate both hidden and output layers (Haykin, 2009). We set up 90% of the data for training and the remaining 10% for testing by merely opting for input neurons based on significant independent variables obtained from the priori PLS-SEM-paralleling with Tewari et al. (2022). Our first network, namely, *Model A*, had the output neuron as CES, and the second network, *Model B*, had the output neuron as PUI.

As shown in Table 6, we assessed the predictive accuracy of models through the root mean square error (RMSE) values, following a 10-fold cross-validation to avoid over-fitting problems. For Model A, the average RMSE values for training and testing stages were .095 and .076, while for Model B, these were .074 and .086, which remained comparably small. The lower average RMSEs in combination with high R^2 values (75.77% $_{\text{Model A}}$ -81.94% $_{\text{Model B}}$) demonstrated the predictive accuracy of models (Tewari et al., 2022). We then performed a sensitivity analysis to rank input neurons based on their normalized relative importance to output neurons. Markedly, the top three predictors of PUI and CES were (1) GRV, (2) EMV, and (3) EPV (see Table 7 for all normalized scores and rankings). To validate this analysis with advanced PLS-SEM inferences, we additionally performed two benchmark tests: IPMA⁷ (see Figure 8), in which PUI and CES served as target variables for the same predictors. As compared

in Table 7, IPMA rankings were consistent with sensitivity analysis, providing triangulated support to the validity of ANN results.

6 | DISCUSSION OF MAIN FINDINGS

6.1 Value perceptions and sustainable luxury

Building upon the TCV of Sheth et al. (1991), our multi-analytical findings jointly confirm that high-value perceptions explain consumers' strong interest in sustainable luxury fashion. First, GRV was the most important predictor of PUI. This suggests that consumers primarily purchase SLFPs because they are concerned about the potential environmental impacts of their actions. This outcome fortifies the findings of previous research (Essiz et al., 2023; Haws et al., 2014; Kelleci, 2022) and is prudent, contemplating that GRV creation can result in motivated reasoning and guide consumers to process information about SLFPs in a positive light that unites with their CES. The strong effects of GRV on both ANN and IPMA outputs might indirectly suggest that consumers with high GRV are more inclined to involve in tangible actions and perform larger scale sustainable behaviors. Congruently, one alternative explanation for this effect is that stronger GRV can ignite a sense of empowerment and a high degree of environmental citizenship, exhorting consumers to focus on the well-being of future generations in luxury purchase decisions (Vanhamme et al., 2023). Next, we anchor the fit between EMV and sustainable luxury fashion. This fit can be partially attributed to the guilt-free mindset propounded by sustainable luxury (see Figure 2), in which the inclusion of green practices into luxury might lead guiltladen consumers to enact reparative actions towards society and send value-expressive signals about themselves, so as to ameliorate their ecological well-being. Corroborating the findings of early research (Khan & Mohsin, 2017; Wang et al., 2021), we surmise that this effect is retained since consumers who view sustainable luxury as a way to protect the environment are more likely to gain hedonic benefits and

 $^{^6}$ Our training sample of 805 (90% of 894) was sufficient to model two ANNs, as it surpassed the 50-times rule of thumb criteria of Alwosheel et al. (2018). That is, the minimum sample size for the ANN should be no less than $50\times$ the number of parameters: Model A (350) and Model B (400).

⁷IPMA complements PLS-SEM and ANN findings by seeking to determine the importanceperformance effects of each predictor for the dependent (target) variable. The reader is further directed to Ringle and Sarstedt (2016) for a tutorial on the principles of IPMA.

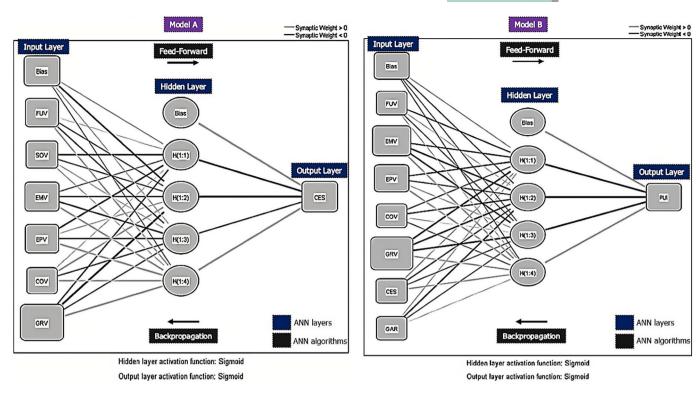


FIGURE 7 Artificial neural network diagrams (FUV: functional value, SOV: social value, EMV: emotional value, EPV: epistemic value, COV: conditional value, GRV: green value, CES: conspicuous ethical self-identity, GAR: green advertising receptivity, bias: the constant term, larger input node sizes [boxes] represent stronger connection weights to output neurons).

TABLE 6 Root mean square error values for artificial neural networks.

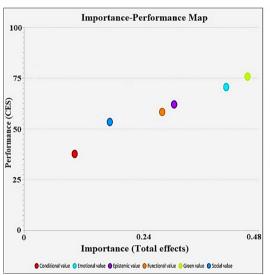
| | Input | A ($R^2 = 3$) neurons: Interest neuron: | UV, SOV, | EMV, E | PV, COV, | GRV | Input i | B ($R^2 = 8$ neurons: F t neuron: I | UV, EMV, E | PV, COV, | GRV, GAF | R, CES | |
|----------------|--------|--|----------|--------|----------|------|---------|--------------------------------------|------------|----------|----------|--------|---------|
| | Traini | ng | | Testi | ng | | Trainir | ng | | Testin | g | | |
| Neural network | N | SSE | RMSE | N | SSE | RMSE | N | SSE | RMSE | N | SSE | RMSE | Total N |
| 1 | 804 | 7.66 | .098 | 90 | 0.75 | .091 | 804 | 5.01 | .079 | 90 | 0.71 | .089 | 894 |
| 2 | 800 | 7.82 | .099 | 94 | 0.90 | .098 | 799 | 3.90 | .070 | 95 | 0.95 | .101 | 894 |
| 3 | 799 | 7.41 | .096 | 95 | 0.53 | .075 | 809 | 4.57 | .075 | 85 | 0.67 | .088 | 894 |
| 4 | 806 | 6.90 | .093 | 88 | 0.39 | .067 | 792 | 4.32 | .074 | 102 | 0.74 | .085 | 894 |
| 5 | 802 | 8.01 | .100 | 92 | 0.64 | .083 | 796 | 3.89 | .070 | 98 | 0.66 | .082 | 894 |
| 6 | 797 | 6.51 | .090 | 97 | 0.26 | .051 | 803 | 4.69 | .076 | 91 | 0.52 | .076 | 894 |
| 7 | 801 | 7.91 | .099 | 93 | 0.71 | .088 | 805 | 3.91 | .071 | 89 | 0.77 | .093 | 894 |
| 8 | 805 | 6.65 | .091 | 89 | 0.84 | .097 | 803 | 4.95 | .079 | 91 | 0.74 | .090 | 894 |
| 9 | 803 | 6.70 | .091 | 91 | 0.41 | .067 | 806 | 5.24 | .081 | 88 | 0.59 | .082 | 894 |
| 10 | 798 | 8.04 | .101 | 96 | 0.20 | .045 | 802 | 4.10 | .072 | 92 | 0.63 | .083 | 894 |
| Mean | | 7.36 | .095 | | 0.56 | .076 | | 4.45 | .074 | | 0.69 | .086 | |
| SD | | 0.61 | .004 | | 0.24 | .018 | | 0.50 | .004 | | 0.11 | .006 | |

Note: $R^2 = 1 - \frac{RMSE}{S_y^2}$, where S_y^2 is estimated based on the SSE in the testing stages of ANNs. Grey shades are used to indicate mean and deviations of RMSE values. This logic is explained in Note of Table 6.

Abbreviations: N, sample size; RMSE, root mean square of errors; SD, standard deviation; SSE, sum square of errors.

TABLE 7 Artificial neural network sensitivity analyses and rank comparisons.

| Output neuro | n/target variable: CES | | | | | |
|---------------|---------------------------------|------------------------------------|-----------------|-------------------------|------------------|-----------------------|
| Predictors | ANN average relative importance | ANN normalized relative importance | ANN rankings | IPMA importance effects | IPMA rankings | ANN vs. IPMA (√/×) |
| • GRV | 0.418 | 100% | 1 | 0.462 | 1 | ✓ |
| • EMV | 0.232 | 46.2% | 2 | 0.394 | 2 | ✓ |
| • EPV | 0.141 | 33.8% | 3 | 0.291 | 3 | ✓ |
| • FUV | 0.133 | 31.7% | 4 | 0.268 | 4 | ✓ |
| • SOV | 0.092 | 21.9% | 5 | 0.166 | 5 | ✓ |
| • COV | 0.055 | 13.1% | 6 | 0.115 | 6 | ✓ |
| Output neuror | n/target variable: PUI | | | | | |
| • GRV | 0.340 | 100% | 1 | 0.601 | 1 | ✓ |
| • EMV | 0.249 | 73.1% | 2 | 0.518 | 2 | ✓ |
| • EPV | 0.160 | 47.0% | 3 | 0.293 | 3 | ✓ |
| • CES | 0.079 | 22.8% | 4 | 0.209 | 4 | ✓ |
| • GAR | 0.065 | 18.1% | 5 | 0.192 | 5 | ✓ |
| • FUV | 0.059 | 17.3% | 6 | 0.083 | 6 | ✓ |
| • COV | 0.057 | 16.7% | 7 | 0.067 | 7 | ✓ |



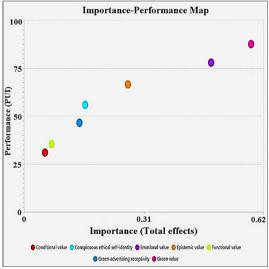


FIGURE 8 Importance-performance map analyses.

experience fulfillment in affective states such as moral satisfaction, emotional attachment, pride, and warm glow feelings.

Subsequently, the significance of EPV in explaining PUI is in line with other TCV-based works (Biswas & Roy, 2015; Lin & Huang, 2012). This result designates that SLFPs can arouse inquisitiveness and novelty among consumers by satisfying their desire for knowledge. Considering our proposed literature, the atypical characteristics of SLFPs, particularly their distinctive design and sustainability-centered communication elements might be the underlying reason behind this observed effect (Amatulli et al., 2021). Indeed, consumers who seek epistemic benefits seem to be more prone to

choosing them over routine alternatives, as this might enable them to form better cognitive risk assessments, potentially stimulating curiosity while seeking these new options (Essiz et al., 2023). Further, the importance of FUV in encouraging PUI validates early conceptual works (Hennigs et al., 2013; Jain, 2019), ratifying that consumers expect sustainable luxury fashion to be valuable in terms of quality, performance, and price. Consistent with Dangelico et al. (2021), the findings indicate that if consumers perceive SLFPs as lacking in utilitarian features, they may be hesitant to buy them, as it could diminish the luxury dimension of sustainable luxury brands. This is a logical ultimatum because functionality-oriented consumers may more swiftly

observe a match between conspicuous and sustainable dimensions of luxury, thus reckoning them as both enduring and symbolic commodities that are worth money (Achabou & Dekhili, 2013).

Our results regarding the positive effect of COV substantiate existing TCV research (e.g., Bhutto et al., 2022) by expounding that extrinsic situations such as the availability of sustainable luxury fashion along with subsidies and deteriorating environmental conditions encourage consumers to place more weight on conditional benefits while making a trade-off between sustainable (vs. standard) choices. This outcome is logical and aligns with the findings of Park et al. (2022), supporting that perceived product scarcity may enable consumers to become more aware of the conditional benefits associated with accessing limited-edition SLFPs. Compellingly, SOV played an insignificant role in predicting PUI. This did not side up with the inferences of Yang et al. (2022) and was contrary to our expectancies that sustainable luxury fashion might contribute to building social prestige. Further, a recent integrated TCV framework by Srivastava and Gupta (2023) articulates that subjective norms and social groups can stimulate a habitual inclination towards conventional green purchasing within a non-Western culture (India). However, our empirical examination challenges the validity of this direct correlation in the context of sustainable luxury fashion, indicating potential variability in its generalizability. At first glance, one explanation for this divergence might be the effect of product category and individualistic nature of our US sample (Hofstede, 1984). Paralleling the findings of Wang et al. (2021), our sample regards social groups as second-order artificial constructs, thereby pursuing more idiosyncratic decisions and showing a lower tendency to fit interpersonal (e.g., peer group) opinions. Another plausible account is that consumers may choose to forego "showing off" to others in this domain to safeguard against inequalities that come with social stratification and the self-enhancement (e.g., power, prestige) aspect of conventional luxury purchases (Han & Kim, 2020). Taken together, these findings corroborate the positive perspective of sustainable luxury (as elaborated in Section 2.1) and delineate that consumers are not merely purchasing a product but are investing in a diverse range of consumption values, such as environmental protection and emotional satisfaction. This resonates positively with the shared understanding of both luxury and sustainability, thereby reinforcing the proposition by Osburg et al. (2021) that these two concepts can exist synergistically within the marketplace.

6.2 | CES and sustainable luxury

Athwal et al. (2019) noted that our understanding of the influence of consumer identity on sustainable luxury choices remains constrained. This research has sought to fill this gap by investigating the prominence of CES, thereby enhancing our knowledge of the identity-related facets of sustainable luxury. Our data indicate that CES has a positive direct impact on purchase intention. In the ambit of sustainable consumption, this is in parallel with recent works on self-congruity and identity theories (Carranza et al., 2023; Pai et al., 2022). From our findings, it would be sensible to presume that luxury

consumers who view themselves as environmentally conscious and have salient identity goals are more likely to make self-congruent choices, as this has a high potential to indulge their self-affirmation and self-completion needs. One may expect such consumers to realize a closer fit between luxury and sustainability when the prominence of CES is elevated. Our research further lends credence to the position of Athwal et al. (2019) that consumers' self-identity propels them towards more enduring sustainable luxury actions. Along the same lines, we enrich the findings of Bhutto et al. (2022), suggesting that CES, when combined with TCV variables, can generate a model with greater behavioral predictability, as opposed to when it is examined in

isolation.

Next, we show that the association between six consumption values and PUI is mediated by CES. This concurs with the findings of Lavuri et al. (2023) and Qasim et al. (2019), as consumers' inner moral beliefs and values chronically reflect their ideal ethical selves-that is, their self-sacrifice in protecting the environment, emotional and inquisitive involvement, combined with positive functional, situational. and social value-expressive functions towards sustainable luxury fashion can have the power to allure their conspicuous ethical selves. When these consumption values reflect consumer's aspiration to be perceived as ethically conspicuous, it demonstrates a potent predictive relevance (75.77% ANN-Model A) and echoes the new school of thought on the harmonious relationship between sustainable luxury and consumer behavior (e.g., Amatulli et al., 2021; Vanhamme et al., 2023). This result also resonates with the recent research on the motivation-identity-behavior hierarchy (e.g., Chaihanchanchai & Anantachart, 2023; Tewari et al., 2022) by clarifying that value perceptions not only serve as a motivation to purchase SLFPs but also contribute to the formation of ethical self. From the opposite angle. these mediations manifest a negative spillover effect at the personal level, in which consumers can choose to withdraw their purchases when SLFPs do not align with their ethical selves—a conjecture in line with White et al. (2019). Intriguingly, we found that SOV can still indirectly influence PUI if perceived utilities derived from this construct inform the ethical identity. Keeping context differences aside, this lines up with the observations of Lu and Ahn (2022), wherein the social capital of consumers can contribute to the enhancement of self-luxury brand connection. As a result, a socially shaped personal identity may still serve as a psychological linkage in leading to the purchase decision. However, alternative accounts for this finding exist pondering that the magnitude of social conformity differs between consumers with high vs. low prestige sensitivity (Bao Mandrik, 2004).

6.3 | GAR and sustainable luxury

Bailey et al. (2016a) called for investigations on potential psychographic differences between consumers with high versus low receptivity to green advertising. In response, we showed that consumers with high ad receptivity (vs. low counterparts) tend to espouse stronger GRV, EMV, and EPV as well as CES, which ultimately magnifies

their purchase decisions. These significant moderations are consistent with the correlated literature on signaling theory (Atkinson & Rosenthal, 2014; Sun et al., 2021), as green luxury ads can signal feelings of affinity towards the environment through nature imagery or moral primes and arouse curiosity among high-receptive consumers by supplying epistemic benefits on products, which, in turn, reinforces PUI. Likewise, it is conceivable that concrete and trustworthy hedonic appeals used in green communication might stimulate positive affective responses and assist our high-receptive sample to favorably realign their conspicuous ethical selves (Van der Werff et al., 2013). Although recent research indicated that some luxury consumers are skeptical of green advertising and hold ambivalent views related to luxury-sustainability relationship (Septianto et al., 2023), our findings affirm that for high-GAR consumers, the act of purchasing sustainable luxury serves as a way to signal their consumption values and conspicuous identity. A potential explanation for this could be GAR's proximal influence on both personal and system trust of consumers, which subsequently shapes green purchasing decisions, a sentiment evidenced by Sun et al. (2021). Building upon the insights of our proposed literature (e.g., Bailey et al., 2016b; Rahman & Nguyen-Viet, 2023), these findings highlight the pivotal role of green advertising in elevating luxury consumers' awareness of environmental practices and understanding of SLFPs.

On the other hand, the non-significant moderating effects of GAR on FUV, COV, and SOV were surprising and designated that the link between these values and PUI did not bolster as consumers moved towards high receptivity. At first glance, this finding can be conferred to the view that perceiving functional, conditional, and social value appeals in green luxury ads may seem perplexing because they are often subtle and not immediately visible cues (Atkinson & Rosenthal, 2014). This is in tandem with the contention that consumers may not necessarily be familiar with the specific utilitarian or situational signals used in different types of green ads, making it harder for them to characterize the appeal types being made (Schmuck et al., 2018). In addition, our sample appears to rely less on peripheral routes provided by reference groups when forming PUI, and this might explain the insignificant interaction term between SOV and GAR given that green messages do not routinely induce a bandwagon effect (Pittman et al., 2021). Collectively, these results add to the lively debate on the complexities of consumer response to green marketing communications (Amatulli et al., 2021; Bailey et al., 2016a; Tewari et al., 2022), refining the need to decipher the dynamic nature of value propositions in order to shape consumers' receptivity towards sustainable luxury.

6.4 | Generational disparities and sustainable luxury

Our study found that younger consumers, those in Gen Y, exhibit a higher level of sensitivity towards sustainable luxury fashion purchases compared to their Gen X counterparts. This result mostly aligns with prior research, which suggests that millennials place a

greater emphasis on sustainability in luxury choices as opposed to other cohorts and do not perceive such goods as paradoxical (Rolling & Sadachar, 2018; Sun et al., 2022), yet it partially contrasts with the findings of Kapferer and Michaut-Denizeau (2020). Setting aside cultural differences, one possible explanation for this disparity is that the millennial participants in our sample had a stronger sense of CES and were more responsive to green luxury ads, hypothetically leading to a higher likelihood of purchasing from sustainable luxury brands. Even though not hypothesized explicitly, our millennials also scored significantly higher on three consumption values (GRV, EMV, and EPV) than Gen X. This could offer an alternative account for this incongruity.

Furthermore, PLS-MGA results show that Gen Y places a higher significance on green and emotional values for PUI, while Gen X finds functional value more pivotal to their PUI and CES. This aligns with Septianto et al. (2021), who posit that millennials are inclined towards procuring sustainable luxury items due to ecological and affective reasons (e.g., self-transcendence and authentic pride). It also resonates with Dangelico et al. (2021) who suggested that constructs such as value for money and quality-representing functional utilities—are crucial in determining green purchase satisfaction among the Gen X cohort. In line with the generational cohort theory, such differences in value orientations of generations can partially be attributed to their diverse cultural transformation background and socio-economic levels (Casalegno et al., 2022). Among other things, US millennials as trendsetters are known to possess a high proclivity towards altruism and a heightened level of consciousness regarding the CSR efforts of luxury brands (Sun et al., 2022), and this might explain the more favorable disposition towards sustainable luxury fashion among this generational cohort when contrasted with Gen X.

7 | IMPLICATIONS, LIMITATIONS, AND FUTURE DIRECTIONS

7.1 | Theoretical and methodological implications

On a theoretical basis, this research advances sustainable luxury literature in several ways. Admittedly, previous research has largely focused on the perceived sustainability-luxury oxymoron at the macromarketing level (e.g., Pai et al., 2022), with scant theoretically grounded attention given to micro-underlying mechanisms influencing consumers' engagement with sustainable luxury. As such, researchers gradually called for the development of multidimensional models to test value perceptions in sustainable luxury (Jain, 2019; Kunz et al., 2020). Answering these calls, our conceptual framework, coined in Figure 1, is the first attempt to broaden the scope of the TCV paradigm to the domain of sustainable luxury. This operationalization helps us to channelize how multiple value dimensions influence sustainable luxury choices and contribute to the advancement of TCV by enhancing the predictive power of the theory in a hitherto underexplored consumption setting.

In our conceptual framework, we have incorporated the GRV as a sixth value dimension. This addition enhances the explanatory power of the TCV and places the "GREEN" construct of Haws et al. (2014) within a broader nomological network, illustrating how it can be used in the taxonomy of sustainable luxury consumption. To the best of the authors' knowledge, this research is the first to incorporate the GRV into a comprehensive theoretical structure that encompasses luxury consumers' perceptions, identities, and intentions. To understand the conspicuous ethical selves of consumers and their reactions to green luxury brand communications, it is crucial to grasp the nature of their GRV. On top of that, we have incrementally unified the TCV with a mediator (CES) and a moderator (GAR) that have not previously been studied in this domain. This work thus adds to the contemporary TCV literature (Tanrikulu, 2021 for a review) by encompassing these mediating and moderating effects in one holistically integrated model. As the existing literature produced mixed results across generations (e.g., Kapferer & Michaut-Denizeau, 2020), we also pinpointed divergences in the level of sensitivity towards sustainable luxury among generations Y and X. These conceptualizations advance findings of recent works on the widely reported valueaction gap and sustainable luxury fashion paradox (e.g., Carranza et al., 2023; Essiz et al., 2023) by elucidating the theoretical pathway through which individual difference factors influence consumers' ability to translate their value perceptions into purchasing decisions. At the macro-scale, our integrated TCV model goes beyond generic TCV applications (Biswas & Roy, 2015; Lin & Huang, 2012; Srivastava & Gupta, 2023) and adds to the latest movement on transformative luxury research (Kim et al., 2022; Pai et al., 2022), echoing the positivistic sentiment that sustainability and luxury can have a common future in fostering social-environmental change among US consumers.

Besides augmenting the theory, this research makes two main methodological contributions. First, previous studies have often relied on convenience samples with diverse backgrounds (some composed of students) who had little or no consumption experience with luxury products (e.g., Sun et al., 2022). As condemned by Athwal et al. (2019), this sampling method does not accurately represent the luxury consumer market. To address this shortcoming, we used a balanced representative sample that helped us to derive context-specific results with a lower margin of sampling error. Second, this research is the first to employ a combination of multi-trait approaches, PLS-SEM, ANN, and IPMA in this literature, whereas previous works have merely used single SEM or simple logistic regressions (Ali et al., 2019; Wang et al., 2021; Yang et al., 2022). The single-analytical method often leads to an overestimation of effect sizes and jeopardizes the reliability of early results. Alternatively, our tri-stage approach provides a prevailing perspective on TCV modeling and contributes to the methodological development of this pertinent literature by controlling for linear and nonlinear associations between constructs. Particularly, the deep-learning powered ANN models allow us to prioritize the most important drivers of endogenous constructs with higher predictive accuracy and cross-validate significant effects obtained through PLS-SEM, therefore minimizing measurement errors.

7.2 | Managerial implications

This research offers several implications for luxury marketers on how to align their sustainable positioning strategy with the perceived values of US consumers. Primarily, our results suggest that marketers cannot rely on only one value dimension in promoting sustainable luxury, as focusing on a single value is not sufficient to explain purchase decisions. Instead, we recommend marketers to harness multiple value propositions into their communication efforts. In particular, our results indicate that positioning SLFPs by using bandwagon appeals is not the most effective way to target all consumers because one's PUI is not directly driven by the desire to signal status. Moreover, it is essential for marketers to convey factual information about labor practices, transparency in the production process (e.g., materials recycled), and environmental safety (e.g., carbon footprint) of SLFPs-as alluded by our descriptive findings (see Figures 2 and 3). Understanding such practices would enable consumers to make more informed decisions, helping them to derive additional EPV. As our sample largely associated sustainable luxury consumption with guilt-free license, marketers are recommended to relate these purchases with the idea of doing good for the environment. They could highlight the ways in which sustainable luxury products help preserve environmental resources. By enhancing the salience of GRV among consumers, they may reduce cognitive dissonance and lead to positive spillover effects on other green domains. To help seed the market, another area for improvement can be increasing the accessibility and visibility of sustainable luxury fashion across different behavioral segments without compromising the quality. This will let the majority of consumers derive extra conditional benefits from their purchases and add to the long-term circularity of luxury brands.

Building on the ANN and IPMA outputs, we further sensitize that consumption values vary in their importance and performance. In cases where it is not feasible to foster multiple values, marketers are recommended to concentrate on cost-benefit analysis and prioritize managerial actions around the most salient determinants of sustainable luxury fashion. As such, marketers need to focus more on changing the attitudes of consumers who hold weaker GRV, EMV, and EPV since those with stronger value perceptions are already self-motivated to engage on their own. Additionally, we underscore that consumers still have doubts about whether luxury brands are truly sustainable (see Table 3). In practice, low CES consumers are expected to hold greater doubts, and they require more persuasion from marketers while making purchase decisions. Ideally, ad campaigns can concentrate on featuring green, emotional, and epistemic appeals via associative priming tools to attract the attention of this segment, as these values positively interact with ad receptivity. For instance, leveraging celebrity endorsers who are coupled with green consumption values might lead low-receptive consumers to procure higher self-congruity in sustainable luxury branding. However, endorsers need to be cognizant about not making false claims in their promotions, as this can elicit product perception biases, potentially leading to negative word of mouth among consumers (Acuti et al., 2022).

Another practical suggestion is that marketers can target various demographic segments of consumers simultaneously, such as those who differ in age and gender while promoting sustainable luxury fashion. As aforementioned, millennials (vs. Gen X) and females (vs. males) had a higher level of receptivity, self-identity, and purchase intent. In light of this information, it is critical to consider using pull marketing and buzz marketing strategies by featuring Gen Y and females to attract the attention of Gen X and males (Essiz & Mandrik, 2022). To boost perceived readiness among the latter group, marketers may consider crafting personalized experiences (e.g., early access to limited editions of SLFPs). Recalling our PLS-MGA findings (see Appendix D), it is palpable that sustainable luxury brands would benefit significantly from adopting a multidimensional marketing strategy across generations. For Gen Y, emphasis can be placed on warmth, hedonic, and collective ecological message frames (e.g., Dai & Sheng, 2022; Rizomyliotis et al., 2021) to leverage their amplified sensitivity to green, emotional, and social values, given these aspects exert greater influence over their PUI and CES enhancement. Conversely, Gen X are more swayed by the functional value when forming their PUI and CES. To fortify purchases among this group, we encourage marketers to accentuate competence-based utilitarian advertising appeals, signaling that SLFPs match the perceived superior quality linked with general luxury goods. Portraying them as a desirable alternative to general luxury equivalents can aid marketers in highlighting the longevity and unique craftsmanship associated with sustainable luxury (Pai et al., 2022). Moreover, marketers might consider designing visually expressive meta-sustainability labeling schemes for both cohorts to nudge specific value-expressive benefits associated with SLFPs (Torma & Thøgersen, 2023), Ultimately, it is imperative for marketers to delve into the contexts under which different categories of sustainable luxury products are more susceptible to influence, whether from Gen Y to Gen X, or vice versa. Such efforts may assist them in discerning the appropriate weight to be placed on emotional versus rational appeals in developing sustainable marketing strategies.

Next, as the consumer journey has become a multi-sensory experience (Laukkanen et al., 2022), we recommended marketers to utilize sensory cues and virtual reality technologies to promote significant value perceptions identified in this study. This will nudge consumers towards sustainable luxury fashion in the physical store, aiding them to internalize sustainable product information more effectively. For the online environment, one long-term positioning strategy can be related to the metaverse because it has a large potential to transform the way consumers and brands interact (Dwivedi et al., 2023). As time evolves, we suggest luxury brands to ramp up their digital sustainable product lines within the metaverse and explore ways to optimize metaverse sensory inputs through personalized avatar-based marketing strategies, which, in turn, can generate receptivity among users and assist the digital value creation process.

Apart from liabilities of luxury brands, other stakeholders such as policymakers and educational institutions should also actively promote sustainable luxury practices (Srivastava & Gupta, 2023). In a

broader context, our research finally suggests policymakers to implement stricter ethical standards in luxury production by adopting extended producer responsibility policies and enhancing supply chain transparency using blockchain technology. Besides, they should incentivize the transition to circular luxury fashion through tax breaks and by offering support for sustainable R&D activities. While educational institutions can take the initiative in promoting the cultivation of CES, green receptivity, and consumption values via knowledge instillation methods (e.g., curriculum development, awareness campaigns, and seminars). This would enhance the social desirability of sustainable luxury products and guard against potential negative perceptions related to sustainable luxury consumption.

7.3 | Limitations and future research directions

This research, while comprehensive, has certain limitations that influence the generalizability of its findings. First, our data were gathered directly from the actual luxury consumers, providing a realistic snapshot of sustainable luxury consumption and adding credence to our results. Nevertheless, the cross-sectional nature of our data means we captured a static snapshot, missing out on dynamic variations in consumption values. Given that our sample comes exclusively from the United States, our findings are inherently tethered to its market maturity as well as economic, cultural, and demographic characteristics. Therefore, extrapolating these results to other luxury markets without consideration of their unique structures might risk misinterpretation. To avert this threat of ethnocentrism, longitudinal (e.g., quasi-natural experiments) and cross-national comparisons will add to the external validity of our model. Next, while our research identified six consumption values facilitating sustainable luxury fashion, it is critical to recognize that consumption values are multidimensional (Sheth et al., 1991). There are other potentially influential constructs such as esthetic, experiential, and zero-moment-of-truth values that could hold significance in sustainable luxury brand consumption (Han & Kim, 2020). Thus, our results might not be generalizable to contexts where these unexplored values are pivotal.

Moreover, we focused solely on the fashion domain and prepurchasing stage, hence generalizing our conclusions to other consumption domains or all sustainable luxury purchases might not be straightforward. To broaden the applicability of our findings, one promising avenue would be to study the subtle differences of value perceptions in product-category variations and other servicedominant sustainable luxury areas (e.g., technology, tourism, and the vintage market) with a particular focus on post-purchasing stage variables such as word of mouth intentions (Shashi et al., 2021). Apart from theoretical reasonings, the limited representation of baby boomers and Gen Z consumers in the dataset led this study to primarily concentrate on Gen Y and Gen X consumers. While our focus on these generations allows for an in-depth exploration, it also hinders the immediate relevance of our results to baby boomers and Gen Z. Given that these cohorts display interest in sustainable consumption (Arora & Manchanda, 2022), understanding their values and

perceptions regarding sustainable luxury consumption may warrant more generalizable insights. Lastly, on methodological fronts, future studies can explore other nonlinear activation functions (e.g., softmax and hyperbolic tangent) in ANN modeling to further fine-tune the predictive capability of our model. Alternatively, researchers can combine the PLS-SEM with other machine learning methods such as random decision forests, gradient boosting, and asymmetric fuzzy-set qualitative comparative analyses to causally characterize specific value configurations that can conjointly lead to a high level of sustainable luxury purchases, thereby enriching our model's vigor (e.g., Bhattacharyya et al., 2023).

8 | CONCLUDING REMARKS

Originally employing a multi-analytical approach, this research provides a rigorous empirical assessment of value-based determinants of sustainable luxury and unravels exogenous factors affecting this link (i.e., CES and GAR). It also focuses on illuminating cross-generational disparities between Gen Y and X. Unitedly, these findings contribute to a better understanding of the psychographic, behavioral, and demographic characteristics of sustainable luxury consumers. By initiating this line of inquiry, our study is the first to delineate the applicability of the integrated TCV model in this sphere, hence adding to the positive school of thought in better theorizing research on sustainable luxury (Athwal et al., 2019; Kunz et al., 2020; Osburg et al., 2021).

At this critical point, we contend that the exclusive benchmark of sustainable luxury should not be the accountability of a few firms. As a matter of fact, this transformative movement necessitates collective actions from multiple stakeholders in private and public spheres during the value delivery process. To this end, understanding the multifaceted nature of sustainable luxury via individual value perceptions is a vital first leg for satisfying the changing needs of consumers and normalizing the perceived fit between sustainability and luxury. We thus look forward to seeing more conscientious luxury production and consumption practices on the market side and hope that this investigation may serve as a springboard for future research, especially from high-impact markets to safeguard the long-term sustainable development agenda in the luxury industry.

AUTHOR CONTRIBUTIONS

Oguzhan Essiz: conceptualization, methodology, data curation, software, formal analysis, visualization, writing – original draft, reviewing & editing. Aysu Senyuz: conceptualization, supervision, funding acquisition, writing – reviewing & editing.

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CONFLICT OF INTEREST STATEMENT

The authors declare that there is no conflict of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this research are available from the corresponding author upon reasonable request.

ETHICAL STATEMENT

In this research, all procedures involving human participants were conducted following the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or with comparable ethical standards. Informed consent forms were obtained from all individual participants included in the study.

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APPENDIX A: CONSTRUCT MEASURES, DEFINITIONS, AND RELATED STATISTICS

| Construct management of the construction of th | | | | | | | |
|--|-----------|------|------|------|------|----------|----------|
| Construct measures & operational definitions (# of items adapted, source) | Main role | М | SD | SFLs | VIF | Skewness | Kurtosis |
| Functional value (FUV) (4) (Sweeney & Soutar, 2001): The extent to which consumers will derive utility based on the expected performance and perceived quality of sustainable luxury fashion products. | IV | 3.78 | 1.01 | | 1.76 | -0.92 | 1.08 |
| (•) I would purchase sustainable luxury fashion products because I think they offer consistent quality. | | 3.75 | 1.02 | 0.88 | | | |
| (•) I would purchase sustainable luxury fashion products because I think they are well-made and would perform consistently. | | 3.93 | 0.97 | 0.90 | | | |
| (•) I would purchase sustainable luxury fashion products because I think they have acceptable standards of durability and longevity. | | 3.97 | 0.95 | 0.91 | | | |
| (•) I would purchase sustainable luxury fashion products because I think they offer value for money. | | 3.49 | 1.14 | 0.74 | | | |
| Social value (SOV) (4) (Sweeney & Soutar, 2001): The extent to which consumers will enhance their social self-image through purchasing sustainable luxury fashion products. | IV | 3.10 | 1.14 | | 2.34 | -1.03 | -0.79 |
| (•) Buying sustainable luxury fashion products would help me to feel accepted among my friends. | | 3.05 | 1.14 | 0.90 | | | |
| (•) Buying sustainable luxury fashion products would make a good impression on other people such as reference groups. | | 3.27 | 1.15 | 0.92 | | | |
| (•) Buying sustainable luxury fashion products would help me to gain social approval and a positive social image. | | 3.08 | 1.21 | 0.91 | | | |
| (•) Buying sustainable luxury fashion products will improve my overall social status. | | 3.02 | 1.06 | 0.89 | | | |
| Emotional value (EMV) (3) (Lin & Huang, 2012): The extent to which purchasing sustainable luxury fashion products will cause fulfillment in affective/moral states and generate feelings of elation. | IV | 3.73 | 1.13 | | 2.69 | -0.98 | 0.19 |
| (•) Buying sustainable luxury fashion products would feel like making a good personal contribution to something better. | | 3.75 | 1.10 | 0.92 | | | |
| (•) Buying sustainable luxury fashion products would feel like the morally right thing to do. | | 3.60 | 1.17 | 0.91 | | | |
| (•) Buying sustainable luxury fashion products would arouse positive emotions and make me feel like a better person. | | 3.86 | 1.12 | 0.91 | | | |
| Epistemic value (EPV) (4) (Lin & Huang, 2012): The extent to which the purchase decision of sustainable luxury fashion products will arouse inquisitiveness, represent novelty, and fulfill the desire for knowledge. | IV | 3.81 | 1.06 | | 2.01 | -0.87 | 0.39 |
| (•) I would prefer to check certifications and eco-labels on sustainable luxury fashion products before making a purchase decision. | | 4.07 | 0.98 | 0.88 | | | |
| (•) Before buying a sustainable luxury fashion product, I would obtain substantial information about the different makes and models. | | 3.84 | 1.08 | 0.84 | | | |
| (•) I am inclined to seek novel information about sustainable luxury fashion products. | | 3.58 | 1.14 | 0.90 | | | |
| (•) I am inclined to search for new and different product information when buying sustainable luxury fashion products. | | 3.76 | 1.07 | 0.92 | | | |
| | | | | | | | |

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| Construct measures & operational definitions (# of items adapted, source) | Main role | М | SD | SFLs | VIF | Skewness | Kurtosis |
|--|-----------|------|------|------|------|----------|----------|
| Conditional value (COV) (4) (Lin & Huang, 2012): The extent to which consumers will derive utility from sustainable luxury fashion products over general luxury alternatives based on certain extrinsic and situational circumstances. | IV | 4.14 | 0.97 | | 1.76 | -1.30 | 1.88 |
| (•) I would buy sustainable luxury fashion products instead of general luxury fashion products under deteriorating environmental conditions. | | 3.95 | 1.11 | 0.85 | | | |
| (•) I would buy sustainable luxury fashion products instead of general luxury fashion products when they are available and accessible. | | 4.10 | 0.96 | 0.90 | | | |
| (•) I would buy sustainable luxury fashion products instead of general luxury fashion products when they are offered at subsidized rates or with promotional incentives. | | 4.28 | 0.95 | 0.81 | | | |
| (•) I would change my current luxury fashion consumption style towards sustainable luxury fashion if there will be government subsidies and regulatory changes. | | 4.25 | 0.89 | 0.84 | | | |
| Green value (GRV) (4) (Haws et al., 2014): The consumer's propensity to express the value of environmental protection through luxury fashion consumption patterns. | IV | 4.02 | 0.94 | | 2.16 | -1.17 | 1.61 |
| (•) It is important to me that luxury fashion products I use do not harm the environment. | | 4.11 | 0.85 | 0.88 | | | |
| I consider the potential environmental impact of my actions when making many of my luxury fashion consumption decisions. | | 4.31 | 1.06 | 0.86 | | | |
| (•) I am concerned about wasting the resources of our planet. | | 3.76 | 0.89 | 0.84 | | | |
| (•) I am willing to be inconvenienced in order to take actions that are more environmentally friendly. | | 3.90 | 0.99 | 0.83 | | | |
| Green advertising receptivity (GAR) (3) (Bailey et al., 2016a): The extent to which consumers are receptive and attentive to the green advertising activities of luxury firms. | Moderator | 3.58 | 1.10 | | 1.89 | -1.13 | 0.97 |
| (•) I tend to pay attention to green advertising messages from luxury brands that talk about the environment. | | 3.46 | 1.13 | 0.88 | | | |
| (•) I am the kind of consumer who responds favorably when luxury brands use environmentally friendly messages in their ads. | | 3.70 | 1.11 | 0.90 | | | |
| Green advertising activities of luxury firms are a necessary form of advertising. | | 3.58 | 1.08 | 0.85 | | | |
| Conspicuous ethical self-identity (CES) (3) (Van der Werff et al., 2013): The extent to which ethical considerations and environmental issues are part of consumers' sense of self while making luxury consumption choices, or the degree to which luxury consumers consider themselves to be "ethical consumers." | Mediator | 3.61 | 1.06 | | 1.95 | -0.57 | 1.12 |
| (•) As a luxury consumer, I think of myself as an ethically responsible (green) consumer. | | 3.76 | 0.96 | 0.84 | | | |
| (•) As a luxury consumer, I make significant changes in my lifestyle for environmental reasons. | | 3.51 | 1.12 | 0.88 | | | |
| (•) Purchasing sustainable luxury fashion products would reflect who I am. | | 3.56 | 1.11 | 0.87 | | | |
| Purchase intention towards sustainable luxury fashion products (PUI) (4) (Dodds et al., 1991): The consumer's inclination to purchase sustainable luxury fashion products. | DV | 4.04 | 0.96 | | 2.17 | -1.01 | 1.09 |
| | | 4.21 | 0.88 | 0.87 | | | |

| Construct measures & operational definitions (# of items adapted, source) | Main role | М | SD | SFLs | VIF | Skewness | Kurtosis |
|--|-----------|------|------|------|-----|----------|----------|
| (•) If I were going to purchase a luxury fashion product, I would consider buying a luxury brand with a sustainable policy. | | | | | | | |
| (•) My willingness to buy a luxury fashion product will be high if it has sustainable features. | | 4.02 | 1.02 | 0.89 | | | |
| (•) I would prefer a sustainable luxury fashion product than a general luxury fashion product. | | 3.87 | 1.06 | 0.88 | | | |
| (•) I would make a special effort to buy luxury fashion products that are environmentally friendly. | | 4.05 | 0.87 | 0.90 | | | |
| Perceived social class (PCS) (1) (Yan et al., 2021): Consumers' self-perceptions of their relative social rank that is shaped by the material resources that they possess. | CV | 2.62 | 0.91 | | NA | -0.14 | -0.33 |
| (•) Which of the following social classes do you feel you belong to? (1 = lower class, 2 = lower-middle class, 3 = middle class, 4 = upper-middle class, 5 = upper class). | | 2.62 | 0.91 | NA | | | |

Note: All factor loadings are significant at p < .001. Attention check: "Please select 'strongly disagree' to show you are paying attention to this statement." A higher mean score corresponds to a stronger agreement for the respective scale (5-point Likert scale).

Abbreviations: CV, control variable; DV, dependent variable; IV, independent variable; M, mean (in grey shade); NA, not applicable; SD, standard deviation (in grey shade).

APPENDIX B: ANOVA TEST OF LINEARITY

| Factors | MS | F-values | Sig. | Deviation from linearity |
|-----------|------|----------|------|--------------------------|
| PUI * FUV | 1.23 | 2.05 | * | ✓ |
| PUI * SOV | 1.27 | 1.86 | * | ✓ |
| PUI * EPV | 2.17 | 3.81 | ** | ✓ |
| PUI * COV | 1.05 | 2.09 | * | ✓ |
| PUI * GRV | 0.92 | 2.47 | ** | ✓ |
| CES * FUV | 1.47 | 2.24 | ** | ✓ |
| CES * SOV | 1.61 | 2.20 | * | ✓ |

Abbreviation: MS, mean squares.

^{**} p < .01, and * p < .05.

APPENDIX C: PERMUTATION TEST OF MEASUREMENT INVARIANCE (MICOM)

| | | Compositional invariance assessment | al invariance | assessment | Full mea | Full measurement invariance assessment | nce assessme | ant | | | |
|------------|---|--|---------------|--|----------------|--|----------------------|--------------------|-------------|----------------------|--|
| Constructs | Configural invariance (same algorithms for both groups) | $\begin{array}{l} \text{Original} \\ \text{correlation} \\ \text{(C} = 1) \end{array}$ | ō | Partial measurement invariance established | Mean (Dif.) | כו | Equality of means | Variance (Dif.) | IJ | Equality of variance | Full measurement invariance established |
| CES | Yes | 1 | [1; 1] | Yes | .208 | [147; .145] | _S | 232 | [204; .211] | No | No |
| GAR | Yes | 7 | [.999; 1] | Yes | .178 | [144; .148] | _S | 290 | [201; .214] | No | N _o |
| PUI | Yes | 1 | [1; 1] | Yes | .166 | [142; .151] | N _o | 286 | [252; .267] | No | No |
| FUV | Yes | 766. | [.995; 1] | Yes | 113 | [146; .148] | Yes | 059 | [257; .261] | Yes | Yes |
| SOV | Yes | .992 | [.989; 1] | Yes | 620. | [204; .211] | Yes | 113 | [169; .179] | Yes | Yes |
| EMV | Yes | 1 | [1; 1] | Yes | .032 | [113; .127] | Yes | 089 | [213; .225] | Yes | Yes |
| EPV | Yes | 866. | [.996; 1] | Yes | .081 | [104; .139] | Yes | 110 | [215; .232] | Yes | Yes |
| 000 | Yes | 666. | [.997; 1] | Yes | .163 | [142; .153] | _S | 166 | [275; .288] | Yes | N _o |
| GRV | Yes | 1 | [1; 1] | Yes | .057 | [092; .144] | Yes | 186 | [271; .289] | Yes | Yes |

Note: Following Henseler et al. (2016), establishing partial measurement invariance is sufficient for proceeding with multi-group comparisons between Gen Y and Gen X. The results are based on a two-tailed test type with 5000 permutations. Abbreviations: Cl, confidence interval [2.5%; 97.5%]; Dif., differences.

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APPENDIX D: PLS MULTIGROUP ANALYSIS BETWEEN GEN Y AND GEN X

| | Path coefficie | ents | | |
|---------------|----------------|-------|--|---------------------|
| Relationships | Gen Y | Gen X | Path coefficient differences (Gen Y-Gen X) | Permutation p value |
| $GRV \to PUI$ | .548 | .315 | .233 | ** |
| $EMV \to PUI$ | .364 | .147 | .217 | ** |
| $FUV \to PUI$ | .078 | .279 | 201 | ** |
| $SOV \to CES$ | .222 | .056 | .166 | * |
| $EMV \to CES$ | .386 | .191 | .195 | ** |
| $FUV \to CES$ | .093 | .265 | 172 | * |

Note: The results are based on a two-tailed test type with 5000 permutations. To enhance clarity and focus on the most meaningful relationships, only significant path coefficient differences are reported.

^{**} p < .01, and * p < .05.