

From Guilt to Pride: How Emotions, Identity, and Social Norms Drive Sustainable Consumption with the Mediating Effect of Attitude

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Abstract

A significant priority in the struggle against urgent environmental and social issues is sustainable consumption. This study examines the effects of emotions, identity, and social norms on sustainable consumption by analyzing survey data from 381 consumers from a variety of backgrounds, such as stay-at-home mothers, businesspeople, and students. Exploratory factor analysis and regression analysis using SPSS are used in this quantitative study to investigate how emotions and social norm alignment influence customers' intentions and behaviors toward sustainable purchase decisions. Emotions are strong drivers of pro-environmental decision-making, and the results indicate that they positively influence sustainable consumption. Identity and sustainable consumption are also strongly and favorably correlated, suggesting that consumers align their sustainable choices with their self-perception. The adverse effects of social norms, however, show that external forces do not always lead to sustainable consumer behavior. The study contributes to our understanding of consumer behavior and sustainability by demonstrating the interplay of emotive, cognitive, and normative systems.

KEYWORDS

Emotions; Identity; Social Norms; Consumer Attitude; Sustainable Consumptions

1 | INTRODUCTION

1.1. Historical Background and Introduction

The concept of sustainable consumption gained traction after the 1987 Brundtland Report (Imperatives, 1987) and Agenda 21 at the 1992 Rio Earth Summit (UNCED, 1992) which placed a significant emphasis on finding a balance between the needs of the present and those of future generations. Research first concentrated on production efficiency, but as time passed, the consumer's impact on sustainability gained prominence (Jackson, 2005). In the 1980s, emotions were recognized as significant determinants in decision-making, transcending rational choice theories to elucidate pro-environmental behavior (Schwarz & Clore, 1983). The influence of social norms, rooted in classical sociology, underscores how collective expectations shape behavior and promote sustainable living (Cialdini et al., 1990).

Furthermore, in the same way, identity theory, which has its roots in psychology and symbolic interactionism, showed how people match their

consumption to their self-concept, which has become more and more linked to sustainability in recent years (Stets & Burke, 2000). These historical developments show how crucial it is to understand sustainable consumption by taking social and psychological perspectives into account.

In addition, psychology has long recognized emotions as important decision-making motivators, surpassing rational choice models in the 2000s to explain consumer preferences, including acts that support the environment (Kals & Maes, 2002). Furthermore, since William James's work in the late 19th century (James, 1922). Psychologists have examined emotions as essential factors in decision-making. When academics realized that rational choice models were unable to adequately explain consumption patterns in the 1980s and 1990s, their application to consumer behavior gained prominence. Affective assessments of environmentally friendly items started to connect emotions to pro-environmental behavior (Lyeonov et al., 2025).

Since peer pressure and group expectations have a significant impact on sustainable behaviors, the importance of social norms, which have their roots in classical sociology and social psychology, has also been highlighted (Peattie, 2010). In a similar vein, identity, which was created in psychology and symbolic interactionism, emphasizes how people express and uphold their self-image through their purchase decisions. In recent decades, this notion has become more closely linked to sustainability (Buenstorf & Cordes, 2008). When taken as a whole, these historical processes highlight the necessity of combining social and psychological viewpoints to comprehend sustainable consumption.

Consumers have a significant influence on sustainability outcomes because they are key players in determining the demand for goods and services (Shao & Ünal, 2019). Although organizations, advocacy groups, and governments are working to encourage sustainable behaviors, consumer adoption is still uneven. There is a continuous "attitude behavior gap," where customers' professed ideals frequently do not convert into consistent, sustainable actions, despite the high level of awareness of sustainability challenges (Hertwich, 2005; Jackson, 2004). Price, product availability, expertise, and perceived consumer efficacy are just a few of the variables that have been identified in prior research as having an impact on sustainable consumption (Waris & Hameed, 2020). Smelser (1992) suggested that rather, psychological aspects like identity, emotions, and social conventions provide valuable information about why or not customers may act in a sustainable manner. By influencing affective assessments of sustainable products, emotions have an impact on decision-making (Maniatis, 2016). While social norms establish collective expectations that can either promote or discourage pro-environmental activities, identity motivates people to match consumption with their self-concept (Fritzsche et al., 2018). The majority of previous research has focused on Western contexts, with little evidence from emerging economies, where structural and cultural factors frequently impede sustainability practices (Antonetti & Maklan, 2014; Hertwich, 2005; Pristl et al., 2021; Wang & Wu, 2016).

1.2. Significance of the Study

The study aims to determine the relative significance of these psychological and social determinants and investigate their implications for closing the attitude-behavior gap. Furthermore, this study makes three contributions. It first enhances the body of research on consumer behavior by highlighting the interconnected roles of emotions, identity, and social norms in sustainability decision-making. Second, it provides empirical evidence from a non-Western context, expanding the scope of sustainability research. Third, it

provides policymakers and marketers with practical guidance on leveraging psychological and social processes to promote sustainable lifestyles. This study is unique in that it addresses the psychological and social facets of consumer decision-making, which have not received enough attention in earlier research. This study offers a more thorough explanation of sustainable consumption by examining the interactions between emotions, identity, and social norms as opposed to earlier research that focused on individual drivers.

2. Literature Review and Theoretical Evidence

2.1. Theoretical Foundation

Sustainable consumption has emerged as a significant issue in contemporary society due to the detrimental impacts of overconsumption, environmental degradation, and climate change on global ecosystems (Glavič, 2021). The idea of sustainable consumption became more popular when Beckerman (1994) and Dolan (2002) they discussed the importance of finding a balance between the needs of the present and those of future generations. Before gradually recognizing the significance of customer behavior, sustainability studies primarily concentrated on industrial efficiency (Vlek & Steg, 2007). Several well-established behavioral theories support the proposed paradigm. Attitude is a crucial mediator between psychological antecedents and actual conduct, according to the Theory of Planned Conduct (TPB) (Albrecht et al., 1991; Chatzisarantis & Biddle, 1998). According to TPB, a person's evaluative position on a behavior is shaped by their emotions, identity, and social norms, and this in turn influences their intentions and consumption decisions. Recent systematic evaluations show that TPB is still the best way to explain sustainable consumption patterns. These reviews consistently demonstrate that attitude serves as a mediating mechanism. According to Social Identity Theory (SIT), people believe and act in ways that are consistent with their moral self-concept or group affiliations. People who strongly identify as "pro-environmental" or morally upright usually have pleasant things to say about sustainable activities and products (Hu, 2025). The Affective Events Theory (AET) posits that emotional events, such as anticipated pride or sorrow, significantly influence judgments and subsequent behavior (Silva, 2024). In this environment, emotions act as affective antecedents, shaping attitudes towards sustainable consumption and ultimately guiding behavior.

2.2. Emotions, Identity, and Social Norms

Emotions are characterized as affective states that arise before or in reaction to a conduct (Zinck & Newen, 2008). In research regarding sustainable consumption, these feelings often present as anticipated guilt (for failing to act sustainably) and anticipated pride (for

engaging in pro-environmental behavior) (Schneider et al., 2017). These emotions function as psychological motivators that are essential in shaping consumer attitudes towards environmentally conscious choices. According to Khan & Mohsin (2017), anticipated shame inhibits unsustainable expenditure, but anticipated pride enhances favorable evaluations of eco-friendly products (Rowe, 2017). Researchers have noted that emotional triggers often outperform cognitive appeals in eliciting stronger behavioral commitments (Sattorov, 2024). In the realm of sustainability, emotions are not only secondary effects but significant precursors that influence attitudes and ultimately affect behavioral choices (Wang & Wu, 2016). Identity encompasses individuals' self-perception of their duties, ideals, and relationships, including their pro-environmental or moral identities (Van der Werff et al., 2013). assert that a robust identity aligned with ethical or environmental ideals cultivates positive attitudes towards sustainable consumerism (Zhao et al., 2024). Identity is important because people are motivated to behave in accordance with their self-image. For instance, individuals identifying as "green consumers" are predisposed to view sustainable products positively and to make decisions that align with their self-perception (Søren Ventegodt & Joav Merrick, 2014). Prior research indicates that identification both moderates and facilitates the transformation of attitudes into actual behavioral intentions (Maio & Olson, 1995). Identity functions as a significant psychological anchor that fosters regular consumption behaviors and reinforces pro-environmental attitudes (Lavuri et al., 2023). On the other hand, social norms are the unspoken rules and expectations that regulate behavior in society (Sunstein, 1996). They are sometimes separated into descriptive norms, which are what most people do, and injunctive norms, which are what most people accept or disapprove of norms shape individuals' perceptions regarding sustainability by delineating desirable and socially acceptable behaviors (Bicchieri et al., 2018; Jidda Jidda et al., 2025). When people realize that most people follow environmentally friendly habits, such utilizing reusable bags or eating plant-based foods, their perceptions about these practices increase (Lin, 2024). The absorptive capacity denotes the capability to classify, integrate, and apply the meaning of knowledge (Bukhari et al., 2021). Dynamic norms are characterized by an increasing number of individuals embracing sustainable behaviors, can be particularly effective in cultivating positive attitudes and encouraging action, as evidenced by (Sparkman & Walton, 2017). Social norms are crucial because they help people embrace sustainable consumption by lowering the perceived risks of doing so and bringing individual attitudes into line with group expectations. Moreover, some skills help people think more clearly and deal with challenges that aren't clear-cut when they are starting a business (Jiatong et al., 2021).

2.3. Attitude

A person's attitude is their assessment of carrying out a specific conduct, whether it be favorable or unfavorable (Fawehinmi et al., 2024; Mustafa et al., 2017). According to the research on sustainability, consumers' attitudes about the value or merit of adopting eco-friendly behaviors serve as a key predictor of their intentions and actions (Jaman, 2025). Attitude influences the impact of psychological antecedents including emotions, identity, and social norms on real consumption behavior (Zhang & Cao, 2025). Attitudes toward sustainable food choices totally mediated the impact of values and norms on purchase intentions (Ungureanu et al., 2025). Attitude is crucial because it converts impersonal concepts like moral self-concept or emotional responses into practical behavioral inclinations (Gupta et al., 2024). In the absence of positive attitudes, external motivators might not be able to produce significant behavioral change (Albarracín et al., 2024).

2.4. Sustainable Consumption

Sustainable consumption involves using goods and services that meet basic requirements while having less of a negative impact on the environment and society (Minh & Quynh, 2024). Some practices that come under this area include eating only plants, buying eco-labeled products, and cutting back on unnecessary expenditures (Maduku, 2024). Recent research has shown that identity-based, normative, and affective factors impact sustainable consumption; however, these influences often operate indirectly via attitudes (Cardoso et al., 2025). Shao and Ünal (2019) substantiate by meta-analysis that attitudes represent a significant indication of sustainable consumption across many domains, including food and fashion (Hogh et al., 2025). Importantly, behavioral and policy research emphasizes sustainable consumption, as it is seen as crucial for addressing global challenges such as resource depletion and climate change (Polyportis et al., 2024). This is why studying the reasons for sustainable consumption is essential from a theoretical point of view as well as in marketing and environmental policy.

2.5. Hypothesis Development:

2.5.1. Emotions, Identity, Social Norms, and Sustainable Consumption

Emotions play a crucial role in customer decision-making, particularly when it comes to sustainability. A study conducted by (Antonetti & Maklan, 2014) stated that positive feelings like pride, joy, or satisfaction may make people more likely to buy things in a way that is good for the environment. On the other hand, negative feelings like shame or regret can make people less likely

to engage in harmful environmental practices (Hartmann & Apaolaza-Ibáñez, 2012). They explored the consumer attitude and intentions towards green energy brands, finding that emotional connectedness to nature significantly affects consumers' preferences for sustainable products.

Recently, Li and Kang (2024) found that Identity affects how people see themselves and how their actions fit with how they see themselves. When sustainability becomes part of a person's identity, they are more likely to buy things that are good for the environment because it makes them feel like a responsible and ethical consumer. Whitmarsh and O'Neill (2010) conducted a study on positive and negative antecedents of purchasing of sustainable products and found individuals who identify as environmentally concerned utilize sustainable consumption as a means of expressing their identity. Additionally, having a green self-identity has a significant beneficial effect on people's plans to make environmentally friendly purchases. They found a positive relationship between identity and sustainable consumption.

Furthermore, Nyborg et al. (2016) a review study conducted indicates that social norms are strong predictors of sustainable consumption by promoting environmental responsibility. They added that social norms, or the standards that people think are right for a group or community, have a big effect on what people buy. When people believe their friends and family support sustainable consumption, they are more likely to follow the rules and adopt environmentally friendly practices. White and Simpson (2013) researchers have reported that social influence mechanisms, such as norms, encourage people to make sustainable choices by making them feel a sense of belonging and exerting pressure on them. They also reported that descriptive norms (what others do) and injunctive norms (what others approve of) both affect how people act in a way that is good for the environment by showing social approval or disapproval. Based on these studies, we propose our hypothesis;

H1: Emotions positively influence sustainable consumption.

H2: Identity positively influences sustainable consumption.

H3: Social norms positively influence sustainable consumption.

2.5.2. Emotions, Identity, Social norms, and Attitude:

Emotions play a key role in shaping attitudes toward sustainability. Positive emotions, such as pride or joy, tend to encourage sustainable choices, whereas negative emotions, like guilt, prompt people to seek resolution. This is because emotions affect attitudes,

which then lead to sustainable consumption (Antonetti & Maklan, 2014; Hartmann & Apaolaza-Ibáñez, 2012). Identity also has a significant impact on attitudes. People who think of themselves as ecologically responsible are more likely to have pro-sustainability attitudes, which ultimately lead to actual conduct (Barbarossa & De Pelsmacker, 2016; Whitmarsh & O'Neill, 2010). Social norms influence attitudes by establishing views of socially accepted or expected actions, thereby promoting favorable attitudes toward sustainability that encourage responsible consumption (Nyborg et al., 2016). In sum, these findings indicate that emotions, identity, and social norms indirectly affect sustainable consumption by reinforcing pro-sustainability attitudes, hence underscoring the mediation function of attitude. Thus, we pose our hypothesis:

H4: Attitude mediates the relationship between emotions and sustainable consumption.

H5: Attitude mediates the relationship between identity and sustainable consumption.

H6: Attitude mediates the relationship between social norms and sustainable consumption.

2.5.3. Attitude and Sustainable Consumption:

Attitude represents an individual's overall evaluation of performing a behavior and is widely regarded as one of the strongest predictors of intention and actual behavior in sustainability contexts. According to Albrecht et al. (1991) attitudes significantly shape behavioral intentions by reflecting the degree of favorability or unfavorability toward a specific action. In sustainable consumption, a positive attitude toward environmentally friendly products or practices enhances the likelihood that consumers will make sustainable choices. Vermeir and Verbeke (2008) found that favorable attitudes toward sustainability strongly predict purchase intentions for sustainable food products, while (Joshi & Rahman, 2015) highlighted attitude as a critical factor explaining the attitude-behavior gap in sustainable consumption. Similarly, Paul et al. (2015) demonstrated that pro-environmental attitudes significantly influence green purchase intentions in emerging markets. These findings suggest that attitudes serve as a direct driver of sustainable consumption by shaping consumer preferences, intentions, and behaviors in favor of environmentally responsible choices. With the help of these findings, we pose our hypothesis.

H7: Attitude positively influences sustainable consumption.

3 MATERIALS AND METHODS

3.1. Research Design and Framework:

This study employed a quantitative, cross-sectional

research approach was used to examine the causal links among the constructs. The selection of a quantitative design facilitated objective assessment via standardized scales, whilst the cross-sectional method permitted data gathering at a singular moment in time. This design is suitable for analyzing both direct and indirect effects inside the suggested model. The study focused on engaged consumers who can make their own buying decisions. Using purposive sampling, we got 364 valid replies from both online and offline surveys. This sample size was adequate for regression analysis, surpassing the minimum threshold necessary for dependable statistical testing. A standardized questionnaire using a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree) was used to collect data. Items for each construct were modified from previously validated studies. Pilot testing was used to show that the tests were reliable and valid. Then, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE) tests were done.

The study framework establishes the basis for analyzing the interconnections among emotions, identity, social norms, attitudes, and sustainable consumption. This paradigm combines ideas from consumer behavior, psychology, and sustainability research to show how social and emotional factors affect people's buying habits. It also describes the proposed direct and indirect effects between variables, which is what statistical testing is based on. Moreover, Fig 1 represents the research framework.

3.2. Research Instruments

This study used scales from previous research that was reliable and adapted them to the situation of sustainable consumption. We used a 5-point Likert scale to score the items (1 = Strongly Disagree to 5 = Strongly Agree).

- Emotions (5 items): Recorded emotional reactions to sustainability (Antonetti & Maklan, 2014).

- Identity (5 items): Assessed the congruence of self-concept with sustainable behaviors (Whitmarsh & O'Neill, 2010).
- Social Norms (5 items): looked at how people thought their peers and society expected them to act (Cialdini et al., 1990).
- Attitude (6 items): Assessed respondents' cognitive and emotional appraisal of sustainable consumption (Fishbein & Ajzen, 2010).
- Sustainable Consumption (6 items): This measured how people actually acted when it came to being ecologically responsible (Joshi & Rahman, 2015).

3.3. Demographics and Descriptive Statistics:

The demographic breakdown showed that there were almost as many men as women who answered the question. Most of the participants were young adults (20–35 years), indicating that younger generations are highly aware of sustainability. Most of the people in the sample had bachelor's or master's degrees, which shows that they were educated. Most of the people who took part in the study had middle-class incomes, which shows that sustainable consumption is vital for people at all income levels.

According to Table 1, the descriptive statistics revealed that all dimensions exhibited reasonably high mean values, ranging from 3.72 to 3.94 on a 5-point scale, signifying generally positive perceptions among respondents. Emotions (M = 3.86) and Attitude (M = 3.94) had the highest averages, indicating that people had positive feelings and thoughts about sustainable conduct. Identity (M = 3.72) had a slightly lower score, which could mean that the self-concept wasn't as strong. Social Norms (M = 3.80) and Sustainable Consumption (M = 3.88) were both above average, which means that people were more likely to act in ways that are good for the environment. The standard deviations (0.61–0.69) and variance values showed that.

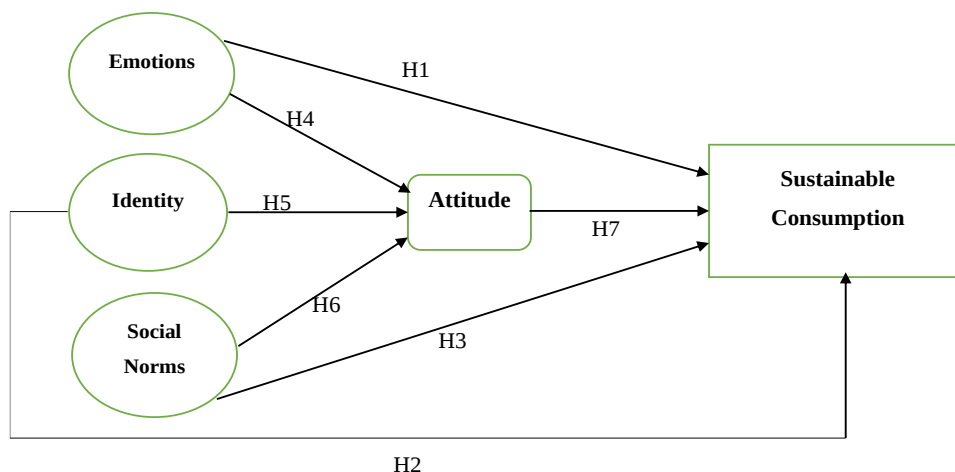


Fig. 1: Model Frame work

the replies were not very different from each other. The results showed that respondents' perceptions were generally consistent, with no severe outliers.

3.4. Measurement Model Results

Table 2 represents the reliability and validity of the research. Results validated that the measurement model was sound and suitable for subsequent research. All constructs exhibited substantial internal consistency, with Cronbach's Alpha values between 0.846 and 0.911, surpassing the suggested minimum of 0.70. The scales' reliability was further validated by Composite Reliability (0.872–0.928), and Average Variance Extracted (0.567–0.634) corroborated convergent validity by indicating that each construct explained more than half of the variance of its indicators.

Moreover, Table 3 represents the correlation matrix, showing that the constructs were significantly positively related to each other, which supports the proposed correlations. In most cases, the square roots of AVE were higher than the correlations between constructs, which shows that the test is legitimate. There was a slight worry, though, about the connection between identity and sustainable consumption. The correlation value (0.782) was slightly higher than identity's square root of AVE (0.768), indicating that the two ideas may

share some commonalities. Even so, the overall measurement model was found to be reliable, valid, and good for structural analysis.

The regression model results as per Table 4 for direct effects, indicated that emotions, social norms, and attitudes were significant predictors of sustainable consumption, whereas identity did not exert a relevant influence. In particular, emotions ($\beta = 0.251$, $p < 0.001$) showed a positive and substantial effect, which means that those who were more emotionally involved were more likely to act in a way that was good for the environment. Social norms ($\beta = 0.176$, $p = 0.006$) exhibited a substantial influence, indicating that perceived social expectations contribute to the formulation of consumption decisions. Attitude was the most critical factor ($\beta = 0.451$, $p < 0.001$), which shows that it is the most critical factor in influencing sustainable consumption. In contrast, identity ($\beta = 0.067$, $p = 0.171$) was not significant, indicating that the alignment of self-concept with sustainability did not serve as a strong predictor of behavior in this population. The model as a whole accounted for 57.3% of the variance in sustainable consumption ($R^2 = 0.573$), and the F-statistic ($F = 119.99$, $p < 0.001$) showed that the model was statistically strong and could be used to make predictions.

Table 1: Descriptive Statistics

Construct	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Emotions	364	2.15	4.95	3.86	0.641	0.41
Identity	364	2.05	4.85	3.72	0.612	0.37
Social Norms	364	2.1	4.9	3.8	0.663	0.44
Attitude	364	2.25	5	3.94	0.692	0.47
Sustainable Consumption	364	2	4.92	3.88	0.671	0.45

Table 2: Reliability and Validity

Construct	Cronbach's Alpha	Composite Reliability (CR)	Average Variance Extracted (AVE)
Emotions (5 items)	0.881	0.902	0.608
Identity (5 items)	0.846	0.872	0.59
Social Norms (5 items)	0.873	0.896	0.567
Attitude (6 items)	0.902	0.919	0.616
Sustainable Consumption (6 items)	0.911	0.928	0.634

Table 3: Correlation Matrix

Construct	$\sqrt{\text{AVE}}$	EMO	IDN	SCN	ATT	SC
Emotions (EMO)	0.78	1				
Identity (IDN)	0.768	0.412**	1			
Social Norms (SCN)	0.753	0.368**	0.291**	1		
Attitude (ATT)	0.785	0.526**	0.337**	0.481**	1	
Sustainable Consumption (SC)	0.796	0.298**	0.782	0.412**	0.561**	1

Table 4: Regression Model (Direct Effects)

Predictor	B	SE	t	p	95% CI (LL – UL)
Emotions (EMO)	0.251	0.056	4.48	0.001	[0.141, 0.361]
Identity (IDN)	0.067	0.049	1.37	0.171	[-0.029, 0.163]
Social Norms (SCN)	0.176	0.064	2.76	0.006	[0.050, 0.302]
Attitude (ATT)	0.451	0.047	9.60	0.001	[0.359, 0.543]
R^2	0.573				
F (4, 359)	119.99, $p < 0.001$				

Table 5 represents the Indirect mediation effect. The PROCESS Macro by (Hayes, 2012) the mediation analysis was conducted using bootstrapping (5,000 resamples) to identify indirect effects and create bias-corrected confidence intervals, thereby assessing the importance of mediation pathways. The mediation analysis underscored the critical function of attitude in elucidating indirect effects. Emotions exerted a substantial indirect impact on sustainable consumption via attitude (Effect = 0.181, 95% CI [0.112, 0.261], $p = 0.001$), suggesting that emotional responses facilitated sustainable consumption when they were converted into positive attitudes. Likewise, social norms exhibited a notable mediating pathway through attitude (Effect = 0.131, 95% CI [0.072, 0.205], $p = 0.001$), affirming that the influence of social expectations on consuming behavior is amplified through attitudinal mechanisms. Conversely, identity showed no significant indirect effect (Effect = 0.051, 95% CI [-0.008, 0.117], $p = 0.092$), indicating that self-concept alignment did not influence sustainable consumption via attitude in this study. In general, the results show that attitude is a strong mediator that turns the effects of emotions and social norms into behavior that is good for the environment.

Table 6 represents the hypothesis testing summary. The hypothesis testing validated that five out of seven hypotheses were corroborated. Emotions (H1) and social norms (H3) exhibited strong direct effects on sustainable consumption, whereas identity (H2) did not. The mediation study indicated that emotions (H4) and social norms (H6) affected sustainable consumption indirectly via attitude, while identity (H5) exhibited no mediation effect. Attitude (H7) emerged as the most robust predictor, greatly influencing sustainable consumption. In general, the data show that emotions, social norms, and attitude were the most important factors, whereas identity had little effect.

4 | DISCUSSION

The descriptive analysis indicated that all constructs scored moderately high, with mean values ranging

between 3.72 and 3.94 on a 5-point scale. This reflects generally favorable perceptions toward emotions, identity, social norms, attitude, and sustainable consumption. The reliability and validity tests confirmed that all constructs achieved strong internal consistency (Cronbach's Alpha > 0.84, CR > 0.87) and adequate convergent validity (AVE > 0.56), ensuring robustness of the measurement model. These findings are related to suggestions of a recent study (Cheung et al., 2024). Correlation analysis showed significant positive associations among most constructs, except for identity, which displayed weaker relationships with other variables and raised a slight concern regarding discriminant validity with sustainable consumption. This is supported by (Fornell & Larcker, 1981). Despite this, the structural model offered clear insights into the hypothesized relationships.

While going through the hypothesis testing, this study found that as per the first hypothesis, H1, there was a positive impact of emotions on sustainable consumption as suggested by the findings of Antonetti and Maklan (2014). This study found that identity is not a driver to align with sustainable consumption, which does not support our hypothesis. These findings contrast with another study by Whitmarsh and O'Neill (2010). On the other hand, social norms predicted positively sustainable consumption, and this aligns with existing research of Cialdini et al. (1990) and supporting the 3rd hypothesis H3.

Furthermore, emotions (H4) and social norms (H6) influenced sustainable consumption indirectly through attitude, both reaching statistical significance, aligning with the previous studies by White and Peloza (2009) and Smith and Louis (2008) respectively, and thus support the hypotheses H4 and H6. In contrast, identity did not exert a significant indirect effect through attitude (H5) and this hypothesis is not supported, aligns with the study of Sparks and Shepherd (1992). Thus, attitude emerged as a key mediator, amplifying the impact of emotions and social norms on sustainable consumption. This finding is aligned with a recent study by Wiśniewska (2025).

Table 5: Indirect (Mediation) Effects

Indirect Path	Effect	BootLLCI	BootULCI	p-value
EMO → ATT → SC	0.181	0.112	0.261	0.001
IDN → ATT → SC	0.051	-0.008	0.117	0.092
SCN → ATT → SC	0.131	0.072	0.205	0.001

Table 6: Hypothesis Testing Summary

Hypothesis	Path	β / Effect	BootLLCI	BootULCI	p-value	Result
H1	EMO → SC	$\beta = 0.251$			0.001	Supported
H2	IDN → SC	$\beta = 0.067$			0.171	Not Supported
H3	SCN → SC	$\beta = 0.176$			0.006	Supported
H4	EMO → ATT → SC	Effect = 0.181	0.112	0.261	0.001	Supported
H5	IDN → ATT → SC	Effect = 0.051	-0.008	0.117	0.092	Not Supported
H6	SCN → ATT → SC	Effect = 0.131	0.072	0.205	0.001	Supported
H7	ATT → SC	$\beta = 0.451$			0.001	Supported

Overall, five hypotheses (H1, H3, H4, H6, and H7) were supported, while two (H2 and H5) were not. These results underline that fostering positive emotions and reinforcing social norms are critical pathways to strengthen sustainable consumption, with attitude serving as the pivotal mechanism that translates these antecedents into behavioral outcomes. Identity, although theoretically relevant, did not demonstrate strong empirical support in this context.

4.1. Theoretical and Managerial Implications

From a theoretical stand point, this study enhances the comprehension of sustainable consumption by illustrating that emotions and social norms exert a more significant influence on behavior than identification. The results corroborate previous studies highlighting the significance of affective and normative factors, while contesting the notion that personal identity serves as a stable predictor. The mediating effect of attitude underscores the credibility of attitude behavior models in sustainability contexts, illustrating how emotions and norms function indirectly by cultivating positive attitudes towards consumption. This enhances the existing literature on consumer psychology and sustainability by elucidating the mechanisms that promote pro-environmental behavior.

Furthermore, from a management point of view, the outcomes provide clear guidance to businesses and government officials. Marketing and awareness initiatives should try to make emotional connections with customers. For example, they could talk about how happy, proud, or satisfied people feel when they make sustainable choices. Media and branding campaigns can utilise social norms by showcasing community standards, peer behavior, and the shared responsibility for one's actions. Most significantly, interventions should work to change people's views toward sustainability, since attitude was the most significant predictor and mediator in this study. However, appeals based on identity may not work as well in this situation and should not be the main technique. These insights indicate that firms, NGOs, and governments can promote sustainable consumption by appealing to emotions, establishing social norms, and influencing attitudes through ongoing communication and involvement.

4.2. Limitations

This study was confined to cross-sectional data, hence limiting causal assumptions. Future studies may utilize longitudinal designs to monitor shifts in attitudes and behaviors across time. The research concentrated on a defined array of psychological and social variables; subsequent investigations may examine supplementary aspects, including cultural values, perceived behavioral control, and environmental awareness. Expanding to

various cultural and demographic contexts may yield deeper insights into the variations of these linkages between countries.

Conclusion

This study investigated the influence of emotions, identity, social norms, and attitude on sustainable consumption. The results confirmed that emotions and social norms significantly affect sustainable consumption. Identity, however, did not show a significant role in either direct or indirect pathways. Attitude emerged as the strongest predictor of sustainable consumption behavior. It also acted as a mediator between emotions, social norms, and consumption. Five hypotheses were supported, while two were not, refining the model's validity. The findings validate the importance of attitude-behavior frameworks in sustainability. They also highlight that affective and normative drivers outweigh identity-based appeals. From a theoretical perspective, the study clarifies indirect behavioral pathways. From a practical perspective, it guides organizations toward emotional and social strategies. Managers and policymakers should prioritize building positive consumer attitudes. Overall, the study demonstrates that sustainable consumption is best promoted through emotions, norms, and attitude rather than identity alone.

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Statement about Data Availability: This study did not involve the creation of datasets or analysis; therefore, the sharing of data does not apply to this research.

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