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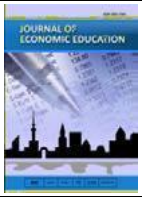

THE INFLUENCE OF ENVIRONMENTAL AWARENESS, PEERS, AND SELF-EFFICACY ON SUSTAINABLE CONSUMPTION BEHAVIOR

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Abstract

Sustainable consumption behavior is an important aspect of environmental education. Previous research has shown inconsistent results regarding the factors influencing sustainable consumption behavior and has been limited to the context of high school students. Therefore, this study provides empirical evidence for students at SMA Negeri 14 Semarang, an Adiwiyata Mandiri School. This study aims to analyze the influence of environmental awareness, peer support, and self-efficacy on sustainable consumption behavior through behavioral intentions and to examine the role of perceived school support as a moderating variable. This study used a quantitative approach with a causal design. The sample size was 283 students selected using proportional stratified random sampling. Data were collected through questionnaires and analyzed using multiple linear regression and mediation and moderation tests with PROCESS Hayes. The results show that environmental awareness and peer support have a significant positive effect on sustainable consumption behavior, while self-efficacy and behavioral intentions do not have a significant direct effect. Environmental awareness, peers, and self-efficacy have a significant effect on behavioral intentions. Behavioral intentions mediate the relationship between the variables, while perceived school support moderates the relationship between behavioral intentions and sustainable consumption behavior. These findings enrich the study of sustainable consumption behavior and provide a basis for schools to strengthen the habit of sustainable consumption behavior in students.

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INTRODUCTION

Global environmental crises such as global warming, pollution, and increasing plastic waste indicate that much of the environmental damage is caused by unsustainable human consumption patterns (United Nations Environment Programme (UNEP), 2022). This condition is exacerbated by a consumptive lifestyle, easy access to technology, and low environmental awareness. Sustainable consumption has become a crucial issue, emphasizing consumption behavior that considers environmental, social, and economic impacts and is part of the Sustainable Development Goals (SDGs), particularly Goal 12 (United Nations Development Programme, 2021). In addressing this, the education sector plays a strategic role, as the school years are crucial for the formation of long-term values and habits. Therefore, the Indonesian government developed the Adiwiyata Program, a school-based environmental education program that integrates sustainability values into learning, policies, and school activities (Kementerian Lingkungan Hidup dan Kehutanan, 2022). The Adiwiyata Mandiri School, the highest form of this program, is expected to not only foster awareness but also foster sustainable consumption behavior in students, such as waste reduction, energy conservation, and the use of environmentally friendly products, thereby significantly contributing to the achievement of the SDGs.

As an Independent Adiwiyata School, SMA Negeri 14 Semarang has demonstrated a strong commitment to implementing environmental education through various programs and supporting facilities such as waste management, reforestation, a healthy canteen, and the integration of sustainable values into the school culture. However, observations indicate a gap between the environmental policies implemented and students' sustainable consumption behavior. Some students still tend to consume products with single-use plastic packaging and have not yet optimally implemented waste sorting, even though environmental awareness has been built through school programs. On the other hand, there are indications that students actually have the potential for environmentally friendly behavior, such as bringing their own containers and being respectful of environmental cleanliness, but these behaviors are not yet consistent. The influence of peers who tend to be consumptive and the suboptimal internalization of self-efficacy are suspected to contribute to this inconsistency, thus creating a gap between high school support and sustainable consumption behavior that has not yet been fully realized.

Environmental awareness, peers, and self-efficacy are important factors influencing the formation of pro-environmental attitudes, intentions, and behaviors within the framework of the Theory of Planned Behavior (Ajzen, 1991). Environmental awareness plays a role in shaping positive attitudes toward sustainable behavior because individuals who are more aware of environmental impacts are more likely to act in an environmentally friendly manner and exhibit sustainable consumption behaviors (Wang et al., 2021; Yanti & Suryani, 2021). Furthermore, peers contribute through the formation of strong subjective norms in adolescents, where social pressure and group behavior can encourage individuals to adjust their actions in a more pro-environmental direction

(Abrahamse & Steg, 2013; Ciranka & van den Bos, 2019). This is consistent with the study by Ardyanti & Kardoyo (2018), which found that peer groups have a significant influence on students' consumption behavior. Similar findings were also reported by other studies, indicating that peer influence plays an important role in shaping students' consumption patterns, including both consumptive and environmentally related behaviors. Therefore, peer influence is considered a significant social factor in determining students' consumption behavior within educational settings. Meanwhile, self-efficacy as part of perceived behavioral control reflects an individual's belief in their ability to perform sustainable behaviors, which has been shown to be influential in increasing the consistency of pro-environmental behaviors such as energy saving, waste management, and environmentally friendly consumption (Chen, 2015; Yan et al., 2024). In the context of the Adiwiyata Mandiri School, these three variables have important relevance because they support the formation of an environmental care culture that is integrated into students' daily activities (Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia, 2024).

Previous research shows inconsistent results regarding the influence of environmental awareness, peer influence, and self-efficacy on sustainable consumption behavior. On the environmental awareness variable, Nguyen et al. (2020) and Perry et al. (2021) found that the influence was relatively weak compared to other factors such as values, attitudes and social support, while Shen & Wang (2022) showed that awareness did not always translate into actual behavior due to obstacles in decision making. Regarding peer variables, Yadav & Pathak (2017) and Lee (2014) report that the influence tends to be indirect through the formation of intentions, and can even vary according to cultural context (Zhuang et al., 2021). Meanwhile, regarding the self-efficacy variable, Ansari (2019), Hanss et al. (2016), and Susanty et al. (2023) shows that the influence of self-efficacy on behavior is influenced by external factors and cultural context so it is not always significant. These findings indicate that these three variables are not able to directly encourage sustainable consumption behavior so that mediating variables such as behavioral intentions are needed. In addition, although behavioral intentions play an important role, the relationship between intentions and behavior still shows an intention–behavior gap (Yuriev et al., 2020). However, research examining intentions as a mediator and perceptions of school support as a moderator in the context of the Adiwiyata Mandiri School in Indonesia is still very limited.

Previous research has shown that the influence of psychological factors such as environmental awareness and self-efficacy, as well as social factors such as peer support, on sustainable consumption behavior remains inconsistent and tends to be indirect. Furthermore, the role of perceived school support as a supportive environment in influencing the relationship between psychological and social factors and sustainable consumption behavior remains understudied, particularly in the context of Adiwiyata Mandiri Schools in Indonesia. Based on this, this study offers a novel approach by integrating psychological, social, and school environmental factors into a single research

model, positioning behavioral intention as a mediating variable and perceived school support as a moderating variable.

Based on this description, this study aims to analyze the influence of environmental awareness, peer support, and self-efficacy on sustainable consumption behavior through behavioral intention, and to examine the role of perceived school support as a moderating variable. Theoretically, this research is expected to enrich the integration of the Theory of Planned Behavior (TPB) and Social Cognitive Theory (SCT) in explaining pro-environmental behavior. TPB is used to explain the formation of behavioral intentions through psychological and social factors, such as environmental awareness, peer influence, and self-efficacy. Meanwhile, SCT complements TPB by explaining how environmental factors, such as perceived school support, influence the realization of intentions into actual behavior. Thus, the integration of the two theories provides a more comprehensive framework in explaining students' sustainable consumption behavior. Practically, this research is expected to provide a foundation for schools and policymakers in strengthening the implementation of the Adiwiyata program and encouraging the development of sustainable consumption behavior in students.

METHODS

This study employed a quantitative approach with a causal research design to examine the effects of environmental awareness, peer influence, and self-efficacy on sustainable consumption behavior through behavioral intention, with perceived school support serving as a moderating variable. The research was conducted at SMA Negeri 14 Semarang, an Adiwiyata Mandiri school, during the 2025/2026 academic year. The population consisted of 962 students, and a sample of 283 respondents was determined using the Slovin formula with a 5% margin of error. Respondents were selected through proportionate stratified random sampling based on gender to ensure proportional representation.

Data were collected using a structured questionnaire measured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The instrument consisted of indicators adapted from previous studies: sustainable consumption behavior (Sharma & Rani, 2020), environmental awareness (Sánchez & Lafuente, 2010), peer influence (Tirtarahardja & Sulo, 2010), self-efficacy (Lunenburg, 2011), behavioral intention (Luthans, 2005), and perceived school support (Malecki & Demaray, 2003). Instrument validity was assessed using Pearson Product-Moment correlation, while reliability was evaluated using Cronbach’s Alpha, with all variables exceeding the recommended threshold of 0.70.

Data analysis was performed using IBM SPSS Statistics 25 and PROCESS Macro Hayes 4.3. Descriptive statistics were used to describe respondent characteristics and research variables. Multiple linear regression analysis was employed to examine the direct effects among variables after meeting the classical assumption tests, including normality, linearity, multicollinearity, and heteroscedasticity. Furthermore, mediation

analysis was conducted using PROCESS Model 4 to examine the mediating role of behavioral intention, while moderation analysis was performed using PROCESS Model 1 to test the moderating effect of perceived school support on the relationship between behavioral intention and sustainable consumption behavior. Statistical significance was determined at the 5% level.

RESULT AND DISCUSSION

Descriptive Statistics

Table 1. Descriptive Statistics of Research Variables

Variable	Minimum	Maximum	Mean	Std. Deviation	Category
Environmental Awareness	6	30	25,78	4,03	Very High
Peer Relationships	8	40	31,40	5,47	High
Self-Efficacy	8	40	31,89	5,42	High
Behavioral Intention	6	30	23,76	4,22	High
Perception of School Support	8	40	32,73	5,38	High
Sustainable Consumption Behavior	10	50	39,82	6,10	High

Source: Data processed, 2026

Based on Table 1, the descriptive statistics indicate that students generally demonstrate a high level of sustainable consumption-related characteristics. Environmental awareness has the highest category, with a mean score of 25.78 (SD = 4.03), indicating that students possess strong awareness of environmental issues and the importance of environmentally responsible behavior. Meanwhile, peer relationships (M = 31.40, SD = 5.47), self-efficacy (M = 31.89, SD = 5.42), behavioral intention (M = 23.76, SD = 4.22), perception of school support (M = 32.73, SD = 5.38), and sustainable consumption behavior (M = 39.82, SD = 6.10) are all categorized as high. The observed minimum and maximum scores indicate variation in respondents' responses across all variables. Overall, the descriptive results suggest that the research variables are well developed among the respondents and provide a favorable basis for examining the relationships among the variables in this study.

Hypothesis Testing Results

Table 2. Hypothesis Testing Results

Hypothesis	Variable	Outcome	Description
1	Environmental Awareness → Sustainable Consumption Behavior	B = 0,730 ; Sig = 0,000	Accepted
2	Peers → Sustainable Consumption Behavior	B = 0,267 ; Sig = 0,000	Accepted
3	Self-Efficacy → Sustainable Consumption Behavior	B = 0,136 ; Sig = 0,062	Rejected
4	Behavioral Intention → Sustainable Consumption Behavior	B = 0,112 ; Sig = 0,171	Rejected

Hypothesis	Variable	Outcome	Description
5	Environmental Awareness → Behavioral Intention	B = 0,202 ; Sig = 0,001	Accepted
6	Peers → Behavioral Intention	B = 0,169 ; Sig = 0,000	Accepted
7	Self-Efficacy → Behavioral Intention	B = 0,370 ; Sig = 0,000	Accepted
8	Environmental Awareness → Behavioral Intention → Sustainable Consumption Behavior	Indirect = 0,2625 ; CI (0,1313–0,4168)	Accepted
9	Peers → Behavioral Intention → Sustainable Consumption Behavior	Indirect = 0,2492 ; CI (0,1206–0,3840)	Accepted
10	Self-Efficacy → Behavioral Intention → Sustainable Consumption Behavior	Indirect = 0,2674 ; CI (0,1129–0,4264)	Accepted
11	Behavioral Intention × Perceived School Support → Sustainable Consumption Behavior	B = -0,024 ; p = 0,000	Accepted

Source: Data processed, 2026

Based on the results of hypothesis testing, environmental awareness and peer influence variables were shown to have a positive and significant influence on sustainable consumption behavior, while self-efficacy and behavioral intention did not have a significant direct influence on sustainable consumption behavior. Furthermore, environmental awareness, peers, and self-efficacy were shown to have a positive and significant influence on behavioral intention. The results of the mediation analysis showed that behavioral intention was able to mediate the influence of environmental awareness, peers, and self-efficacy on sustainable consumption behavior. These findings indicate that increased environmental awareness, positive peer influence, and students' self-efficacy can encourage the formation of behavioral intention which ultimately increases sustainable consumption behavior. In addition, perceived school support was shown to moderate the relationship between behavioral intention and sustainable consumption behavior, indicating that the level of school support also influences the strength of the relationship between students' intentions and the realization of sustainable consumption behavior.

The Influence of Environmental Awareness on Students' Sustainable Consumption Behavior

The results of the study showed that environmental awareness had a positive and significant effect on students' sustainable consumption behavior ($\beta = 0.730$; $p < 0.05$). This finding suggests that the higher the environmental awareness of students, the higher their tendency to adopt sustainable consumption behavior. This occurs because students with high environmental awareness tend to better understand the consequences of consumption activities on the environment, thus considering environmental impacts more carefully before making consumption decisions (Ajzen, 1991; Fishbein & Ajzen, 2010). Environmental awareness also plays a role as a cognitive factor that shapes students'

thinking and attitudes toward the importance of preserving the environment through daily consumption behavior (Ajzen, 1991).

This finding aligns with the Theory of Planned Behavior (TPB), which explains that behavior is influenced by intentions formed through attitudes, subjective norms, and perceived behavioral control. In this study, environmental awareness shaped positive attitudes toward sustainable consumption behavior. Based on the concept of behavioral beliefs, an individual's belief in the consequences of a behavior will influence their attitudes and decisions (Fishbein & Ajzen, 2010). Therefore, students who understand the long-term impacts of consumption activities on the environment will be more motivated to form positive attitudes and choose environmentally friendly consumption behavior.

These findings support research by Fadia et al. (2025), the OECD (2022) and Testa et al. (2021) , which showed that individuals with high environmental awareness tend to be more consistent in implementing sustainable consumption behaviors. In the context of the Adiwiyata Mandiri School, these results indicate that the environmental education program implemented by the school contributes to increasing students' environmental awareness, which is reflected in sustainable consumption behaviors in their daily lives.

The Influence of Peers on Students' Sustainable Consumption Behavior

The results of the study indicate that peers have a positive and significant influence on students' sustainable consumption behavior ($\beta = 0.267$; $p < 0.05$). This finding suggests that the stronger the peer influence, the higher the student's tendency to adopt sustainable consumption behavior. This occurs because students tend to adapt their behavior to the norms and customs developed within their peer group. When peers demonstrate concern for the environment, students are more easily encouraged to emulate these behaviors, such as reducing the use of single-use plastics, choosing environmentally friendly products, and managing consumption more wisely.

This finding aligns with the Theory of Planned Behavior (TPB), which explains that individual behavior is influenced by intentions formed from attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). In this context, peers play a role as part of subjective norms that shape an individual's normative beliefs regarding behaviors deemed important by their social environment. When students perceive peer support for environmentally friendly behavior, they tend to follow and adapt to these norms through a process of social conformity (Fishbein & Ajzen, 2010).

This finding supports research by Pratiwi & Kumalasari (2021) and Schultz (2022), which shows that social norms within peer groups play a significant role in shaping pro-environmental behavior. Furthermore, individuals tend to be more influenced by the behavior of those closest to them than by general environmental messages (Sorcaru et al., 2024). In the context of the Adiwiyata Mandiri School, these results indicate that social interaction among students is a crucial factor in shaping sustainable consumption behavior. Therefore, a positive peer environment can strengthen the adoption of environmentally friendly behavior in daily life.

Effects of Self-Efficacy on Students' Sustainable Consumption Behavior

The results showed that self-efficacy did not significantly influence students' sustainable consumption behavior ($\beta = 0.136$; $p = 0.062 > 0.05$). This finding indicates that even though students have high levels of self-efficacy, this belief does not directly drive sustainable consumption behavior. This occurs because an individual's belief in their abilities is not necessarily followed by consistent behavior in daily life, especially when the influence of established habits and social environmental factors is more dominant. Thus, self-efficacy alone is not sufficient to produce behavioral change without the support of external factors.

Theoretically, this finding does not fully support the Theory of Planned Behavior (TPB), which states that perceived behavioral control can influence behavior (Ajzen, 1991). However, the TPB also explains that this influence often operates indirectly through intentions before ultimately being realized in actual behavior. In line with this, research by Yuriev et al. (2020) showed that self-efficacy has a stronger influence on intention than on behavior. Furthermore, Rhodes & de Bruijn (2013) explained the existence of an intention-behavior gap, a condition where individuals have the belief and intention to act, but are not always able to translate this into actual behavior.

The insignificant influence of self-efficacy can also be explained by the characteristics of adolescents, who tend to be more influenced by their social environment than internal factors. During adolescence, social norms and peer groups play a strong role in shaping behavior (Steinberg, 2014). This aligns with findings that environmental awareness and peers significantly influence sustainable consumption behavior, while self-efficacy does not. Research by Thøgersen (2010) and Koessler et al. (2022) also shows that social norms are an important factor in encouraging environmentally friendly behavior in adolescents. Therefore, increasing sustainable consumption behavior is not sufficient through strengthening self-efficacy alone; it also needs to be supported by a school environment and peer groups that encourage sustainable consumption practices.

The Influence of Behavioral Intention on Students' Sustainable Consumption Behavior

The results of the multiple linear regression analysis showed that behavioral intention had no significant effect on students' sustainable consumption behavior ($\beta = 0.112$; $p = 0.171 > 0.05$). Thus, the hypothesis that behavioral intention has a positive effect on sustainable consumption behavior was rejected. However, the descriptive analysis showed that students' behavioral intention was high. This indicates that students have a strong desire to engage in sustainable consumption behavior, but this desire has not yet been fully translated into concrete actions.

The insignificant effect of behavioral intention can be explained by the intention-behavior gap phenomenon, namely the gap between intention and actual behavior. This

gap occurs when individuals with strong intentions are unable to realize them in actual behavior due to various obstacles. In the context of this study, these obstacles include established consumption habits, limited access to environmentally friendly products, price considerations, and social environmental influences such as peers and group norms. This condition indicates that strong intentions are not always followed by the ability to translate them into concrete actions.

The findings of this study align with those of Carrington et al. (2014), Sheeran & Webb (2016) and Joshi & Rahman (2015), which stated that intention is an important predictor of behavior, but its influence is often weakened when individuals face various situational barriers. These results also indicate that students' sustainable consumption behavior is not solely determined by personal desires but is also influenced by external factors such as social norms, habits, and environmental support. Therefore, efforts to increase sustainable consumption behavior are not sufficient by simply building students' intentions; they also need to be supported through behavioral habits, providing adequate facilities, and creating a school environment that supports sustainable consumption practices.

The Influence of Environmental Awareness on Students' Behavioral Intentions

The results of a simple linear regression analysis indicate that environmental awareness has a positive and significant effect on students' behavioral intentions ($\beta = 0.202$; $t = 3.435$; $p = 0.001 < 0.05$). Thus, the hypothesis that environmental awareness has a positive effect on behavioral intentions is accepted. This finding indicates that the higher the environmental awareness of students, the stronger their intention to engage in sustainable consumption behavior. Furthermore, the descriptive analysis results indicate that students' behavioral intentions are in the very high category, indicating that students have a strong desire to implement environmentally friendly behaviors in their daily lives.

This influence can be explained through the Theory of Planned Behavior (TPB), specifically the attitude toward behavior component. Environmental awareness reflects students' positive evaluations of the importance of preserving the environment. Students with high environmental awareness tend to assess sustainable consumption behavior as beneficial, valuable, and in line with their moral principles. This positive assessment then strengthens attitudes toward the behavior, which in turn shapes intentions to act sustainably. Thus, environmental awareness serves as a cognitive and affective foundation that drives the formation of students' behavioral intentions.

The results of this study support previous research showing that environmental awareness plays a role in increasing intentions to engage in environmentally friendly behaviors and sustainable consumption. Kautish et al. (2019) found that environmental awareness contributes to the formation of sustainable consumption intentions by strengthening individuals' ecological attitudes and values. Furthermore, Joshi and Rahman (2015) explained that individuals with high levels of environmental awareness tend to have a stronger commitment to supporting responsible consumption practices. Therefore,

increasing environmental awareness in students can be an important strategy in strengthening their intentions to adopt sustainable consumption behaviors.

The Influence of Peers on Students' Behavioral Intentions

The results of a simple linear regression analysis indicate that peers have a positive and significant influence on students' behavioral intentions ($\beta = 0.169$; $t = 3.559$; $p = 0.000 < 0.05$). Thus, the hypothesis that peers have a positive influence on behavioral intentions is accepted. This finding indicates that the stronger peer support for environmentally friendly behavior, the higher the students' intention to engage in sustainable consumption behavior. The descriptive analysis also shows that students' behavioral intentions are high, indicating that students generally have a strong drive to act pro-environmentally in their daily lives.

This influence can be explained through the Theory of Planned Behavior (TPB), specifically the subjective norm component. Peers act as a source of social pressure and behavioral reference points that shape students' perceptions of what is considered appropriate or expected behavior within the group. When students see their peers supporting or engaging in environmentally friendly behavior, they will perceive that behavior as a socially acceptable standard. This condition encourages the emergence of motivation to conform to the group, thus strengthening the intention to engage in sustainable consumption behavior.

The results of this study are supported by various previous studies demonstrating the importance of social influence in shaping pro-environmental behavioral intentions. Yuriev et al. (2020) found that subjective norms were one of the factors most consistently influencing pro-environmental intentions. Similar findings were also reported by Rahmawati et al. (2024) and Berger & Andaur (2022), who showed that social support from friends can increase an individual's tendency to adopt environmentally friendly behaviors. Therefore, strengthening a culture and social norms that support sustainability in the school environment can be an effective strategy for increasing students' intentions to adopt sustainable consumption behaviors.

The Influence of Self-Efficacy on Students' Behavioral Intentions

The results of a simple linear regression analysis showed that self-efficacy had a positive and significant effect on students' behavioral intentions ($\beta = 0.370$; $t = 7.661$; $p = 0.000 < 0.05$). Thus, the hypothesis that self-efficacy has a positive effect on behavioral intentions was accepted. This finding indicates that the higher students' confidence in their ability to perform environmentally friendly actions, the stronger their intention to engage in sustainable consumption behavior. The descriptive analysis also showed that students' behavioral intentions were high, indicating that students had a strong readiness and drive to act pro-environmentally in their daily lives.

This influence can be explained through the Theory of Planned Behavior (TPB), specifically the component of perceived behavioral control (PBC). In the context of this

study, self-efficacy reflects students' beliefs in their abilities, resources, and opportunities to engage in environmentally friendly behavior. Students with high self-efficacy feel more capable of overcoming potential obstacles to implementing sustainable consumption behavior, thereby increasing their confidence that their intentions can be translated into action. Thus, self-efficacy not only plays a role as a cognitive factor, but also as a major driver in the formation of behavioral intentions.

The results of this study are supported by various previous studies showing that self-efficacy is a crucial factor in forming pro-environmental behavioral intentions. Maran et al. (2023) and Miller et al. (2022) found that beliefs in one's own abilities contribute to individual engagement in environmentally supportive actions. Furthermore, Yuriev et al. (2020) concluded that perceived behavioral control is one of the most consistent predictors of sustainable behavioral intentions. Therefore, enhancing students' self-efficacy can be an effective strategy for strengthening their intentions to adopt sustainable consumption behaviors.

The Role of Behavioral Intention in Mediating the Influence of Environmental Awareness on Students' Sustainable Consumption Behavior

The results of the multiple linear regression analysis indicate that the behavioral intention variable (M) does not significantly influence students' sustainable consumption behavior, with a coefficient value of 0.112 and a significance level of 0.171 (>0.05). Therefore, the fourth hypothesis (H4) is rejected. However, the descriptive analysis shows that students' behavioral intention is in the high category, with an average of 23.8. This indicates that students generally have a strong desire to engage in sustainable consumption behaviors, such as reducing the use of single-use items and choosing environmentally friendly products. However, this desire has not yet been fully realized in their daily actions. This condition indicates a gap between what students plan and what they actually do in their consumption practices.

This phenomenon can be explained through the concept of the intention-behavior gap, which is a condition where individuals have strong intentions but are unable to realize them in actual behavior. According to Rhodes and de Bruijn (2013), this gap can occur due to obstacles such as established habits, limited resources, lack of opportunities to act, and the influence of the social environment. In the context of students, even if they already have the intention to behave in an environmentally friendly manner, their implementation can be hampered by situational factors such as higher product prices, limited availability of environmentally friendly products, comfort with old habits, and the influence of peers. Furthermore, in adolescence, behavior tends to be more influenced by external factors than internal commitment, so established intentions do not necessarily translate directly into consistent behavior.

This finding aligns with previous research showing that intention is indeed an important predictor of behavior, but its influence often weakens when faced with situational barriers and external factors (Zikri & Hati, 2024; Paul et al., 2016;Joshi and

Rahman, 2015). Therefore, the results of this study indicate that students' sustainable consumption behavior is not only determined by personal intentions but is also strongly influenced by environmental conditions, habits, and social support. Therefore, improving sustainable consumption behavior is not sufficient simply by forming students' intentions; it also needs to be supported through behavioral habits, the availability of adequate facilities, and a school environment that consistently encourages sustainable practices.

The Role of Behavioral Intention in Mediating Peer Influence on Students' Sustainable Consumption Behavior

The results of the mediation analysis indicate that behavioral intention significantly mediates peer influence on students' sustainable consumption behavior. This is indicated by an indirect effect value of 0.2492, with a 95% confidence interval of 0.1206 to 0.3840, which does not exceed zero. This finding indicates that positive peer influence can increase students' intentions to engage in environmentally friendly behavior, which in turn encourages the development of sustainable consumption behavior. Therefore, the hypothesis that behavioral intention mediates peer influence on sustainable consumption behavior is accepted. This result occurs because peer groups in the school environment play a strong role in shaping students' daily social interactions, where behaviors that are frequently observed and socially rewarded within the group tend to be internalized as norms by students.

This finding aligns with the Theory of Planned Behavior (TPB) proposed by Ajzen (1991), which explains that subjective norms are a key factor in shaping behavioral intentions. In the context of this study, peers act as a source of social norms that influence students' perceptions of behaviors deemed important and acceptable by their group. When students receive support and examples of environmentally friendly behavior from their peers, they tend to form stronger intentions to engage in similar behavior. This intention then becomes a mechanism that translates social influence into actual sustainable consumption behavior. The reason this mechanism works is that students, particularly adolescents, have a strong tendency to seek social acceptance, so they are more likely to align their intentions with the expectations and behaviors of their peer group.

The results of this study support previous research showing that social norms and support from peer groups play a crucial role in shaping pro-environmental intentions and behavior. Laursen & Veenstra (2021) found that peer group norms influence the formation of individual intentions and behavior, while Abrahamse and Steg (2013) showed that social support can strengthen an individual's commitment to consistently adopting environmentally friendly behavior. These findings suggest that peer influence not only directly impacts behavior but also works through the formation of behavioral intentions. Therefore, strengthening positive norms and a culture of environmental concern among students can be an effective strategy for increasing sustainable consumption behavior.

The Role of Behavioral Intention in Mediating the Effect of Self-Efficacy on Students' Sustainable Consumption Behavior

The results of the mediation analysis indicate that behavioral intention significantly mediates the influence of self-efficacy on students' sustainable consumption behavior. The indirect effect value of 0.2674, with a 95% confidence interval (0.1129–0.4264) that does not cross zero, indicates a significant indirect effect. This finding suggests that students who have high confidence in their ability to perform pro-environmental actions tend to form stronger intentions to behave in an environmentally friendly manner, which subsequently encourages sustainable consumption behavior. This occurs because self-efficacy strengthens students' psychological readiness and perceived capability, which then translates into a stronger commitment or intention before being realized in actual behavior.

Theoretically, this study's results support Ajzen's (1991) Theory of Planned Behavior, which states that perceived behavioral control, represented by self-efficacy, can influence behavior through the formation of intentions. In this study, self-efficacy did not have a direct effect on sustainable consumption behavior, but did influence it through behavioral intentions. This suggests that students' beliefs in their abilities play a greater role in building psychological readiness to act than directly determining actual behavior. This may occur because sustainable consumption behavior is still influenced by various external factors, such as social norms, peers, and the school environment. Therefore, even when students feel capable, the actual implementation of behavior still depends on external conditions that either support or hinder the translation of intention into action.

These findings align with Ajzen (2011) research, which states that individuals who feel capable of performing a behavior will have a stronger intention to do so. Furthermore, research by Yu (2023) and Anindita et al. (2023) shows that self-efficacy plays a role in improving self-regulation and consistency of positive behavior. Thus, behavioral intention is an important mechanism that bridges the influence of self-efficacy on sustainable consumption behavior. Therefore, strengthening students' self-confidence needs to be accompanied by efforts to foster strong intentions so that environmentally friendly behavior can be realized.

The Role of Perceived School Support in Moderating the Influence of Behavioral Intention on Students' Sustainable Consumption Behavior

The results of the study indicate that perceived school support moderates the influence of behavioral intention on students' sustainable consumption behavior. The moderation observed is negative (buffering moderation), meaning that the higher students' perceptions of school support, the weaker the influence of behavioral intention on sustainable consumption behavior. This finding indicates that students' sustainable consumption behavior is not only driven by internal factors such as intention, but is also shaped by how strongly the school environment is perceived to support sustainable

practices. Therefore, when the school provides strong support, students' behavior becomes less dependent on their personal intentions because the behavior is already facilitated and guided by the environment.

This finding can be explained through the Theory of Planned Behavior (Ajzen, 1991) and Social Cognitive Theory (Bandura, 1986), which emphasize the interaction between individual cognition and environmental context in shaping behavior. In this study, perceived school support—such as environmental policies, availability of facilities, and habituation programs—creates an enabling environment that makes sustainable consumption behavior easier to perform. Why this weakens the role of intention is because behavior becomes more "automated" and structurally supported: students do not need to rely heavily on internal motivation when the environment already provides clear rules, cues, and opportunities for action. This condition reflects the concept of *situational strength*, where strong situational cues reduce behavioral variability driven by personal intention, because individuals tend to follow the structure provided by the environment.

Furthermore, this finding can also be understood through Institutional Theory (DiMaggio & Powell, 1983), which explains that behavior within institutions is shaped by formal and informal pressures such as rules, norms, and routines. In a school with strong sustainability support, students may engage in sustainable consumption not only because they intend to, but because it becomes part of the school culture and expected behavior. Why this leads to a buffering effect is because institutional support substitutes part of the motivational role of intention: when sustainable behavior is continuously reinforced through school systems, students may act consistently regardless of varying intention levels. Thus, perceived school support functions as an external reinforcing mechanism that reduces dependence on individual intention, making the behavior more stable and institution-driven rather than intention-driven.

CONCLUSION

This study aims to analyze the influence of environmental awareness, peers, and self-efficacy on sustainable consumption behavior of students at the Adiwiyata Mandiri School in Semarang City through behavioral intention as a mediating variable and perceived school support as a moderating variable. The results showed that environmental awareness, peers, and self-efficacy were able to explain the variation in behavioral intention by 68.3%, while environmental awareness, peers, self-efficacy, and behavioral intention were able to explain the variation in sustainable consumption behavior by 71.9%. Behavioral intention was proven to significantly mediate the influence of environmental awareness, peers, and self-efficacy on students' sustainable consumption behavior. In addition, perceived school support was shown to moderate the influence of behavioral intention on sustainable consumption behavior in a negative direction, indicating that the higher the school support perceived by students, the less dependent sustainable consumption behavior on individual intentions. These findings emphasize the important role of internal and external factors in shaping students' sustainable consumption behavior.

However, this study has limitations because it was only conducted on students at SMA Negeri 14 Semarang using a cross-sectional survey approach, so the results cannot be generalized widely and are not able to capture behavioral changes over time. Therefore, further research is recommended to involve a wider scope of respondents, use a longitudinal design, and add other variables such as personal values, family parenting patterns, the influence of digital media, or consumption habits to obtain a more comprehensive understanding of students' sustainable consumption behavior.

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REFERENCES

Abrahamse, W., & Steg, L. (2013). Social influence approaches to encourage resource conservation: A meta-analysis. *Global Environmental Change*, *23*(6), 1773–1785.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2011). *Predicting and changing behavior: The reasoned action approach*. Psychology Press.

Anindita, A., & others. (2023). Self-efficacy in adolescent learning. *IJASSH*, *1*(3). https://doi.org/10.24912/ijassh.v1i3.29151

Ansari, S. (2019). Individual vs collective efficacy in green consumer behavior: Evidence from collectivist cultures. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3510931

Ardyanti, N., & Kardoyo. (2018). Determinants of consumption behavior among students. *Dinamika Pendidikan*, *13*(1), 1–10. https://journal.unnes.ac.id/nju/index.php/DP/article/view/15112

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.

Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. W. H. Freeman and Company.

Berger, C., & Andaur, A. (2022). Moral disengagement and peer norms. *Psychology, Society & Education*, *14*(3), 18–28. https://doi.org/10.21071/psye.v14i3.15113

Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2014). Lost in translation: ethical consumer intention–behavior gap. *Journal of Business Research*, *67*, 2759–2767. https://doi.org/10.1016/j.jbusres.2012.09.0

Chen, M. F. (2015). Self-efficacy or collective efficacy within the cognitive theory of stress model: Which more effectively explains people's self-reported pro-environmental

behavior? *Journal of Environmental Psychology*, *42*, 66–75. https://doi.org/10.1016/j.jenvp.2015.02.002

Ciranka, S., & van den Bos, W. (2019). Social influence in adolescent decision-making: A formal framework. *Frontiers in Psychology*, *10*, 1915. https://doi.org/10.3389/fpsyg.2019.01915

Fadia, T., Iranto, D., & Zahra, S. F. (2025). Pengaruh pengetahuan lingkungan, kesadaran lingkungan, dan penggunaan media sosial terhadap perilaku konsumsi berkelanjutan pada generasi Z di DKI Jakarta. *Indonesia Economic Journal*, *1*(2), 665–670.

Hagger, M. S., Cheung, M. W. L., Ajzen, I., & Hamilton, K. (2022). Perceived behavioral control in TPB meta-analysis. *Health Psychology*, *41*(2), 155–167. https://doi.org/10.1037/hea0001153

Hanss, D., Böhm, G., Doran, R., & Homburg, A. (2016). Sustainable consumption of students: Determinants and policy implications. *Journal of Environmental Psychology*, *45*, 30–40. https://doi.org/10.1016/j.jenvp.2015.11.009

Joshi, Y., & Rahman, Z. (2015). Factors affecting green purchase behaviour and future research directions. *International Strategic Management Review*, *3*(1–2), 128–143.

Kautish, P., Paul, J., & Sharma, R. (2019). The moderating influence of environmental consciousness and recycling intentions on green purchase behaviour. *Journal of Cleaner Production*, *228*, 1425–1436. https://doi.org/10.1016/j.jclepro.2019.04.389

Kementerian Lingkungan Hidup dan Kehutanan. (2022). *Pedoman pelaksanaan Program Adiwiyata*.

Kementerian Lingkungan Hidup dan Kehutanan Republik Indonesia. (2024). *Pedoman pelaksanaan program Adiwiyata*.

Laursen, B., & Veenstra, R. (2021). Peer influence functions. *Journal of Research on Adolescence*, *31*(4), 889–907. https://doi.org/10.1111/jora.12606

Lee, K. (2014). Predictors of sustainable consumption among young educated consumers in Hong Kong. *Journal of International Consumer Marketing*, *26*(3), 217–238. https://doi.org/10.1080/08961530.2014.900249

Luthans, F. (2005). *Organizational Behavior* (10th ed.). McGraw-Hill.

Malecki, C. K., & Demaray, M. K. (2003). What type of support do they need? Investigating student adjustment as related to emotional, informational, appraisal, and instrumental support. *School Psychology Quarterly*, *18*(3), 231–252. https://doi.org/10.1521/scpq.18.3.231.22576

Maran, D. A., Butt, M. U., & Begotti, T. (2023). Efficacy beliefs and pro-environment behaviors. *SAGE Open*. https://doi.org/10.1177/21582440231207444

Miller, L. B., & others. (2022). Environmental attitudes and behaviors across countries. *Environment and Behavior*, *54*(7–8), 1465–1492. https://doi.org/10.1177/00139165221131002

Nguyen, T. N., Lobo, A., & Greenland, S. (2020). Pro-environmental purchase behaviour: The role of consumers' biospheric values, attitudes and advertising skepticism. *Journal of Retailing and Consumer Services*, *54*, 102035. https://doi.org/10.1016/j.jretconser.2019.102035

OECD. (2022). *Global plastics outlook: Policy scenarios to 2060*. https://doi.org/10.1787/de747aef-en

Paul, J., Modi, A., & Patel, J. (2016). Green product consumption using TPB. *Journal of Retailing and Consumer Services*, *29*, 123–134. https://doi.org/10.1016/j.jretconser.2015.11.006

Perry, G. L. W., Richardson, S. J., Harré, N., Hodges, D., Lyver, P. O. B., Maseyk, F. J. F., Taylor, R., Todd, J. H., Tylianakis, J. M., Yletyinen, J., & Brower, A. (2021). Evaluating the Role of Social Norms in Fostering Pro-Environmental Behaviors. *Frontiers in Environmental Science*, *9*. https://doi.org/10.3389/fenvs.2021.620125

Pratiwi, Z. R., & Kumalasari, D. (2021). ANALITIKA Jurnal Magister Psikologi UMA Dukungan Orang Tua dan Resiliensi Akademik Pada Mahasiswa The Parental Support and Academic Resilience among Undergarduate Students. *Jurnal Magister Psikologi UMA*, *13*(2), 2502–4590. https://doi.org/10.31289/analitika.v13i1.5482

Rahmawati, H., & others. (2024). Pro-environmental behavior model among university students. *Psympathic: Jurnal Ilmiah Psikologi*, *11*(1), 9–16. https://doi.org/10.15575/psy.v11i1.32182

Rhodes, R. E., & de Bruijn, G. J. (2013). Physical activity intention–behavior gap meta-analysis. *British Journal of Health Psychology*, *18*(2), 296–309. https://doi.org/10.1111/bjhp.12032

Sánchez, M. J., & Lafuente, R. (2010). Defining and measuring environmental consciousness. *Revista Internacional de Sociología*, *68*(3), 731–755. https://doi.org/10.3989/ris.2008.11.03

Schultz, P. W. (2022). Social norms and pro-environmental behavior. *Current Opinion In*, *44*, 218–223. https://doi.org/10.1016/j.copsyc.2021.09.012

Sharma, M., & Rani, L. (2020). Environmentally sustainable consumption awareness among children: An empirical study. *World Review of Entrepreneurship, Management and Sustainable Development*, *16*(1), 76–91. https://doi.org/10.1504/WREMSD.2020.104683

Sheeran, P., & Webb, T. L. (2016). The intention–behavior gap. *Social and Personality Psychology Compass*, *10*(9), 503–518. https://doi.org/10.1111/spc3.12265

Shen, M., & Wang, J. (2022). The Impact of Pro-environmental Awareness Components on Green Consumption Behavior: The Moderation Effect of Consumer Perceived Cost, Policy Incentives, and Face Culture. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.580823

Sorcaru, I. A., Muntean, M. C., Manea, L. D., & Nistor, R. (2024). From social norms to pro-environmental behavior: The role of destination social responsibility for families traveling with children. *Technological Forecasting and Social Change*, *209*. https://doi.org/10.1016/j.techfore.2024.123830

Susanty, A., Puspitasari, N. B., Prastawa, H., Listyawardhani, P., & Tjahjono, B. (2023). Antecedent factors of green purchasing behavior: Learning experiences, social cognitive factors, and green marketing. *Sustainability*, *15*(2), 1449. https://doi.org/10.3390/su15021449

Testa, F., Iovino, R., & Iraldo, F. (2021). The circular economy and consumer behavior: A systematic literature review. *Journal of Cleaner Production*.

Thøgersen, J. (2010). Country differences in sustainable consumption: The case of organic food. *Journal of Macromarketing*, *30*(2), 171–185. https://doi.org/10.1177/0276146710361926

Tirtarahardja, U., & Sulo, L. (2010). *Pengantar Pendidikan*. Rineka Cipta.

United Nations Development Programme. (2021). *Sustainable Development Goals*. https://www.undp.org/sustainable-development-goals

United Nations Environment Programme (UNEP). (2022). *Making peace with nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. https://www.unep.org/resources/making-peace-nature

Wang, Z., Zhang, B., Yin, J., & Zhang, X. (2021). Determinants and policy implications for household electricity-saving behaviour: Evidence from Beijing, China. *Energy Policy*, *39*(6), 3550–3557. https://doi.org/10.1016/j.enpol.2011.03.055

Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological Economics*, *134*, 114–122. https://doi.org/10.1016/j.ecolecon.2016.12.019

Yan, Q.-S., Zhang, Z.-Q., Er, C.-X., & Wang, W.-Q. (2024). The mechanism of internal and external efficacy influences residents' pro-environmental behavior through environmental willingness. *PLOS ONE*, *19*(3), e0298378. https://doi.org/10.1371/journal.pone.0298378

Yanti, N. K. S., & Suryani, L. P. (2021). Pengaruh kesadaran lingkungan dan gaya hidup terhadap perilaku konsumsi hijau generasi Z. *Jurnal Ekonomi Dan Bisnis*, *14*(2), 75–84. https://doi.org/10.24843/jebis.2021.v14.i02.p03

Yu, B. (2023). Self-regulated learning in online learning. *Frontiers in Psychology*, *13*, 1051349. https://doi.org/10.3389/fpsyg.2022.1051349

Yuriev, A., Dahmen, M., Paillé, P., Boiral, O., & Guillaumie, L. (2020). Pro-environmental behaviors through the lens of the theory of planned behavior: A scoping review. *Resources, Conservation and Recycling*, *155*, 104660. https://doi.org/10.1016/j.resconrec.2019.104660

Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach. *Frontiers in Psychology*, *12*. https://doi.org/10.3389/fpsyg.2021.644020

Zikri, A. D., & Hati, S. R. H. (2024). Green apparel purchase in Indonesia. *Binus Business Review*, *17*(1). https://doi.org/10.21512/bbr.v17i1.14009