

# NAVIGATING THE GREEN GAP: THE ROLE OF IDENTITY ALIGNMENT MOTIVATION IN SHAPING SUSTAINABLE CONSUMPTION BEHAVIOR

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**Abstract.** This study examines how environmental awareness, social norms, and identity alignment motivation influence sustainable consumption behavior among Generation Z students in Central Java. It explores the “green gap” between intention and actual behavior, focusing on identity alignment motivation as a mediator. Despite heightened environmental awareness, a significant gap exists between Gen Z’s intention to consume sustainably and their actual behavior due to conflicting personal and social identities. The novelty of this study lies in introducing identity alignment motivation as a mediating factor, which has not been fully explored in prior research. Data from 238 students across several Central Java universities were collected using purposive sampling and analyzed with SmartPLS. The results show that both environmental awareness and social norms significantly influence sustainable consumption behavior, with identity alignment motivation playing a strong mediating role. The study underscores the importance of identity alignment in bridging the gap between awareness and sustainable behavior.

**Keywords:** environmental social norms, environmental awareness, identity alignment motivation, sustainable consumption behavior.

**JEL Classification:** A13, D91, M31, Q56, Q57.

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## 1. Introduction

Due to worldwide environmental concerns, Generation Z students’ sustainable consumption behavior is crucial. Despite increasing awareness of environmentally friendly behavior, a persistent “green gap” remains between pro-environmental intentions and actual sustainable consumption behavior. This gap is particularly evident when individuals experience misalignment between their personal identity (e.g., cost-saving or convenience orientation) and the sustainability-oriented norms of their social groups. Environmental social norms can promote eco-friendly conduct, but awareness and norms alone are often insufficient to overcome practical and psychological barriers to action (Ajibade & Boateng, 2021; Cesinger et al., 2022; Garnelo-Gomez et al., 2022; Lin et al., 2023; Perry et al., 2021; Wan & Du, 2022).

High costs and limited access to green items strengthen perceived barriers, even when there is an internal incentive to engage in sustainable behavior (Zhao et al., 2024). Thus, the considerable hurdles in meeting global

sustainability targets, particularly among Generation Z students, who play a key role in shaping sustainable consumer practices, motivate this research. Prior studies indicate that environmental knowledge and social norms are associated with sustainable consumption among Generation Z students (Aqmala et al., 2025; Čapienė et al., 2022). However, previous studies have primarily focused on normative aspects and environmental awareness without accounting for the psychological and cultural factors that influence pro-environmental behavior (Akhir et al., 2022; Saracevic & Schlegelmilch, 2021). Culture and self-construal also play an important role in moderating social norms, where cultural contexts can either enhance or hinder the adoption of sustainable behaviors (Li et al., 2021; Niu et al., 2023).

Although some studies draw on the Theory of Planned Behavior (TPB) to explain green consumption through determinants such as environmental concern and perceived behavioral control (Hossain et al., 2022; Ling et al., 2024). Socially and digitally savvy, Generation Z faces challenges in balancing personal and societal sustainable consumption norms. Green product quality must also address the

awareness-to-purchasing divide. A more holistic strategy that incorporates social and environmental factors into responsible consumerism is needed. Despite rising social standards and environmental awareness among Generation Z students, the “green gap” between intent and sustainable consumption behavior remains (Khare & Pandey, 2017). Students generally identify with sustainability groups, but economic priorities or green product accessibility may prevent them from acting (Sharma et al., 2023; Zhu et al., 2021). In line with SIT, individuals tend to align behavior with salient in-group norms when these norms are internalized as part of the self-concept, which is particularly relevant for sustainability-related consumption choices. The gap between social and personal identity in sustainable product purchases remains unclear. Students may have a green social identity, but their personal identity, which stresses efficiency or cost-saving, may deter them from buying eco-friendly products. This suggests that despite societal norms, a psychological mechanism is needed to explain how social and personal identities are reconciled to translate sustainability intentions into consistent consumption behavior (Do & Do, 2024; Duong, 2024). Identity Alignment Motivation, a new variable derived from Identity-Based Motivation (Alfrey et al., 2023; Simons, 2021) and Social Identity Alignment (O'Reilly et al., 2024; Steiglechner et al., 2023) is proposed in this work. Identity Alignment Motivation (IAM) is defined as an internal motivational state that drives individuals to actively align their personal identity with salient social norms in sustainability-related consumption decisions. This concept is positioned to complement, rather than duplicate, existing identity-related constructs by emphasizing the motivational process of resolving identity misalignment in behavioral execution. This construct sheds light on how Generation Z students might reconcile personal and societal identity with sustainable consumerism. Identity Alignment Motivation stresses the need for matching personal ideals with social expectations in eco-friendly purchases. Its new approach focuses on identity motivation and social alignment to overcome conflicts between individual ideals and community norms, enhancing internal desire for sustainable conduct.

This study employs a quantitative design and examines the relationships among environmental awareness, environmental social norms, IAM, and sustainable consumption behavior using survey-based data. The proposed model tests IAM as a mediating mechanism through which environmental awareness and social norms influence sustainable consumption behavior. Questionnaires measure how social norms and environmental awareness affect eco-friendly product purchases. The inclusion of Identity Alignment Motivation as a mediator between environmental awareness and sustainable consumer behavior is the key contribution of this research. This study sheds light on how personal values and social standards might motivate people to operate more sustainably. This contribution is essential for improving interventions to help students transition from intention to sustainable consumption. This study emphasizes identity-based internal motivation,

unlike prior research that focused on external factors such as CSR programs that promote green behavior (AlSuwaidi et al., 2021). Social identity has been linked to sustainable behavior, but how social and personal identities can be connected to drive action remains unclear (Barth et al., 2021; Garnero-Gomez et al., 2022). Thus, this study investigates how Identity Alignment Motivation can motivate students to consume sustainably by aligning personal values with social norms.

Accordingly, this study aims to examine how Environmental Awareness (EA) and Environmental Social Norms (ESN) influence Sustainable Consumption Behavior (SCB) through Identity Alignment Motivation (IAM) among Generation Z students in Central Java. Specifically, this study addresses the following research questions:

- (1): How do Environmental Awareness (EA) and Environmental Social Norms (ESN) influence Sustainable Consumption Behavior (SCB) among Generation Z students?
- (2): Does Identity Alignment Motivation (IAM) mediate the relationships between EA, ESN, and SCB?

The subsequent sections present the conceptual framework and hypotheses, research methods, results and discussion, and concluding implications for theory and practice.

## 2. Literature review and hypothesis development

### 2.1. A perspective social-identity theory

Social Identity Theory states that individual behavior is heavily influenced by their membership in social groups, as people tend to align themselves with the norms and values of their group. In the context of sustainable consumption among Gen Z, this theory is crucial for understanding how environmental social norms shape behavior. Specifically, Social Identity Theory explains that social norms influence behavior most strongly when they are internalized as part of an individual's self-concept. Research has shown that social norms greatly influence eco-friendly consumption, especially for individuals who prioritize social image and collective values over personal preferences (Do & Do, 2024). Social media amplifies this dynamic by reinforcing group behavior related to sustainability, creating a platform for peer influence and brand messaging that promotes pro-environmental choices (Han & Cheng, 2020). Additionally, the interaction between social identity and moral values, such as altruism, strengthens the link between personal identity and sustainable behavior (Lavuri et al., 2023). However, barriers such as economic limitations and the convenience of unsustainable choices often create a gap between the environmental idealism of Gen Z and their actual behavior (Kowalska et al., 2021; Palomo-Domínguez et al., 2023). This gap highlights the need for an internal motivational mechanism that explains how social identity and norms are translated into consistent sustainable consumption behavior.

## 2.2. Environmental awareness, identity alignment motivation, sustainable consumption behavior

Environmental awareness (EA) is positively related to Identity Alignment Motivation (IAM), as individuals with higher awareness of environmental issues tend to align their self-identity with pro-environmental values, with IAM conceptualized as a motivational process rather than a static identity trait. This alignment is driven by the desire to maintain consistency between their environmental beliefs and personal actions, which strengthens their environmental identity (Rahmani et al., 2022). The motivation to align identity with environmental concerns stems from moral identity and altruistic values, as individuals strive to act in accordance with their environmental beliefs (Wang & Udall, 2023). Furthermore, environmental awareness is also positively associated with sustainable consumption behavior (SCB). Awareness increases environmental concern, leading to more informed decisions that prioritize sustainable consumption (Zeng et al., 2023). Individuals with a strong environmental identity are more likely to translate their awareness into action, as seen in populations with high environmental consciousness (Sierra-Barón et al., 2023). However, despite the positive relationship, a gap between awareness and action remains, particularly in demographic segments with weaker identity alignment (Tang et al., 2022). This gap suggests that environmental awareness alone is insufficient unless it is internalized through a motivational mechanism that aligns identity with behavior. Thus, the following hypotheses are proposed:

*H1: EA is positively related to IAM.*

*H2: EA is positively related to SCB.*

## 2.3. Environmental social norms, identity alignment motivation, sustainable consumption behavior

Environmental social norms (ESN), which represent the collective expectations within communities regarding pro-environmental behavior, encourage individuals to align their personal identities with these norms, primarily through social influence and group dynamics (Elgammal et al., 2024). This identity alignment is crucial because individuals who are motivated to maintain consistency between their identity and group expectations are more likely to engage in sustainable consumption practices (Boyer et al., 2024). Key elements of this relationship include the influence of social groups and exposure to social media, which amplifies peer behavior and reinforces identity alignment with sustainable choices (Jang & Kim, 2023). Moreover, moral values and altruism further strengthen the connection between identity alignment and sustainable behavior (Wang & Udall, 2023).

The positive influence of ESN on SCB is also evident in how these norms reduce negative perceptions of sustainable options, promoting responsible consumption despite

personal costs (Kara & Min, 2024). Therefore, ESN serve as a strong antecedent, driving both identity alignment and SCB. ESN serve as an important antecedent for sustainable consumption behavior, particularly when their influence is internalized through identity alignment motivation. Thus, the following hypotheses are proposed:

*H3: ESN is positively related to IAM.*

*H4: ESN is positively related to SCB.*

## 2.4. Direct relationship of IAM and SCB

The hypothesis that IAM is positively related to SCB is based on the understanding that when an individual's personal and social identities align with sustainability values, they are more likely to engage in sustainable consumption behavior. In the context of Generation Z, this motivation is highly relevant, as this demographic strongly identifies with environmental issues. Pro-environmental identity has been shown to increase engagement in eco-friendly consumption behavior, such as in eco-friendly products and sustainability in fashion (Mahasuweerachai & Suttikun, 2022; Palomo-Domínguez et al., 2023). Antecedent elements like EA and social norms strengthen this relationship, motivating Gen Z to adopt eco-friendly behavior, even in the face of social and economic pressures (Ling et al., 2024). This research highlights that when consumption behavior reflects their pro-environmental identity, Gen Z is more motivated to choose sustainable products (Zhao & An, 2023), with moral identity serving as a powerful lever in shaping this behavior (Itani & Chaker, 2022). Thus, the following hypothesis is proposed:

*H5: IAM is positively related to SCB.*

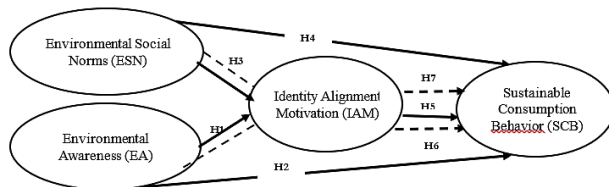
## 2.5. Indirect linkages between EAS and SCB and ESN: mediating roles of IAM

IAM will mediate the relationship between EAS and SCB. This mediation is based on the premise that when Gen Z students are aware of environmental challenges, their desire to align their identity with environmental values fosters sustainable consumption. Studies indicate that heightened environmental awareness among Gen Z strongly correlates with their ethical consumption practices (Lin et al., 2023; Jilani et al., 2021). By internalizing environmental concerns as part of their personal identity, they are more motivated to act sustainably (Gibson et al., 2023). Social norms shape consumption behavior by reinforcing group identities that prioritize sustainability (Williams & Hodges, 2022). Gen Z's adherence to these norms, coupled with IAM, enhances their engagement in sustainable practices, as they align their behavior with collective expectations (Kara & Min, 2024). Both hypotheses emphasize how identity alignment motivation serves as the psychological mechanism that translates environmental values and social expectations into sustained sustainable consumption behavior. Thus, the following is proposed:

H6: IAM will mediate the relationship between EA and SCB.

H7: IAM will mediate the relationship between ESN and SCB.

The conceptual framework of this study was developed to explain the relationships among *Environmental Awareness* (EA), *Environmental Social Norms* (ESN), *Identity Alignment Motivation* (IAM), and *Sustainable Consumption Behavior* (SCB) among Generation Z. The proposed model suggests that *Environmental Awareness* and *Environmental Social Norms* influence *Sustainable Consumption Behavior* both directly and indirectly through *Identity Alignment Motivation* as a mediating variable. This framework was designed to provide a deeper understanding of how identity alignment may serve as a mechanism for bridging the *green gap*, namely the discrepancy between environmental awareness and actual sustainable consumption behavior. The relationships among the variables and the proposed research hypotheses are illustrated in Figure 1.



**Figure 1.** Conceptual framework (source: developed from research Ali et al., 2021)

### 3. Research method

#### 3.1. Sampling

The target population for this study consisted of Generation Z students (aged 18–26) from various universities across Central Java. This population was chosen due to its significant role in shaping future sustainable consumption patterns, as Generation Z is considered highly aware of environmental issues. Central Java was selected as the research context because of its diverse demographic and educational landscape, providing a representative sample of the larger student population in Indonesia. The region also exhibits a growing focus on sustainability initiatives, making it relevant for studying sustainable consumption behavior. A purposive sampling method was employed, targeting students who had demonstrated prior knowledge of or participation in environmental sustainability campaigns. This sampling approach was deemed appropriate given the study's objectives to analyze behavior in a specific, informed group of students. Out of the total population of 370 students approached, 238 valid responses were obtained, which were deemed sufficient for Partial Least Squares Structural Equation Modeling (PLS-SEM) based on statistical power considerations. Following Hair Jr et al. (2020) PLS-SEM is appropriate for exploratory mediation models with relatively small to medium sample sizes, provided that minimum power requirements are met. In

this study, the sample size of 238 exceeds the ten-times rule and provides adequate statistical power to estimate the proposed mediation relationships among Environmental Awareness, Environmental Social Norms, Identity Alignment Motivation, and Sustainable Consumption Behavior. Furthermore, although the sample comprises students from several universities, it captures heterogeneity in academic background, gender, age, and sustainability engagement, supporting its representativeness for Generation Z students in Central Java. Accordingly, the final sample size was considered sufficient to test the proposed model while maintaining acceptable levels of statistical power and external validity.

#### 3.2. Measures

The study's key constructs were measured using well-established indicators from previous research, ensuring both the validity and reliability of the constructs. A 5-point Likert scale was employed to measure the respondents' agreement with various statements related to the following constructs: EA, ESN, IAM, and SCB. The selection of indicators for each construct was based on their relevance and reliability in measuring variables related to sustainable consumption behavior. EA consisted of four indicators: Environmental Knowledge (Zeng et al., 2023), Risk Perception (Bouzari et al., 2022), Pro-environmental Behavior (Lin et al., 2023) and Personal Norms and Values (Garnelo-Gomez et al., 2022). These indicators were chosen because they provided a comprehensive view of the extent to which respondents understood environmental issues and how their personal norms and values influenced eco-friendly behavior. The ESN construct was measured using four indicators: Perceived Social Norms (Do & Do, 2024), Personal Norms and Perceived Responsibility (Čapienė et al., 2022), Social Pressure and Environmental Knowledge (Ghaffar & Islam, 2024), Normative Feedback in Social Tipping Interventions (Berger, 2021).

These indicators highlighted the influence of social norms and environmental pressure on sustainable consumption behavior, particularly relevant to the campus setting and the social dynamics of students. IAM was measured through four indicators: Personal and Social Identity Expression (Gil-Giménez et al., 2021), Identity-Based Motivation (Garnelo-Gomez et al., 2022), Social Identity and Consumer Values (Lin et al., 2023) and Environmental Self-Identity (Gil-Giménez et al., 2021). These indicators were used to understand how students aligned their personal and social identities in their sustainable consumption decisions. Lastly, SCB was measured using four indicators: Environmental Impact Awareness (Altassan, 2023), Energy Efficiency and Resource Conservation (Majid et al., 2023), Preference for Sustainable Products (Norouzi et al., 2021), Waste Reduction and Recycling Practices (Hadad et al., 2023). Each indicator was designed to measure specific dimensions of the construct, focusing on sustainable consumption behavior. Reliability and validity were further assessed using Cronbach's Alpha and Composite Reliability

(CR) tests, ensuring that the measures used met the required standards for internal consistency and reliability.

### 3.3. Demographic profile

The characteristics of the 238 Generation Z students who participated in this study are summarized in Table 1 as follows:

**Table 1.** Characteristic of respondents (source: data processed, 2025)

| No | Characteristics                          |                                           | Total | %     |
|----|------------------------------------------|-------------------------------------------|-------|-------|
| 1  | Gender                                   | Male                                      | 113   | 47.5% |
|    |                                          | Female                                    | 125   | 52.5% |
| 2  | Age                                      | >18–20 years old                          | 96    | 40.3% |
|    |                                          | >20–23 years old                          | 108   | 45.4% |
|    |                                          | >23–26 years old                          | 34    | 14.3% |
| 3  | Field of Study                           | Social Sciences                           | 82    | 34.5% |
|    |                                          | Engineering Sciences                      | 77    | 32.4% |
|    |                                          | Applied Sciences                          | 46    | 19.3% |
|    |                                          | Others                                    | 33    | 13.9% |
| 4  | Environmental Awareness Knowledge        | High                                      | 164   | 68.9% |
|    |                                          | Medium                                    | 54    | 22.7% |
|    |                                          | Low                                       | 20    | 8.4%  |
| 5  | Participation in Environmental Campaigns | Participated                              | 146   | 61.3% |
|    |                                          | Never Participated                        | 92    | 38.7% |
| 6  | Preference for Eco-Friendly Products     | Yes (always choose green products)        | 158   | 66.4% |
|    |                                          | No (choose based on price/ accessibility) | 80    | 33.6% |

### 3.4. Data analysis

This study utilized a Partial Least Squares Structural Equation Modelling (PLS-SEM) approach to explore the relationships between EA, ESN, IAM, and SCB. The PLS-SEM approach was chosen for its suitability in handling complex models with multiple latent variables and relatively small sample sizes, making it ideal for exploratory research involving mediation analysis. This study relied exclusively on survey-based quantitative data and no qualitative interviews were conducted. The SmartPLS software was used to conduct the analysis, which involved two key stages: Firstly, measurement model assessment: To evaluate the reliability and validity of the constructs, factor loadings, Cronbach's Alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) were calculated. All constructs met the recommended thresholds (Factor loadings > 0.6, Cronbach's Alpha > 0.7, CR > 0.7, AVE > 0.5), confirming that the measurement model was both reliable and valid. Secondly, structural model assessment: The relationships between the variables were tested through path analysis, with the model's fit evaluated using T-statistics and P-values to determine the significance of each hypothesized relationship. Variance

Inflation Factor (VIF) values were also calculated to check for multicollinearity, ensuring that no issues were present in the model. The R-squared values for the endogenous constructs indicated strong explanatory power, confirming the suitability of the proposed model.

## 4. Result and discussion

The results of the construct reliability and validity assessment are presented in Table 2. The analysis of construct reliability and validity showed that all indicators had outer loadings above 0.70, with the lowest value being 0.755 (ES.1) and the highest being 0.893 (IA.1), indicating good convergent validity (Hair Jr et al., 2020). Internal reliability, measured using Cronbach's Alpha, was also adequate, with the lowest value being 0.813 (IAM) and the highest being 0.871 (EA), which met the cut-off criteria above 0.7 (Hair Jr et al., 2020). Additionally, Composite Reliability (CR) showed the highest value of 0.910 (EA) and the lowest of 0.889 (IAM), all of which exceeded the threshold of 0.70, indicating excellent reliability. Finally, the Average Variance Extracted (AVE), which measures convergent validity, had the lowest value of 0.685 (ESN) and the highest of 0.729 (IAM), all above the cut-off of 0.50, indicating that more than half of the variance of the indicators were explained by their respective constructs (Henseler et al., 2016). Therefore, the model met all recommended reliability and validity criteria.

**Table 2.** Construct reliability and validity (source: data processed, 2025)

| Indicators | Outer Loadings | Cronbach's Alpha | rho_A | CR    | AVE   |
|------------|----------------|------------------|-------|-------|-------|
| EA.1       | 0.877          | 0.871            | 0.895 | 0.91  | 0.717 |
| EA.2       | 0.825          |                  |       |       |       |
| EA.3       | 0.833          |                  |       |       |       |
| EA.4       | 0.851          |                  |       |       |       |
| ES.1       | 0.755          | 0.846            | 0.852 | 0.897 | 0.685 |
| ES.2       | 0.858          |                  |       |       |       |
| ES.3       | 0.862          |                  |       |       |       |
| ES.4       | 0.833          |                  |       |       |       |
| IA.1       | 0.893          | 0.813            | 0.818 | 0.889 | 0.729 |
| IA.3       | 0.825          |                  |       |       |       |
| IA.4       | 0.841          |                  |       |       |       |
| SC.1       | 0.868          | 0.867            | 0.875 | 0.909 | 0.714 |
| SC.2       | 0.824          |                  |       |       |       |
| SC.3       | 0.846          |                  |       |       |       |
| SC.4       | 0.841          |                  |       |       |       |

The results of the discriminant validity assessment using the Fornell–Larcker criterion are presented in Table 3. The discriminant validity test results showed that each construct had a sqrt (AVE) value (displayed diagonally in the correlation matrix) greater than the correlations

between constructs, indicating good discriminant validity (Hair Jr et al., 2020). The highest sqrt (AVE) value was observed for IAM (0.854), and the lowest for ESN (0.828), both exceeding the minimum threshold of 0.70. The highest correlation between constructs was between IAM and SCB (0.841), while the lowest was between EA and ESN (0.579). In the cross-loadings in Table 4, all indicators had the highest loadings on their respective constructs. For example, the indicator EA.1 had the highest loading on EA (0.877) and the lowest on ESN (0.404), demonstrating that each indicator was more strongly related to its own construct than to others, supporting discriminant validity (Henseler et al., 2016).

**Table 3.** Discriminant validity (source: data processed, 2025)

| Construct | EA    | ESN   | IAM   | SCB   |
|-----------|-------|-------|-------|-------|
| EA        | 0.847 |       |       |       |
| ESN       | 0.579 | 0.828 |       |       |
| IAM       | 0.674 | 0.836 | 0.854 |       |
| SCB       | 0.693 | 0.812 | 0.841 | 0.845 |

**Table 4.** Cross loadings (source: data processed, 2025)

| Construct | EA    | ESN   | IAM   | SCB   |
|-----------|-------|-------|-------|-------|
| EA.1      | 0.877 | 0.404 | 0.529 | 0.522 |
| EA.2      | 0.825 | 0.337 | 0.456 | 0.465 |
| EA.3      | 0.833 | 0.651 | 0.708 | 0.750 |
| EA.4      | 0.851 | 0.485 | 0.520 | 0.530 |
| ES.1      | 0.489 | 0.755 | 0.582 | 0.615 |
| ES.2      | 0.507 | 0.858 | 0.709 | 0.719 |
| ES.3      | 0.528 | 0.862 | 0.716 | 0.712 |
| ES.4      | 0.396 | 0.833 | 0.752 | 0.638 |
| IA.1      | 0.638 | 0.744 | 0.893 | 0.780 |
| IA.3      | 0.621 | 0.682 | 0.825 | 0.717 |
| IA.4      | 0.455 | 0.714 | 0.841 | 0.648 |
| SC.1      | 0.682 | 0.791 | 0.814 | 0.868 |
| SC.2      | 0.473 | 0.673 | 0.610 | 0.824 |
| SC.3      | 0.562 | 0.627 | 0.683 | 0.846 |
| SC.4      | 0.601 | 0.635 | 0.711 | 0.841 |

The model fit assessment results are presented in Table 5. The evaluation of model fit showed that the SRMR (Standardized Root Mean Square Residual) values for the saturated and estimated models were 0.092, which is below the threshold of 0.10, indicating good model fit (Henseler et al., 2016). The d\_ULS and d\_G values, 1.009 and 0.567 respectively, also supported the model fit, although no strict cut-off exists for these metrics. The Chi-Square value of 696.909 provided information about the model's degree of misfit; however, in the context of PLS-SEM, Chi-Square is not the primary indicator. The NFI (Normed Fit Index) value of 0.752 exceeded the minimum value of 0.70, indicating that the model had a reasonably good fit (Hair Jr et al., 2020). Overall, the model met the criteria for adequate fit.

**Table 5.** Model fit (source: data processed, 2025)

| Description | Saturated Model | Estimated Model |
|-------------|-----------------|-----------------|
| SRMR        | 0.092           | 0.092           |
| d_ULS       | 1.009           | 1.009           |
| d_G         | 0.567           | 0.567           |
| Chi-Square  | 696.909         | 696.909         |
| NFI         | 0.752           | 0.752           |

The results of the explanatory and predictive power analysis are presented in Table 6. The results of the explanatory and predictive power analysis showed that the EA construct had a significant influence on IAM, with an R-squared value of 0.754. This indicated that 75.4% of the variance in IAM could be explained by EA, demonstrating strong predictive power (Hair Jr et al., 2020). The F-squared value for EA's effect on IAM was 0.221, indicating a moderate effect (Cohen, 2013). The ESN construct had a strong influence on SCB, with an R-squared value of 0.773, meaning that 77.3% of the variance in SCB could be explained by ESN and IAM. The F-squared value for ESN's effect on SCB was 0.162, indicating a small to moderate effect, while IAM had an F-squared value of 0.173, which also represented a small to moderate effect. These values indicated that the model had good explanatory and predictive power, with a range of predictive effects from small to moderate, in line with Hair Jr et al. (2020) recommendations for interpreting F-squared.

**Table 6.** Explanatory and predictive power (source: data processed, 2025)

| Predictor (s) | Outcome (s) | R Square | F Square |
|---------------|-------------|----------|----------|
| EA            | IAM         | 0.754    | 0.221    |
| ESN           |             |          | 1.214    |
| EA            |             |          | 0.118    |
| ESN           | SCB         | 0.773    | 0.162    |
| IAM           |             |          | 0.173    |

The results of the predictive power analysis and hypothesis testing are presented in Table 7. The predictive power analysis results showed that the Q<sup>2</sup> value for the IAM construct was 0.538 and for the SCB construct was 0.537. According to Hair Jr et al. (2020) positive Q<sup>2</sup> values above 0 indicate good predictive capability. Q<sup>2</sup> values greater than 0.35 are generally considered to indicate moderate to strong predictive power (Chin, 1998). Therefore, these results suggested that the model had moderate predictive power for both IAM and SCB. Overall, the Q<sup>2</sup> values indicated that the model had a strong predictive capacity for the IAM and SCB variables. The hypothesis test results showed that all hypotheses in the model were supported, with p-values of 0.000, indicating strong significance below the 0.05 threshold (Hair Jr et al., 2020). Hypotheses H1 and H2 showed that EA had a positive and significant effect on IAM ( $\beta = 0.286$ , T-value = 4.255) and

SCB ( $\beta = 0.221$ , T-value = 3.667). Hypotheses H3 and H4 showed that ESN had a stronger influence on IAM ( $\beta = 0.671$ , T-value = 8.844) and SCB ( $\beta = 0.350$ , T-value = 4.558). Hypothesis H5 showed that IAM also had a significant effect on SCB ( $\beta = 0.399$ , T-value = 5.526).

**Table 7.** Predictive power analysis (source: data processed, 2025)

| Construct | Q <sup>2</sup> |
|-----------|----------------|
| EA        |                |
| ESN       |                |
| IAM       | 0.538          |
| SCB       | 0.537          |

Additionally, mediation testing through IAM in Hypotheses H6 and H7 showed significant mediation effects of EA and ESN on SCB through IAM, with T-values of 3.772 and 4.453 respectively, indicating strong mediation effects (Preacher & Hayes, 2008). In conclusion, the model supported all proposed hypotheses with significant direct and mediating effects. The results of the mediation and hypothesis testing are presented in Table 8.

**Table 8.** Hypotheses test (source: data processed, 2025)

| Relational            | $\beta$ | T - Value | P- Values | Conclusion |
|-----------------------|---------|-----------|-----------|------------|
| H1 EA → IAM           | 0.286   | 4.255     | 0.000     | Supported  |
| H2 EA → SCB           | 0.221   | 3.667     | 0.000     | Supported  |
| H3 ESN → IAM          | 0.671   | 8.844     | 0.000     | Supported  |
| H4 ESN → SCB          | 0.350   | 4.558     | 0.000     | Supported  |
| H5 IAM → SCB          | 0.399   | 5.526     | 0.000     | Supported  |
| H6 EAS → IAM<br>→ SCB | 0.114   | 3.772     | 0.000     | Supported  |
| H7 ESN →<br>IAM → SCB | 0.268   | 4.453     | 0.000     | Supported  |

Note: \*\*\* = p-value < 0.005.

The results of the Importance-Performance Map Analysis (IPMA) with SCB as the target in Table 9 showed that among the three constructs tested, ESN had the greatest influence on SCB, with an importance value of 0.618. This

**Table 9.** IPMA of components of SCB (source: data processed, 2025)

| Construct | Importance | Performances |
|-----------|------------|--------------|
| EA        | 0.336      | 76.295       |
| ESN       | 0.618      | 76.974       |
| IAM       | 0.399      | 76.718       |

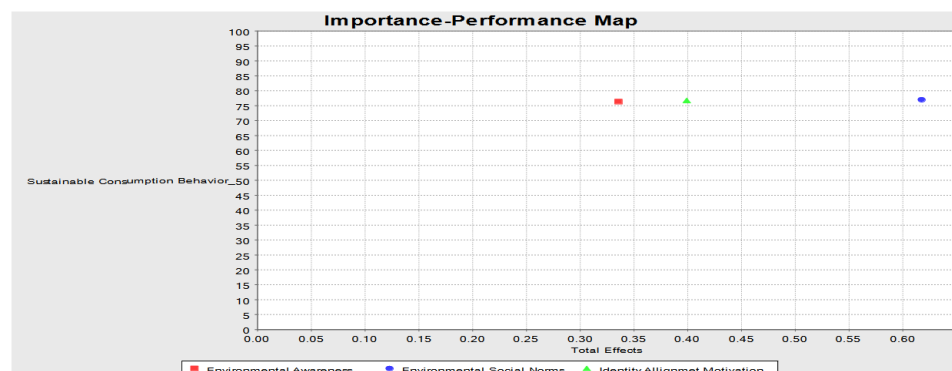
indicates that improvements in ESN would have the most significant impact on sustainable consumption behavior. ESN also had the highest performance, with a value of 76.974. IAM had a moderate influence on SCB, with an importance value of 0.399 and a performance value of 76.718, indicating that individuals' motivation to align their identity with eco-friendly behavior also played an important role in influencing SCB.

EA had a lower influence compared to ESN and IAM, with an importance value of 0.336 and a performance value of 76.295, but it still contributed significantly. According to Hair Jr et al. (2020), in IPMA, constructs with higher importance indicate that improvements in those constructs will have a more significant impact on the target variable. Therefore, in this context, focusing on improving ESN would be more effective in driving changes in sustainable consumption behavior, followed by IAM. The relatively high-performance values for all constructs indicate that the overall performance is already good, but there is still room for improvement, especially in the aspects that have a greater influence on sustainable consumption behavior. The results of the Importance-Performance Map Analysis (IPMA) for the components of IAM are presented in Table 10.

**Table 10.** IPMA of components of IAM (source: data processed, 2025)

| Construct | Importance | Performances |
|-----------|------------|--------------|
| EA        | 0.286      | 76.295       |
| ESN       | 0.671      | 76.974       |

Based on the IPMA with IAM as the target, two constructs were evaluated: EA and ESN. The analysis showed that ESN had the highest importance value of 0.671,



**Figure 2.** IPMA of components of SCB (source: output figure from software SmartPLS)

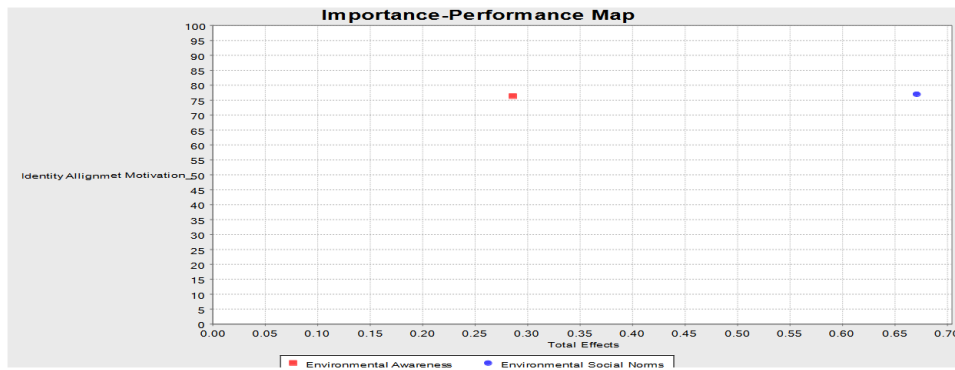


Figure 3. IPMA of components of IAM (source: output Figure from software SmartPLS)

meaning that this construct had the greatest influence on IAM. Additionally, ESN had the highest performance value of 76.974. This indicates that improvements in environmental social norms would have a significant impact on individuals' motivation to adopt behaviors more aligned with environmental goals. Meanwhile, EA had a lower importance value of 0.286, but it still made a moderate contribution to IAM. The performance of EA was also at a good level, with a value of 76.295.

Although EA had a smaller influence compared to ESN, it remains important not to overlook the improvement of environmental awareness, as it significantly contributes to enhancing individuals' identity motivation. According to Hair Jr et al. (2020), in IPMA, constructs with greater importance should receive more attention because their improvement will have a larger impact on the target variable. Thus, the focus for improving IAM should be directed toward enhancing ESN, followed by increasing EA which, although having a smaller influence, still provides an important contribution. The results of the Importance-Performance Map Analysis (IPMA) for the components of IAM are illustrated in Figure 3.

This study accepted Hypotheses H1 and H2. This indicates that environmental awareness is favorably correlated with identity alignment motivation and sustainable consumption behavior. The results correspond with the research conducted by Ajibade and Boateng (2021); Jung and Cho (2023), which indicates that individuals with

elevated environmental awareness often integrate pro-environmental ideals into their self-identity. The structural model results are illustrated in Figure 4.

Zeng et al. (2023) demonstrated environmental awareness improves sustainable consumption behavior by facilitating more informed decision-making. These findings, however, contradict those of Tang et al. (2022), who demonstrated a disparity between environmental awareness and actual behavior, especially among individuals with diminished identification drive. This disparity may result from external obstacles, including the expense and availability of sustainable products. Our findings clarify this inconsistency by showing that environmental awareness contributes to sustainable consumption behavior primarily when it is translated into action through Identity Alignment Motivation. Our findings highlight the significance of identity alignment motivation in enhancing the coherence between personal ideals and actual conduct. This study enhances the comprehension of how identity motivation might connect awareness and sustained action among Generation Z students (Gibson et al., 2023). Additional research is required to investigate the moderating variables that may affect this association. This study also accepted Hypotheses H3 and H4, demonstrating that they are favorably associated with IAM and SCB. According to Elgamal et al. (2024), social norms influence individual behavior through group influence and social expectations. Aligning personal identity with community standards motivates

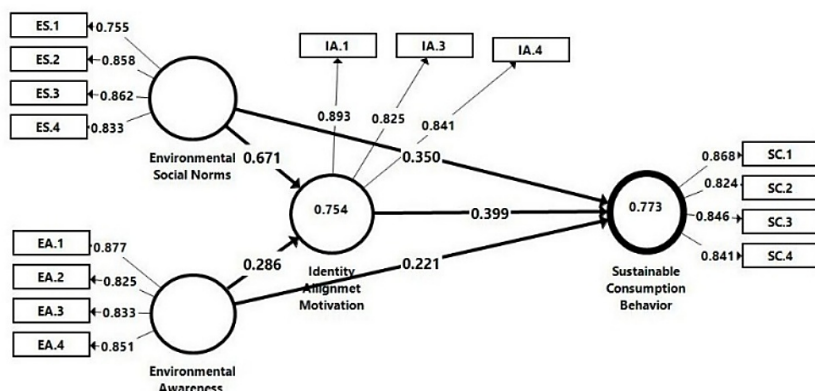


Figure 4. Result model (source: output Figure from SmartPLS)

sustainable consumption. Barbu et al. (2022), revealed that social norms may be limited by green product pricing and accessibility. The present findings reconcile these views by demonstrating that social norms alone may be insufficient; however, when social norms are internalized through Identity Alignment Motivation, their influence on sustainable consumption behavior becomes substantially stronger. These findings reveal that IAM helps overcome pricing and accessibility obstacles to green items and enhances individuals' commitment to sustainable behavior despite challenges. For instance, students who identify with campus environmental values are more likely to buy eco-friendly products, even at higher prices.

This shows that IAM's internal motivation can make people more resilient to external barriers like cost, which were previously considered a key hindrance in earlier studies. These findings show excellent external validity and can be applied to students, especially those exposed to pro-environmental social norms on campus. A positive relationship between IAM and SCB was accepted in this investigation. This suggests that people are more likely to consume sustainably when their personal and social identities match sustainability values. According to Mahasuweera-chai and Suttikun (2022), pro-environmental identification improves green consumption. Contrary to our findings, Do and Do (2024) found that social norms influence sustainable consumption more directly. This difference suggests that the effectiveness of social norms depends on whether they are internalized as part of an individual's identity, rather than operating solely as external social pressure. Identity Alignment Motivation strengthened internal motivation by mediating the association between environmental awareness and sustainable consumer behavior in this study. Importantly, IAM does not replace social norms as the primary driver of behavior; instead, it functions as a psychological mechanism that transforms external social norms into internally motivated action. A sustainable fashion brand might emphasize that buying green products is about joining an environmentally conscious community as well as focusing on quality or trends. The brand can motivate environmentally conscientious customers who may be hesitant to buy eco-friendly apparel despite higher prices by emphasizing how their products match their pro-environmental identity.

Consumers who believe their pro-environmental identity is reinforced by product choices are more likely to overcome cost or accessibility hurdles, enhancing their commitment to sustainable purchasing (Zhao et al., 2024). These findings can help promote sustainable consumption, especially among younger generations with strong pro-environmental identities. This study accepted the idea that IAM mediates EA-SCB relationship. While environmental awareness and social norms show direct associations with sustainable consumption behavior, the findings indicate that their effects are substantially strengthened when mediated by Identity Alignment Motivation. According to Lin et al. (2023) and Gibson et al. (2023), the urge to link an individual's identity with environmental ideals increases

sustainable behavior. In contrast to our findings, Williams and Hodges (2022) claimed that social norms can directly affect behavior without mediation. Generation Z students sustainable consumption behavior is more consistent and resilient when social norms are internalized through identity alignment rather than operating solely as external normative pressure. For instance, an environmentally conscious student would be more encouraged to participate in campus environmental initiatives if it aligns with their group's social beliefs rather than merely conforming to social expectations. This shows that sustainable consumption behavior is more likely to occur consistently when students' personal identification matches societal norms rather than just due to external normative pressure (Aguirre Sánchez et al., 2021; Jiang et al., 2022). This study emphasizes the role of identity-based motivation in encouraging sustainable consumption among students, providing new insights into green consumer behavior.

## 5. Conclusions

This study aims to answer how EA and ESN influence SCB through IAM. The findings showed that environmental awareness and social norms do not directly influence sustainable consumption behavior. Instead, through IAM, individuals are motivated to act in accordance with environmental values. These findings provide evidence that IAM serves as a key factor in bridging the gap between sustainable intent and action (the "green gap") by strengthening the emotional connection and personal commitment to sustainable behavior. Generation Z students are more likely to adopt sustainable behavior when they perceive that their personal identity aligns with the prevailing social norms within their group. For example, a student personally concerned with environmental issues will be more motivated to purchase eco-friendly products. This means that while social pressure plays an important role, IAM is crucial for reinforcing personal identity and commitment. These results are consistent with Lin et al. (2023), who highlight the importance of identity alignment in reinforcing sustainable action. The IPMA analysis conducted in this study also showed that ESN had the greatest influence on SCB, with an importance value of 0.618 and the highest performance at 76.974. This suggests that improving environmental social norms will have a significant impact on sustainable consumption behavior. Meanwhile, IAM had an importance value of 0.399, further highlighting its important role in influencing SCB. These findings align with Social Identity Theory (SIT), which posits that group identity influences individual behavior (Do & Do, 2024; Williams & Hodges, 2022).

## Practical implications

The theoretical implications of these findings are significant for the development of the literature on sustainable behavior. This study adds to the understanding of how IAM, as a component of personal identity, can bridge the

gap between social norms and actual behavior. In this context, IAM enables individuals to internalize group norms and translate them into consistent behavior. For example, in university environmental campaigns, focusing on the importance of students' personal identity aligned with sustainability values may result in more consistent actions compared to merely providing information about environmental benefits. These findings also provide a theoretical foundation for future researchers to explore how internal factors such as identity motivation interact with external factors such as social norms to influence sustainable behavior. The practical implications of this research are crucial for business managers, marketers, and policymakers. In the business context, companies promoting eco-friendly products should consider how they can design communication strategies that explicitly connect sustainable products with the social identity and everyday lifestyles of Indonesian Generation Z consumers, particularly university students in Central Java.

A concrete example is sustainable fashion companies, which can emphasize in their marketing campaigns that their products reflect the sustainability values held by consumers. For instance, local sustainable fashion brands can collaborate with Indonesian Gen Z influencers – such as student content creators, eco-activists, or campus community leaders – to share personal stories on platforms like Instagram, TikTok, and YouTube about how choosing local eco-friendly products aligns with being an environmentally conscious student. By highlighting how these product choices can support consumers' pro-environmental identity, companies can enhance consumer engagement in sustainable consumption behavior. This not only increases customer loyalty but also boosts green product sales. Additionally, firms can partner with campus-based environmental communities and youth movements in Central Java, such as student environmental organizations, "Green Campus" initiatives, or local clean-up communities, to reinforce Identity Alignment Motivation. Communication messages can be framed using culturally resonant narratives – such as collective responsibility and pride in supporting local sustainable products – to present eco-friendly consumption as a socially valued group identity rather than an individual sacrifice. The tangible impact for knowledge and managerial practice is evident in the importance of identity-based campaigns. In the education sector, environmental awareness campaigns at universities should not only focus on delivering information but also on strengthening students' emotional connection to campus environmental initiatives or movements. For example, a "Green Campus" program could increase student involvement by creating a community that celebrates sustainability as part of their identity. By actively engaging students in activities such as tree planting or using eco-friendly products on campus, they will be more motivated to adopt sustainable behaviors both on and off-campus. This also has long-term implications for shaping sustainable behavior in the future, both in the workplace and daily life.

## Limitations and suggestions

There are several limitations that should be noted. The study focused on Generation Z students, so these findings may not be fully generalizable to other demographic groups or geographic contexts. To achieve broader generalization, future research should expand the scope to include participants from diverse cultural and economic backgrounds. Additionally, further exploration of moderating variables, such as economic pressures or cultural values, would provide additional insights into how IAM can influence sustainable consumption behavior in a wider context.

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