

Brand Extension Wardah: The Influence of Brand Image and Environmental Concern

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Abstract. *Increasing consumer attention to environmental issues encourages companies to integrate sustainability into their marketing strategies, including through the development of sustainability-based brand extensions. In the beauty industry, Wardah implements this strategy through the Wardah Nature Series which carries the concept of Halal Green Beauty. This study aims to analyze the influence of environmental concern and brand image on attitude toward brand extension with brand extension fit as a mediating variable in Generation Z in Padang City. This study uses a quantitative approach with an associative design. Data was collected through the distribution of questionnaires to 138 Generation Z respondents in Padang City who had used Wardah products with purposive sampling techniques. Data analysis was carried out using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method with the help of SmartPLS software. The results of the study show that brand image has a positive and significant effect on attitude toward brand extension and brand extension fit. Environmental concerns have a positive and significant effect on brand extension fit, but do not have a significant effect directly on attitude toward brand extension. In addition, brand extension fit has a positive and significant effect on attitude toward brand extension and is able to mediate the influence of environmental concerns and brand image on attitude toward brand extension. These findings show that consumer acceptance of the Wardah Nature Series is not only influenced by concern for the environment and brand image, but also by the perception of conformity between the parent brand and the expanded product. Therefore, brand extension fit and a strong brand image are important factors in increasing consumer acceptance of sustainability-based brand extensions.*

Keywords: *Environmental Concern, Brand Image, Brand Extension Fit, Attitude Toward Brand Extension, Wardah Nature Series, Generation Z*

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INTRODUCTION

The global environmental crisis has prompted companies to integrate sustainability into their business and marketing strategies. Increasing attention to environmental issues makes consumers increasingly consider sustainability aspects when evaluating a product or brand (Seal & Bag., 2022; Majeed et al., 2022; Panda et al., 2020; Shao & Ünal, 2019). This phenomenon encourages the development of the concept of green marketing, which is a marketing strategy that emphasizes environmental responsibility in the process of creating and delivering value to consumers (Busalim et al., 2022; Thakkar, 2021; Reddy et al., 2023; Yan & Yazdanifard, 2014).

In the beauty industry, these changes can be seen from the increasing demand for products that use natural ingredients, eco-friendly packaging, and sustainable production processes. In line with that, YouGov shows Indonesia as the country with the highest increase in

purchase intention for sustainable products, which is 79%, while the Snapcart TASC Online Survey 2024 survey noted that 84% of respondents have used eco-friendly products. However, some people still face obstacles in the form of lack of understanding, higher prices, and limited product availability (Harris et al., 2016; Martinčić et al., 2022).

This phenomenon shows an increasing level of environmental concern, which is the level of individual awareness of environmental problems accompanied by support for environmental protection efforts (Peñasco & Grossman, 2026; Huang, 2016; Su et al., 2021; Ahmed et al., 2021). Individuals with a high level of environmental concern tend to consider environmental impacts in consumption decision-making (Lopes et al., 2024; Yue et al., 2020), so they are more responsive to sustainability initiatives undertaken by a brand.

Increasing consumer attention to environmental issues encourages companies to develop various strategies that are able to accommodate sustainability demands while maintaining competitiveness in the market (Chung, 2020; Taherdangkoo et al., 2019; Le et al., 2024; Chen et al., 2015). One of the strategies that is widely applied is brand extension to expand the product portfolio by utilizing existing brand strengths. In the context of sustainability, this strategy is often realized through sustainable line extension, which is the development of product lines under major brands that highlight environmental and sustainability aspects (Magano et al., 2026; Aydin & Badurdeen, 2019; Qiu et al., 2020; Goworek et al., 2020; Katsikeas et al., 2016).

In the Indonesian beauty industry, Wardah as a pioneer of halal cosmetics has integrated halal values, ethics, and sustainability through the concept of Halal Green Beauty which includes the use of natural ingredients, environmentally friendly production practices, and a commitment to cruelty-free principles. The implementation of this concept is reflected in various product lines and is strengthened through continuous innovation and brand extension strategies, such as the Wardah Nature Series.

Wardah's consistency in developing products that are in line with sustainability principles has also earned global recognition as the Top Muslim-Friendly Cosmetic Brand in the World by Salaam Gateway as well as the Top Halal Award 2025, which further strengthens its position as a sustainable and competitive halal brand in the global market. Brand extension is a strategy to introduce new products by using familiar brand names, both in the same and different categories (Brexendorf & Keller, 2017; Davvetas & Diamantopoulos, 2016; Mishra et al., 2015; Ansary & Nik, 2018). In the context of sustainable products, this strategy is important because consumers with a high level of *environmental concern* tend to be more responsive to brands that show a commitment to sustainability.

According to *Brand Extension Theory*, the success of *brand extension* is greatly influenced by the perception of *fit* between the parent brand and the new product. In addition, Peng et al. (2023) and Baumeister et al. (2015) explains that the success of brand expansion depends on the ability of the parent brand to transfer a positive image and association to the new product. However, the transfer of such associations does not always occur automatically because consumers will first evaluate the suitability between the parent brand and the expanded product.

Consumers tend to group information based on the schema that has been formed in their memory, so that the compatibility between the parent brand and the expanded product is an important factor in determining the success of the brand extension (Allman et al., 2019; Gürhan-Canli et al., 2018). The concept of conformity is known as brand extension fit, which is the consumer's perception of the similarity of attributes, benefits, or image between the parent brand and the new product.

Extensions that are perceived to be consistent with brand image can strengthen consumer evaluations, while non-conformities have the potential to weaken the main brand image. Therefore, the higher the level of conformity that consumers feel, the more likely they are to give a positive evaluation of brand extension. In the context of this study, the success of the Wardah

Nature Series does not only depend on the sustainability attributes offered, but also on the extent to which these eco-friendly values are perceived to be in line with Wardah's brand identity and image.

This perception of conformity is inseparable from the brand image that has been formed in the minds of consumers. Brand image is a set of perceptions and associations stored in the consumer's memory about a brand. A strong brand image can increase trust and reduce the risks felt by consumers when evaluating new products. In the context of brand extension, a positive brand image makes it easier for consumers to accept the expanded product because they believe that the quality and characteristics of the parent brand will be reflected in the new product.

These factors are important to understand in the context of Generation Z as one of the main consumer segments of sustainable products. Based on data from the Central Statistics Agency (2023), around 24% of the population of Padang City is Generation Z who are known to have a relatively high level of environmental awareness. However, this concern is not always reflected in real consumption behavior, thus creating a gap between environmental concern and action (Korsunova et al., 2021).

The findings of Raditya & Soelasih (2025) show that although Generation Z has higher environmental concern than Generation Y, they tend to be less consistent in translating it into green consumption behavior. In addition, Generation Z's behavior is also influenced by value perception and brand communication, so they tend to consider the suitability of values and brand extension fit with the brand image before forming attitudes towards the product resulting from brand expansion (Prashar and Kausal., 2025).

Although the characteristics and consumption behavior of Generation Z have been extensively researched, studies that specifically analyze the influence of environmental concern and brand image on attitude toward brand extension with brand extension fit as a mediating variable are still limited, especially in the context of local brands and sustainable products in Indonesia. Most previous research has focused more on purchase intent and has been conducted in a global context, so it has not fully explained how local consumers evaluate sustainability-based brand expansion. Therefore, this study was conducted to fill this gap by examining the influence of environmental concern and brand image on attitude toward brand extension through brand extension fit in Generation Z in Padang City in the context of the Wardah Nature Series.

METHODS

Type of Research

This study uses a quantitative approach with an associative design. The quantitative approach is used to test the relationships between variables through numerical data and statistical analysis, while the associative design aims to systematically analyze the effects between variables. In particular, this study examines the influence of environmental concern and brand image on attitude toward brand extension with brand extension fit as a mediating variable. The research data was collected through a questionnaire survey distributed to Generation Z in Padang City who have experience using Wardah products. Furthermore, the data was analyzed using the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method with the help of SmartPLS software to test the direct and indirect relationships between variables in the research model. This approach was chosen because it is able to test models that involve simultaneous mediation variables and provide an empirical understanding of consumer responses to sustainable brand extension in the beauty industry.

Research Population

The population in this study is Generation Z in Padang City who have bought and used Wardah products in the last six months. The population was chosen because Generation Z is a consumer segment that has a relatively high level of awareness of environmental issues and has experience in using and evaluating Wardah products. With these characteristics, Generation Z is

considered relevant to examine the influence of environmental concern and brand image on attitude toward brand extension with brand extension fit as a mediating variable. The sampling technique used is purposive sampling with a non-probability sampling approach. Respondents were selected based on several criteria, including Generation Z (born in 1997–2012), at least 17 years old, domiciled in Padang City, and having used Wardah products in the last six months. The number of samples was determined based on the results of the calculation of 5–10 times the number of research indicators (Hair et al., 2019). With a total of 12 indicators, this study requires a minimum of 120 respondents to obtain representative data and support the validity of the research results. Although the minimum sample size required in this study was 120 respondents, the final number of respondents analyzed was 138. The questionnaires were distributed online to Generation Z consumers in Padang City who met the predetermined criteria. A total of 167 responses were initially received; however, only 138 responses were included in the final analysis after the screening process. Responses that did not meet the respondent criteria, such as age category, domicile, or experience using Wardah products in the last six months, were excluded from the analysis.

Operational Definition of Research variables

Variables are everything that is the focus of attention in research and can be measured to obtain the information needed (Sugiyono, 2022). In this study, there are three types of variables, namely independent variables (*exogenous*), mediating variables, and dependent variables (*endogenous*). The operational definition of each variable is as follows.

Exogenous (Independent) Variables

Exogenous variables are variables that affect other variables in the study (Sugiyono., 2022). The independent variables in this study consist of *environmental concern* and *brand image*. *Environmental concern* is the level of individual awareness and concern for environmental problems accompanied by a willingness to act in an effort to protect and improve environmental conditions. This variable is measured through indicators of willingness to make sacrifices to preserve the environment, concern for various environmental problems, and consideration of environmental impacts in daily decision-making. Meanwhile, *brand image* is a consumer's perception and association of a brand that reflects functional, emotional, and symbolic attributes and influences consumer attitudes and beliefs. These variables are measured through high product quality indicators, better product characteristics than competing brands, and unique brand personality.

Mediating Variables

Mediation variables are variables that bridge the relationship between independent and dependent variables (Sugiyono., 2022). The mediating variable in this study is *brand extension fit*, which is the level of conformity felt by consumers between the parent brand and the expanded product that reflects a logical, consistent, and relevant relationship. This variable is measured through indicators of conformity with brand image, the launch of expanded products as a logical step for the company, and the relevance of the product to environmental issues.

Endogenous (Dependent) Variables

Dependent (*endogenous*) variables are variables that are influenced by other variables in the study (Sugiyono., 2022). The dependent variable in this study is *attitude toward brand extension*, which is the overall assessment of consumers towards brand extension products that reflect positive or negative responses based on perceptions of suitability, benefits, and value offered. This variable is measured through indicators of differences from ordinary products, good product ideas, and preferences for sustainability-based product expansion.

Table 1. Operational Definition of Variables and Measurement Indicators

Variables	Operational Definition	Indicators	Source	Scale
Independen (X1) Environmental Concern	Environmental concern is the level of individual awareness and concern for environmental problems accompanied by a willingness to act in an effort to protect and improve environmental conditions.	Willing to make sacrifices to maintain environmental sustainability. Feel concerned about various environmental problems. Consider environmental impacts when making decisions in daily life.	Magano et al. (2026)	Likert
Independen (X2) Brand Image	Brand image is a consumer's perception and association of a brand that reflects functional, emotional, and symbolic attributes and influences consumer attitudes and beliefs.	The products are of high quality. The products have better characteristics compared to competitor products. Have a unique personality.	Magano et al. (2026)	Likert
Mediasi (Z) Brand Extension Fit	Brand extension fit is the level of conformity that consumers perceive between the parent brand and the expanded product that reflects a logical, consistent, and relevant relationship.	In accordance with the brand image. The launch of the expanded product is a logical step for the company. Relevant to environmental issues.	Magano et al. (2026)	Likert
Dependen (Y) Attitude Toward Brand Extension	Attitude toward brand extension is a consumer's overall assessment of brand extension products that reflects a positive or negative	There is a difference with ordinary products. Great product idea. Loves the expansion of sustainable-based products.	Magano et al. (2026)	Likert

	response based on perceptions of suitability, benefits, and value offered			
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Data Collection Instrument and Techniques

The source of data in this study is primary data obtained directly from respondents through questionnaires. The questionnaire was compiled based on the research framework and consisted of a number of statements measured using a five-point Likert scale, ranging from strongly disagree to strongly agree. This instrument was used to measure respondents' perception of *environmental concerns*, *brand image*, *brand extension fit*, and *attitude toward brand extension*. Data collection was carried out by distributing questionnaires online through the Google Forms platform to Generation Z consumers in Padang City who have used Wardah products. Thus, the data obtained can be processed quantitatively according to the research objectives. The questionnaire items were adapted from previous research, particularly Magano et al. (2026), and adjusted to the context of Wardah Nature Series as a sustainability-based brand extension. The items were developed based on the operational definitions of each variable, namely environmental concern, brand image, brand extension fit, and attitude toward brand extension. Before being distributed to respondents, the questionnaire was reviewed to ensure that each statement was clear, relevant to the research indicators, and suitable for the characteristics of Generation Z respondents. The quality of the instrument was then evaluated statistically through validity and reliability testing in the SEM-PLS analysis.

Data Analysis Techniques

Descriptive Analysis

Descriptive analysis was used to provide an overview of the characteristics of respondents and the distribution of answers in each research variable. In this study, descriptive analysis included data verification, calculation of respondent answer frequency, mean score, and Respondent Achievement Level (TCR). Data verification is carried out to ensure that all questionnaire answers are complete and worthy of further analysis. Furthermore, *the mean* and TCR values were used to describe the tendency of respondents' responses to *environmental concern variables*, *brand image*, *brand extension fit*, and *attitude toward brand extension*.

Inferential Statistical Analysis

The inferential analysis in this study uses the Structural Equation Modeling–Partial Least Squares (SEM-PLS) method with the help of SmartPLS 4 software. This method was chosen because it allows the simultaneous testing of measurement *models* and structural *models*, making it suitable for analyzing the relationship between *environmental concerns*, *brand image*, *brand extension fit*, and *attitude toward brand extension*. The evaluation of the measurement model was carried out through validity and reliability tests which included *convergent validity*, *discriminant validity*, *Cronbach's alpha*, and *composite reliability*. Meanwhile, the evaluation of the structural model was carried out by looking at *the R-square* value to measure the model's ability to explain endogenous variables. Hypothesis testing was carried out using *a bootstrapping* procedure by analyzing *path coefficients*, *t-statistics*, and *p-values* to test the direct and indirect influence between research variables. The SEM-PLS analysis was conducted in two stages: evaluation of the measurement model and evaluation of the structural model. The measurement model was assessed using convergent validity, discriminant validity, and reliability. Convergent validity was evaluated based on outer loading values and Average Variance Extracted (AVE), with acceptable criteria of outer loading above 0.60 and AVE above 0.50. Reliability was assessed using Cronbach's Alpha and Composite Reliability, with acceptable values above 0.70. The structural model was evaluated using the R-square value to determine the explanatory power of the model.

Hypothesis testing was conducted through the bootstrapping procedure by examining path coefficients, t-statistics, and p-values. A hypothesis was considered supported when the t-statistic value was greater than 1.96 and the p-value was less than 0.05 at a 5% significance level.

RESULTS AND DISCUSSION

In this study, the data analysis technique was carried out using Partial Least Squares (PLS) through SmartPLS 4 software. PLS is a variance-based *Structural Equation Modeling* (SEM) analysis method that allows model testing to be carried out simultaneously and effectively. The questionnaire data that had been collected from 138 respondents was then processed using the PLS-SEM method with the help of SmartPLS 4.0.0 software.

Table 2. Characteristic of Respondent

Characteristic	Category	Number of Respondents	Percentage (%)
Gender	Male	29	21%
	Female	108	79%
Birth Year Range	<1997	3	1,8%
	1997-2012	157	84%
	>2012	7	4,2%
Occupation	Student	129	91,3%
	Employee	8	5,8%
	Stay at Home Parent	1	0,7%
	Government Employee	1	0,7%
	Fresh Graduate	1	0,7%
	Unemployed	1	0,7%
Length of Using Wardah Products	<6 months	29	17,4%
	6 months-1 year	72	43,1%
	1-2 years	24	14,4%
	>2 years	42	25,1%
Frequency of Wardah Product Use in the Last Six Months	1-5 times	52	31,1%
	6-10 times	41	24,6%
	>10 times	74	44,3%

Source: Processed Data, 2026

The data were collected through an online questionnaire distributed from 8 May to 29 June 2026. Of the 167 responses received, 138 met the predetermined criteria and were included in the analysis. Overall, the respondents were predominantly female, belonged to Generation Z, were mostly students, and had sufficient experience using Wardah products, making them appropriate participants for this study. These respondent characteristics are relevant to the objectives of this study because the research focuses on Generation Z consumers who have experience using Wardah products. The dominance of female respondents and students also reflects the potential consumer segment of beauty and skincare products. In addition, respondents' experience in using Wardah products within the last six months strengthens the relevance of their evaluation of Wardah Nature Series as a brand extension product.

Outer Model

Validity Testing

The validity test in this study was carried out using two measurement methods, namely *convergent validity* and *discriminant validity*. Both tests are used to ensure that each indicator is able to accurately measure the construct in question and can distinguish one construct from other constructs in the research model.

Convergent Validity

The validity test in this study was carried out through convergent validity and discriminant validity. Convergent validity is used to ensure that each indicator is able to adequately represent the measured construct. The test was carried out by evaluating the outer loading and Average Variance Extracted (AVE) values. An indicator is declared to meet convergent validity if it has an outer loading value greater than 0.60 and an AVE value greater than 0.50 (Hair et al., 2022). Therefore, this test is carried out to ensure that the indicators on the variables of environmental concern, brand image, brand extension fit, and attitude toward brand extension are able to explain the construct that is validly measured before further analysis is carried out using SEM-PLS. The results of the convergent validity test on the research instrument are shown through the Average Variance Extracted (AVE) value and outer loading, as presented in the following table:

Table 3. Outer Loading

Item	Attitude Toward Brand Extension	Brand Extension Fit	Brand Image	Environmental Concern
ATBE1	0.833			
ATBE2	0.881			
ATBE3	0.892			
BEF1		0.896		
BEF2		0.885		
BEF3		0.893		
BI1			0.843	
BI2			0.822	
BI3			0.846	
EC1				0.887
EC2				0.867
EC3				0.835

Source: Data Processed, Year 2026

These results indicate that all indicators are able to represent their respective latent variables adequately. This is important because the research model depends on the accurate measurement of environmental concern, brand image, brand extension fit, and attitude toward brand extension. Therefore, the validity of the indicators supports the suitability of the instrument for examining consumer responses toward Wardah Nature Series as a sustainability-based brand extension.

Discriminant Validity

Discriminant validity is used to measure the extent to which a construct differs from other constructs in a research model. Discriminatory validity testing was carried out using *cross loading* values and *Fornell-Larcker Criterion* criteria. A construct is declared to have good discriminant validity if the *loading* value of an indicator in the construct it is measured is higher than the *loading* value of another construct (Hair et al., 2022). In addition, the square root value of AVE in each construct must be greater than the correlation between other constructs. This test aims to

ensure that each variable in the study has different characteristics and is able to measure the concepts that should be measured appropriately.

Table 4. Cross Loading Model

Item	Attitude Toward Brand Extension	Brand Extension Fit	Brand Image	Environmental Concern
ATBE1	0.833	0.685	0.549	0.503
ATBE2	0.881	0.809	0.696	0.649
ATBE3	0.892	0.757	0.633	0.615
BEF1	0.757	0.896	0.608	0.606
BEF2	0.758	0.885	0.589	0.627
BEF3	0.800	0.893	0.639	0.636
BI1	0.575	0.603	0.843	0.599
BI2	0.562	0.531	0.822	0.502
BI3	0.675	0.589	0.846	0.575
EC1	0.609	0.658	0.626	0.887
EC2	0.559	0.585	0.556	0.867
EC3	0.597	0.565	0.546	0.835

Source: Data Processed, Year 2026

Based on the table above, the correlation value between each construct and its indicator is higher than the correlation with other constructs, with all values being above 0.70. These results show that all indicators in this study have met the criteria for discriminant validity. The path diagram of all research indicators is presented in the following figure. The fulfillment of discriminant validity confirms that each construct measures a different concept in the research model. This distinction is important because environmental concern, brand image, brand extension fit, and attitude toward brand extension have different theoretical roles. Therefore, the results of the structural model can be interpreted more accurately because the constructs are not overlapping with one another.

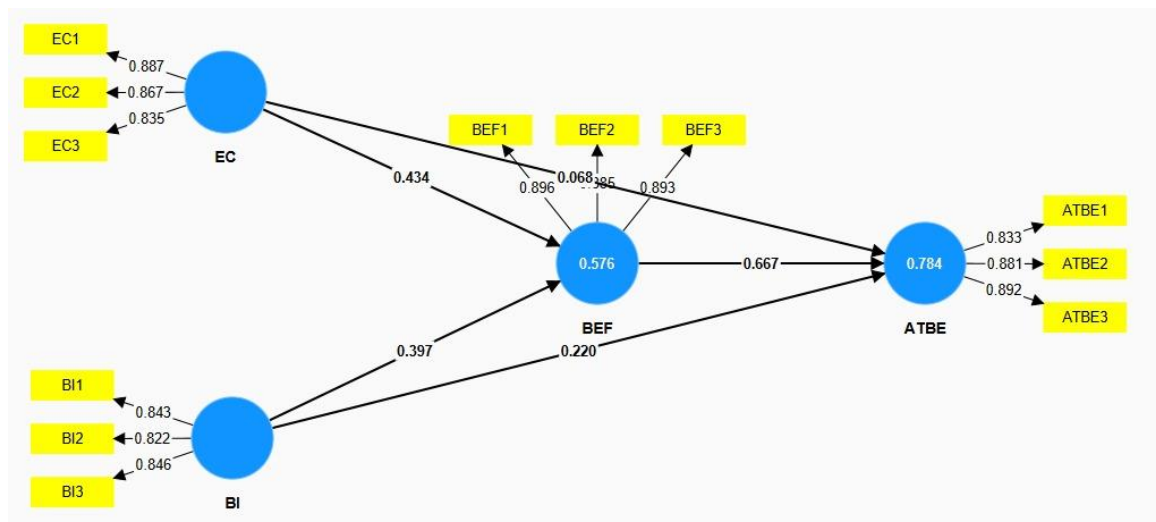


Figure 1. Data Processing Results

Reliability Test

The reliability test was carried out by evaluating Cronbach's Alpha and Composite Reliability values. A construct is declared reliable if it meets a predetermined threshold value.

The results of the reliability test for each latent variable processed using SmartPLS are presented in the following table.

Table 5. Cronbach's Alpha dan Composite Reliability

Variable	Cronbach's Alpha	Composite Reliability
Attitude Toward Brand Extension	0.838	0.903
Brand Extension Fit	0.871	0.921
Brand Image	0.787	0.876
Environmental Concern	0.829	0.898

Source: Data Processed, Year 2026

Based on Table 4, all constructs in this study have met the reliability criteria. This is indicated by Cronbach's Alpha values greater than 0.60 and Composite Reliability values that exceed 0.70. Thus, all research variables are declared to have good internal consistency and are suitable for further analysis. The following is a table that presents the results of the *Average Variance Extracted (AVE)* for each research variable.

Table 6. Average Variance EXtracted (AVE)

Variabel	AVE
Attitude Toward Brand Extension	0.756
Brand Extension Fit	0.795
Brand Image	0.701
Environmental Concern	0.745

Source: Data Processed, Year 2026

Based on the table, all variables have an AVE value above 0.50. Thus, it can be concluded that all constructs have met the criteria for *convergent validity* and have been declared valid. The reliability and AVE results show that the research instrument has adequate internal consistency and convergent validity. This means that the questionnaire items consistently measure the intended constructs and are appropriate for further hypothesis testing. These findings strengthen the methodological basis for analyzing the direct and indirect effects among the variables in the SEM-PLS model.

Structural Model Testing (Inner Models)

R Square

Internal *model testing* was carried out to test the causal relationships between latent constructs in the research model. The *R-Square value* is used to measure the extent to which independent variables and mediating variables are able to explain variations in dependent variables. *R-Square* is a value that ranges from 0 to 1 which indicates the ability of exogenous variables to explain endogenous variables. The closer the value is to 1, the better the model's ability to explain the variability of dependent variables.

Table 7. R-Square Output

Variable	R Square	R Square Adjusted
Attitude Toward Brand Extension	0.784	0.779
Brand Extension Fit	0.576	0.570

Source: Data Processed, Year 2026

Based on the results of data processing in the table above, the *R-Square* value for the Attitude Toward Brand Extension variable is 0.784 with the *Adjusted R-Square* is 0.779. These results show that the variables of environmental concern, brand image, and brand extension fit were able to explain 78.4% of the variation in attitude toward brand extension, while the

remaining 21.6% were influenced by other variables outside the research model. Furthermore, the Brand Extension Fit variable has an *R-Square* value of 0.576 with an *Adjusted R-Square* of 0.57069, which means that *environmental concerns* and *brand image* are able to explain 57.6% of *brand extension fit* variations, while the other 42.4% are explained by factors other than the model. Thus, the structural model in this study shows good predictive ability in explaining the relationship between the variables studied.

Hypothesis Testing

Hypothesis testing was carried out using the *bootstrapping* method on SmartPLS to test the direct and indirect influence between variables in the research model. The test decision was based on the *T-Statistics* and *P-Values* values, where the hypothesis was stated to be supported if the *T-Statistics* value was > 1.96 and the *P-Values* were < 0.05 at a significance level of 5%. The results of the hypothesis test are presented in the following table.

Table 8. Output Path Coefficient (Direct Hypothesis)

	Original Sample (O)	T Statistics (O/STDE)	P Values
Brand Extension Fit -> Attitude Toward Brand Extension	0.667	9.445	0.000
Brand Image -> Attitude Toward Brand Extension	0.220	3.278	0.001
Brand Image -> Brand Extension Fit	0.397	5.185	0.000
Environmental Concern -> Attitude Toward Brand Extension	0.068	1.022	0.307
Environmental Concern -> Brand Extension Fit	0.434	5.428	0.000

Source: Data Processed, Year 2026

The direct effect results show that brand extension fit has the strongest influence on attitude toward brand extension compared to the other predictors. This finding indicates that consumer acceptance of Wardah Nature Series is mainly determined by how well consumers perceive the product to be consistent with Wardah's existing brand image and values. Meanwhile, the insignificant direct effect of environmental concern on attitude toward brand extension is an important finding because it shows that environmental awareness alone does not automatically lead to a positive attitude toward sustainability-based brand extensions.

Table 9. Indirect Effect

	Original Sample (O)	T Statistics (O/STDE)	P Values
Brand Image -> Brand Extension Fit -> Attitude Toward Brand Extension	0.265	4.732	0.000
Environmental Concern -> Brand Extension Fit -> Attitude Toward Brand Extension	0.290	4.477	0.000

Source: Data Processed, Year 2026

The indirect effect results further clarify the role of brand extension fit as an important mediating variable. Although environmental concern does not directly influence attitude toward brand extension, it has a significant indirect effect through brand extension fit. This means that consumers who care about environmental issues are more likely to develop a positive attitude when they perceive Wardah Nature Series as compatible with Wardah's brand identity. Thus, brand extension fit serves as the mechanism that connects environmental concern and brand image with consumer attitudes toward brand extension.

Environmental Concern Has a Positive and Significant Influence on Attitude Toward Brand Extension

The hypothesis test shows that Environmental Concern has a positive but insignificant effect on Attitude Toward Brand Extension, as indicated by the path coefficient of 0.068, *t*-statistic of 1.022, and *p*-value of 0.307. This means that although respondents who are more concerned about environmental issues tend to show slightly more favorable attitudes, this concern alone is not sufficient to directly shape their attitude toward Wardah's brand extension.

Brand Image Has a Positive and Significant Influence on Attitude Toward Brand Extension

The test results showed that *brand image* had a positive and significant effect on *attitude toward brand extension*, with an *original sample* value of 0.220, *t*-statistic of 3.278, and a *p*-value of 0.001. The value indicates that the second hypothesis is accepted, because the *t*-statistic is greater than 1.96 and the *p*-value is less than 0.05. This means that the better the image of the Wardah brand, the more positive the consumer attitude towards *brand extension*.

Brand Image Has a Positive and Significant Influence on Brand Extension Fit

The test results showed that *brand image* had a positive and significant effect on *brand extension fit*, with an *original sample* value of 0.397, *t*-statistic of 5.185, and *p*-value of 0.000. These results show that the third hypothesis is accepted. Thus, a positive brand image encourages consumers to judge that Wardah Nature Series has a good fit with its parent brand.

Environmental Concern Has a Positive and Significant Influence on Brand Extension Fit

The test results showed that *environmental concern* had a positive and significant effect on *brand extension fit*, with an *original sample* value of 0.434, *t*-statistic of 5.428, and *p*-value of 0.000. The value indicates that the fourth hypothesis is accepted. This means that the higher the consumer's environmental awareness, the higher their perception of conformity to the Wardah Nature Series as a sustainability-oriented brand expansion product.

Brand Extension Fit Has a Positive and Significant Influence on Attitude Toward Brand Extension

The test results showed that *brand extension fit* had a positive and significant effect on *attitude toward brand extension*, with an *original sample* value of 0.667, *t*-statistic of 9.445, and *p*-value of 0.000. These results show that the fifth hypothesis is accepted. Thus, the higher the level of compatibility between the Wardah brand and Wardah Nature Series, the more positive the consumer attitude towards the expansion of the brand.

Brand Extension Fit Positively and Significantly Mediates the Effect of Environmental Concern on Attitude Toward Brand Extension

The results of the indirect influence test showed that *brand extension fit* mediated positively and significantly the influence of *environmental concern* on *attitude toward brand extension*, with an *original sample* value of 0.290, *t*-statistic 4.477, and *p*-value 0.000. Thus, the sixth hypothesis is accepted. This shows that consumers' environmental concerns do not directly form attitudes towards *brand extension*, but first through the perception of suitability between the brand and the expanded product.

Brand Extension Fit Positively and Significantly Mediates the Effect of Brand Image on Attitude Toward Brand Extension

The results of the indirect influence test also showed that *brand extension fit* mediated positively and significantly the influence of *brand image* on *attitude toward brand extension*, with an *original sample* value of 0.265, *t*-statistic 4.732, and *p*-value 0.000. This result shows that the seventh hypothesis is accepted. This means that a positive brand image will be more effective in forming a positive attitude towards *brand extension* if consumers first feel the compatibility between the parent brand and its new product.

The discussion of this study aims to explain and interpret the results of research on the influence of *environmental concern* and *brand image* on *attitude toward brand extension* in Wardah Nature Series with *brand extension fit* as a mediating variable. After data analysis was carried out using the PLS-SEM method on 138 Generation Z respondents in Padang City, the results of statistical analysis regarding the relationship between research variables were obtained as follows.

The Effect of Environmental Concern on Attitude toward Brand Extension

The results of the study show that *environmental concern* has a positive but not significant effect on *attitude toward brand extension*. These findings show that environmental concern is not strong enough to directly shape consumers' positive attitudes towards Wardah Nature Series. The success of *brand extension* is more determined by the perception of *fit* between the parent brand and the new product. In addition, consumers judge new products based on pre-formed brand schemes, so that positive attitudes do not arise just because consumers care about the environment. The influence of *environmental concerns* on consumer attitudes is relatively small, while stronger influences emerge through mediating variables such as *brand extension fit* (Magano et al., 2026). This indicates that *environmental concerns* play a more indirect role in shaping consumer attitudes towards *brand extension*. This finding is particularly important because it shows a gap between environmental awareness and consumer attitude toward brand extension. Although Generation Z is often associated with stronger environmental concern, this concern does not automatically produce a favorable attitude toward Wardah Nature Series. In green marketing research, this result extends previous findings by showing that environmental concern needs to be supported by perceived product relevance and brand consistency. Therefore, consumers may support environmental values in general, but they still evaluate whether the sustainability-based product is credible, relevant, and consistent with the parent brand before forming a positive attitude.

The Effect of Brand Image on Attitude toward Brand Extension

The results of the study prove that *brand image* has a positive and significant effect on *attitude toward brand extension*. *Brand image* is a collection of associations in the minds of consumers that influence the evaluation of a brand. A strong brand image can increase brand equity and make it easier to accept brand expansion. In this context, Wardah's positive image makes it easier for consumers to accept Wardah Nature Series as a valuable and relevant expansion product. In addition, *brand image* has a positive effect on trust and purchase decisions, as well as a significant positive effect on consumer attitudes (Kim & Chao., 2019; Magano et al., 2026). Thus, the stronger the brand image that Wardah has, the more positive the consumer attitude towards *the brand extension* that is launched. This result is consistent with previous brand extension studies which emphasize that a strong parent brand image can reduce perceived risk and increase consumer acceptance of new products. In this study, Wardah's image as a halal, ethical, and trusted beauty brand provides a positive basis for consumers to evaluate Wardah Nature Series. Thus, the finding supports the view that brand image is not only important for the parent brand, but also plays a strategic role in shaping consumer attitudes toward new product lines developed under the same brand.

The Effect of Environmental Concern on Brand Extension Fit

The results of the study show that *environmental concerns* have a positive and significant effect on *brand extension fit*. These findings confirm that consumers who have a high concern for the environment tend to rate the compatibility between Wardah and Wardah Nature Series higher. *Environmental concern* reflects an individual's awareness of environmental issues along with their support for environmental protection efforts (Sultan et al., 2020; Saeed et al., 2019; Taufique & Vaithianathan, 2018), individuals with *high environmental concern* consider environmental impacts in decision-making. In the context of *brand extension*, this assessment makes it easier for consumers to see the alignment between the sustainability values carried by

Wardah Nature Series and Wardah's brand identity as a whole. *Environmental concerns* encourage the perception of brand suitability in the context of sustainable products. This means that environmental concern not only influences attitudes, but also shapes the perception that the expansion of the brand is indeed feasible and relevant (Magano et al., 2026). This finding is in line with green marketing studies which explain that consumers with higher environmental concern tend to be more sensitive to the environmental attributes of products and brands. However, this study extends previous research by showing that environmental concern works more strongly through the perception of fit. In the context of Wardah Nature Series, environmentally concerned consumers may perceive the product as more appropriate when its sustainability message is seen as consistent with Wardah's broader brand identity.

The Influence of Brand Image on Brand Extension Fit

The results of the study show that *brand image* has a positive and significant effect on *brand extension fit*. The success of *brand extension* depends on the transfer of image and positive associations from the main brand to the new product (Keller., 2020; Brexendorf et al., 2015; Dwivedi et al., 2015). Consumers judge brand extensions based on their suitability with the brand scheme that they have in mind. With Wardah's strong image as a halal, ethical, and sustainable brand, consumers tend to think of Wardah Nature Series as a logical and harmonious development. Because a positive image, especially in brands that carry sustainability, has been proven to strengthen consumers' perceptions of suitability for new products (Magano et al., 2026; Tan et al., 2022). Thus, *brand image* plays an important role in building the perception that Wardah Nature Series is a consistent part of Wardah's identity. This result supports previous studies on brand extension which state that consumers evaluate new products by comparing them with the associations attached to the parent brand. Wardah's established image helps consumers perceive Wardah Nature Series as a logical extension rather than as an unrelated product. Therefore, this finding strengthens the argument that brand image contributes not only to direct consumer attitudes, but also to the formation of perceived fit between the parent brand and the extended product.

The Effect of Brand Extension Fit on Attitude toward Brand Extension

The results of the study show that *brand extension fit* has a positive and significant effect on *attitude toward brand extension*. This means that the higher the compatibility felt by consumers between Wardah and Wardah Nature Series, the more positive their attitude towards the product will be. The compatibility between the parent brand and the new product is at the core of the success of *brand extension*, *brand extension fit* reflects the perception of similarity of attributes, benefits, or images between the two (Loken et al., 2023). In this study, it is also explained that when the level of conformity is high, consumers are more likely to accept new products because they are considered to be still in line with the familiar brand identity. These results are in line with research showing that *brand extension fit* strengthens consumers' positive attitudes towards brand extension products (Magano et al., 2026). Therefore, conformity is not only an additional aspect, but is an important basis in shaping consumer acceptance of Wardah Nature Series. This finding is consistent with brand extension theory, which places perceived fit as a central factor in determining the success of brand extension. When consumers perceive a high level of fit, they are more likely to transfer positive associations from the parent brand to the new product. In this study, the strong effect of brand extension fit indicates that Wardah Nature Series is more positively evaluated when consumers see it as relevant to Wardah's identity, values, and product category.

The Role of Brand Extension Fit in Mediating Environmental Concern Towards Attitude Toward Brand Extension

The results of the study show that *brand extension fit* mediates positively and significantly the influence of *environmental concern* on *attitude toward brand extension*. These findings suggest that environmental concern does not directly form a positive attitude, but first increases the

perception of conformity to expanded products. The influence of values and environmental concern on consumer attitudes tends to be stronger when through mediation mechanisms (Paul et al., 2016; Jacobs et al., 2018). In the context of the Wardah Nature Series, consumers who care about the environment will first assess whether the product is truly in line with Wardah's image as an ethical and sustainable brand. If the suitability is felt to be high, a positive attitude towards *brand extension* will be formed. Thus, *brand extension fit* is an important mechanism that bridges environmental values and consumer attitudes.

The Role of Brand Extension Fit in Mediating Brand Image Towards Attitude Toward Brand Extension

The results of the study also show that *brand extension fit* mediates positively and significantly the influence of *brand image* on *attitude toward brand extension*. This confirms that a good brand image does not automatically form a positive attitude, but needs to be translated first into a perception of conformity between the parent brand and its new product. Positive associations that have been formed in the minds of consumers can be transferred to new product lines, in addition to which consumers will assess whether the new product is in line with the existing brand scheme. These findings are in line with research showing that a positive brand image will be more effective in shaping attitudes if consumers first feel a *strong fit* (Magano et al., 2026; Tan et al., 2022). Thus, *brand extension fit* serves as a bridge that transforms Wardah's brand image into a positive evaluation of Wardah Nature Series. This finding is consistent with earlier studies which suggest that the positive image of a parent brand becomes more effective when consumers perceive the extended product as suitable and relevant. In the case of Wardah Nature Series, brand image alone is important, but its effect becomes stronger when consumers believe that the extension is consistent with Wardah's halal, ethical, and sustainability-oriented positioning. Thus, brand extension fit strengthens the transfer of positive brand associations from Wardah to Wardah Nature Series.

CONCLUSION

This study shows that *brand image* and *brand extension fit* are the main factors that affect *attitude toward brand extension* in Wardah Nature Series. The results of the study found that *brand image* had a positive and significant effect on *attitude toward brand extension* and *brand extension fit*, while *environmental concern* only had a positive and significant effect on *brand extension fit* but did not have a significant effect directly on *attitude toward brand extension*. In addition, *brand extension fit* has been proven to have a positive and significant effect on *attitude toward brand extension* and is able to mediate the influence of *environmental concern* and *brand image* on *attitude toward brand extension*. These findings show that Generation Z's acceptance of Wardah Nature Series is not only determined by concern for the environment or brand image alone, but also by the extent to which the expanded products are perceived to be in line with Wardah's brand identity and values.

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