



Customer-Based Green Brand Equity: The Mediating Role of Psychological Ownership of Green Products among IKEA Family Members in Indonesia

Mazaya Izzatur
Rahim*

Universitas Pendidikan
Indonesia,
Indonesia

Ratih Hurriyati

Universitas Pendidikan
Indonesia,
Indonesia

Puspo Dewi
Dirgantari

Universitas Pendidikan
Indonesia,
Indonesia

***Corresponding author:**

Mazaya Izzatur Rahim,
Universitas Pendidikan Indonesia, Indonesia.
✉ mazayarahim@upi.edu

Article Info:

Article history:

Received: July 22, 2026

Revised: July 27, 2026

Accepted: September 05, 2026

Available Online: October 05, 2026

Keywords:

Digital Green Product Signals;
Psychological Ownership of Green
Products; Customer-Based Green
Brand Equity; IKEA.



This is an open access article under the
[CC BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) license.

Copyright © 2026 by Author. Published by
Politeknik Siber Cerdika International

Abstract

Background: This study advances Cue Utilization Theory and Psychological Ownership Theory by establishing psychological ownership as a pivotal mediating mechanism through which digital green product cues generate green brand value within digitally engaged loyalty communities.

Objective: This study investigates how digital green product cues shape customer-based green brand equity via the psychological ownership of green products among IKEA Family Indonesia members.

Methods: This study employed a quantitative survey design, collecting data from 348 purposively sampled IKEA Family Indonesia members. CB-SEM was applied to examine both direct and indirect pathways among the research variables.

Results: Findings reveal that digital green product cues meaningfully strengthen psychological ownership of green products, which in turn elevates customer-based green brand equity. Moreover, psychological ownership of green products serves as a significant positive mediator in the pathway from digital green product cues to customer-based green brand equity.

Conclusion: These results confirm that communicating sustainability credentials via digital channels both directly enhances green brand perception and cultivates a sense of product belonging that reinforces customer-based green brand equity.

To cite this article: Rahim, M. I., Hurriyati, R., & Dirgantari, P. D. (2026). Customer-Based Green Brand Equity: The Mediating Role of Psychological Ownership of Green Products among IKEA Family Members in Indonesia. *Equivalent: Jurnal Ilmiah Sosial Teknik*, 8(4), 1625-1644. <https://doi.org/10.59261/jequi.v8i4.423>

INTRODUCTION

Over the past half-decade, sustainability concerns have substantially reshaped both corporate strategy and consumer purchasing patterns (Abubakar, 2022; Skare & Riberio Soriano, 2021). Heightened ecological consciousness has made consumers increasingly sceptical of brand-level environmental assertions (Abubakar, 2022). The proliferation of digital information now enables consumers to readily verify and benchmark corporate sustainability claims (Taufik & Daryanto, 2023). In the current digital landscape, a firm's capacity to cultivate perception-driven green brand equity has emerged as a decisive competitive differentiator (Castillo-Villar & Murillo, 2025; Górska-Warsewicz et al., 2021). According to the United Nations Environment Programme (Programme, 2024), global green market revenues reached USD 4.2 trillion in 2023, reflecting a 12.3 per cent year-on-year increase. The World Economic Forum 2024 further reports that 78 per cent of consumers in emerging economies now consider environmental sustainability a decisive factor in purchase decisions. The OECD (2024) Green Growth Indicators database corroborates this trend, showing that corporate environmental disclosure rates among OECD member countries rose from 41 per cent in 2019 to 67 per cent in 2023. Customer-based green brand equity is particularly strategic in the furniture retail industry because furniture products involve

high consumer involvement, long product life cycles, and significant raw material consumption, making sustainability claims more scrutinised than in fast-moving consumer goods sectors (Yu et al., 2024). Unlike the fashion or food industries where purchase frequency dilutes brand evaluation, furniture purchases are deliberate decisions where green credentials directly affect perceived value and long-term brand loyalty.

The furniture retail industry in Indonesia faces significant structural challenges. Based on data from the Indonesian Furniture Association, the furniture and home furnishings retail industry is the only sector that has experienced a consistent contraction or decline for three consecutive years, with negative growth of -1.5% in 2022, -2.1% in 2023, and -3.8% in 2024. This is inversely proportional to the e-commerce sector which recorded positive growth of +15.2% in 2022, +18.7% in 2023, and +22.3% in 2024 (Katadata.co.id, 2024). The simultaneous contraction of physical furniture retail and the expansion of e-commerce implies that consumers increasingly rely on digital platforms as their primary channel for evaluating furniture products. This digital migration makes digital green product cues critically important, as consumers can no longer physically inspect products for sustainability attributes and must instead depend on digital signals, certifications, and online narratives to assess a brand's environmental commitment (Taufik & Daryanto, 2023; Wang et al., 2021).

Although IKEA Indonesia recorded revenue of IDR 11.3 trillion in fiscal year 2024 and aggressively positioned itself as a pioneer in sustainability through various green initiatives (M. R. Indonesia, 2024a), empirical data from IKEA Family Indonesia actually shows a disconfirmation between corporate sustainability aspirations and consumer perceptions at the micro level (I. F. Indonesia, 2025). Key indicators of customer-based green brand equity show a systematic decline: value perception decreased from 72% (2023) to 58% (2025), green trust decreased from 78% (2023) to 63% (2025), and green loyalty (*retention rate*) decreased from 75% (2023) to 62% (2025) (M. R. Indonesia, 2024b; Populix, 2022). These data are derived from the IKEA Family Indonesia Member Retention Analytics Report 2022-2025, an internal company report published by PT Hero Retail Indonesia (I. F. Indonesia, 2025), cross-validated with independent consumer surveys conducted by Marketing Research Indonesia (2024b) and Populix (2022). This systematic decline suggests that IKEA's existing sustainability communication strategy may not be effectively translated into consumer psychological engagement. One potential explanation is the gap between corporate green messaging and consumer internalisation of those messages, which underscores the need to examine digital green product cues as an independent variable capable of influencing the psychological mechanisms that shape green brand equity.

Previous research on customer-based green brand equity is still dominated by conventional viewpoints outside the digital realm (Cuesta-Valiño et al., 2021; Qayyum et al., 2023). A study by Malhotra et al. (2022) shows that psychological ownership plays an important role in consumers' relationships with green brands, but it has not been widely explored in the context of digital cues. Sehgal et al. (2023) found that psychological ownership and self-suitability with green brands influence repurchase intentions, but the study did not test the role of digital green product cues as an antecedence. Liu et al. (2025) emphasize that consumers evaluate external attributes such as quality, price, and brand when purchasing green products, but the microcognitive mechanisms behind purchasing decisions are still poorly explored. Senalasari et al. (2026) and Vitayapiruks et al. (2026) also show that digital communication and brand image influence purchase intent, but have not tested the role of psychological mediation in the context of green products. Critically, Malhotra et al. (2022) limited their analysis to anthropomorphism as a moderator without examining how digital cues trigger psychological ownership, representing a theoretical gap. Sehgal et al. (2023) focused on brand warmth and self-brand congruity but neglected the role of digital information environments, constituting a contextual gap. Liu et al. (2025) tested only direct effects of green perceived value without a mediation mechanism, revealing a methodological gap. Senalasari et al. (2026) and Vitayapiruks et al. (2026) examined digital content marketing but did not incorporate psychological ownership as a mediator, representing an empirical gap. Collectively, these studies share a common limitation: they treat the antecedents of green brand equity and psychological ownership as separate constructs rather than as an integrated causal pathway operating within digital loyalty community contexts.

This research offers novelty by integrating digital green product cues as an external

stimulus and the psychological ownership of green products as a mediation mechanism in shaping customer-based green brand equity. Unlike previous studies that were still separate in testing these variables, this study tested an integrated model on IKEA Family Indonesia members as a digital loyalty community. This approach aligns with the observations of Chang et al. (2020) who showed that the psychological ownership of green products influences environmental behavior and performance, but this study extends the context to the digital realm by examining digital green product cues as an antecedence (Mukhtar et al., 2026). In addition, this study fills the gap from the studies of Vitayapiruks et al. (2026) and Senalasari et al. (2026) who have not explored the psychological mechanisms behind the influence of digital communication on green brand equity. Specifically, the theoretical novelty of this study lies in extending Cue Utilisation Theory (Mei et al., 2025; Olson & Jacoby., 1972) from its original offline product evaluation context into the digital green consumption domain, while simultaneously integrating it with Psychological Ownership Theory (Pierce et al., 2001; Verkuyten, 2025) to construct an integrated stimulus-mechanism-outcome model that has not been tested in prior research. The empirical novelty resides in testing this integrated model within a digital loyalty community context (IKEA Family Indonesia), which differs from the general consumer samples used by Malhotra et al. (2022), Sehgal et al. (2023), and Liu et al. (2025), thereby providing context-specific insights into how digital green cues operate among highly engaged consumers.

Digital green product cues encompass the deliberate deployment of informational, visual, and symbolic digital stimuli across online platforms, designed to convey a product's or brand's environmental attributes and responsibility credentials, ultimately shaping consumer perception and green brand equity (Chaves-Castro et al., 2025; Hazarhun & Çetinsöz, 2024). This construct draws on Cue Utilization Theory (Mei et al., 2025; Olson & Jacoby., 1972), which posits that consumer product evaluation relies not on objective quality per se but on the interpretation of both intrinsic and extrinsic informational cues.

In the digital era, green product signals transform into online representations of products (Cuesta-Valiño et al., 2021; Qayyum et al., 2023). Digital green product cues refer to eco-friendly signals conveyed through digital media, such as green labels, environmental certifications, virtual packaging designs, eco-friendly narratives, and visual attributes that emphasize sustainability (Biswas & Roy, 2015; Fu et al., 2026). Consumers assess the credibility and authenticity of green cues through a combination of visual, descriptive, and symbolic cues available in digital platforms (Taufik & Daryanto, 2023; Wang et al., 2021). The stronger and more consistent the digital green signal conveyed, the higher the perception of brand trust and brand authenticity, two important elements in the formation of green brand equity (Nguyen et al., 2022).

The measurement of digital green product cues in this study refers to the four dimensions adopted from the research of Parveen and Chaudhary (2025) and Shi et al. (2025). First, Green Information Signals refers to the digital presentation of textual, narrative, or data information regarding the sustainability aspects of products and processes, including material details, durability, and supply chain transparency. Second, Green Display Cues refers to the use of visual elements on digital platforms that highlight the green attributes of the product, such as the use of green colors, leaf icons, or interface design related to nature. Third, Third-Party Signals relate to the appearance of logos, certifications, or sustainability standards from recognized independent bodies, such as FSC (Forest Stewardship Council) or MSC (Marine Stewardship Council). Fourth, Social Proof Signals refer to reviews, testimonials, or other forms of social proof that highlight the sustainability of green companies and products digitally (Chen et al., 2024).

Psychological ownership of green products refers to the subjective sense of possession that consumers develop toward a sustainable brand through ongoing engagement and digital interaction, manifesting as feelings of personal ownership, environmental responsibility, and affective bonds with the brand's sustainability ethos (Azila-Gbette et al., 2025; Tanvir et al., 2025). This construct originates from Psychological Ownership Theory (Pierce et al., 2001; Verkuyten, 2025), which holds that individuals may experience a subjective sense of possession over objects, ideas, or organisations independent of any legal title. The theory identifies three foundational pathways for ownership formation: efficacy-effectance (perceived control over the target), self-identity integration (incorporation of the target into one's self-concept), and belongingness (the need for a sense of place and attachment) (Pierce et al., 2001; Verkuyten,

2025).

In the context of green products, psychological ownership arises when consumers feel that the green product or brand is "part of themselves" (Ozbozkurt et al., 2022). Research by Veit et al. (2024) explicitly links psychological ownership to digital technology, where they argue that the use of digital technology can promote environmentally friendly behavior indirectly through the formation of such psychic aspects. Gao et al. (2025) prove that the psychological ownership of green products acts as a moderator that strengthens the relationship between virtual pro-environmental behavior and the perception of human-nature connectedness.

The measurement of the psychological ownership of green products in this study refers to the three dimensions adopted from the research of Park and Kim (2025). First, Efficacy-Based Ownership is a feeling of ownership towards a green product that arises because individuals feel able to use, control, and influence the environmental benefits of the product. Second, Identity-Based Ownership is a feeling of belonging to green products that arise because the product reflects the consumer's values, lifestyle, and self-identity as an individual who cares about the environment. Third, Responsibility-Based Ownership is a feeling of belonging to green products that arise because individuals feel a moral obligation to maintain, use, and support the product for environmental sustainability.

Customer-based green brand equity captures the intangible brand value that crystallises from consumer evaluations of and interactions with a brand's environmental commitments, yielding loyalty, trust, and competitive differentiation within sustainability-conscious markets (Cuesta-Valiño et al., 2021; Lindgärde & Mionic, 2020; Qayyum et al., 2023). This concept is a development of Customer-Based Brand Equity (CBBE) proposed by Keller and Swaminathan (2019), which explains that the strength of a brand is built from the ground up based on consumer perception and knowledge of the brand (Keller, 2026).

Customer-based green brand equity is measured using four dimensions adopted from Kencebay and Ertugan (2025) research. Green Brand Awareness is the ability of consumers to recognize or remember a brand in a product category (Kencebay & Ertugan, 2025). Green Brand Association is everything related to a consumer's memory of a brand, including the attributes, benefits, experiences, and image attached to it. Green Trust is a consumer's belief that a brand's environmental performance and commitment are reliable, honest, and consistent with the green claims conveyed (Yu et al., 2024). Green Brand Loyalty is a level of customer commitment that is reflected in the loyalty to repeatedly buy and choose a brand compared to its competitors (Kencebay & Ertugan, 2025).

The Influence of Digital Green Product Signals on Psychological Ownership of Green Products

The capacity of digital green product cues to shape psychological ownership stems from their role in amplifying consumers' subjective sense of possession through brand-mediated digital stimuli. Their influence operates through multiple reinforcing channels: delivering credible sustainability information, cultivating consumer trust, reinforcing eco-related self-identity, and nurturing environmental responsibility (Parveen & Chaudhary, 2025). By generating trust in sustainability assertions, these digital cues prompt consumers to assimilate environmental values into their self-concept (Chen & Chang, 2023). A positive digital experience through clear and consistent green cues can enhance consumers' emotional responses, so they are more likely to develop a sense of psychological ownership of the green product (Shi et al., 2025).

Consumers who are exposed to authentic and credible digital green cues will be more likely to internalize sustainability values. This internalization process, as described by Psychological Ownership Theory (Pierce et al., 2001; Verkuyten, 2025), fosters a consumer's sense of psychological ownership of green brands, which is characterized by feelings of ownership, responsibility, and emotional attachment. When consumers feel the high digital green product cues in sustainable furniture products, whether through credible third-party certifications, transparent green information, supportive visualizations, or social proof from other customers, they are likely to develop a sense of psychological ownership of the product (Parveen & Chaudhary, 2025). Thus, the first hypothesis of this study is:

H1: Digital green product signals have a positive effect on the psychological ownership of green products.

The Influence of Green Product Psychological Ownership on Customer-Based Green Brand Equity

When consumers develop psychological ownership of green products, an emotional bond and stewardship orientation emerges, prompting them to regard the brand as integral to their identity and not easily substituted. Consumers who have a high sense of psychological ownership typically have a more positive experience with green products, which increases their perception of brand value (Mishra et al., 2023). These experiences can lead to increased loyalty, trust, and stronger brand awareness, which ultimately strengthens customer-based green brand equity.

Psychological ownership of green products meaningfully shapes customer-based green brand equity by deepening emotional engagement, enhancing quality perceptions, and solidifying loyalty (Mishra et al., 2023). Consumers who forge strong emotional ties with green products are inclined to perceive the brand as more valuable and preferable relative to alternatives. Such ownership drives consumers to prioritise their chosen brand even when confronted with premium pricing or competing options (Frasquet et al., 2024). In addition, a sense of responsibility and emotional attachment among consumers who have psychological ownership reinforces their desire to support brands. Strategies to increase the psychological ownership of green products, such as participatory programs, personalization, community building, and sustainability education, can ultimately strongly increase the equity of customer-based green brands (Park & Kim, 2025). Thus, the three hypotheses of this study are:

H2: The psychological ownership of green products has a positive effect on the equity of customer-based green brands.

The Mediating Role of Psychological Ownership of Green Products

Based on Psychological Ownership Theory (Pierce et al., 2001; Verkuyten, 2025), a sense of psychological ownership arises when individuals feel involved and have control over certain objects. In the context of green brands, exposure to credible green product cues can foster efficacy-based ownership, identity, and consumer responsibility towards the brand (Malhotra et al., 2022; Sehgal et al., 2023). When consumers feel emotionally attached and responsible to the company's green practices, it reinforces loyalty and positive perceptions of the brand. Thus, the psychological ownership of green products has the potential to be a mediator between digital green product cues and customer-based green brand equity (Mishra et al., 2023; Nguyen et al., 2022; Wang et al., 2022).

Digital green product cues act as an external stimulus that triggers consumers' cognitive and affective processes in evaluating a brand's environmental commitment (Parveen & Chaudhary, 2025). When consumers receive credible and consistent digital green signals, they are more likely to internalize those sustainability values. This internalization process fosters a sense of consumers' psychological ownership of green brands. This sense of ownership then drives the formation of strong green brand equity, which is reflected in green brand awareness, positive associations, trust, and loyalty to the brand (Frasquet et al., 2024). Thus, digital green product cues not only have a direct effect on the equity of customer-based green brands, but also have an indirect effect through the mediation mechanism of psychological ownership of green products.

Psychological ownership functions as a cognitive-affective conduit linking external digital stimuli to the consolidation of green brand equity (Mishra et al., 2023). Consumers who feel psychological ownership over green products incorporate these products into their extended self, exhibiting heightened responsibility, affective attachment, and sustained commitment (Pierce et al., 2001; Verkuyten, 2025). In the context of this study, when IKEA Family Indonesia consumers receive authentic and consistent digital green product cues, they tend to develop a sense of psychological ownership that strengthens their relationship with the IKEA green brand. This sense of ownership then translates into a positive perception of green brand equity, which includes green brand awareness, positive associations, trust, and loyalty. Thus, the four hypotheses of this study are:

H3: Psychological ownership of green products positively mediates the influence of digital green product cues on customer-based green brand equity

This study investigates how digital green product cues shape customer-based green brand equity via the psychological ownership of green products among IKEA Family Indonesia members.

Specifically, this study examines: (1) the direct effect of digital green product cues on customer-based green brand equity, (2) the direct influence of digital green product cues on green product psychological ownership, (3) the direct influence of green product psychological ownership on customer-based green brand equity, and (4) the mediating role of green product psychological ownership in the relationship between digital green product cues and customer-based green brand equity. Theoretically, this study contributes to the advancement of Cue Utilisation Theory and Psychological Ownership Theory by demonstrating the integrated mechanism through which digital green cues shape green brand equity via psychological ownership. Practically, this study provides actionable insights for green marketing practitioners, particularly in the furniture retail industry, regarding the design of effective digital sustainability communication strategies that foster consumer psychological engagement and strengthen green brand equity.

METHOD

A quantitative research design combining descriptive and hypothesis-testing methods was adopted. Descriptive analysis characterised respondent demographics and variable perceptions, whereas the hypothesis-testing component evaluated the proposed causal pathways from digital green product cues through psychological ownership to customer-based green brand equity (Arifin, 2011; Kartodikromo, 2026; Malhotra, 2015). This approach was selected for its capacity to statistically examine causal linkages and extend findings beyond the study sample (Creswell & Creswell, 2018; Sarun, 2026).

A cross-sectional design was employed, with data gathered at a single point in time (Siyoto, 2015; Suhardi, 2023). The data collection period was carried out from April to June 2026. This design aligns with the research goal of capturing inter-variable relationships within a defined temporal and budgetary frame (Bougie & Sekaran, 2025; Sekaran & Bougie, 2016).

The target population comprised all active IKEA Family Indonesia members who had engaged with IKEA's digital touchpoints (including the website, mobile application, and social media channels) and who had previously accessed online information regarding IKEA's green products. Based on the available data, the target population in this study is 285,600 active members of IKEA Family Indonesia (I. F. Indonesia, 2025). This figure is sourced from the IKEA Family Indonesia Member Retention Analytics Report 2022-2025, an internal report published by PT Hero Retail Indonesia, the official operator of IKEA in Indonesia, which is publicly accessible through corporate disclosure documents.

The determination of the number of samples in this study uses two approaches at once to ensure the adequacy of the sample statistically and SEM analysis. First, based on the table of determining the number of samples from Isaac and Michael (1981) with a population of 285,600 members and an error rate of 5%, a sample of 348 respondents was obtained (Mishra & Alok, 2022). Second, to meet the requirements of SEM analysis, the researcher also referred to a general rule that states that the minimum sample size for SEM is 5-10 times the number of estimated indicators/parameters (Backhaus et al., 2025; Hair et al., 2014). In this study, there are 30 indicators, so with a rule of 10 times the number of indicators, a minimum sample of 300 respondents is required ($30 \times 10 = 300$). Thus, a sample of 348 respondents met both criteria, which is sufficient for population representation based on the The final sample size of 348 was determined by adopting the larger estimate derived from the Isaac and Michael table, which accounts for population size and desired confidence level. While the SEM-based calculation yielded a minimum of 300, the higher figure of 348 was retained to provide a safety margin against potential data attrition (e.g., incomplete responses or failed screening), thereby ensuring that both statistical power for SEM estimation and population representativeness were simultaneously satisfied (Kline, 2016). Isaac & Michael (1981) table as well as adequate for estimating SEM parameters (Mishra & Alok, 2022).

A non-probability purposive sampling strategy was adopted because no exhaustive membership register of IKEA Family Indonesia was available to the researchers. In addition, this study requires respondents who meet specific criteria related to experience interacting with IKEA's digital platform as well as knowledge of IKEA's green products, so not all members of the population can be valid respondents. Purposive sampling was deemed appropriate as it enables the intentional recruitment of participants whose profiles and experiences directly correspond to

the study's analytical requirements (Bougie & Sekaran, 2025; Sekaran & Bougie, 2016). It is acknowledged that purposive sampling carries an inherent risk of selection bias, as respondents who voluntarily participate may possess stronger environmental awareness or brand engagement compared to non-respondents. This limitation may affect the generalisability of the findings and should be considered when interpreting the results.

To ensure that the selected respondents really meet the criteria as a research sample, a screening question is placed at the beginning of the questionnaire. Respondents will only proceed to the core part of the questionnaire if they meet all the criteria that have been set. The respondent criteria in this study are as follows: (1) respondents are active members of IKEA Family Indonesia, (2) respondents have made at least one purchase of IKEA products through digital platforms (websites, applications, or marketplaces) in the last 12 months, (3) respondents have accessed information about green products or IKEA sustainability through IKEA's digital channels, and (4) respondents are at least 17 years old and domiciled in Indonesia.

Research and Operationalization Variables

This study consists of three main variables: exogenous (independent) variables, mediating variables, and endogenous (dependent) variables. The exogenous variable in this study is digital green product cue (X_1), the mediating variable is the psychological ownership of green products (M), and the endogenous variable is customer-based green brand equity (Y).

Digital Green Product Signals (X_1)

Digital green product cues are defined as a set of digital instructions, information, or signals that are consciously presented to consumers through online platforms to communicate the attributes, benefits, or aspects of environmental responsibility of a product, brand, or company (Chaves-Castro et al., 2025; Hazarhun & Çetinsöz, 2024). These variables were measured using four dimensions adopted from the research of Parveen and Chaudhary (2025) and Shi et al. (2025), namely: (1) Green Information Signals, (2) Green View Signals, (3) Third-Party Signals, and (4) Social Proof Signals. Each dimension is measured by two indicators, so there are a total of 8 statement items.

Psychological Ownership of Green Products (M)

Psychological ownership of green products refers to the subjective sense of possession that consumers develop toward a sustainable brand through ongoing engagement and digital interaction, manifesting as feelings of personal ownership, environmental responsibility, and affective bonds with the brand's sustainability ethos (Azila-Gbette et al., 2025; Tanvir et al., 2025). This variable is measured using three dimensions adopted from the research of Park and Kim (2025), namely: (1) Efficacy-Based Ownership, (2) Identity-Based Ownership, and (3) Responsibility-Based Ownership. Each dimension is measured by two indicators, so there are a total of 6 statement items.

Customer-Based Green Brand Equity (Y)

Customer-based green brand equity captures the intangible brand value that crystallises from consumer evaluations of and interactions with a brand's environmental commitments, yielding loyalty, trust, and competitive differentiation within sustainability-conscious markets (Cuesta-Valiño et al., 2021; Lindgärde & Mionic, 2020; Qayyum et al., 2023). This variable was measured using four dimensions adopted from the research of Kencebay and Ertugan (2025), namely: (1) Green Brand Awareness, (2) Green Brand Association, (3) Green Trust, and (4) Green Brand Loyalty. Each dimension is measured by two indicators, so there are a total of 8 statement items.

Measurement Scale

All variables were measured using a semantic differential scale with a range of 1 to 7, where 1 indicated "strongly disagree" and 7 indicated "strongly agreed" (Niyomyaht, 2014; Oakshott & Kotiadis, 2026). The semantic differential scale was chosen because it allows respondents to express the intensity of their perception more accurately than the dichotomy scale

or simple Likert (Oakshott & Kotiadis, 2026; Sekaran & Bougie, 2016).

Research Instruments

Data were collected via a structured online questionnaire administered through Google Forms. The questionnaire consists of four main parts: (1) screening questions to verify respondents' criteria, (2) respondents' identities (demographic characteristics), (3) respondents' experiences as members of IKEA Family Indonesia, and (4) statements to measure the three research variables.

Prior to full deployment, the instrument was pilot-tested with 30 respondents sharing comparable characteristics to the target sample, enabling preliminary validity and reliability assessment. Item validity was assessed through Pearson Product-Moment correlations computed in IBM SPSS 26.0. An item strongly agreed is declared valid if the r -calculated value is greater than the r -table (0.361) at a significance level of 0.05 (Djunaedi et al., 2024; Sugiyono, 2002). The results of the validity test showed that all 22 statement items (8 items for digital green product cues, 6 items for green product psychological ownership, and 8 items for customer-based green brand equity) were declared valid with r -calculated values ranging from 0.364 to 0.817.

Internal consistency was evaluated via Cronbach's Alpha in IBM SPSS 26.0, applying the conventional threshold of $\alpha > 0.70$ (Bland & Altman, 1997; Hussey et al., 2025). The results of the reliability test showed that all three variables had good reliability: digital green product cues ($\alpha = 0.764$), green product psychological ownership ($\alpha = 0.784$), and customer-based green brand equity ($\alpha = 0.773$).

Data Collection Techniques

Responses were gathered by disseminating the online questionnaire through Google Forms. The questionnaire links are distributed through various digital channels, including social media (Instagram, Facebook, X/Twitter), IKEA Family community groups, as well as online forums discussing furniture products and sustainable lifestyles. This technique was chosen because it allows researchers to reach respondents who are geographically dispersed throughout Indonesia efficiently (Creswell & Creswell, 2018; Sarun, 2026).

The data collection process is carried out with the following steps: (1) compiling an online questionnaire using Google Form by placing the screening question on the first page before the respondent accesses the core research question, (2) distributing the questionnaire link through various digital channels, (3) verifying the answers to the screening question; Respondents who do not meet all the criteria will be directed to the Thank You page and cannot proceed to the core part of the questionnaire, (4) collect data from respondents who passed the screening until they reach the targeted sample number (348 respondents), and (5) conduct final validation of all data collected to ensure the feasibility of respondent data before further analysis.

Data Analysis Techniques

Descriptive Statistical Analysis

Descriptive statistical analysis was used to describe the characteristics of respondents and their perception of the research variables. The data is analyzed by calculating the frequency, percentage, mean, and standard deviation. To categorize the level of respondents' perception of each variable, a continuum line with seven categories was used: very low, low, quite low, medium, moderate, quite high, high, and very high (Bougie & Sekaran, 2025; Sekaran & Bougie, 2016).

The total score for each variable is compared to the ideal score (the highest score $\times$ number of items $\times$ number of respondents) to calculate the percentage of achievement. The higher the percentage of achievement, the better the respondents' perception of the variable (Kartodikromo, 2026; Malhotra, 2015).

Verifiable Statistical Analysis

Hypotheses were tested through CB-SEM implemented in IBM SPSS AMOS 22.0. CB-SEM was selected for its suitability in theory-confirmation research, its provision of holistic model-fit diagnostics, and its simultaneous parameter estimation that accounts for indicator-level measurement error (Backhaus et al., 2025; Hair et al., 2014; Santoso, 2011). SEM analysis is

carried out through several stages.

SEM Assumption Test

Prior to model estimation, prerequisite diagnostic checks were performed to confirm data suitability. The assumption test includes:

- a. Sample Size: The minimum sample size required for SEM is 100-200 respondents to get an accurate parameter estimate (Ghozali, 2014; Harsono & Imran, 2025). This study used 348 respondents, who had met these requirements.
- b. Data Normality: Data were analyzed to see if the normality assumption was met by looking at the critical ratio (c.r) values of skewness and kurtosis. The data is said to be normally distributed if the value of c.r skewness and c.r kurtosis is at the position of ± 2.58 (Santoso, 2011; Harsono & Imran, 2025).
- c. Data Outliers: Outlier checks are performed by comparing the value of d-squared Mahalanobis with chi-square (χ^2) at the corresponding degree of freedom (df). Data outliers are indicated if the p2 value is 0.000 (Ghozali, 2014; Harsono & Imran, 2025).
- d. Multicollinearity: The detection of multicollinearity is carried out by looking at the determinant value of sample covariance matrix. The assumption of multicollinearity requires that there is no perfect or large correlation between exogenous variables, with the correlation value not being 0.9 or more (Ghozali, 2014; Harsono & Imran, 2025).

Measurement Model

Each construct's measurement model was assessed via CFA. The evaluation of the measurement model was carried out by looking at:

- a. Convergent Validity: Judged from the values of standardized loading factor (≥ 0.50) and Average Variance Extracted ($AVE \geq 0.50$) (Bogaert et al., 2025; Fornell & Larcker, 1981; Hair et al., 2014).
- b. Construct Reliability: Assessed from the Composite Reliability value ($CR \geq 0.70$) (Ghozali, 2014; Harsono & Imran, 2025).
- c. Discriminant Validity: Assessed by comparing the square root of AVE with correlation between constructs (Bogaert et al., 2025; Fornell & Larcker, 1981).

Structural Model

The structural model is evaluated by looking at the overall goodness of fit value. The goodness of fit criteria used in this study refer to the opinions of Ghozali (2014), Hair et al. (2014), and Yvonne & Kristaung (2013), with the following indicators:

- a. Chi-Square (χ^2): The smaller the χ^2 value the better, with a value of $\chi^2/df < 2.00$ indicating a fit model.
- b. Goodness of Fit Index (GFI) ≥ 0.90 (good fit) or $0.80 \leq GFI < 0.90$ (marginal fit).
- c. Adjusted Goodness of Fit Index (AGFI) ≥ 0.90 .
- d. Root Mean Square Error of Approximation (RMSEA) ≤ 0.08 .
- e. Tucker Lewis Index (TLI) ≥ 0.90 .
- f. Comparative Fit Index (CFI) ≥ 0.90 .
- g. Parsimonious Normal Fit Index (PNFI) and Parsimonious Goodness of Fit Index (PGFI): The higher the PNFI and PGFI scores, the better (Ghozali, 2014; Harsono & Imran, 2025).

Hypothesis Testing

Hypotheses were evaluated using Critical Ratio (C.R.) and p-value thresholds ($C.R. \geq 1.96$; $p \leq 0.05$) from the SEM output (Ghozali, 2014; Harsono & Imran, 2025). To test the effect of mediation, the Bootstrap approach with the Sobel method (Sobel test) was used. The mediation effect is declared significant if the two-tailed significance value is less than 0.05 (Backhaus et al., 2025; Hair et al., 2014).

Research Model

Based on the theoretical framework described, the research models tested in this study is seen in figure1.

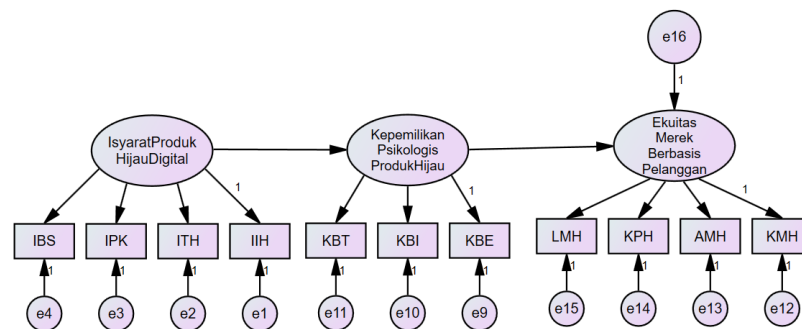


Figure 1. Full Research Model

- H1: Digital Green Product Signals Have a Positive Effect on Psychological Ownership of Green Products
H2: Psychological Ownership of Green Products has a Positive Effect on Customer-Based Green Brand Equity
H3: Psychological Ownership of Green Products mediates positively the influence of Digital Green Product Signals on Customer-Based Green Brand Equity

RESULTS AND DISCUSSION

Respondent Characteristics

This study involved 348 respondents who were active members of IKEA Family Indonesia. Based on demographic characteristics, respondents were dominated by female consumers (51.44%) compared to men (48.56%). The most dominant age group was the 20-30 year range with a total of 165 respondents (47.41%), consisting of 73 males and 92 females. This shows that IKEA Family Indonesia's consumers are dominated by women and the younger generation, especially at the productive age of 20-30 years, which is a group with high purchasing power and exposure to digital information (Center, 2024).

Based on education level, respondents were dominated by consumers with 162 people with S1 education (46.55%) and unmarried status as many as 161 people (46.26%). The dominance of respondents with a S1 education aligns with the observations that higher levels of education correlate with stronger environmental awareness and the ability to access sustainability information more critically (Tung & Vigneron, 2024).

Based on the province of domicile, the most respondents came from West Java with a total of 66 respondents (18.97%), and dominated by work as a private employee as many as 111 respondents (31.90%). The high rate of respondents working as private employees is in line with research that states that employees of private companies tend to have stable incomes and access to broader information (Castillo-Villar & Murillo, 2025; Górska-Warsewicz et al., 2021).

Respondent Experience

The majority of respondents have joined as members of IKEA Family Indonesia within 3-4 years, namely 143 respondents (41.09%), followed by the 1-2 year group of 110 respondents (31.61%). This shows that most of IKEA Family Indonesia's members have joined from around 2022 to 2023, which coincides with the increasing trend of environmental awareness and sustainable lifestyles among Indonesian consumers (Soepatini & al., 2025).

The main reason respondents joined as members of IKEA Family Indonesia was to get information about the latest products and promotions (29.20%), followed by interest in IKEA's sustainability programs and eco-friendly products (28.91%). These findings indicate that IKEA's sustainability program is becoming a significant attraction for consumers, in line with the increasing environmental awareness among Indonesians (Tung & Vigneron, 2024).

The frequency of access to the IKEA digital platform shows that the majority of respondents accessed in the Frequent category (11-20 times), which was 104 respondents (29.89%), followed by the Quite Frequent category (6-10 times) with 98 respondents (28.16%). This high frequency of access reflects that IKEA Family Indonesia consumers are used to digital platforms as the main channel to find product information and access sustainability content (Rahman et al., 2024).

Results of Descriptive Analysis of Research Variables

Digital Green Product Signal Overview

Digital green product cues in this study were measured through four dimensions: Green Information Cues, Green View Cues, Third-Party Cues, and Social Proof Cues (Parveen & Chaudhary, 2025; Shi et al., 2025). The total score obtained for the digital green product cue variable was 15,008 out of a total ideal score of 19,488 for 8 statement items, with an achievement percentage of 77.01%. Based on the results of the score, the digital green product signal variable is categorized as "High".

The Third Party Signal Dimension had the highest contribution of 25.11% with a score of 3,769 out of an ideal score of 4,872 and an achievement percentage of 77.36%. This indicates that IKEA Family Indonesia members pay close attention to the existence of logos, labels, or environmental certifications from independent institutions such as FSC (Forest Stewardship Council) or MSC (Marine Stewardship Council) as the main marker of the credibility of green products. These results are consistent with the research of Parveen and Chaudhary (2025) which states that third-party cues serve as a mechanism of reducing uncertainty for consumers in evaluating a brand's sustainability claims.

The Green Display Signal Dimension had the lowest contribution of 24.77% with a score of 3,717 out of an ideal score of 4,872 and an achievement percentage of 76.29%. The low contribution of this dimension can be due to the tendency of consumers to prioritize substantive and verified evidence over mere visual appearances of an aesthetic nature. Consumers with higher levels of environmental literacy tend to be less easily influenced by visual cues alone and rely more on credible and measurable information (Lee & Park, 2024).

Overview of the Psychological Ownership of Green Products

The psychological ownership of green products in this study was measured through three dimensions: Efficacy-Based Ownership, Identity-Based Ownership, and Responsibility-Based Ownership (Park & Kim, 2025). The total score obtained by the green product psychological ownership variable was 11,187 out of a total ideal score of 14,616 for 6 statement items, with an achievement percentage of 76.54%. Based on the results of these scores, the psychological ownership variable of green products is categorized as "High".

The Responsibility-Based Ownership dimension had the highest contribution of 33.49% with a score of 3,747 out of an ideal score of 4,872 and an achievement percentage of 76.91%. This indicates that IKEA Family Indonesia members have a strong awareness and moral obligation to use, maintain, and support IKEA green products responsibly for environmental sustainability. These results are consistent with the research of Park and Kim (2025) who stated that responsibility-based ownership is an important dimension of psychological ownership, where consumers feel a moral obligation to support products that are in line with sustainability values.

The Identity-Based Ownership dimension had the lowest contribution of 33.20% with a score of 3,714 out of an ideal score of 4,872 and an achievement percentage of 76.23%. The low contribution of this dimension can be caused by differences in personal values, lifestyles, or varying levels of environmental concern among consumers (Astuti & Wahyuni, 2025).

Customer-Based Green Brand Equity Overview

Customer-based green brand equity in this study was measured through four dimensions: Green Brand Awareness, Green Brand Association, Green Trust, and Green Brand Loyalty (Kencebay & Ertugan, 2025). The total score obtained by the customer-based green brand equity variable is 14,968 out of a total ideal score of 19,488 for 8 statement items, with an achievement percentage of 76.81%. Based on the results of the score, the customer-based green brand equity variable is categorized as "High".

The Green Brand Loyalty dimension had the highest contribution of 25.11% with a score of 3,758 out of an ideal score of 4,872 and an achievement percentage of 77.13%. This shows that IKEA Family Indonesia consumers have a strong commitment to continue buying IKEA green products and recommending them to others. High green brand loyalty reflects a strong emotional bond and trust in the environmental commitment carried by the brand (Cuesta-Valiño et al., 2021; Qayyum et al., 2023).

The Green Brand Awareness dimension had the lowest contribution of 24.94% with a score of 3,733 out of an ideal score of 4,872 and an achievement percentage of 76.62%. The low contribution of these dimensions can be due to the high level of competition in the green furniture market which leaves consumers exposed to a large selection of brands, making it difficult for them to remember the specific green attributes of IKEA (Lee & Park, 2024).

Verifiable Analysis Results

SEM Assumption Test

Prior to model estimation, prerequisite diagnostic checks were performed to confirm data suitability. The results of the normality test showed that all variables had a critical ratio value of skewness and the critical ratio of kurtosis was in the range of -2.58 to +2.58, which indicated that the data was normally distributed (Santoso, 2011; Harsono & Imran, 2025). The multivariate critical ratio value of 2.298 is also within the required range.

The results of the outliers test using Mahalanobis Distance showed that all data observations had a d-squared Mahalanobis value below the value χ^2 (df=30, p=0.01) = 50.892, which indicates that there were no multivariate outliers (Ghozali, 2014; Harsono & Imran, 2025). The results of the multicollinearity test showed that the determinant value of sample covariance matrix was 52.081 and there was no correlation between manifest variables whose value was above 0.90, so there was no multicollinearity problem.

Evaluation of Measurement Models

The evaluation of the measurement model was carried out through Confirmatory Factor Analysis (CFA) for each construct. The results of the analysis showed that all indicators had a standardized loading factor value above 0.50, which indicated good convergent validity (Backhaus et al., 2025; Hair et al., 2014). The Composite Reliability (CR) values for each construct were: digital green product cue (0.802), green product psychological ownership (0.799), and customer-based green brand equity (0.860). All CR values have met the criterion ≥ 0.70 , which indicates good construct reliability (Ghozali, 2014; Harsono & Imran, 2025).

The Average Variance Extracted (AVE) values for each construct are: digital green product cues (0.504), green product psychological ownership (0.570), and customer-based green brand equity (0.605). All AVE values met the criterion ≥ 0.50 , which indicates good convergent validity (Bogaert et al., 2025; Fornell & Larcker, 1981).

Structural Model Evaluation

The evaluation of the structural model was carried out by looking at the overall goodness of fit value. The results of the analysis showed that the model met all the criteria of goodness of fit: Chi-Square (χ^2) = 109.323 with df = 84 (χ^2 /df = 1.301), GFI = 0.961, AGFI = 0.944, RMSEA = 0.029, TLI = 0.993, and CFI = 0.994. All of these values have met the required criteria (Ghozali, 2014; Hair et al., 2014; Harsono & Imran, 2025), which indicates that structural models have a good fit with empirical data.

The value of the determination coefficient (R^2) for endogenous constructs were: psychological ownership of green products (0.682) and customer-based green brand equity (0.818). The R^2 value shows that 68.2% of the variation in the psychological ownership of green products and 81.8% of the variation in the equity of customer-based green brands can be explained by the model. According to the classification by Cohen (1988), R^2 values above 0.26 are considered large effect sizes. Thus, the R^2 of 0.682 for psychological ownership of green products indicates that digital green product cues explain a substantial proportion of the variance, demonstrating strong predictive capability. Similarly, the R^2 of 0.818 for customer-based green brand equity indicates that the combined effects of digital green product cues and psychological ownership of green products account for an exceptionally large proportion of variance, confirming the model's robust explanatory power.

Hypothesis Testing

Hypothesis testing was carried out by looking at the Critical Ratio (C.R.) value and probability value (P). The hypothesis is accepted if the C.R. value is ≥ 1.96 and the P value is ≤ 0.05

(Ghozali, 2014; Harsono & Imran, 2025).

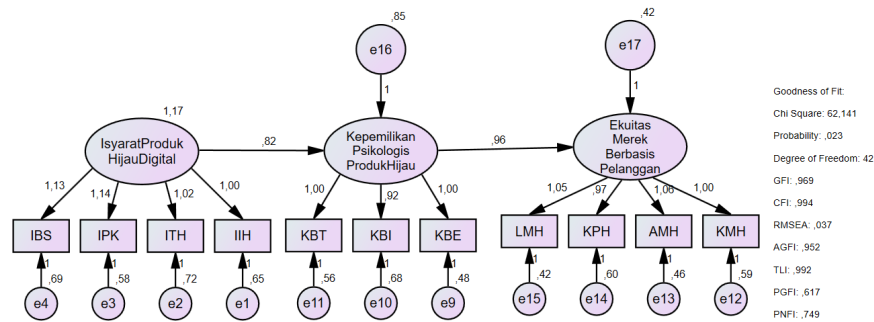


Figure 2. Hypothesis Test Results

H1: The Influence of Digital Green Product Signals on Psychological Ownership of Green Products

The analysis confirmed a statistically significant positive path from digital green product cues to psychological ownership (SRW = 0.472; C.R. = 9.569; $p < 0.001$), supporting H1. This result corroborates Parveen and Chaudhary (2025), who demonstrated that transparent and credible digital sustainability information promotes psychological ownership. By generating trust in sustainability assertions, these digital cues prompt consumers to assimilate environmental values into their self-concept (Y. S. Chen & Chang, 2023).

Table 1

Full Model Hypothesis Test Analysis

			Estimate		S.E.	C.R.	P	Label
			R.W.	S.R.W.				
Psychological Ownership of Green Products	<--	Digital Green Product Signals	,556	0,472	,058	9,569	***	par_1
Customer-Based Green Brand Equity	<--	Psychological Ownership of Green Products	,591	0,544	,074	7,946	***	par_2
IIH	<--	Digital Green Product Signals	1,000	0,803				
ITH	<--	Digital Green Product Signals	1,020	0,795	,063	16,089	***	par_3
GPA	<--	Digital Green Product Signals	1,135	0,849	,065	17,576	***	par_4
IBS	<--	Digital Green Product Signals	1,130	0,828	,067	16,997	***	par_5
KBE	<--	Psychological Ownership of Green Products	1,000	0,878				
KBI	<--	Psychological Ownership of Green Products	,933	0,828	,047	19,848	***	par_6
KBT	<--	Psychological Ownership of Green Products	1,005	0,870	,046	21,875	***	par_7
KMH	<--	Customer-Based Green Brand Equity	1,000	0,874				
AMH	<--	Customer-Based Green Brand Equity	1,064	0,909	,043	24,797	***	par_8
KPH	<--	Customer-Based Green Brand Equity	,974	0,870	,043	22,632	***	par_9

			Estimate		S.E.	C.R.	P	Label
			R.W.	S.R.W.				
LMH	<--	Customer-Based Green Brand Equity	1,051	0,913	,042	25,118	***	par_10

Source: Data Processing Results, 2026

H2: The Effect of Psychological Ownership of Green Products on Customer-Based Green Brand Equity

Psychological ownership significantly predicted customer-based green brand equity (SRW = 0.544; C.R. = 7.946; $p < 0.001$), confirming H2. Consistent with Mishra et al. (2023), these findings underscore that psychological ownership strengthens green brand equity through emotional bonding, quality enhancement, and loyalty cultivation. When consumers feel a strong emotional connection to green products, they tend to find the brand valuable and superior to competitors (Frasquet et al., 2024).

H3: The Mediating Role of Psychological Ownership of Green Products

Mediation analysis confirmed that psychological ownership transmits a significant positive indirect effect from digital green product cues to customer-based green brand equity. The standardized indirect effect value was 0.257 with a significance of 0.002 ($P < 0.05$). Thus, H3 is accepted.

The results of the Sobel (*Bootstrap*) test also confirmed the significance of the mediation effect with a t-count value of 6.136 (t-table = 1.96) and an indirect effect value of 0.329. These findings suggest that the psychological ownership of green products serves as a psychological bridge that connects external cues with the formation of green brand equity (S. Mishra et al., 2023). Consumers who feel psychological ownership over green products incorporate these products into their extended self, exhibiting heightened responsibility, affective attachment, and sustained commitment (Pierce et al., 2001; Verkuyten, 2025).

Discussion

The Influence of Digital Green Product Signals on Psychological Ownership of Green Products

The results demonstrate that digital green product cues positively and significantly predict psychological ownership, suggesting that more robust and coherent digital sustainability communication by IKEA amplifies consumers' subjective sense of ownership over its green product range.

These results are in line with research by She Shengxiang et al. (2023) who found that psychological ownership moderates the influence of digital green behaviors on intentions to support environmental initiatives. In the context of their research on the Ant Forest program, psychological ownership strengthened the link between digital green behavior and support for environmental programs. These findings reinforce the argument that psychological ownership is an important psychological mechanism in linking digital behavior to support for green initiatives. From a theoretical standpoint, this finding can be explained through the lens of Cue Utilisation Theory, which posits that consumers utilise available cues to reduce uncertainty and form quality judgements. In the digital environment, green product cues function as extrinsic signals that reduce perceived risk associated with sustainability claims, thereby enabling consumers to develop a sense of control and familiarity with the product. This sense of control, according to Psychological Ownership Theory (Pierce et al., 2001; Verkuyten, 2025), constitutes the efficacy pathway through which psychological ownership is formed.

The Third Party Signal Dimension has the highest contribution in shaping the psychological ownership of green products. This shows that IKEA Family Indonesia consumers rely heavily on environmental certification from independent institutions as a basis for developing a sense of psychological ownership of green products. Certifications such as FSC and MSC serve as a uncertainty reduction mechanism that strengthens consumer confidence in a company's environmental commitments (Parveen & Chaudhary, 2025).

The Influence of Green Product Psychological Ownership on Customer-Based Green Brand Equity

The data confirm that psychological ownership positively and significantly drives customer-based green brand equity, implying that deeper consumer psychological attachment to IKEA's green offerings translates into stronger brand equity perceptions.

These results are in line with the research of Marganingsih et al. (2024) which found that green entrepreneurial motivation plays a significant mediator in the influence of training on green entrepreneurial innovation. Their findings suggest that psychological aspects (motivation) mediate the influence of external factors (training) on outcomes (green innovation), which aligns with the observations of this study that psychological ownership mediates the influence of external stimuli (digital green cues) on outcomes (green brand equity). This study extends Psychological Ownership Theory by demonstrating that digital interaction, not merely physical contact, can serve as a sufficient pathway for forming psychological ownership. While Pierce et al. (2001) originally conceptualised psychological ownership through direct object interaction, this finding reveals that digitally mediated green cues can activate all three ownership routes (efficacy, identity, responsibility) without physical product engagement, thereby expanding the theory's applicability to digital consumer behaviour contexts (Verkuyten, 2025).

The Responsibility-Based Ownership dimension has the highest contribution in shaping customer-based green brand equity. This shows that IKEA Family Indonesia consumers who have a strong awareness and moral obligation to environmental sustainability tend to develop stronger loyalty, trust, and positive associations towards the IKEA green brand. These results are consistent with the research of Park and Kim (2025) which states that responsibility-based ownership is an important dimension of psychological ownership that drives the formation of strong green brand equity.

The Mediating Role of Psychological Ownership of Green Products

Mediation testing reveals that psychological ownership transmits a significant proportion of the digital green product cues' effect onto customer-based green brand equity, indicating that the cues' influence operates both directly and via the psychological ownership mechanism.

Table 2

Standardized Indirect Effect

	Digital Green Product Signals	Psychological Ownership of Green Products	Customer-Based Green Brand Equity
Psychological Ownership of Green Products	,000	,000	,000
Customer-Based Green Brand Equity	0,257	,000	,000

Source: Data Processing Results, 2026

These results are consistent with research by Malhotra et al. (2022) which shows that psychological ownership plays an important role in consumers' relationships with green brands. Sehgal et al. (2023) also found that psychological ownership and self-conformity to green brands influence repurchase intent, which is an important indicator of brand equity. Research by Wang et al. (2022) also shows that psychological ownership of nature acts as a mechanism that links the perception of object attributes to behavioral outcomes.

Table 3

Standardized Indirect Effect – Two Tailed Significance

	Digital Green Product Signals	Psychological Ownership of Green Products	Customer-Based Green Brand Equity
Psychological Ownership of Green Products	,000	,000	,000
Customer-Based Green Brand Equity	0,002	,000	,000

Source: Data Processing Results, 2026

Psychological ownership functions as a cognitive-affective conduit linking external digital stimuli to the consolidation of green brand equity (S. Mishra et al., 2023). Consumers who feel psychological ownership over green products incorporate these products into their extended self, exhibiting heightened responsibility, affective attachment, and sustained commitment (Pierce et al., 2001; Verkuyten, 2025). In the context of this study, when IKEA Family Indonesia consumers receive authentic and consistent digital green product cues, they tend to develop a sense of psychological ownership that strengthens their relationship with the IKEA green brand. This sense of ownership then translates into a positive perception of green brand equity, which includes green brand awareness, positive associations, trust, and loyalty.

Table 4

Bootstrap Test Results of Digital Green Product Signals on Customer-Based Green Brand Equity Through Psychological Ownership of Green Products

Pathway	Coefficients	Std. Error	t-count	T-Table	Remarks
a ($X_1 \rightarrow M$)	0,556	0,058	9,569	1,96	Significant
b ($M \rightarrow Y$)	0,591	0,074	7,946	1,96	Significant
a × b (<i>Indirect Effect</i>)	0,329	0,054	6,136	1,96	Significant

Source: Data Processing Results, 2026

The indirect effect (0.257) surpassing the direct path coefficient confirms that psychological ownership constitutes a reinforcing mediating pathway between digital green product cues and customer-based green brand equity. This indicates that the effectiveness of digital green product cues in building green brand equity is highly dependent on the extent to which consumers feel psychological ownership of the green product.

CONCLUSION

This study concludes that digital green product cues, psychological ownership of green products, and customer-based green brand equity among IKEA Family Indonesia members are categorized as high. Digital green product cues achieved an overall score of 77.01%, with Third-Party Signals as the strongest dimension, indicating that credible environmental certifications play an important role in shaping consumer perceptions. Psychological ownership of green products achieved a score of 76.54%, with Responsibility-Based Ownership as the dominant dimension, reflecting consumers' moral awareness and commitment toward sustainable products. Meanwhile, customer-based green brand equity achieved a score of 76.81%, with Green Brand Loyalty as the strongest dimension, demonstrating consumers' commitment to maintain relationships with IKEA's green products. The structural model results confirm that digital green product cues have a statistically significant positive influence on psychological ownership of green products (SRW = 0.472; C.R. = 9.569; $P < 0.001$), and psychological ownership of green products positively and significantly influences customer-based green brand equity (SRW = 0.544; C.R. = 7.946; $P < 0.001$). Furthermore, psychological ownership significantly mediates the relationship between digital green product cues and customer-based green brand equity (indirect effect = 0.257; $P = 0.002$), confirming its role as a psychological mechanism that connects digital sustainability information with stronger green brand value.

Theoretically, this study contributes to the development of Cue Utilization Theory and Psychological Ownership Theory by demonstrating that digital sustainability signals, particularly credible third-party certifications, can stimulate consumers' psychological ownership and subsequently strengthen green brand equity. The integrated model developed in this research provides a broader understanding of how digital green marketing strategies influence consumer cognition and brand relationships in sustainable markets. Practically, IKEA Indonesia is encouraged to strengthen digital communication of environmental certifications, improve interactive green product displays, and develop participatory sustainability programs that enhance consumer involvement and psychological ownership. However, this study has limitations, including the use of a single research object, a cross-sectional design, and purposive sampling that may limit generalization. Future research is recommended to examine other industries, incorporate additional variables such as green trust, environmental concern, and green perceived value, and apply longitudinal or probability sampling approaches to provide deeper

insights into the development of green brand equity.

ACKNOWLEDGEMENT

The authors would like to express their sincere gratitude to Universitas Pendidikan Indonesia for providing academic support, research facilities, and a collaborative environment throughout the completion of this study. Appreciation is also extended to IKEA Family members in Indonesia who participated as respondents and provided valuable insights related to green brand equity, psychological ownership, and sustainable consumption behavior. The authors also acknowledge the support and contributions of colleagues and researchers whose perspectives and feedback contributed to the development and refinement of this research.

AUTHOR CONTRIBUTION STATEMENT

Mazaya Izzatur Rahim contributed to the conceptualization, research design, data collection, data analysis, interpretation of findings, and preparation of the original manuscript. Ratih Hurriyati contributed to supervision, theoretical framework development, methodology validation, and critical review of the manuscript. Puspo Dewi Dirgantari contributed to research guidance, validation, manuscript refinement, and final evaluation.

REFERENCES

- Abubakar. (2022). *Heightened Ecological Consciousness Has Made Consumers Increasingly Sceptical Of Brand-Level Environmental Assertions*.
- Arifin, Z. (2011). *Penelitian Pendidikan: Metode Dan Paradigma Baru*.
- Astuti, R. D., & Wahyuni, S. (2025). Green Digital Literacy Dan Paradoks Kepemilikan Psikologis: Studi Segmentasi Konsumen Furniture Lokal Di Indonesia. *Jurnal Manajemen Pemasaran Indonesia*, 8(1), 45–62.
- Azila-Gbette, E. M., Mensah, C., Atatsi, E. A., & Fiati, H. M. (2025). Promoting Green Creativity Among Hotel Employees: A Multi Serial Mediation. <https://doi.org/10.1108/Jhti-09-2024-1033>
- Backhaus, K., Erichson, B., Gensler, S., Weiber, R., & Weiber, T. (2025). *Multivariate Analysis*. Springer.
- Biswas, A., & Roy, M. (2015). Leveraging Factors For Sustained Green Consumption Behavior Based On Consumption Value Perceptions: Testing The Structural Model. (2015). *Leveraging Factors For Sustained Green Consumption Behavior Based On Consumption Value Perceptions: Testing The Structural Model. Journal Of Cleaner Production*. <https://doi.org/10.1016/J.jclepro.2015.02.042>
- Bland, J. M., & Altman, D. G. (1997). Statistics Notes: Cronbach's Alpha. *M*. <https://doi.org/10.1136/Bmj.314.7080.572>
- Bogaert, J., Loh, W. W., Schuberth, F., & Rosseel, Y. (2025). The Effect Of Measurement Error On Hypothesis Testing In Small Sample Structural Equation Modeling: A Comparison Of Various Estimation Approaches. *Structural Equation Modeling: A Multidisciplinary Journal*, 32(2), 215–236.
- Bougie, R., & Sekaran, U. (2025). *Research Methods For Business, With Ebook Access Code: A Skill Building Approach*. John Wiley & Sons.
- Castillo-Villar, F. R., & Murillo, E. (2025). Industrial Brand Equity: A Systematic Literature Review And Directions For Future Research. *Cogent Business & Management*, 12(1), 2440623.
- Center, K. I. (2024). *Profil Dan Perilaku Konsumen E-Commerce Indonesia 2024*. Katadata Insight Center.
- Chang, T.-W., Wang, K.-H., & Lin, Y.-H. (2020). Corporate Sustainability: It's Mine! Effect Of Green Product Psychological Ownership On The Environmental Behavior And Performance Of Employees. (2020). *Corporate Sustainability: It's Mine! Effect Of Green Product Psychological Ownership On The Environmental Behavior And Performance Of Employees. Sustainability*. <https://doi.org/10.3390/Su122410514>
- Chaves-Castro, K., Morán-Gámez, G., Nuviala, A., & Fernández-Martínez, A. (2025). Green Practices And Sustainability As Precursors To The Intention To Participate Again In Sporting Events Held In Nature. (2025). *Green Practices And Sustainability As Precursors To The Intention To Participate Again In Sporting Events Held In Nature. Frontiers In Sports And Active Living*. <https://doi.org/10.3389/Fspor.2025.1541485>
- Chen, Y., Qin, Z., Yan, Y., & Huang, Y. (2024). The Power Of Influencers: How Does Influencer Marketing Shape Consumers' Purchase Intentions? *Sustainability*, 16(13), 5471. (2024). *The Power Of Influencers: How Does Influencer Marketing Shape Consumers' Purchase Intentions? Sustainability*. <https://doi.org/10.3390/Su16135471>

- Chen, Y. S., & Chang, T. W. (2023). The Greenwashing Effects On Corporate Reputation And Brand Equity: Exploring The Double-Edged Sword Of Sustainability Claims. *Journal Of Business Ethics*, 188(3), 521–539.
- Creswell, J. W., & Creswell, J. D. (2018). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches* (5th Ed.). Sage Publications.
- Cuesta-Valiño, P., Gutiérrez-Rodríguez, P., Sierra-Fernández, M.-P., & Aguirre García, M.-B. (2021). Measuring A Multidimensional Green Brand Equity: A Tool For Entrepreneurship Development. (2021). *Measuring A Multidimensional Green Brand Equity: A Tool For Entrepreneurship Development. British Food Journal*. <https://doi.org/10.1108/Bfj-07-2020-0639>
- Djunaedi, H., Rahmawati, M. P. A., Suryadi, I. G. I., & Pahmi, S. P. (2024). Metode Penelitian Administrasi. *Ypad Penerbit*.
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models With Unobservable Variables And Measurement Error. *F. (1981). Evaluating Structural Equation Models With Unobservable Variables And Measurement Error. Journal Of Marketing Research*. <https://doi.org/10.1177/002224378101800104>
- Frasquet, M., Ieva, M., & Mollá-Descals, A. (2024). Customer Inspiration In Retailing: The Role Of Perceived Novelty And Customer Loyalty Across Offline And Online Channels. (2024). *Customer Inspiration In Retailing: The Role Of Perceived Novelty And Customer Loyalty Across Offline And Online Channels. Journal Of Retailing And Consumer Services*. <https://doi.org/10.1016/j.jretconser.2023.103592>
- Fu, C. J., Shih, T., Baljir, K., & Jargalsaikhan, S. (2026). Linking Personal Cultural Values To Consumer Value Perception Through Perceived Sustainability. *Journal Of Open Innovation: Technology, Market, And Complexity*, 100720.
- Gao, J., Tang, L., & Wang, J. (2025). Does Individuals' Pro-Environmental Behavior In The Virtual World Influence Their Perceived Human-Nature Connection? *The Green Consumption Effect*. <https://doi.org/10.1016/j.techfore.2025.124296>
- Ghozali, I. (2014). *Model Persamaan Struktural. Konsep Dan Aplikasi Dengan Program Amos 24. Update Bayesian Sem*. Badan Penerbit Universitas Diponegoro.
- Górska-Warsewicz, H., Dębski, M., Fabuš, M., & Kováč, M. (2021). Green Brand Equity—Empirical Experience From A Systematic Literature Review. *Sustainability*. <https://doi.org/10.3390/Su132011130>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate Data Analysis (7th Ed.)*.
- Harsono, S., & Imran, B. (2025). *Buku Pendekatan Structural Equation Modeling Untuk Penelitian Kuantitatif: Teori, Metodologi Dan Aplikasi*. Penerbit Widina.
- Hazarhun, E., & Çetinsöz, B. C. (2024). Improving Consumer-Based Destination Green Brand Equity: The Role Of Green Practices And Artificial Intelligence. <https://doi.org/10.1108/978-1-83753-746-420241014>
- Hussey, I., Alsalti, T., Bosco, F., Elson, M., & Arslan, R. (2025). An Aberrant Abundance Of Cronbach's Alpha Values At. 70. *Advances In Methods And Practices In Psychological Science*, 8(1), 25152459241287124.
- Indonesia, I. F. (2025). *Member Retention Analytics Report 2022-2025*. PT Hero Retail Indonesia.
- Indonesia, M. R. (2024a). *Ikea Family Member Behavior Analysis: Sustainable Product Purchase Trend 2023-2024*. Marketing Research Indonesia.
- Indonesia, M. R. (2024b). *Indonesia Retail Sector Outlook 2024: Pertumbuhan, Tantangan, Dan Peluang*. Marketing Research Indonesia.
- Isaac, S., & Michael, W. B. (1981). *Handbook In Research And Evaluation (2nd Ed.)*.
- Kartodikromo, E. M. N. (2026). Ekopedagogi Spiritual Berbasis Nilai-Nilai Islam Sebagai Paradigma Baru Pendidikan Keberlanjutan. *Jurnal Tadris Ipa Indonesia*, 6(1), 66–77.
- Katadata.Co.Id. (2024). *Data Pertumbuhan Pengguna E-Commerce*. Katadata.Co.Id.
- Keller, K. L. (2026). The Foundations, Evolution And Promise Of Customer-Based Brand Equity. *Journal Of The Academy Of Marketing Science*, 1–19.
- Keller, K. L., & Swaminathan, V. (2019). *Strategic Brand Management Building, Measuring, And Managing Brand Equity Global Edition*.
- Kencebay, B., & Ertugan, A. (2025). Understanding The Mediating Effect Of Brand Equity On Sustainability And Omnichannel Operation And Phygital Experience. (2025). *Understanding The Mediating Effect Of Brand Equity On Sustainability And Omnichannel Operation And Phygital Experience. Sustainability*. <https://doi.org/10.3390/Su17051878>
- Kline, R. B. (2016). *Principles And Practice Of Structural Equation Modeling*. The Guilford Press.

- Lee, S. H., & Park, J. Y. (2024). The Paradox Of Green Digital Literacy: When Too Much Knowledge Backfires In The Fast Furniture Industry. *Journal Of Retailing And Consumer Services*.
- Lindgärde, M., & Mionic, A. (2020). *Brand Equity Within Skin Care: A Qualitative Study Of Consumer Attitudes And Preferences Towards Green Skin Care Brands*.
- Liu, X., Kim, T.-H., & Lee, M.-J. (2025). The Impact Of Green Perceived Value Through Green New Products On Purchase Intention: Brand Attitudes, Brand Trust, And Digital Customer Engagement. (2025). *The Impact Of Green Perceived Value Through Green New Products On Purchase Intention: Brand Attitudes*. <https://doi.org/10.3390/Su17094106>
- Malhotra, G., Jham, V., & Sehgal, N. (2022). Does Psychological Ownership Matter? Investigating Consumer Green Brand Relationships Through The Lens Of Anthropomorphism. (2022). *Does Psychological Ownership Matter? Investigating Consumer Green Brand Relationships Through The Lens Of Anthropomorphism. Sustainability*. <https://doi.org/10.3390/Su142013152>
- Malhotra, N. K. (2015). *Essentials Of Marketing Research (Global Edi)*.
- Marganingsih, A., Pelipa, E. D., Seran, E. Y., Tuah, Y. A. E., Kholifah, N., & Subakti, H. (2024). Determining Green Entrepreneurial Innovation Of Higher Education Students: Sem Analysis Approach. *Pegem Journal Of Education And Instruction*, 14(2), 158–166.
- Mei, D., Zhu, Z., Li, J., Wu, H., Li, J., & Xiao, Q. (2025). Comparing The Effectiveness Of Green Attributes In Food Consumption: A Cue Utilization Theory Perspective. *British Food Journal*, 1–16.
- Mishra, S. B., & Alok, S. (2022). *Handbook Of Research Methodology*. Educreation Publishing.
- Mishra, S., Malhotra, G., Chatterjee, R., & Kareem Abdul, W. (2023). Ecological Consciousness And Sustainable Purchase Behavior: The Mediating Role Of Psychological Ownership. (2023). *Ecological Consciousness And Sustainable Purchase Behavior: The Mediating Role Of Psychological Ownership. Asia Pacific Journal Of Marketing And Logistics*. <https://doi.org/10.1108/Apjml-08-2021-0591>
- Mukhtar, B., Hussain, A., & Arli, D. (2026). Determinants Of Sustainability-Driven Entrepreneurship: The Role Of Environmental Knowledge, Psychological Ownership And Csr. *Journal Of Knowledge Management*, 30(2), 728–750.
- Nguyen, T. T., Pham, H. C., & Le, Q. H. (2022). Digital Literacy And Green Consumption: The Mediating Role Of Psychological Ownership In Building Brand Equity. *Sustainability*, 14(15).
- Niyomyaht, S. (2014). *Research Methods For Business*. 2(2), 203–206.
- Oakshott, L., & Kotiadis, K. (2026). *Essential Quantitative Methods: For Business, Management And Finance*. Bloomsbury Publishing.
- OECD. (2024). *Green Growth Indicators Database*. Organisation For Economic Co-Operation And Development.
- Olson, & Jacoby. (1972). *Cue Utilization Theory*.
- Ozbozkurt, O. B., Ince, M., & Yesilkus, F. (2022). Does Psychological Ownership Affect Green Organizational Behavior? People: International Journal Of Social Sciences, 8(1), 138–157. B. <https://doi.org/10.20319/Pijss.2022.81.138157>
- Park, J., & Kim, H. (2025). Psychological Ownership Of Avatars In The Metaverse: Its Key Antecedents And Outcomes. (2025). *Psychological Ownership Of Avatars In The Metaverse: Its Key Antecedents And Outcomes. Journal Of Consumer Behaviour*. <https://doi.org/10.1002/Cb.2417>
- Parveen, A., & Chaudhary, R. (2025). *Do Attitude And Subjective Norm Mediate The Relationship Between Social Media E-Wom And Green Purchase Intention? An Empirical Investigation Using Pls-Sem*. <https://doi.org/10.1177/02560909241297015>
- Pierce, Kostova, & Dirks. (2001). Psychological Ownership Theory. L. <https://doi.org/10.5465/Amr.2001.4378028>
- Populix. (2022). *Understanding Consumers' Perception Towards Environmental Sustainability And Social Responsibility*. Populix. <https://Info.Populix.Co/>
- Programme, U. N. E. (2024). *Unep Report Cited In Manuscript*. United Nations Environment Programme.
- Qayyum, A., Jamil, R. A., & Sehar, A. (2023). Impact Of Green Marketing, Greenwashing And Green Confusion On Green Brand Equity. *Spanish Journal of Marketing-ESIC*, 27(3), 286–305. <https://doi.org/10.1108/Sjme-03-2022-0032>
- Rahman, F., Huda, M., & Siregar, M. (2024). Green Digital Literacy Dan Pengaruhnya Terhadap Niat Pembelian Produk Ramah Lingkungan Pada Platform E-Commerce. *Jurnal Ekonomi Dan Bisnis*, 27(3).
- Santoso, S. (2011). *Structural Equation Modeling (Konsep Dan Aplikasi Dengan Amos 18)*.
- Sarun, H. (2026). Research Design: Qualitative, Quantitative, Mixed-Methods—Comprehensive. *Journal Of Agriculture And Environment*, 3(2), 311–314.

- Sehgal, N., Jham, V., & Malhotra, G. (2023). Does Green Brand Anthropomorphism Influence Repurchase Intention? Understanding The Impact Of Brand Warmth, Psychological Ownership, And Self-Brand Congruity. (2023). *Does Green Brand Anthropomorphism Influence Repurchase Intention? Understanding The Impact Of Brand Warmth*. <https://doi.org/10.1016/J.Jretconser.2023.103546>
- Sekaran, U., & Bougie, R. (2016). *Research Methods For Business*.
- Senalasari, W., Pratiwi, R. A.-Z., & Kania, R. (2026). Beyond Digital Buzz: Brand Image Shapes Purchase Intention From Tiktok Usage, Ewom, And Green Marketing. A.-Z. <https://doi.org/10.35313/Jmi.V6i1.291>
- She, S., Li, S., Chen, J., & Sheng, G. (2023). Spillover Effect Of Digital Green Behavior: Mediation Of Identity And Moderation Of Psychological Ownership. *Journal Of Psychological Science*, 46(5), 1180–1187.
- Shi, R., Qiao, T., Liu, C., & Chen, Z. (2025). An Eye-Tracking Study On The Impact Of Green Consumption Values On The Purchase Intention Of Bamboo Products Under The Background Of “Replacing Plastic With Bamboo.” *Behavioral Sciences*, 15(9), 1162. <https://doi.org/10.3390/Bs15091162>
- Siyoto, S. (2015). *Dasar Metodologi Penelitian*.
- Skare, M., & Riberio Soriano, D. (2021). How Globalization Is Changing Digital Technology Adoption: An International Perspective. (2021). *How Globalization Is Changing Digital Technology Adoption: An International Perspective*. *Journal Of Innovation & Knowledge*. <https://doi.org/10.1016/J.Jik.2021.04.001>
- Soepatini, S., & Al., Et. (2025). Green Consumption Behavior Among Indonesian Millennials. *Journal Of Consumer Behaviour*.
- Sugiyono. (2002). *Metode Penelitian Administrasi*. Cv Alfabeta.
- Suhardi, M. (2023). *Buku Ajar Dasar Metodologi Penelitian*. Penerbit P4i.
- Tanvir, A., Zainol, N. R., & Abdullah, Z. (2025). Linking Sustainable Leadership And Employee Green Behavior: A Serial Mediation Model Of Green Shared Vision And Green Psychological Ownership. <https://doi.org/10.1108/Apjba-08-2024-0414>
- Taufik, D., & Daryanto, A. (2023). Digital Information Transparency And Consumer Trust In Green Claims. *Journal Of Consumer Behaviour*, 22(3), 521–535. <https://doi.org/10.1002/Cb.2154>
- Tung, T., & Vigneron, F. (2024). Effects Of Brand Knowledge On Green Trust And Green Brand Equity: Multigroup Comparisons Based On Perceived Brand Greenness And Age. <https://doi.org/10.1108/Jfmm-12-2022-0262>
- Veit, J., Ehlen, R., Fasbender, U., Otto, S., & Ruiner, C. (2024). Twin Transition In Practice. (2024). *Twin Transition In Practice. Gruppe. Interaktion. Organisation. Zeitschrift Für Angewandte Organisationspsychologie (Gio)*. <https://doi.org/10.1007/S11612-024-00741-9>
- Verkuyten, M. (2025). “Ours”: Understanding Collective Psychological Ownership. *The Journal Of Psychology*, 159(6), 389–418.
- Vitayapiruks, R., Nutittamont, W., & Phayaphrom, B. (2026). *The Impact Of Digital Content Marketing On Brand Equity And Purchase Intention: A Study Of Green Food Packaging In Thailand*. <https://doi.org/10.32479/Irmm.23133>
- Wang, X., Fielding, K. S., & Dean, A. J. (2022). Psychological Ownership Of Nature: A Conceptual Elaboration And Research Agenda. S. <https://doi.org/10.1016/J.Biocon.2022.109477>
- Wang, Y., Li, X., & Zhang, J. (2021). Digital Green Cues And Consumer Trust: The Role Of Transparency And Credibility In E-Commerce Platforms. *Journal Of Retailing And Consumer Services*, 62, 102–115.
- Yu, S., Zhong, Z., Zhu, Y., & Sun, J. (2024). Green Emotion: Incorporating Emotional Perception In Green Marketing To Increase Green Furniture Purchase Intentions. (2024). *Green Emotion: Incorporating Emotional Perception In Green Marketing To Increase Green Furniture Purchase Intentions. Sustainability*. <https://doi.org/10.3390/Su16124935>
- Yvonne, A., & Kristaung, R. (2013). *Metodologi Penelitian Bisnis Dan Akuntansi*.