

The Effect of Innovation Barriers and Green Skepticism on Millennials and Gen Z's Intention to Resist Green Baby Care Products in Indonesia

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ABSTRACT

As sustainability gains momentum worldwide, green-labeled products are flooding the market, including in the baby care segment. However, adoption is not guaranteed among Indonesian Millennials and Gen Z, despite their environmental awareness. This study investigates why Indonesian Millennials and Gen Z still resist green baby care products by examining how functional and psychological barriers shape consumer decisions. A structured online survey of 222 respondents was conducted, and data were analyzed using PLS-SEM. The results reveal that usage, value, and tradition barriers significantly increase resistance, while risk and image barriers do not. Notably, green skepticism strengthens the effect of the value barrier, meaning that when consumers doubt the truth behind “green” claims, their perception of product value weakens, further amplifying resistance. However, green skepticism does not significantly moderate other types of barriers. This study extends Innovation Resistance Theory by incorporating green skepticism as a moderating factor in the context of baby care, a category rarely examined in previous studies. This integration provides new insights into how skepticism toward sustainability claims can interact with innovation barriers in shaping consumer resistance. These findings call for action: Brands must go beyond labels. To win over today’s critical, connected consumers, companies must not only deliver real value and ease of use, but also improve product visibility and accessibility. In addition, addressing habitual buying patterns and building trust through transparent, evidence-based communication are crucial to reducing resistance and supporting adoption of green innovations, especially among young, discerning parents.

Keywords: innovation resistance, green baby care, green skepticism, intention to resist, Millennials, Gen Z.

INTRODUCTION

The baby care products market continues to show very promising potential, not only at the global level but also in Indonesia. As an established industry, baby care does not just survive but continues to evolve following the trends and needs of today's parents. What's more, the younger generation is now increasingly aware of the importance of choosing safe, quality, and environmentally friendly products for their children. In Indonesia itself, this positive trend is reflected in significant market growth. According to Euromonitor International (2024), the sales value of baby care products in Indonesia will reach USD 439 million in 2023 and is forecasted to grow, surpassing USD 800 million in 2028. This figure shows that baby care is still one of the sectors with great potential for innovation, including sustainability-based innovation.

However, sustainability claims that are often used by baby care products such as natural, organic, vegan, cruelty-free, botanicals, plant-based, eco-friendly, and biodegradable (BASF, 2024; Mintel data) are not necessarily immediately trusted by consumers. These claims do

sound promising, but for some parents—especially those who are not familiar with the concept and certification—doubts still arise about the safety and effectiveness of the product. This is natural, considering that a baby's skin is much more sensitive, with a thinner protective layer and is more prone to irritation than adult skin (Rahma & Lane, 2022).

In the midst of increasing consumer awareness of sustainability issues, especially among Millennials and Gen Z, there is an interesting paradox when many of them have voiced support for sustainable lifestyles but have not fully switched to eco-friendly products, including for their baby's needs. Studies show that 72% of Gen Z and 70% of Millennials in Indonesia say they are willing to pay more for sustainable products (Rakuten Insight, 2023), and 80% say they care about environmental issues (Sudirjo et al., 2024). However, in practice, this attitude has not been fully realized. As stated by Zahan et al. (2024), consumers often show a positive attitude towards environmentally friendly innovations, but resistance actually arises when they are in the adoption stage.

One of the factors that widens the gap between awareness and behavior is green skepticism, which is consumer doubt or distrust of sustainability claims. Claims such as "eco-friendly," "natural," or "organic" are often considered unclear, unverified, or even regarded as just a marketing strategy (Syadzwina & Astuti, 2021; Kifaya, 2024). A cross-country study by Kifaya (2024) shows that green skepticism is a strong inhibitor in the adoption of organic products, including in the cosmetics and personal care categories. Similar findings were reported by Khan et al. (2022), who revealed that green skepticism negatively impacts brand attachment and trust in brands that claim sustainability.

Furthermore, green skepticism does not stand alone but rather strengthens various innovation barriers such as risk barriers (doubts about security), value barriers (benefits not proportional to prices), and image barriers (doubts about brand image), as shown in studies by Puspitasari & Alversia (2023) and Sadiq et al. (2020). Tandon et al. (2021) found that in the context of organic food products, which are closely related to family health, the risk barrier and tradition barrier are the most significant obstacles in encouraging consumer resistance. These findings are relevant when associated with green baby care products, which are also in the category of sensitive needs and require high trust from consumers, so they are likely to face similar challenges in the adoption process.

To understand this resistance phenomenon more comprehensively, the research refers to the Innovation Resistance Theory (IRT) developed by Ram and Sheth (1989). This theory states that resistance to innovation is often not due to a lack of information but rather due to subjective barriers perceived by consumers. These barriers include the usage barrier (the product is considered impractical or difficult to use), the value barrier (the benefits are not worth the cost or effort required), the risk barrier (doubts about safety and effectiveness), the tradition barrier (dependence on old habits or family inheritance), and the image barrier (negative impression of the brand or the claim carried by the product).

IRT has been shown to be effective in explaining the resistance of a wide range of sustainable innovations, from eco-friendly cosmetics (Sadiq et al., 2020) to consumer products such as personal care and household necessities (Bhutto & Rutelione, 2024). Therefore, its application in the context of green baby care is seen as relevant to understand the dynamics of young consumers' resistance to this product.

A deeper understanding of the context on the ground was obtained through a pre-survey involving 40 young mothers from the Millennials and Gen Z generations in the Greater Jakarta area, with children aged 0 to 3 years. The survey results show that resistance to green baby care products is not only related to price but also strongly influenced by consumption habits, value perceptions, and levels of trust in sustainability claims. The majority of respondents, 71.25%, stated that they believe more in products that have been used for generations in the family, reflecting the strong traditional barrier. As many as 70% of respondents consider that conventional products are good enough, so they feel that the benefits of green products are not worth the price paid, a real form of value barrier. Meanwhile, the perception that green products are only a temporary trend appears in 70% of respondents, showing the dominance of image barriers. Most respondents, 72.5%, also felt that they needed to relearn how to use green baby care products, which indicated the existence of a usage barrier. On the other hand, 65% of respondents stated that they consider sustainability claims to be just a marketing strategy, which shows the high level of green skepticism among these young mothers.

Furthermore, the survey results also revealed that the level of environmental literacy and awareness of ethical consumption among respondents is still relatively low. Only 23.75% of respondents felt able to assess the authenticity of green products, and only 32.5% considered social and environmental issues in purchasing decisions. Social support has not been a strong trigger, considering that only 38.75% of respondents have ever been encouraged by the closest people to choose environmentally friendly products. As many as 37.5% of respondents associate the consumption of green products with social contributions, which shows that altruistic values are not yet a major consideration in purchases.

Although various previous studies have addressed the factors influencing the adoption of green products, most of the focus remains on general categories such as organic food, sustainable fashion, or eco-friendly cosmetics. Studies on resistance to green baby care products, especially from the perspective of young parents who strictly consider emotional aspects and safety risks, are still very limited. In fact, this category involves very personal and thoughtful decisions, so it is relevant to examine it through psychological and consumer behavioral approaches.

So far, the use of IRT in the context of green baby care has not been widely found, although this theory has been widely applied in studies related to organic food (Bhutto & Rutelione, 2024; Tandon et al., 2021) and natural-based cosmetics (Sadiq et al., 2020; Puspitasari & Alversia, 2023). In addition, studies on IRT and green skepticism are generally still running separately and have not been widely integrated into a single complete theoretical framework (Bhutto & Rutelione, 2024; Tandon et al., 2021; Syadzwina & Astuti, 2021). Therefore, this study positions itself to fill this gap by combining the perspective of IRT and green skepticism to understand resistance to green innovation, especially in baby care products in Indonesia, which are very sensitive to trust and safety issues.

The objective of this study is to analyze the factors influencing the resistance of Millennials and Gen Z consumers in Indonesia toward green baby care products, despite their relatively high awareness of environmental sustainability issues. Specifically, the study examines the impact of usage, value, risk, tradition, and image barriers on the intention to resist, as well as the moderating role of green skepticism. The contributions of this research span three dimensions: academically, it enriches the literature on consumer resistance to innovation by

extending the Innovation Resistance Theory (IRT) with a moderating perspective; practically, it offers insights for the baby care industry to design targeted communication, education, and product innovation strategies that address consumer hesitations and build trust; and socially, it contributes to global sustainability efforts, since green baby care products align with SDG 3 (good health and well-being) and SDG 12 (responsible consumption and production), while encouraging young parents to adopt more thoughtful and sustainable consumption behaviors.

METHOD

This study adopted a quantitative approach with a causal-explanatory design to examine how innovation barriers influence intention to resist and how green skepticism moderates these relationships. Data were collected through a structured online survey using purposive sampling of young consumers aged 18–39 years living in the Greater Jakarta area (Jabodetabek) who were parents of children aged 0–3 years and had experience using or considering sustainable baby care products (e.g., natural, organic, vegan, cruelty-free, plant-based, eco-friendly, biodegradable). The age range was chosen to represent Millennials (24–39 years) and Gen Z (≥ 18 years) who had entered parenthood, in line with BPS (2021). Jabodetabek was selected due to its status as the region with the highest baby care product distribution and its urban, digitally literate consumers who are primary targets of sustainability campaigns. Respondents underwent screening questions to ensure eligibility, and only those who met the inclusion criteria were allowed to proceed. A total of 222 valid responses were collected, exceeding the minimum requirement for PLS-SEM analysis, with purposive sampling deemed appropriate as it allowed targeting of a consumer group with relevant experiences, thereby improving data quality (Memon et al., 2025).

The questionnaire measured six main constructs: usage barrier (UB), value barrier (VB), risk barrier (RB), tradition barrier (TB), image barrier (IB), and green skepticism (GSk) as the moderating variable, with intention to resist (IR) as the dependent variable. All constructs were measured using 5-point Likert scales. Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software, employing bootstrapping procedures with 5,000 resamples to test hypothesis significance. This method was selected for its suitability in exploring complex models involving moderating relationships and its flexibility regarding sample size and data distribution assumptions.

RESULTS AND DISCUSSION

Results of Path Significance Test and Hypothesis Testing (Bootstrapping)

Testing the significance of the path between constructs in the structural model was carried out using the bootstrapping technique in the SEM-PLS approach. This test helps researchers evaluate whether the relationships between latent variables built in the model are statistically significant. Thus, researchers can understand the direction and strength of influences between constructs, as well as determine whether the hypothesis proposed is acceptable or rejected.

In this study, the bootstrapping process was carried out using SmartPLS software with a number of 5000 subsamples, in accordance with the recommendations of Hair et al. (2022) to obtain stable and reliable estimates. The Amount of Results setting is set to the Complete (slower) option to produce a more detailed output, while Test Type is selected One-tailed

because the direction of the test has been determined from the beginning. As for the rest of the parameters, they are left to follow the default settings of the system.

The bootstrapping results produce four main elements, namely Original Sample (O), Standard Deviation (STDEV), t-statistics, and p-value. The value of O indicates the direction and magnitude of the influence of the independent variable (X) on the bound variable (Y); Positive values reflect unidirectional influences, while negative values indicate opposite influences. The STDEV value is used to calculate t-statistics, i.e. by dividing the O value by STDEV. Furthermore, t-statistics and p-values are used to assess whether these influences are statistically significant.

In a one-tailed test with a significance level of 5%, a relationship is said to be significant if the t-statistical value > 1.645 or the p-value < 0.05 (Hair et al., 2022). This criterion is a reference in determining the acceptance or rejection of the hypothesis in the research. Therefore, the bootstrapping results not only show the direction and strength of the relationship, but also serve as the basis for decision-making against the hypothesis proposed.

Figure 1 shows the structural model of SEM-PLS after the bootstrapping process. Five X variables (UB, VB, RB, TB, IB) were assumed to affect variable Y (IR), with GSk as the moderation variable. The number on the line shows the value of the path coefficient (Original Sample/O) which represents the direction and strength of influence. The R^2 value at IR is 0.640, which means that the model is quite strong, because 64% of the variation in IR can be explained by the variables in the model.

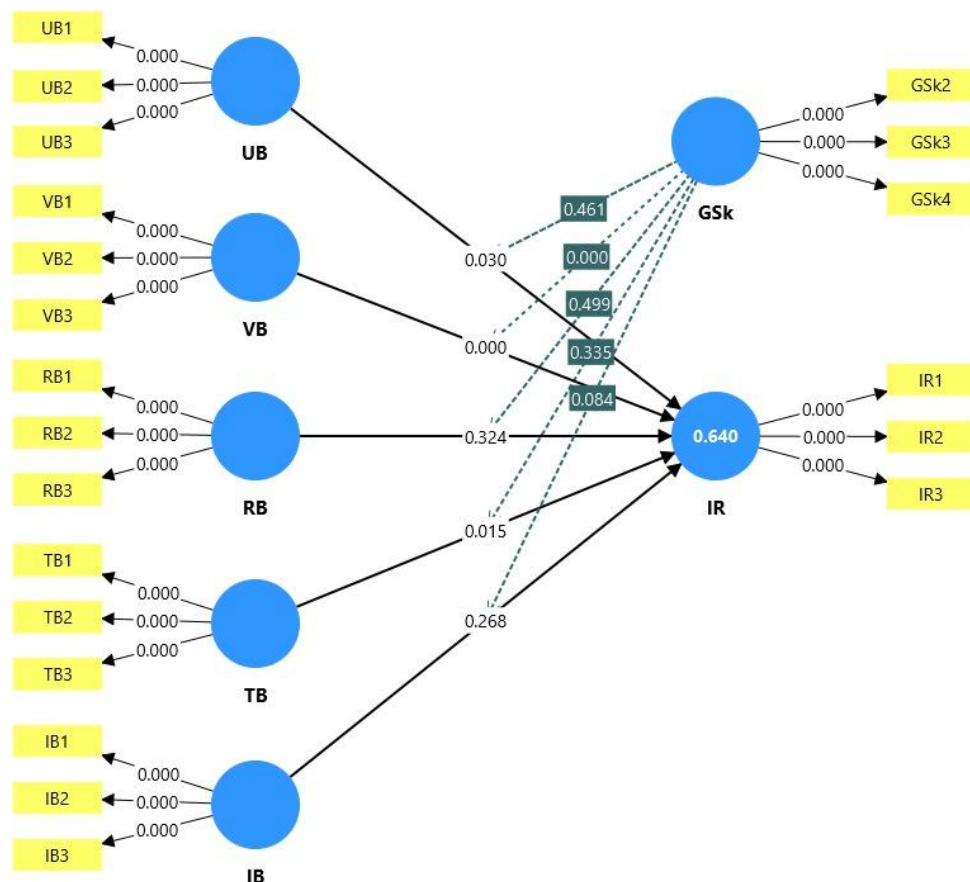


Figure 1. SEM-PLS Structural Model after Bootstrapping
Source: Data Processing Results using SmartPLS 4

Table 1. Results of Testing the Direct Influence of Innovation Barriers on Intention to Resist through SEM-PLS Bootstrapping

Relationships Between Variables	Path Coefficient	t-statistics	p-value	Result
Usage barrier (X1) → Intention to Resist (Y)	0.143	1.878	0.030	Positive and significant effect → Hypothesis 1 Accepted
Value barrier (X2) → Intention to Resist (Y)	0.452	5.122	0.000	Positive and significant effect → Hypothesis 2 Accepted
Risk barrier (X3) → Intention to Resist (Y)	-0.042	0.456	0.324	Negative and insignificant effects → Hypothesis 3 Rejected
Tradition barrier (X4) → Intention to Resist (Y)	0.184	2.161	0.015	Positive and significant effect → Hypothesis 4 Accepted
Image barrier (X5) → Intention to Resist (Y)	0.064	0.618	0.268	Positive and insignificant effects → Hypothesis 5 Rejected

Source: Data Processing Results using SmartPLS 4

Table 1 shows that Hypotheses 1, 2, and 4 are accepted because they have a $p < 0.05$ and $t > 1.645$.

- 1) The Usage Barrier has a positive and significant influence on Intention to Resist, in line with the findings of Zahan et al. (2024) and Bhutto & Rutelione (2024) who emphasize the importance of the perception of ease of use in the adoption of innovation.
- 2) Value Barrier is the most dominant factor with the highest path coefficient (0.452), indicating that low value perception strongly encourages consumer resistance to environmentally friendly products, according to the theory and findings of Puspitasari & Alversia (2023).
- 3) The Tradition Barrier is also significant, showing that attachment to old habits and values can hinder the acceptance of innovation, as outlined in the IRT framework.

Hypotheses 3 and 5 were rejected because they did not meet the significance criteria.

- 1) Although the theory states that the Risk Barrier has an influence on resistance (Luthra et al., 2024), the empirical findings in this study are not supportive, likely because respondents felt green baby care products were relatively safe.
- 2) Image Barrier also does not have a significant effect, which can be caused by the perception that baby products are more functional than symbolic, so brand image is less of a major consideration.

Table 2. Results of Testing the Effect of Green Skepticism Moderation on the Relationship between Innovation Barriers and Intention to Resist through SEM-PLS Bootstrapping

Relationship Moderation	Path Coefficient	t-statistics	p-value	Result
Green Skepticism × Usage Barrier → Intention to Resist	0.008	0.097	0.461	Insignificant → Hypothesis of moderation 1 rejected
Green Skepticism × Value Barrier → Intention to Resist	0.307	3.672	0.000	Significant → Moderation Hypothesis 2 accepted

Green Skepticism × Risk Barrier → Intention to Resist	-0.000	0.002	0.499	Insignificant → Moderation Hypothesis 3 rejected
Green Skepticism × Tradition Barrier → Intention to Resist	0.045	0.425	0.335	Insignificant → Moderation Hypothesis 4 rejected
Green Skepticism × Image Barrier → Intention to Resist	-0.157	1.378	0.084	Insignificant → Moderation hypothesis 5 rejected

Source: Data Processing Results using SmartPLS 4

Based on Table 2, of the five moderation pathways tested (H6 – H10), only Hypothesis 7 was accepted, suggesting that Green Skepticism significantly strengthens the relationship between the Value Barrier and the Intention to Resist. These findings are in line with Khan et al. (2022) and Bhutto & Rutelione (2024) who emphasize that skepticism of sustainability claims lowers the perception of value and increases resistance.

The other four moderation hypotheses (H6, H8, H9, H10) were rejected because they showed no significant effect. This indicates that Green Skepticism does not always function as a moderator, especially in relation to other barriers such as usage, risk, tradition, and image. Although H10 is close to a significant value ($p = 0.084$), these results are not statistically robust enough and require further testing.

Discussion

The results of testing 10 hypotheses in this study showed that only 4 hypotheses were statistically accepted. These findings provide important insights related to the dynamics of consumer resistance to green baby care products among the Indonesian Millennial and Gen Z generations. Not all innovation barriers play a significant role, and not all of the moderation effects of green skepticism strengthen the hypothetical relationship.

The Effect of Usage Barrier on Intention to Resist

The results of this study show that the usage barrier has a positive and significant influence on the intention to resist green baby care products. This means that the greater the barriers that consumers feel in terms of use and access, the higher their tendency to resist the adoption of the product. These barriers are not only related to the perception that products are difficult to use, but also include a lack of easily accessible information, limited product choices, and difficulties in finding products physically and digitally.

These findings are in line with the Innovation Resistance Theory of Ram & Sheth (1989), which states that resistance to innovation increases when new products require consumers to change routines, or when consumers do not have enough practical information and adequate access. In the context of green baby care, resistance arises not only because of the perception that the product is unfamiliar in how it is used, but also because of the limited product variants, uneven distribution, and lack of exposure in digital channels and physical stores.

The demographic aspect reinforces this interpretation. The majority of respondents in this study are women domiciled in Jakarta, which is a group that tends to prioritize practicality, time, and ease of finding products. They have an expectation that baby products must be easily recognized and found, both in minimarkets, supermarkets, and e-commerce. If green baby care

is invisible or difficult to reach on the platform, they usually access, then resistance increases. On the other hand, respondents from Millennials and Gen Z who are generally very digital-savvy also show resistance if they do not find the product information they are looking for instantly. This shows that even though this group is familiar with technology and information, they will still refuse to buy if product visibility is low or the information available is not enough.

Studies from Zahan et al. (2024) and Bhutto & Rutelione (2024) support these findings, highlighting that limited access and lack of clear information can be barriers to adoption, even in young consumers who are used to instant solutions. Puspitasari & Alversia (2023) also noted the low penetration of eco-friendly products in public distribution channels as the main inhibition of adoption. Meanwhile, Sadiq et al. (2020) and Tandon et al. (2021) emphasized the importance of the availability of green products as a key element in shaping consumer acceptance attitudes towards innovation.

Thus, to lower the usage barrier, manufacturers are not enough to rely solely on marketing messages. Usage education needs to be communicated concisely, visually, and relevantly, both through packaging, social media, and digital channels that are often accessed by target consumers. In addition, the expansion of distribution, including collaborations with large retailers and e-commerce, is a strategic step to increase product visibility and availability. It is also important to provide a variety of product variants that are tailored to your needs, such as travel size packaging for high mobility, unscented variants for sensitive skin, or time-saving multi-function products. This kind of innovation is very attractive to urban mothers who prioritize practicality, as well as the younger generation who are used to shopping online and expect a complete, informative, and easily accessible digital catalog. Products that address real and easy-to-find needs will help lower the barriers to use and drive wider adoption.

The Effect of Value Barrier on Intention to Resist

The results of the study show that the value barrier has a positive and significant influence on the intention to resist green baby care products. This means that the greater the skepticism of consumers about the perceived benefits of environmentally friendly products, the higher their tendency to resist adoption. This indicates that while consumers may be aware of environmental issues, their decisions are still influenced by how much functional and emotional benefits they can actually feel.

This finding is in line with the Innovation Resistance Theory by Ram & Sheth (1989), which states that resistance will arise when consumers feel that the benefits of innovation are not worth the effort or sacrifice expended. In the context of green baby care, respondents indicated doubts about the specific benefits of the product, such as advantages over conventional products, the authenticity of natural ingredients, and the absence of chemical content. This reflects that perceived benefits are not strong enough to replace the sense of security or comfort they have felt from conventional products.

Furthermore, the demographic profile of respondents—mostly productive-age mothers with higher education backgrounds and living in urban areas—also reinforces the tendency toward value-based resistance. They tend to be critical, rational, and selective in evaluating the perceived benefits of products. This aligns with the findings of Pratyaharani et al. (2022), who reported that millennial mothers prioritize quality as the primary consideration in purchasing baby care products rather than merely following trends. Such preferences are also rooted in Indonesia's cultural parenting values of *asuh*, *asih*, *asah*, which emphasize the parents'

commitment to providing protection, affection, and stimulation for their children from an early age (Aliyanti & Pawestuti, 2023).

The study of Sadiq et al. (2020) and Tandon et al. (2021) also strengthens these findings which highlight that low value perception of green products is often a major barrier to adoption, especially in emerging markets where consumer education is not evenly distributed. Eco-friendly products are often considered "compromises" because consumers feel they have to sacrifice quality, comfort, or trust for environmental values that don't feel relevant or real.

Therefore, to lower the value barrier, manufacturers need to focus more on increasing perceived benefits through concrete and communicative evidence, such as effectiveness tests, clear ingredient labels, and convincing education. Communication that not only sells sustainability ideas, but also answers the practical and emotional needs of consumers, will be key to reducing resistance and driving adoption.

The Effect of Risk Barrier on Intention to Resist

The results of the study showed that the risk barrier did not have a significant effect on the intention to resist green baby care products. In fact, the direction of the relationship found is negative, which means that the higher the perception of risk, the higher the risk perception, does not necessarily increase resistance to adoption. These findings contradict the initial assumption in Innovation Resistance Theory (Ram & Sheth, 1989), which states that uncertainty about the performance, safety, or consequences of an innovation will tend to increase consumer resistance.

This finding contradicts the assumptions of Innovation Resistance Theory (Ram & Sheth, 1989), which emphasizes that risk perceptions usually increase resistance to innovation. The divergence may be explained by the context of respondents, most of whom are Millennials and Gen Z parents who perceive green baby care as reputable products, comparable to premium skincare. They associate such products with higher quality, assured safety due to natural ingredients, strong brand image, and prices deemed proportional to perceived quality (Seilatu, Usman, & Febrilia, 2022). These perceptions strengthen consumer trust, thereby lowering risk concerns.

The results are also consistent with Desai (2025), who highlights that urban, educated mothers are more motivated by the health value and benefits of products for their children. This motivation drives them to allocate more spending toward what they perceive as premium options, thus diminishing risk perceptions. Such trust and motivations help explain why risk is not a major barrier in this context.

The Bhutto & Rutelione study (2024) said that risk perception of green products tends to weaken when consumers do not have a negative experience, or when trust in the brand is high enough. Luthra (2024) also added that in the personal care category, risk is only a significant barrier when it comes to direct safety issues such as irritation or serious side effects. In this context, respondents are likely to not have such hands-on experience, so the risk barrier does not appear as a major barrier.

Thus, although in theory the risk barrier is important, empirical results show that Indonesian consumers, especially Millennials and Gen Z, do not see green baby care products as something directly risky. However, manufacturers still need to maintain the perception of security with transparency of active ingredients, safety certifications, and responsible claims, so that resistance does not arise in the future due to a crisis of trust or misinformation

The Influence of Tradition Barrier on Intention to Resist

The results of the study show that the tradition barrier has a positive and significant effect on the intention to resist green baby care products. This means that the stronger the habits or routines that have been embedded in the use of conventional products, the higher the tendency of consumers to resist the adoption of new products that carry sustainability claims or natural ingredients.

These findings are in line with the framework of Innovation Resistance Theory by Ram & Sheth (1989), which explains that resistance to innovation often arises when a new product conflicts with established habits, both personally and socially. In the context of baby care, many consumers feel more confident in conventional products that they have known and used for a long time. These products are often passed down from generation to generation, recommended by parents, or associated with previous positive experiences.

One cultural value that reinforces the tradition barrier is the belief in conditions such as *masuk angin* (wind illness), which often underlies the choice of certain baby care products. For instance, warm *telon* oil is widely believed to provide thermal comfort and protect babies from bloating. As noted by Permatasari, Pramesti, & Nurhayati (2020), *telon* oil is commonly used by Indonesian mothers to provide warmth and initial protection for newborns. Green baby care products that do not offer similar sensory effects, or fail to communicate their benefits in culturally relevant terms, are likely to be perceived as less suitable.

This result is further supported by Puspitasari & Alversia (2023), who highlight that personal care habits are often shaped by family experiences and social influences. Zahan et al. (2024) also confirm that resistance to green innovations can emerge when innovations conflict with long-established routines. In the beauty industry, Khan et al. (2022) similarly note that emotional attachment to conventional brands and products becomes a significant barrier to adopting green cosmetics, particularly when communication strategies fail to consider traditional values.

To lower these barriers, manufacturers need to package sustainability messages in a more familiar way, for example, by emphasizing sustainability values, that caring for babies with eco-friendly products is a modern form of love and protection, without abandoning existing beliefs. In addition, green product innovation can also be directed to integrate local traditional values, such as using natural ingredients that have long been known to the community or presenting products in a culturally familiar format. Presenting a relatable mother figure, or family figure, in a product communication narrative, can also help bridge changing preferences and build a bridge between old values and new innovations.

The Effect of Image Barrier on Intention to Resist

The results of the study showed that the image barrier did not have a significant effect on the intention to resist green baby care products. Negative perceptions, such as viewing green products as a temporary trend, doubting their credibility, or questioning the authenticity of natural ingredients, were not strong enough to shape consumer resistance among Indonesian Millennials and Gen Z. According to Innovation Resistance Theory (Ram & Sheth, 1989), image barriers typically arise when innovations are perceived to lack credibility or fail to meet consumer expectations. However, in this context, respondents were more influenced by the *premiumization* of green baby care products, which are positioned similarly to premium skincare emphasizing quality, safety, and exclusivity. As Seilatu, Usman, & Febrilia (2022)

note, such positioning strengthens trust in product claims and minimizes potential resistance. This aligns with Bhutto & Rutelione (2024), who argue that image barriers become significant only when consumers strongly distrust the brand. By contrast, younger, urban, and information-savvy consumers in this study, accustomed to product diversity and more open to sustainability narratives, did not perceive negative brand image as a decisive factor driving resistance.

Thus, although in theory the image barrier can be an obstacle in the adoption of innovation, the results of this study show that negative images of green baby care products are not influential enough in encouraging resistance among respondents. For manufacturers, this is an opportunity to continue to build trust without worrying that the image of "green" will cause resistance as long as communication is transparent, not excessive, and consistent with product quality.

The Effect of Green Skepticism Moderation on the Relationship between the Usage Barrier and Intention to Resist

The results showed that green skepticism did not significantly moderate the relationship between the use barrier and the intention to resist green baby care products. This means that the level of consumer skepticism about sustainability claims does not strengthen or weaken the influence of barriers to use on adoption resistance.

These findings suggest that although the usage barrier directly affects refusal intentions, the high level of green skepticism is not strong enough to magnify the effect. In other words, both consumers who believe and those who doubt green claims show a tendency to resist when they encounter obstacles in use such as uninformative labels, hard-to-find products, or unclear ways to use. This indicates that functional factors stand alone as reasons for resistance, independent of trust in sustainability aspects.

These findings differ from the initial assumption that refers to the theory that skepticism will exacerbate the influence of innovation barriers (Bhutto & Rutelione, 2024; Luthra, 2024). In this context, the results could reflect that consumers are resisting for practical reasons, without being overly influenced by perceptions of sustainability claims. It could be that, for a highly technical type of barrier such as usage, skepticism does not play a decisive role.

Thus, to reduce resistance due to the use barrier, manufacturers still need to focus on improving the functional aspects of the product, such as clarifying label information, expanding distribution, and providing education on how to use regardless of the level of consumer confidence in the green claim itself.

The Effect of Green Skepticism Moderation on the Relationship between Value Barrier and Intention to Resist

The results showed that green skepticism significantly strengthened the relationship between the value barrier and the intention to resist green baby care products. This means that when consumers feel that the benefits of the product are not commensurate with their expectations, such as not being superior to conventional products, still containing chemicals, or doubting their naturalness, the tendency to resist adoption will be higher if they also doubt the honesty of the product's sustainability claims. These findings show that the value barrier is more related to the perception of benefits (perceived benefits) than the price aspect. Consumer resistance arises not because the product is considered expensive, but because they do not see any advantages or convincing added value compared to conventional products.

When green skepticism is high, for example because labels and advertisements are perceived as non-transparent or misleading, negative perceptions of product benefits will be further strengthened. Skeptical consumers will be more likely to question the validity of the manufacturer's promised advantages, and ultimately more likely to refuse to try or buy the product.

This condition is relevant to the demographic characteristics of the respondents in the study, namely the majority of young mothers who are digital savvy, have a S1 education, and have good cognitive abilities. This group tends to be more critical of the information they consume, especially if the manufacturer's communication is not transparent enough or leaves room for doubt. In addition, some of the respondents also come from low-income groups who tend to be price sensitive, so when the benefits of the product are not realized, they prefer conventional products that are more familiar and affordable.

These findings are in line with studies by Sadiq et al. (2020) and Tandon et al. (2021), which show that green skepticism can weaken the perception of benefits and strengthen resistance to eco-friendly products. When consumers don't trust sustainability claims, then the potential added value that the product offers loses relevance.

Therefore, strategies to reduce value barriers need to be accompanied by efforts to build communication credibility. Consumer education must be conducted in an informative, transparent, and evidence-based manner such as through easy-to-understand labels, credible certifications, and consistent and convincing digital communication. Without confidence in sustainability claims, any effort to improve the perception of product value will be difficult to come to fruition.

The Effect of Green Skepticism Moderation on the Relationship between Risk Barrier and Intention to Resist

The findings of the study show that green skepticism does not moderate the relationship between risk barrier and intention to resist green baby care products. This means that even if consumers have concerns about the quality or effectiveness of the product, the level of skepticism of green claims does not strengthen or weaken their tendency to resist adoption.

One of the reasons is because baby products that are labeled natural or organic are often associated with safety and softness, especially for sensitive baby skin. Instead of being considered risky, eco-friendly claims give the impression that the product is safer to use. Even when consumers are skeptical of labels or advertisements, their doubts tend to have more to do with the clarity of the information or price, rather than with the risk of direct use.

These findings are consistent with Puspitasari & Alversia (2023), Zahan et al. (2024), and Bhutto & Rutelione (2024), who emphasize that risk perceptions—whether related to disproportionate price or doubts about lower quality—represent fundamental concerns that can independently shape resistance. For many consumers, especially mothers as the primary decision-makers, the anxiety that green products may cost more without delivering proportional benefits, or may be less effective than conventional options, is sufficient to trigger resistance. Such concerns are deeply rooted and cannot be easily eliminated through sustainability claims or green communication strategies alone. In other words, no matter how transparent the labeling or how persuasive the advertising, if these practical risk perceptions remain unaddressed, consumers are still reluctant to adopt green products.

The Effect of Green Skepticism Moderation on the Relationship between Tradition Barrier and Intention to Resist

The results showed that green skepticism did not moderate the relationship between the tradition barrier and the intention to resist. This means that although some consumers doubt sustainability claims, this doubt does not reinforce the influence of old habits in resisting green baby care products. Tradition barriers are more about comfort with conventional products that have been used for generations, as well as trust in family advice or proven personal experience. In this case, resistance does not arise because consumers do not believe in green claims, but because they feel no need to move away from options that have been considered safe.

These findings indicate that green skepticism is not a factor magnifying tradition-based barriers, as they both stem from different psychological roots. To lower resistance, producers can communicate sustainability as a continuation of familiar values. One effective approach is to create green product innovations that remain connected to local culture. In this way, consumers do not feel that they are abandoning traditions, but rather preserving them in a form that aligns with the needs and awareness of today's consumers (Lestari et al., 2022; Rahayuningsih et al., 2024).

The Effect of Green Skepticism Moderation on the Relationship between Image Barrier and Intention to Resist

The findings of the study showed that the image barrier had no significant effect on the intention to resist green baby care products, and green skepticism also did not moderate the relationship. This means that negative perceptions of green product image, such as doubts over labels, natural ingredients, or brand reputation, are not strong enough to encourage resistance, even when consumers have a high level of skepticism.

Most likely, Indonesian consumers, especially the younger generation, have not made their image or initial impression the main factor in resisting green products. Thus, even when doubts arise about labels or advertising, such concerns do not automatically translate into resistance to adoption. This indicates that brand image and reputation—especially when a product is perceived as premium—remain dominant factors in shaping consumer trust, while green skepticism does not substantially reinforce the relationship between image barriers and resistance.

CONCLUSION

This study explored the resistance of Indonesian Millennials and Gen Z towards green baby care products using the Innovation Resistance Theory and incorporating green skepticism as a moderating factor. Findings showed that resistance mainly stemmed from usage barriers, due to limited accessibility and practical challenges, and value barriers, driven by skepticism about the benefits of green products compared to conventional ones. Tradition barriers also contributed, reflecting adherence to family preferences, while risk and image barriers were less influential. Green skepticism significantly strengthened the link between value barriers and resistance, highlighting how distrust in sustainability claims increases resistance, though it did not moderate other barriers. Future research could investigate strategies to reduce green skepticism and examine its impact across different cultural and product contexts to better support green product adoption.

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