

Women and sustainable consumption in emerging markets: implications for management

Mujeres y consumo sostenible en mercados emergentes: implicancias para la gestión

Sebastián Araya-Pizarro

Professor and researcher at Universidad de La Serena, Chile

saraya@userena.cl

<https://orcid.org/0000-0002-5857-8441>

<https://ror.org/01ht74751>

Received on: 05/12/25 **Revised on:** 27/01/26 **Approved on:** 19/02/26 **Published on:** 01/04/26

Abstract: sustainability and marketing literature identifies women as a segment with consistent patterns of environmental sensitivity, enabling the examination of ecological orientations in emerging contexts. This study analyzes attitudes, practices, and consumption preferences toward eco-friendly products among Chilean women, identifying sociodemographic factors associated with ecological self-perception and willingness to pay for sustainable alternatives. Using a non-experimental, cross-sectional quantitative design, a survey was administered to 391 women residing in a strategic urban center in Chile (Coquimbo). The analysis integrated descriptive statistics, binary logistic regression, and cluster segmentation. Results reveal an identity legitimacy gap, as only one in four women self-identifies as “green” despite reporting favorable attitudes, alongside an attitude-behavior gap in higher-effort actions. Regression indicates increased ecological self-perception among young women (OR=2.05, $p=.017$) and those in larger households (OR=1.62, $p=.047$). Cluster segmentation identifies three groups: Green Core (9,7 %), Economical (23,0 %), and a dominant Pragmatic segment (67,3 %), with a willingness-to-pay threshold between 10 % and 25 %. It is concluded that, in emerging contexts, the expansion of sustainable consumption requires strategies that overcome identity and economic gaps, engaging the majority pragmatic segment through offerings that balance sustainability, quality, and price, consolidating the adoption of ecological practices beyond the core of environmentally committed consumers.

Keywords: sustainability, consumption, gender, attitudes, behavior, segmentation, preferences, identity.

Resumen: la literatura en sostenibilidad y marketing identifica a las mujeres como un segmento con patrones consistentes de sensibilidad ambiental, lo que permite examinar orientaciones ecológicas en contextos emergentes. Este estudio analiza las actitudes, prácticas y preferencias de consumo hacia productos ecológicos en mujeres chilenas, identificando factores sociodemográficos asociados a la autopercepción ecológica y a la disposición a pagar por alternativas sostenibles. Bajo un diseño cuantitativo no experimental y transeccional, se aplicó una encuesta a 391 mujeres residentes en un centro urbano estratégico de Chile (Coquimbo). El análisis combinó estadística descriptiva, regresión logística binaria y segmentación por conglomerados. Los resultados revelan una discrepancia en la legitimación identitaria, ya que solo una de cada cuatro mujeres se autodefine como “verde” pese a reportar actitudes favorables, sumado a una brecha actitud-conducta en acciones de alto esfuerzo. La regresión indica mayor autopercepción ecológica en mujeres jóvenes (OR=2.05, $p=.017$) y de hogares numerosos (OR=1.62, $p=.047$). La segmentación identifica tres perfiles: Núcleo Verde (9,7 %), Económicas (23,0 %) y un segmento Pragmático dominante (67,3 %), cuyo umbral de disposición a pagar se sitúa entre el 10 % y el 25 %. Se concluye que, en contextos emergentes, la expansión del consumo sostenible requiere estrategias que superen las fracturas identitaria y económica, conectando con el segmento pragmático mayoritario mediante ofertas que equilibren sostenibilidad, calidad y precio, y que consoliden la adopción de prácticas ecológicas más allá del núcleo de consumidoras ecológicamente comprometidas.

Palabras clave: sostenibilidad, consumo, género, actitudes, conducta, segmentación, preferencias, identidad.

Suggested citation: Araya-Pizarro, S. (2026). Women and sustainable consumption in emerging markets: implications for management. *Retos Revista de Ciencias de la Administración y Economía*, 16(31), pp. 23-38. <https://doi.org/10.17163/ret.n31.2026.02>

Introduction

The environmental crisis has intensified interest in sustainability, making it a key factor in purchasing decisions and in frameworks that promote responsible behavior (White *et al.*, 2019; Yusoff *et al.*, 2023). Consequently, the market for eco-friendly products has grown steadily, driven by consumers seeking to align their habits with environmental values (Testa *et al.*, 2021). However, as noted by Bechler *et al.* (2021) and Kollmuss and Agyeman (2002), the transition toward genuinely sustainable consumption is hindered by the attitude-behavior gap, i.e., the difference between pro-environmental intentions and actual actions, where priorities, purchasing habits, convenience, and perceived costs act as critical barriers (Carrington *et al.*, 2014; Kollmuss and Agyeman, 2002).

To explain this gap, consumer behavior research has shifted from mainly sociodemographic approaches (Diamantopoulos *et al.*, 2003) toward studies that incorporate psychographic variables such as identity, values, and social norms. In this line, Barbarossa and De Pelsmacker (2016) highlight the role of these factors in sustainable behavior, systematized in recent meta-analyses that synthesize individual, contextual, and experiential predictors (Neves *et al.*, 2025). Likewise, market segmentation through cluster analysis has been shown to capture consumer heterogeneity; as demonstrated by Jaiswal *et al.* (2021), this approach allows identifying profiles based on real trade-offs between attributes, where environmental considerations compete with price, quality, and brand (Dinh *et al.*, 2021). In parallel, Whitmarsh and O'Neill (2010) argue that ecological identity constitutes a key predictor of pro-environmental behavior by internalizing environmental values into the self-concept (Bouman *et al.*, 2020; Lou and Li, 2021).

However, favorable attitudes or isolated behaviors rarely suffice to consolidate a stable environmental identity. Although aggregate studies confirm a general positive relationship between identity and climate action (Vesely *et al.*, 2021), the literature suggests the existence of a representative subgroup that engages in

pro-environmental behaviors without identifying as “green.” A phenomenon conceptualized in this study as the “identity legitimation gap,” based on a more nuanced understanding derived from the integration of quantitative and qualitative findings on the identity-action relationship and the role of self-identity (White *et al.*, 2019). This paradox poses a substantial obstacle, as the lack of identification with the “green” category can weaken consumer loyalty and the consistency of their purchasing choices in the long term (Wild and Schulze, 2024). As Gatersleben *et al.* (2014) warn, the relationship between identity and action is complex and mediated by personal values and situational factors, highlighting the need to align identity, values, and communication to foster sustainable behaviors (Wang and Udall, 2023).

In Chile, research on eco-friendly consumption has progressed from models focused on attitudes and intentions (Araya-Pizarro and Rojas-Escobar, 2020; Palavecinos *et al.*, 2016) toward more sophisticated psychometric models (Araya-Pizarro, 2025; Sandoval-Díaz and Neumann, 2023). However, a critical gap persists in the local literature: integrating the identity construct—and, specifically, the legitimation gap—with revealed preferences and the identification of market segments using multivariate analysis. This approach, common in developed contexts (Sánchez *et al.*, 2016), has been scarcely explored in emerging markets, where economic constraints complicate the adoption of sustainable consumption.

This gap is relevant for women, a group that, as documented by McCright and Xiao (2014) and Zhao *et al.* (2021), tends to show a greater willingness toward sustainability, but whose processes of self-perception and identity legitimation under economic constraints have not been examined in depth in Chile.

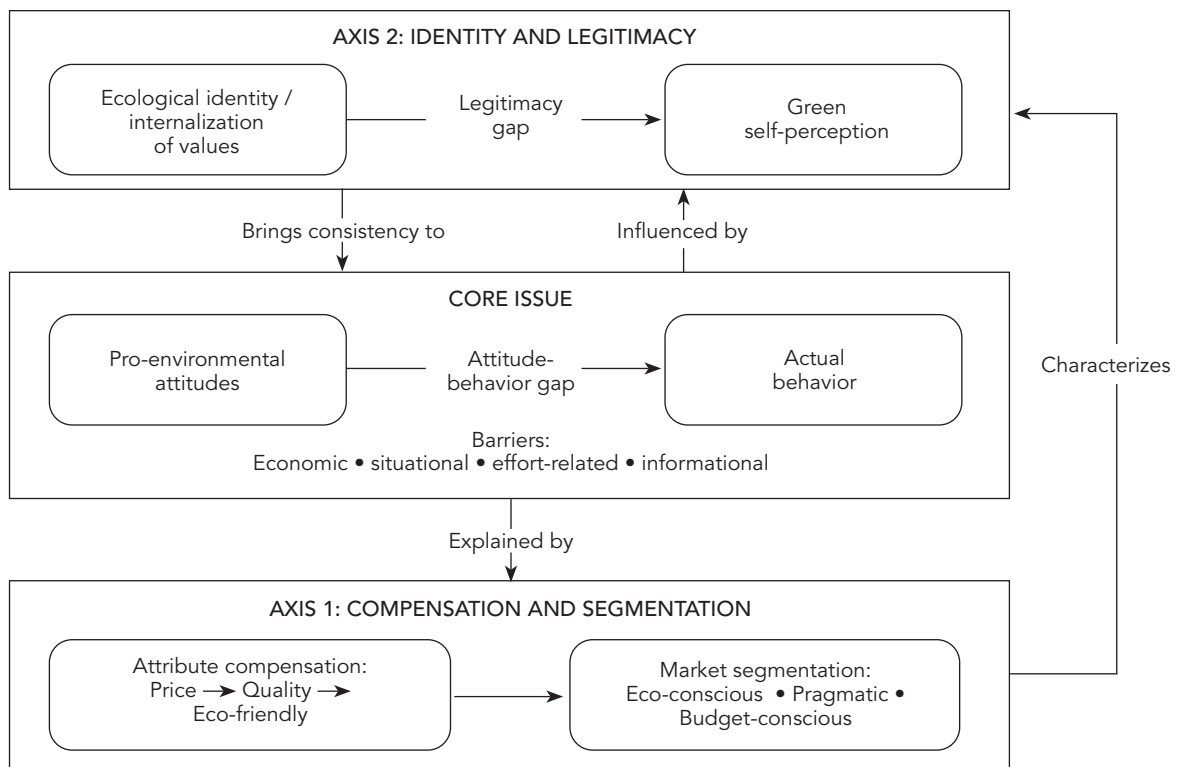
Therefore, this study aims to analyze the attitudes, practices, and consumption preferences toward eco-friendly products among Chilean women, identifying the sociodemographic factors associated with ecological self-perception and willingness to pay (WTP) for sustainable alternatives. The specific objectives are: (1) to characterize environmental practices and attitudes,

assessing the attitude-behavior and identity legitimization gaps; (2) to determine the preference structure and trade-offs between ecological attributes, quality, and price through cluster analysis; (3) to establish willingness-to-pay thresholds for eco-friendly products; and (4) to identify the sociodemographic factors associated with self-identification as a green consumer. The findings sought to provide empirical evidence for the green consumer theory in Latin America and offer practical guidance for marketing and public policy, focusing on overcoming economic and identity-related barriers.

Attitude-Behavior Gap and Barriers to Sustainable Consumption

The study of eco-consumer behavior is grounded in various theoretical approaches that explain the divergence between stated pro-environmental attitudes and the actual adoption of sustainable practices. This study proposes an integrative model with three conceptual axes: the attitude-behavior gap as the central problem, attribute trade-offs and segmentation as explanatory mechanisms for market heterogeneity, and ecological identity as psychosocial support that provides long-term coherence (Figure 1).

Figure 1
Theoretical model of the gap in eco-friendly consumption



Note. Model developed based on the conceptual integration of the attitude-behavior gap, ecological identity, and the mechanisms of attribute compensation and segmentation.

The starting point is the attitude-behavior gap (Bechler *et al.*, 2021; Kollmuss and Agyeman, 2002), understood as the discrepancy between favorable attitudes toward sustainability and their translation into actual purchasing behaviors (Carrington *et al.*, 2014). This disassociation is conditioned by barriers that filter intention into action (White *et al.*, 2019), including economic factors (premium pricing, low purchasing power), situational factors (availability), effort factors (time, convenience), and informational factors (mistrust, greenwashing) (Isac *et al.*, 2025). In this context, the trade-off between ecological attributes and other decision-making criteria explains varied responses to sustainable consumption (Dinh *et al.*, 2021; Dolnicar *et al.*, 2018), while ecological identity provides greater behavioral consistency over time (Whitmarsh and O'Neill, 2010).

Decision-Making and Heterogeneity in the Green Market

To understand actual decision-making, research has moved toward models based on attribute trade-offs. According to Dinh *et al.* (2021) and Tsaabitah *et al.* (2025), choice arises from a multi-criteria evaluation that simultaneously weighs environmental impact, perceived quality, and price. Experiments show that these trade-offs are strongly conditioned by price sensitivity, limiting the premiums actually paid for green attributes.

This decision-making process, together with attitudinal factors, generates marked heterogeneity in the market. As Dolnicar *et al.* (2018) highlight, such variability can be captured empirically through segmentation techniques such as cluster analysis, which allows identifying distinct consumer profiles. The literature on market segmentation commonly reveals a typology ranging from a Green Core or *Early Adopters* (enthusiastic greens, with high environmental concern and purchase intent), through Pragmatic groups (moderate greens), to Economic groups (reluctant greens, with low levels of commitment), as demonstrated in studies based on cognitive and behavioral variables (Jaiswal *et al.*, 2021).

Ecological identity and the legitimization of sustainable behavior

To address long-term behavioral consistency, it is necessary to examine ecological identity. Drawing on Tajfel and Turner's (1979) social identity theory and Bem's (1972) self-perception theory; this construct represents the degree to which individuals integrate environmental values into their self-concept (Whitmarsh and O'Neill, 2010). Ecological identity offers a more stable predictor of sustainable behavior than general attitudes, as actions tend to align with the self-image that people seek to maintain and validate socially (Bouman *et al.*, 2020). This internalization occurs in interaction with the social environment, where perceived norms and values reinforce environmental commitment (Lou and Li, 2021).

Contemporary literature introduces a key complexity: the identity legitimization gap. This phenomenon occurs when consumers, despite holding favorable attitudes and engaging in pro-environmental behaviors, do not identify themselves as "green." Based on Higgins' (1987) self-discrepancy theory, this can be explained by the perception of a gap between the "actual self" (behaviors exhibited) and the "ideal self" (the perfect eco-conscious consumer), creating an identity barrier that inhibits internalization (White *et al.*, 2019). In turn, Wild and Schulze (2024) describe this mechanism as a form of environmental modesty in which individuals underestimate their achievements by assuming they do not meet the socially constructed standard of what it means to be "green."

The articulation of these three axes (attribute compensation, market segmentation, and ecological identity) allows for a more comprehensive view of sustainable consumption. While attribute compensation explains specific decisions, segmentation identifies stable patterns, and ecological identity provides the psychological foundation that gives temporal coherence to choices.

Based on this review, it is hypothesized that women will exhibit a triple dissociation: (1) an attitude-behavior gap mediated primarily by economic and effort barriers; (2) an identity

legitimation gap where environmental practices do not correspond to a high level of green self-identification; and (3) a heterogeneous preference structure manifested in distinct segments dominated by a pragmatic profile that balances sustainability, quality, and price.

Materials and Methods

Study Design and Sample

This study adopted a quantitative approach with a non-experimental cross-sectional design, integrating descriptive, analytical-classificatory techniques, and inferential models. The design allowed for the characterization of attitudes and preferences, the identification of natural consumer segments through cluster analysis, and the determination of factors associated with ecological self-perception using logistic regression.

The target population consisted of women aged 18 to 65 residing in Chile's fourth most populous metropolitan area: La Serena-Coquimbo metropolitan area (Coquimbo Region). The sample size was determined using the formula for infinite populations, with a 95% confidence level, 5% margin of error, and maximum variance ($p = .50$), resulting in a minimum of 384 participants.

Given the absence of an exhaustive sampling frame and the exploratory nature of the study—focused on validating emerging theoretical constructs rather than estimating population parameters—non-probabilistic network (snowball) sampling was implemented. This technique is useful for accessing hard-to-reach populations or those for which no defined sampling frame exists, and is particularly appropriate for exploratory and qualitative research, or in the initial phases of quantitative studies (Etikan *et al.*, 2016). Although this type of sampling does not allow for statistical generalization, its strength lies in the identification and recruitment of cases with representative characteristics.

Of a total of 401 questionnaires received, 391 valid cases that met the inclusion criteria were retained. The final sample profile showed diver-

sity in age, educational level, and employment status, thus capturing the structural heterogeneity of the analyzed population.

Data Collection

Data collection was conducted using a self-administered structured questionnaire, administered between May and June 2021, and distributed via email and digital platforms (Instagram, Facebook, X). Participants were informed about the study's objectives, the voluntary nature of their participation, and the academic use of the data, with anonymity and confidentiality safeguarded in accordance with current ethical principles. The instrument underwent content validation by a panel of four experts in management, sustainability, and methodology, and demonstrated adequate internal consistency on the scale of ecological attitudes and practices ($\alpha = .82$), exceeding the recommended threshold of .70.

The questionnaire was organized into three sections. The first collected sociodemographic information through categorical questions (age, educational level, marital status, employment status, monthly household income, number of children, and household size). The second section assessed ecological attitudes and practices using a five-point Likert scale (1 = never; 5 = always) comprising twelve items, distributed across two dimensions: pro-environmental attitudes (awareness and interest in environmental protection) and ecological behavioral practices (consumption behaviors requiring varying levels of effort).

The third section operationalized the constructs of ecological self-perception, preferences, and willingness to pay. Self-perception was measured using a direct self-identification question, while preferences were captured through a revealed-preference task designed to observe the actual trade-offs in the purchasing decision. To do so, each participant ranked four prototypes of a cosmetic product (A, B, C, and D), combining three attributes: eco-certification (yes/no), quality (fair/good), and price (low/medium/high), presented as visual representations that emulated real-world choice contexts

(Figure 2). Finally, the DAP was assessed using a categorical question regarding the maximum acceptable price premium for products with

ecological attributes. This approach minimized social desirability bias by relying on observed trade-offs rather than stated intentions.

Figure 2

Choice prototypes based on ecological, quality, and price attributes



Note: 1 USD = 950 CLP.

Data Analysis

The analysis was conducted in a three-phase methodological sequence. In Phase 1, a univariate descriptive analysis was performed to characterize the sociodemographic profile of the sample and describe the frequency distributions of attitudes, practices, and ecological self-perception.

Phase 2 consisted of cluster segmentation, carried out in two stages. Initially, a hierarchical method using Ward's criterion was applied to determine the optimal number of clusters, evaluated by inspecting the dendrogram. Next, a k-means analysis was performed, which generated a three-group solution based on the Z-scores of preferences for the attributes of quality, environmental friendliness, and price. Finally, the clusters were validated using a one-way analysis of variance (ANOVA).

In Phase 3, a binary logistic regression model was used to identify the sociodemographic predictors of ecological self-perception, coded based on self-identification as a green consumer (1 = yes; 0 = no). Predictor variables included age (<25 years), marital status (single), household size (>3 members), presence of children (yes), educational level (higher education), and income (>USD 1,052). WTP thresholds were derived from the direct question regarding the maximum acceptable amount for eco-friendly products.

Model evaluation included goodness of fit (Hosmer-Lemeshow test), explanatory power (Nagelkerke, Cox & Snell, and McFadden pseudo R^2), as well as discriminatory power (AUC-ROC). In addition, multicollinearity was assessed using the Variance Inflation Factor (VIF). All analyses were performed using IBM SPSS Statistics v.24 software, with a significance level of $\alpha = .05$.

Results and discussion

Sociodemographic characteristics of the sample

The sample consisted mainly on young women (76.2% under 35 years of age). The educational level was relatively high, with 50.4% of participants reporting a college education. Most reported being single (68.3%) and childless (56.0%),

and living in households with 1 to 5 members (91.8%). The employment distribution showed a predominance of employed workers (45.8%) and unemployed individuals (36.0%). Monthly household income was concentrated in the low and lower-middle income brackets, with the majority of households reporting incomes below USD 738 (51.1%). This sociodemographic pattern reveals a profile of young women with outstanding educational capital but evident economic constraints (Table 1).

Table 1
Sociodemographic Characteristics of Participants (n=391)

Variable	Segment	Percentage
Age	Between 18 and 25 years	33.5
	Ages 26–35	42.7
	Between 36 and 45 years old	14.6
	Over 45	9.2
Educational level	High school or lower	26.1
	Vocational (CFT or IP)	23.5
	University (undergraduate)	44.3
	Graduate	6.1
Marital status	Single	68.3
	Married	15.3
	Living with a partner	11.5
	Other	4.9
Children	None	56.0
	One	19.2
	Two	17.9
	More than two	6.9
Household size	1 to 3 members	50.6
	4 to 5 members	41.2
	More than 5 members	8.2
Employment status	Employed	45.8
	Self-employed	17.9
	Unemployed	36.0
	Retiree	0.30
Monthly household income	Less than USD 369	19.7
	Between USD 369 and 737	31.4
	Between USD 738 and 1,052	17.9
	Between \$1,053 and \$1,579	16.4
	More than USD 1,579	14.6

Note. 1 USD = 950 CLP.

Environmental attitudes and practices

The analysis of environmental practices and attitudes revealed consistent differences between statements and actual behaviors. In the attitudinal dimension, high percentages of favorable responses were observed: 89.8% reported a high commitment to environmental protection, 88.5% acknowledged the impact of their consumption, 81.8% expressed concern for future generations, and 75.4% experienced emotional well-being when purchasing eco-friendly products.

Environmental practices varied substantially depending on the effort required. Low-cost actions, such as turning off lights, showed nearly universal adoption (90.0%), while behaviors requiring greater commitment, such as sorting waste (25.6%) or repairing electronic devices (36.1%), were markedly less frequent. Intermediate engagement behaviors, such as researching eco-friendly products (55.3%) or discussing climate change (56.5%), showed moderate levels of adoption (Table 2).

Table 2
Frequency of eco-friendly attitudes and practices ($n=391$), in %

Statements	Low	Medium	High
Q1. I turn off the lights when I am not using them	4.4	5.6	90.0
Q2. I buy products with recyclable packaging	14.4	32.4	53.2
Q3. I separate organic and inorganic waste	54.5	19.9	25.6
Q4. I recycle or reuse paper and cardboard	31.2	27.6	41.2
Q5. I repair damaged electronic devices	37.0	26.9	36.1
Q6. I usually buy secondhand clothes	38.6	20.7	40.7
Q7. I look into eco-friendly products when I see them advertised	18.9	25.8	55.3
Q8. I talk about climate change with family and friends	23.3	20.2	56.5
Q9. I am interested in protecting the environment	4.8	5.4	89.8
Q10. I feel good about buying eco-friendly products	11.3	13.3	75.4
Q11. I care for the environment for future generations	6.9	11.3	81.8
Q12. I am aware that my consumption affects others	5.1	6.4	88.5

Note. Low = Never or almost never, Medium = Sometimes, High = Always or almost always.

The results confirmed the attitude-behavior gap (Bechler *et al.*, 2021; Kollmuss and Agyeman, 2002), reflected in an adoption gradient inversely proportional to the effort required and consistent with situational barriers (White *et al.*, 2019). However, the study showed that, among Chilean women, the adoption of pro-environmental practices does not imply the internalization of an ecological identity. When asked how they view themselves, only 25.6% self-identify as “green,” revealing a gap in identity legitimation—understood as the distance between acting and feeling entitled to assume that identity.

This finding suggested the operation of a “perceived sufficiency” threshold that consumers do not reach, possibly exacerbated by multiple social demands traditionally managed by women, where the pro-environmental role competes with other priority responsibilities (caregiver, homemaker). Based on Higgins’ (1987) self-discrepancy theory, the aspiration toward the “ideal self” of a sustainable consumer—the “perfectly green consumer”—constitutes a difficult-to-achieve standard, creating a barrier in self-perception (White *et al.*, 2019).

Although participants engage in pro-environmental actions, they do not fully internalize them, possibly out of fear of being perceived as inconsistent. This reveals that self-efficacy and subjective norms, components of Ajzen's (1991) Theory of Planned Behavior, mediate both behavior and identity construction (Whitmarsh and O'Neill, 2010).

Preference Structure and Market Segmentation

Choice patterns became evident after examining revealed preferences. Product D (eco-friend-

ly, average quality, medium price) obtained the most favorable average ranking (1.92), being selected in first or second position by 76.7% of the participants. Product A (organic, good quality, high price) showed a polarized pattern, with 23.0% of first preferences but 45.6% of last choices. Product B (non-organic, average quality, low price) captured 28.1% of first choices, while Product C (non-organic, good quality, medium price) was predominantly ranked as the third choice (49.9%) (Table 3).

Table 3
Choice patterns and trade-offs between attributes (n=391)

Product	1st Place (%)	2nd Place (%)	3rd Place (%)	4th Place (%)	Ranking*
A	90 (23.0)	61 (15.6)	62 (15.9)	178 (45.6)	2.92
B	110 (28.1)	45 (11.5)	64 (16.4)	172 (44.0)	2.82
C	38 (9.7)	138 (35.3)	195 (49.9)	20 (5.1)	2.45
D	153 (39.1)	147 (37.6)	70 (17.9)	21 (5.4)	1.92

Note. *Ranking: weighted average calculated using positions (1–4), where a lower value indicates higher preference.

Cluster analysis (k-means) confirmed the existence of three statistically distinct consumer segments with clear commercial implications. The ANOVA showed that all variables contribute significantly to the variability between groups (Quality: $F = 195.00$, $p < .001$; Organic: F

$= 84.85$, $p < .001$; Price: $F = 195.00$, $p < .001$). The distances between cluster centers were significant (2.44–3.30), indicating adequate separation between them (Table 4).

Table 4
Profiles of consumer segments identified through cluster analysis

Segment	n (%)	Quality	Organic	Price	Dominant profile
Green Core	38 (9,7 %)	+1.43	+1.28	+0.55	Premium and organic
Economy	90 (23,0 %)	+1.43	-0.78	-1.83	Quality at a low price
Pragmatic	263 (67,3 %)	-0.70	+0.08	+0.55	Value-price-ecology balance

Note: Values represent standardized Z-scores. Positive = above-average preference, Negative = below-average preference.

The identified clusters are characterized as:

- **Green Core (9.7%):** high quality rating ($Z = +1.43$) and strong preference for ecological attributes ($Z = +1.28$), showing a willingness to accept premium prices ($Z = +0.55$).
- **Economy (23.0%):** value high quality ($Z = +1.43$), but show low interest in ecological attributes ($Z = -0.78$) and a strong preference for low prices ($Z = -1.83$).
- **Pragmatists (67.3%):** represent the largest segment, exhibiting a balanced profile with acceptance of average quality ($Z = -0.70$), a slight preference for organic products ($Z = +0.08$), and tolerance for higher prices ($Z = +0.55$).

The segmentation highlighted the heterogeneity of the organic market, identifying three statistically distinct segments (Green Core, Pragmatists, and Economists) that replicate and quantify, within the Chilean context, typologies empirically identified in other emerging markets (Jaiswal *et al.*, 2021). The most decisive finding was the predominance of the pragmatic segment, which reflects the practical rationality that many women apply in household management, where sustainability is valued as an attribute integrated

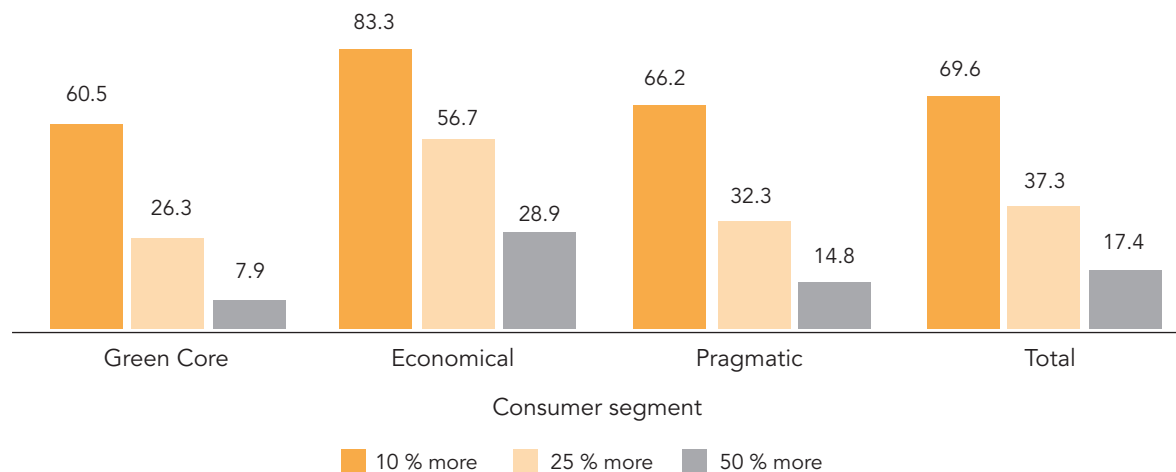
into a broader value equation that includes family well-being and budget constraints, rather than as an absolute purchasing principle.

The analysis of revealed preferences validated the theory of attribute trade-offs (Dinh *et al.*, 2021; Tsaabitah *et al.*, 2025). The preference for Product D (eco-friendly, medium price, average quality) over Product A (eco-friendly, high price, good quality) demonstrates that, in situations of economic constraint, sustainability is valued but subordinated to considerations of affordability. The **WTP** inflection point between 10% and 25% establishes a critical mass threshold for organic products, consistent with studies reporting high price elasticity for green goods (Dinh *et al.*, 2021).

Willingness to pay for eco-friendly products

The results identified a critical price threshold for the mass adoption of organic products: while 69.6% accept 10% premiums, this acceptance drops significantly to 37.3% for 25% premiums, identifying a critical price range between 10% and 25% premiums, which provides key guidance for the pricing strategy of sustainable products (Figure 3).

Figure 3
Willingness to pay for organic products (%)



Note: The percentages represent the sum of the “Agree” and “Strongly Agree” categories.

Association analysis using chi-square tests showed that the relationship between segments and WTP intensifies and becomes statistically significant as the required premium increases (WTP 10%: $\chi^2 = 14.67$, $p = .066$; WTP 25%: $\chi^2 = 22.14$, $p = .005$; WTP 50%: $\chi^2 = 24.55$, $p = .002$). This gradient indicates that for low premiums (10%), DAP operates as a relatively cross-cutting phenomenon, where sustainability begins to be perceived as an expected attribute that does not substantially increase the product's price—a trend documented in mature markets (White *et al.*, 2019). However, as the premium increases, the latent preference structure defining each segment emerges strongly, triggering mechanisms for compensating for differential attributes (Dinh *et al.*, 2021).

The disaggregated frequency analysis confirmed this behavior. The Green Core demonstrates consistency with its profile, maintaining the highest DAP across all three levels, reflecting the internalization of sustainability as a core value of its identity (Whitmarsh and O'Neill, 2010). For this segment, price is a secondary attribute compared to quality and ecological benefits. In contrast, the Economical segment shows a sharp drop in DAP beyond 10%, prioritizing the price attribute almost exclusively, even above quality, reflecting budget constraints as *the* main decision-making *driver* (Carrington *et al.*, 2014).

The managerial relevance lay in the behavior of the Pragmatics segment (67.3% of the sample). This group exhibits a consistently moderate DAP profile, with high acceptance at 10% (66.2%), which experiences a sharp drop at 25% (32.3%), falling to nearly half, and plummets at 50% (14.8%). This pattern validates its characterization as the segment that makes rational *trade-offs* between sustainability, price, and quality (Jaiswal

et al., 2021). Its tolerance threshold, between 25% and 50%, establishes the critical price limit for the widespread adoption of sustainable consumption in this context. Exceeding this point would restrict the market to a limited niche, concentrated in the Green Core.

Ecological self-perception and sociodemographic profile

As a key finding, the study identified a wide gap in identity legitimation. While the majority report favorable pro-environmental attitudes and engage in low-effort sustainable practices, only 25.6% self-identify as “green,” indicating that the implementation of environmental actions does not necessarily translate into an integrated ecological identity.

Logistic regression analysis found that women under 25 (OR=2.05, $p=.017$) and those living in households with more than three members (OR=1.62, $p=.047$) were more likely to self-identify as “green.” These data indicate that younger women and those belonging to larger households are approximately twice and 1.6 times more likely, respectively, to adopt this ecological identity, although the magnitude of these associations was modest (OR < 3.47). Single marital status showed a positive association, although it remained at a statistically trend-level (OR=1.73, $p=.08$).

Model evaluation revealed adequate overall fit (Hosmer-Lemeshow test, $p = .767$), moderate discriminatory power (AUC-ROC = .64), and a classification accuracy of 74.4%, albeit with limited explanatory power (Nagelkerke $R^2 = .067$). The multicollinearity analysis confirmed the independence among the predictors, with variance inflation factor (VIF) values below 2.5 (Table 5).

Table 5
Binary logistic regression model ($n = 391$)

Item	B	Error	Wald	Sig.	VIF	OR	I.C. 95 % OR
Marital status (single)	0.55	.31	3.03	.082*	1.32	1.72	0.93 – 3.19
Education (higher education)	0.19	.28	0.45	.501	1.09	1.21	0.70 – 2.08
Household size (> 3)	0.48	.24	3.95	.047**	1.05	1.62	1.01 – 2.61
Age (< 25 years)	0.72	.30	5.70	.017**	1.50	2.05	1.14 – 3.68

Income (> 1,000,000)	0.20	.27	0.59	.444	1.08	1.23	0.73 – 2.07
Children (with children)	0.19	.31	0.39	.530	1.59	1.21	0.66 – 2.22
Constant	-2.27	.48	22.0	.000***		0.10	
Hosmer and Lemeshow test	.564	$\chi^2 = 6.75$					
Cox and Snell R ²	.045						
Nagelkerke's R ²	.067						
McFadden's pseudo-R ²	.041						
Overall percentage	.744						
AUC-ROC curve	.642						

Note. Dependent variable: ecological self-perception (1 = Yes, 0 = No). * $p < .10$; ** $p < .05$; *** $p < .01$. Effect size of the ORs: negligible ($OR < 1.68$), small ($1.68 < OR < 3.47$), moderate ($3.47 < OR < 6.71$), and large ($OR > 6.7$).

The results reinforced recent trends in the literature but also reveal its limitations. The association with large households suggests that the family acts as a microenvironment that reinforces ecological norms, where women's role as educators and transmitters of values facilitates identity internalization through social validation (Bouman *et al.*, 2020). However, the coexistence of educational capital with economic constraints creates a paradox of actionable knowledge, where high environmental awareness does not always translate into the ability to act when the budget is limited. In these contexts, abstract or long-term environmental benefits do not offset economic barriers, and immediate attributes such as price carry greater weight in purchasing decisions (Carrington *et al.*, 2014; White *et al.*, 2019).

Although youth and large households largely predict green self-perception, the model explains only a fraction of the variance. Neves *et al.* (2025) highlight that sociodemographic factors operate as incomplete approximations of underlying psychological constructs.

Strategic implications

This research offers an integrative view of women's sustainable consumption in emerging markets, identifying three interrelated gaps that explain its complexity: the attitude-behavior gap (Carrington *et al.*, 2014; Kollmuss and Agyeman, 2002), an economic gap marked by high price sensitivity, and an identity legitimation gap. The findings show that although environmental

awareness exists, its practical expression is mediated by contextual and identity-related factors, challenging linear models of pro-environmental behavior (Syed *et al.*, 2024). Although the data were collected in 2021, the observed patterns reflect structural dynamics that remain relevant today. The attitude-behavior gap and economic barriers continue to condition the willingness to pay considerable premiums, results that agree with recent studies in emerging economies (Adalita *et al.*, 2025; Alenazi, 2025) and align with theoretical syntheses on environmentally responsible practices (Neves, 2025). Simultaneously, ecological identity plays a central role in legitimizing conscious consumption habits (Wild and Schulze, 2024), confirming the analytical relevance of these findings for understanding the persistent tensions in women's behavior committed to environmental care.

Theoretically, the findings suggest expanding explanatory frameworks of consumer behavior. Ajzen's Theory of Planned Behavior (1991) could be enriched by incorporating ecological identity not only as a predictor but as an outcome mediated by "perceived sufficiency" (Vesely *et al.*, 2021), in line with Tajfel and Turner's (1979) theories of social identity and Bem's (1972) theory of self-perception. Furthermore, evidence suggests that economic constraints act as a double barrier in emerging markets, limiting both action (Carrington *et al.*, 2014) and identity construction by hindering the behaviors necessary to legitimize oneself as "eco-friendly" (Lou and Li, 2021). DAP is thus structured from the consumer's segmental

position, combining price sensitivity, attribute compensation, and identity willingness. The growing statistical significance of this relationship shows that as price increases, the segmental profile gains greater predictive weight, linking segmentation theory with the literature on DAP. Finally, we propose shifting the analytical focus from “why they do not act” (Kollmuss and Agyeman, 2002) to “why those who act do not feel legitimized,” positioning the identity gap as a strategic component of sustainable behavior (Wild and Schulze, 2024).

From a practical perspective, the results offer useful guidelines for business strategy and public policy. It is recommended to develop narratives that legitimize progress rather than perfection; to abandon the archetype of the “perfect green consumer” and normalize partial behaviors to reduce the identity barrier and engage the pragmatic majority (White *et al.*, 2019). At the same time, innovation in business models is required through “accessible eco-friendly offerings” that ensure profitability even with minor concessions on environmental attributes, supported by supply chain efficiencies to achieve critical levels of accessibility. This aligns with evidence that perceived behavioral control, influenced by price, determines adoption (Paul *et al.*, 2016). The effectiveness of these strategies depends on precise segmentation, targeting pragmatic consumers through messages that highlight tangible benefits and align sustainability with economic rationality, reinforcing the coherence between identity, environmental values, and communication (Wang and Udall, 2023).

In short, moving toward sustainable consumption in emerging markets requires transforming the dominant narrative, replacing the pressure for ecological perfection with the legitimization of imperfect but consistent action. Only when consumers feel empowered to call themselves “green”—even if only partially—can an identity foundation be established that supports deeper, more lasting, and strategically manageable behavioral changes.

Conclusions

This study showed that the transition toward sustainable consumption in emerging markets requires overcoming three interconnected critical points: economic, behavioral, and, centrally, identity-related. In scenarios of economic constraint such as Chile’s, sustainability operates as a negotiated value within decision-making equations where price, quality, and functionality compete with environmental attributes.

The identification of a pragmatic majority segment suggests redefining competitive opportunities. While traditional strategies focus on the core green niche, the potential for mass adoption lies with consumers seeking to balance sustainability with other benefits. The critical price threshold (10%–25%) clearly defines the commercial viability of sustainable offerings in these markets. While acknowledging that price and functionality influence the adoption of sustainable products, the identity legitimization gap revealed that action alone does not guarantee the internalization of a green identity. Despite high levels of stated commitment, only one in four women identifies as “green,” demonstrating that the sustainable transition requires not only facilitating actions but also reinforcing the associated identity. Thus, we propose shifting the focus from “why they do not act” to “why those who act do not feel legitimized.” The strategic imperative is not limited to overcoming barriers of price or availability, but to building narratives that enable identification with sustainability without demanding ecological perfection.

These findings have implications for the theory of sustainable behavior and for the implementation of business strategies and public policies. At the academic level, it is necessary to integrate identity into explanatory models of pro-environmental behavior. For businesses and public policies, this implies promoting narratives that value progress and designing offerings that balance sustainability and accessibility.

This study has certain limitations that open opportunities for future research. First, the cross-sectional nature of the data collected in 2021 prevents the establishment of causal relationships and the observation of the temporal evolution

of identity and behavioral gaps. Longitudinal studies could examine how these dynamics change in response to economic fluctuations or new environmental policies. Second, the use of non-probabilistic sampling restricts the statistical generalizability of the results, although it allows for a valuable initial exploration of the constructs in the analyzed context. It is recommended to replicate the study with probabilistic and representative samples, as well as to extend it geographically to assess the cross-cultural consistency of the findings. Finally, future work could experimentally validate the marketing strategies derived from segmentation, or explore through mixed methods the narrative construction of “perceived sufficiency” as a mechanism to address the identity legitimization gap.

Based on these results, three complementary areas of focus are identified: (1) experimental evaluation of marketing and communication strategies centered on the pragmatic segment, articulating sustainability, tangible value, and economic rationality; (2) analysis of business models and pricing schemes within the critical premium threshold identified for emerging markets; and (3) studies on the construction of “perceived sufficiency” in the ecological identity of women as household managers under economic constraints.

In conclusion, the competitiveness of sustainable businesses in Latin America will depend on developing models and strategies adapted to the reality of emerging economies, recognizing both the persistence of economic constraints and the presence of a large pragmatic segment willing to adopt sustainable options since they offer tangible value, accessibility, and an identity with which they can identify.

Acknowledgments

To Francisca Álvarez Ríos, Engineer at the University of La Serena, for her valuable contribution in gathering the information necessary for conducting this research.

References

- Adialita, T., Sigarlaki, F., Vasudevan, A., Rusuli, M., Chen, W., Cheng, Q., Krishnasamy, H. and Miskam, Z. (2025). Assessing consumer willingness to pay for sustainable products: An application of the extended theory of planned behavior. *Journal of Infrastructure, Policy and Development*, 9(2), 6582. <https://doi.org/10.24294/jipd6582>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Alenazi, S. (2025). Sustainability Awareness, Price Sensitivity, and Willingness to Pay for Eco-Friendly Packaging: A Discrete Choice and Valuation Study in the Saudi Retail Sector. *Sustainability*, 17(16), 7287. <https://doi.org/10.3390/su17167287>
- Araya-Pizarro, S. (2025). Determinantes psicosociales del consumo sostenible en la generación posmilenial: Un análisis basado en la teoría del comportamiento planificado. *Universitas Psychologica*, 24, 1–16. <https://doi.org/10.11144/Javeriana.upsy24.dpcs>
- Araya-Pizarro, S. and Rojas-Escobar, L. (2020). Consumo responsable e intención de compra en sectores populares: Una aproximación multivariante. *Ciencias Administrativas*, 8(16), 13-24. <https://doi.org/10.24215/23143738e062>
- Barbarossa, C. and De Pelsmacker, P. (2016). Positive and negative antecedents of purchasing eco-friendly products: A comparison between green and non-green consumers. *Journal of Business Ethics*, 134(2), 229–247. <https://doi.org/10.1007/s10551-014-2425-z>
- Bechler, C. J., Tormala, Z. L. and Rucker, D. D. (2021). The attitude–behavior relationship revisited. *Psychological Science*, 32(8), 1285–1297. <https://doi.org/10.1177/0956797621995206>
- Bem, D. J. (1972). Self-perception theory. *Advances in Experimental Social Psychology*, 6, 1–62. [https://doi.org/10.1016/S0065-2601\(08\)60024-6](https://doi.org/10.1016/S0065-2601(08)60024-6)
- Bouman, T., Steg, L. and Zawadzki, S. J. (2020). The value of what others value: When perceived biospheric group values influence individuals’ pro-environmental engagement. *Journal of Environmental Psychology*, 71(April), 101470. <https://doi.org/10.1016/j.jenvp.2020.101470>
- Carrington, M. J., Neville, B. A. and Whitwell, G. J. (2014). Lost in translation: Exploring the ethical consumer intention-behavior gap. *Jour-*

- Journal of Business Research*, 67(1), 2759-2767.
<https://doi.org/10.1016/j.jbusres.2012.09.022>
- Diamantopoulos, A., Schlegelmilch, B. B., Sinkovics, R. R. and Bohlen, G. M. (2003). Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation. *Journal of Business Research*, 56(6), 465-480.
[https://doi.org/10.1016/S0148-2963\(01\)00241-7](https://doi.org/10.1016/S0148-2963(01)00241-7)
- Dinh, C. T., Uehara, T. and Tsuge, T. (2021). Green attributes in young consumers' purchase intentions: A cross-country, cross-product comparative study using a discrete choice experiment. *Sustainability*, 13(17), 9825.
<https://doi.org/10.3390/su13179825>
- Dolnicar, S., Grün, B. and Leisch, F. (2018). *Market segmentation analysis: Understanding it, doing it, and making it useful*. Springer.
<https://doi.org/10.1007/978-981-10-8818-6>
- Etikan, I., Musa, S. A. and Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1-4.
<https://doi.org/10.11648/j.ajtas.20160501.11>
- Gatersleben, B., Murtagh, N. and Abrahamse, W. (2014). Values, identity and pro-environmental behaviour. *Contemporary Social Science*, 9(4), 374-392.
<https://doi.org/10.1080/21582041.2012.682086>
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94(3), 319-340.
<https://doi.org/10.1037/0033-295X.94.3.319>
- Isac, N., Javed, A., Radulescu, M., Cismasu, I. D. L., Yousaf, Z. and Serbu, R. S. (2025). Is green-washing impacting on green brand trust and purchase intentions? Mediating role of environmental knowledge. *Environment, Development and Sustainability*, 27(9), 21329-21346.
<https://doi.org/10.1007/s10668-023-04352-0>
- Jaiswal, D., Kaushal, V., Singh, P. K. and Biswas, A. (2021). Green market segmentation and consumer profiling: A cluster approach to an emerging consumer market. *Benchmarking*, 28(3), 792-812.
<https://doi.org/10.1108/BIJ-05-2020-0247>
- Kollmuss, A. and Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239-260.
<https://doi.org/10.1080/13504620220145401>
- Lou, X. and Li, L. M. W. (2021). The relationship between identity and environmental concern: A meta-analysis. *Journal of Environmental Psychology*, 76(June), 101653.
<https://doi.org/10.1016/j.jenvp.2021.101653>
- McCright, A. M. and Xiao, C. (2014). Gender and environmental concern: Insights from recent work and for future research. *Society & Natural Resources*, 27(10), 1109-1113.
<https://doi.org/10.1080/08941920.2014.918235>
- Neves, C., Oliveira, T. and Santini, F. (2025). Understanding the determinants of sustainable consumption behavior: Insights from a meta and weight analysis. *Journal of Environmental Management*, 393(August), 126932.
<https://doi.org/10.1016/j.jenvman.2025.126932>
- Palavecinos, M., Américo, M., Ulloa, J. B. and Muñoz, J. (2016). Preocupación y conducta ecológica responsable en estudiantes universitarios: Estudio comparativo entre estudiantes chilenos y españoles. *Psychosocial Intervention*, 25(3), 143-148.
<https://doi.org/10.1016/j.psi.2016.01.001>
- Paul, J., Modi, A. and Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29, 123-134.
<https://doi.org/10.1016/j.jretconser.2015.11.006>
- Sánchez, M., López-Mosquera, N. and Lera-López, F. (2016). Improving pro-environmental behaviours in Spain: The role of attitudes and socio-demographic and political factors. *Journal of Environmental Policy and Planning*, 18(1), 47-66.
<https://doi.org/10.1080/1523908X.2015.1046983>
- Sandoval-Díaz, J. and Neumann, P. (2023). Green products purchase intention in Chilean consumers: Comparing three models using structural equations. *Revista Colombiana de Psicología*, 32(1), 83-101.
<https://doi.org/10.15446/rcp.v32n1.92739>
- Syed, S., Acquaye, A., Khalfan, M. M., Obuobisa-Darko, T. and Yamoah, F. A. (2024). Decoding sustainable consumption behavior: A systematic review of theories and models and provision of a guidance framework. *Resources, Conservation and Recycling Advances*, 23(October), 200232.
<https://doi.org/10.1016/j.rcradv.2024.200232>
- Tajfel, H. and Turner, J. C. (1979). An integrative theory of intergroup conflict. *The social psychology of intergroup relations*, 33-47.
<https://doi.org/10.13140/RG.2.2.30820.60809>

- Testa, F., Pretner, G., Iovino, R., Bianchi, G., Tessitore, S. and Iraldo, F. (2021). Drivers to green consumption: A systematic review. *Environment, Development and Sustainability*, 23(4), 4826-4880.
<https://doi.org/10.1007/s10668-020-00844-5>
- Tsaabitah, A. J., Ismoyowati, D. and Yuliando, H. (2025). Green consumer preferences toward green marketing: A conjoint approach. *BIO Web of Conferences*, 167, 1-7.
<https://doi.org/10.1051/bioconf/202516707003>
- Vesely, S., Masson, T., Chokrai, P., Becker, A. M., Fritsche, I., Klöckner, C. A., Tiberio, L., Carrus, G. and Panno, A. (2021). Climate change action as a project of identity: Eight meta-analyses. *Global Environmental Change*, 70, 102322.
<https://doi.org/10.1016/j.gloenvcha.2021.102322>
- Wang, B. and Udall, A. M. (2023). Sustainable consumer behaviors: The effects of identity, environment value and marketing promotion. *Sustainability*, 15(2), 1-14.
<https://doi.org/10.3390/su15021129>
- White, K., Habib, R. and Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49.
<https://doi.org/10.1177/0022242919825649>
- Whitmarsh, L. and O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology*, 30(3), 305-314.
<https://doi.org/10.1016/j.jenvp.2010.01.003>
- Wild, S. and Schulze Heuling, L. (2024). Exploring the role of identity in pro-environmental behavior: Cultural and educational influences on younger generations. *Frontiers in Psychology*, 15(October), 1-11.
<https://doi.org/10.3389/fpsyg.2024.1459165>
- Yusoff, N., Alias, M. and Ismail, N. (2023). Drivers of green purchasing behaviour: A systematic review and a research agenda. *F1000Research*, 12, 1286.
<https://doi.org/10.12688/f1000research.140765.1>
- Zhao, Z., Gong, Y., Li, Y., Zhang, L. and Sun, Y. (2021). Gender-related beliefs, norms, and the link with green consumption. *Frontiers in Psychology*, 12(December), 1-13.
<https://doi.org/10.3389/fpsyg.2021.710239>

Research support and funding

This project did not receive any funding or financial support.

Declaration of Authorship - CRediT Taxonomy

Author	Contributions
Sebastián Araya-Pizarro	Conceptualization, formal analysis, research, methodology, writing. Original draft, writing. Review and editing.

Statement on the use of artificial intelligence

The author **DECLARES** that, in the preparation of the article titled: "Women and Sustainable Consumption in Emerging Markets: Implications for Management," artificial intelligence (AI) was not used at any stage of the process.