

THE IMPACT OF CONSUMER VALUES ON SUSTAINABLE CONSUMPTION BEHAVIOR THROUGH SELF-IDENTITY PERSPECTIVE

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Abstract

Due to increasing concern for the environment, companies are promoting sustainable products and services. Research on antecedents of consumers' sustainable consumption behavior has been a major focus nowadays. The purpose of this research study is to examine the impact of egoistic, emotional, social, functional, and altruistic values on sustainable consumption behavior. Moreover, the mediating role of sustainable self-identity is also investigated. Data were collected from 383 respondents through survey technique. A quantitative approach is used and hypotheses were tested through regression analysis. Results show that egoistic, emotional, social, functional, and altruistic values positively affect sustainable consumption behavior of consumers. Moreover, sustainable self-identity mediates the effect of egoistic, emotional, social, functional, and altruistic values on sustainable consumption behavior. This is the first study of its kind to present a holistic view of the effect of key consumer values on sustainable consumption behavior. Managerial implications are discussed at the end of the study.

INTRODUCTION

The world is facing pressing challenges due to unsustainable practices both at individual and organizational level. Factories are depleting resources during production process and spreading pollution to an extent which is extremely alarming (Hegab et al., 2023). These factories are also responsible for rising temperature, depletion of Ozone layer, floods, and many other natural disasters (Jige et al., 2023). Due to these environmental issues, life on earth has been endangered. Addressing this environmental challenge requires attention at both individual and organizational levels (Tang et al., 2023). The irresponsible behavior of individuals further

exacerbates this situation. Many individuals are engaging in extravagant and unnecessary purchases instead of limiting themselves to products and services that are pro-environmental in nature (Ullah et al., 2023). Sustainable consumption behavior (SCB) is one area that has recently attracted attention of researchers (Li & Huang, 2023; Tang et al., 2023; Wang, Yang &, 2024). A number of antecedents of SCB have been examined but the role of consumer values is neglected in previous studies. Tang et al., (2023) suggests that future studies should investigate holistic view of consumer values on SCB. This study therefore examines the impact of five key

consumer values (egoistic, emotional, social, functional, and altruistic) on SCB. Moreover, the mediating role of sustainable self-identity is also explored in this study.

It has become evident that understanding individual purchase behavior's determinants is very important; without such understanding, addressing the root causes of this behavior is difficult (Siddiqui, Chakraborty, & Siddiqui, 2023). The global community is an urgent need to adopt sustainable consumption. Sustainable consumption refers to balanced, conscientious and harmonious use of resource with a sense of responsibility and concern for future generations. It involves that adopting behavioral patterns that stop resource exploitation and contributing to the well-being of both the planet and its inhabitants. The significance of sustainability research is widely acknowledged. Therefore, a comprehensive understanding of factors that drive such behavior has been an area of interest of prevailing researchers. Understanding the intricate drivers of sustainable consumption has become a focal point for contemporary researchers. However, despite notable interest, this aspect has received relatively limited scrutiny (White & Hardisty, 2019). Contemporary researchers like (Tian & Liu, 2022; Lakshmi & HimaBindu, 2023) are suggesting for further investigation into the role of consumer values in shaping sustainable consumption behavior. This aspect of inquiry has been paid less attention. The available studies like (Lauvri et al., 2022; Ali et al., 2022) are fragmented and lack a comprehensive framework. Therefore here is still room for a holistic model to investigate the effect of psycho-social values on sustainable consumption behavior. This gap manifests in the insufficient comprehension of how egoistic, altruistic, emotional, functional, and social values intersect with sustainable self-identity toward sustainability.

There are three research gaps that this study intends to fill. First, the holistic understanding of SCB in relation to consumer values is still an under-explored area. This study adds to the literature by investigating the impact of egoistic, emotional, social, functional, and altruistic values on SCB. By doing this, the current study addresses the call for further studies into the holistic view of values by Alyaha et al., (2023), Tang et al., (2023), and Lakshmi and

HimaBindu (2023). Second, researchers suggest that SCB is not straight forward. It involves intrinsic factors as well as personal belief system. Due to complexity of SCB phenomenon, there are mixed results. While some studies show positive impact of certain interventions, others found a negative effect of these interventions on SCB. This suggests that there are intervening mechanism through which SCB can be better explained. Among various intervening variables, self-identity and belief towards the concept of environment and sustainability is critical. When one's self concept is in line with the value system, the intent to display sustainable behavior becomes evident. That is why this study suggests that sustainable self-identity mediates the effect of egoistic, emotional, social, functional, and altruistic values on SCB. Third, millennial behave differently as compared to other generations when it comes to purchasing decision. They are the ones who would also likely to suffer more if the environment gets polluted. That is why it is important to understand how millennial's values might affect their SCBs. This study adds to the available literature by providing insight into the effect of these values on SCBs of Millennial.

Literature Review and hypotheses development

Sustainable consumption behavior

Sustainable consumption refers to socially and environmentally responsible habits (Mishra & Mishra (2023). Hornibrook and Fearn (2015) suggest that it is way of consuming resources only to cater for the basic needs and to ensure quality of life. Quoquab et al. (2019) looked at sustainable consumption as a phenomenon with various dimensions including care for the welfare of environment, quality of life and needs of coming generations. In nutshell, sustainable consumption is all about the wise and mindful utilization habits of resources restricted to satisfaction of basic needs and to avoid the excessive and unnecessary extravagant utilization (Parvatiyar & Sheth, 2023). It stresses upon the improvement of quality of life by discouraging the unneeded and obsessive exploitation of scarce resources and material gain (Boström, 2023). It also advocates the cause to take care of environment and future generations.

The definition of White et al. (2019) focuses on the deliberate behavior that individual take to minimize their negative impacts. It highlights the intention of individual to make conscious decision. The role consumer awareness and Intentionality is important in driving Sustainable Consumption behavior. This definition also considers the long term perspective of present consumption. In other words, the definition takes into account the needs of future generations. That current consumption can affects the welfare of future consumers. This forward-looking perspective is essential for truly sustainable consumption. The definition of White et al. (2019) takes into account wide range of behavior from purchasing, conserving resources and waste reducing. The scope of this definition is broad in sense that it encompasses all facets of Sustainable Consumption. Due to this reason the definition of White et al. (2019) is comprehensive and adopted for this study.

Consumer values

Consumer values refer to the calculations of consumers regarding benefits of the use of products. That is based on his consumption experience which facilitate in meeting the requirements in comparison to other offerings (Sheth, Newman & Gross, 1991; Sweeney & Soutar, 2001). Theory of consumption value (Shet et al., 1991) discusses the reason behind the decision that consumer makes to purchase a product or service and avoid another product or service and utilize one thing and refrain from using another. According to this theory there are reasons behind the choices consumer make. These reasons are their values. There are three main assumption of the theory of consumption value. The consumption choice of consumer is the function of various values. The choice of consumption creates difference in any consumption situation. The values behind consumption are free and independent in themselves (Shet et al., 1991). The decision a consumer makes is the result of any one are all values. This theory identified the following values. These values are discussed one by one in the following section:

Functional Value

Functional value refers to the functional benefits that are caused by the use of products or services (Shet et al., 1991). Functional value means that the

performance or utility of the product. Simply it means the function of the product (Sweeney & Soutar, 2001). This is the basic driver of consumer choice. It is examined through price, durability and reliability (Tanrikulu, 2021). The function is also in the form of possessing a product (Amin & Tar, 2021). Functional value is rooted in practical benefits of a product or service such as durability, quality, efficiency, performance, and overall utility. When utility of a product in terms of environmental protection and sustainability is high, the functional value as perceived by the consumer also increases. If companies manufacture products that show tangible benefits to consumers such as protecting the environment, mitigating climate change, reducing waste, and recycling, the consumer might think that the functional value is high and as a consequence, he/she might engage in SCB. Sustainable products that demonstrate superior functionality—such as energy efficiency, low maintenance costs, or extended product lifespan—can significantly influence consumption choices, especially among consumers who prioritize rational evaluation over emotional or moral considerations.

Social Value

Social value refers to the perceived utility which consumer gets by the possession of a product. Along with the actual functionality of the product, consumers also use to purchase or utilize a product for its social significance (Sweeney & Soutar, 2001). By social significance is meant to use the product to be identified with a particular social class or strata in society (Shao, 2024). Social values are the social acceptability by the economic group of which the consumer is a member. The consumer's concern is his social image in his class (Caniels, 2021). Secondly his acceptability in social groups is linked with his conformance to the social norms. The purchase decision is influenced by the perceived function of the product in the form of gaining association with a particular social class (Lim & Danodotiya., 2021). Social value is based on social approval and enhancement of one's social identity. In collectivist societies such as Pakistan, one way to improve self-image is to associate with group norms and values. This implies that social values intrinsically motivates individuals to engage in SCBs. By doing so, one

thinks that society would approve such behavior and he/she would be regarded as a better person. Sustainable products and practices—such as using reusable bags, driving electric vehicles, or supporting eco-conscious brands—can signal moral integrity and social awareness, thereby enhancing one's social image. By engaging in SCBs, an individual might believe that society would recognize and appreciate his/her actions.

Emotional Value

The psychosocial significance of the possession or use of product cannot be overlooked. Emotional value refers to the psychological significance of the use or possession of a product. The psychological satisfaction in the form of positive feelings or elevating consumer's mood is the perceived utility of the product. Products also have emotional value due to their association with specific emotion or memories (Akhtar et al., 2025). Emotional value is about psychological gratification. It is derived when an individual purchases a product or service for affective benefits. Any behavior that is promoting sustainable consumption would serve as a catalyst to enhance feelings of satisfaction, pride, fulfillment, and moral obligation. Emotional value appeals to an individual's internal emotional state and as a consequence, his/her engagement in SCB provides him/her with feelings of moral fulfillment. Consumers may engage in sustainable practices—such as recycling, choosing eco-friendly products, or supporting ethical brands—not solely for utilitarian or social reasons, but because such actions evoke positive emotions like self-respect, inner peace, or a sense of contributing to a greater good. On the contrary, if one does not engage in SCBs, his/her feeling of guilt, disappointment, and moral dissonance would soar.

Egoistic Value

Egoistic values are often associated with self-centered motivations, wherein individuals prioritize personal benefits and self-interest (Wang et al., 2024). In the context of sustainable consumption, research suggests that egoistic values may lead to mixed outcomes (Huang et al., 2022). Consumers driven by egoistic values may be drawn to sustainable products that offer cost savings, efficiency, and convenience.

However, their short-term focus and emphasis on personal gains can hinder more transformative and long-term sustainable behaviors (Renzi et al., 2022). Studies indicate that egoistic values may lead to selective adoption of eco-friendly products (Shimul & Cheah, 2023).

Egoistic value is based on the notion that one maximizes utility, personal benefits, and self-interest. Instead of looking at the broader goals of groups and organizations, one tends to prefer personal goals and utility. Egoistic individuals might engage in sustainable consumption behaviors in order to satisfy personal interests and gains such as health, social status, cost savings, and self-image. By purchasing products and services that are sustainable, egoistically oriented individual might improve his/her image in eyes of the others and would also take into account the cost saving factor. Although they do not engage in SCBs due to love for humanity, environment, nature, and future generations, the intent to engage in such behaviors is usually for personal gains. For instance, purchasing energy-efficient appliances to reduce utility bills or choosing organic products for personal health reflect egoistically driven yet environmentally favorable actions.

Altruistic Value

Altruistic value reflects a consumer's concern for the welfare of others, society, and the natural environment, often motivating actions that prioritize collective well-being over individual gain. There is a moral obligation towards the planet and future generations in altruistic values. When an individual has altruistic value, he/she would think about the environment from the perspective of future generations. This increases moral obligation to save the planet from pollution and environmental degradation. One way to do so is by engaging in SCBs. They would reduce waste usage and engage in behaviors that conserve energy and protect the natural environment. Another way to display greater level of altruistic orientated belief is through supporting pro-environmental products and services. These behaviors are often internalized as part of one's moral identity, making altruistic value a key predictor of sustained and consistent engagement with sustainability.

Altruism refers to acts that are prosocial with positive intention towards other for their welfare. In the view of Batson et al., (1988), prosocial behavior covers the broad range of action intended to benefit one or more people other than oneself." In the view of Eisenberg and Miller (1987, p.92) "altruistic values refer to voluntary, intentional behavior that results in the benefits for others." Baston et al. (2010) say that motivation with the ultimate goal of increasing another's welfare. Pfattheiche & Thielmann (2022) Eisenberg and Miller (1987, p.92) writes that "Altruism refers to the voluntary behavior intended to benefit another, which is not performed with the expectation of receiving external rewards or avoiding extremely produced aversive stimuli or punishment" (Pfattheiche & Thielmann.,2022). In the view of West et al. (2011, p.232), a behavior that is costly to the actor and beneficial to the recipient or recipients is always preferred. Cost and benefits are defined on the basis of the lifetime direct fitness consequences of a behavior and whether the behavior is beneficial in tangible as well as intangible terms for the consumer (Pfattheicher & Thielmann, 2022).

Altruistic value and SCB

Research consistently highlights the significant relationship between altruistic values and sustainable consumption behavior. Consumers with strong altruistic orientations show more sustainable patterns such as reusing, avoiding excessive power usage and take ethical stand for green products (Ribeiro et al. 2023). Altruistically motivated individuals may prioritize the broader social and environmental implications of their consumption choices over personal benefits (Turner, 2025). Altruistic value reflects a consumer's concern for the welfare of others, society, and the natural environment, often motivating actions that prioritize collective well-being over individual gain. There is a moral obligation towards the planet and future generations in altruistic values. When an individual has altruistic value, he/she would think about the environment from the perspective of future generations. This increases moral obligation to save the planet from pollution and environmental degradation. One way to do so is by engaging in SCBs. They would reduce waste usage and engage in behaviors that conserve energy and protect the

natural environment. Another way to display greater level of altruistic orientated belief is through supporting pro-environmental products and services. These behaviors are often internalized as part of one's moral identity, making altruistic value a key predictor of sustained and consistent engagement with sustainability.

The study of Nguyen et al. (2017) explore the influence of altruistic values on the purchase behavior of energy-efficient appliances by Vietnamese consumers. The research approach being employed is hypothetical-deductive, using a structured questionnaire. Data was collected using the questionnaire from a random sample of 682 consumers upon their visit to stores. The study found out that altruistic values significantly influence personal norms, environmental attitudes and subjective norms that further the purchase of energy efficient appliances. Altruistic values were found to also impact the perceived barriers as high cost and less availability. In the context consumer behavior consumer make their choices keeping in view their personal benefits. Consumers place high importance to egoistic values (Birch et al., 2018). Consumers prefer to go for such buying decision that improves their well-being, financial gain and their social status. Egoistic values emphasize self-interest and personal benefit in consumer decision-making (Sahelices-Pinto et al., 2018). It has been found that individuals who are inclined to egoistic values exhibit less environmentally friendly behaviors (Parkash et al., 2019).

Emotional values and SCB

Emotional values highlight the affective and emotional responses associated with consumption choices (Low et al., 2022). Emotional connections to products, brands, or experiences can shape sustainable consumption behavior (Maduka et al., 2024). Consumers' positive emotions, such as joy, pride, and satisfaction, linked to eco-friendly choices can reinforce sustainable behaviors (Barbarossa & Pelsmacker., 2016). Emotional appeals and marketing strategies that evoke emotional responses can influence consumers' perceptions of sustainability and motivate them to choose environmentally responsible options (Taufique, 2022). Emotional values are of high importance in

the field of consumer behavior. Marketing researchers have been shown interest to study emotions from their influence on consumption decision (Santos et al., 2022). The study of emotion is very important as they influence how consumer perceives, interact and show consistent loyalty towards a specific product or brand (Shahid et al., 2022).

According to some prominent researchers like Habit et al., (2019) social influence is the first route to cause sustainable consumer behavior (Abrahamse & Steg, 2013). In addition to this there are diverse views on what constitute sustainable consumption behavior. Emotional value is about psychological gratification. It is derived when an individual purchases a product or service for affective benefits. Any behavior that is promoting sustainable consumption would serve as a catalyst to enhance feelings of satisfaction, pride, fulfillment, and moral obligation. Emotional value appeals to an individual's internal emotional state and as a consequence, his/her engagement in SCB provides him/her with feelings of moral fulfillment. Consumers may engage in sustainable practices—such as recycling, choosing eco-friendly products, or supporting ethical brands—not solely for utilitarian or social reasons, but because such actions evoke positive emotions like self-respect, inner peace, or a sense of contributing to a greater good. On the contrary, if one does not engage in SCBs, his/her feeling of guilt, disappointment, and moral dissonance would soar.

Egoistic value and SCB

Many researchers have reflected upon this grave concern of unsustainable consumption of resources. Egoistic value is based on the notion that one maximizes utility, personal benefits, and self-interest. Instead of looking at the broader goals of groups and organizations, one tends to prefer personal goals and utility. Egoistic individuals might engage in sustainable consumption behaviors in order to satisfy personal interests and gains such as health, social status, cost savings, and self-image. By purchasing products and services that are sustainable, egoistically oriented individual might improve his/her image in eyes of the others and would also take into account the cost saving factor. Although they do not engage

in SCBs due to love for humanity, environment, nature, and future generations, the intent to engage in such behaviors is usually for personal gains. For instance, purchasing energy-efficient appliances to reduce utility bills or choosing organic products for personal health reflect egoistically driven yet environmentally favorable actions. The growing interest of contemporary researcher is to identify the factors of Unsustainable behavior. They believe that there are many factors of over consumption of resources. The central issue is the behavior of individuals (Linder et al., 2022). Therefore it is imperative to understand the behavior aspect of sustainable consumption behavior. Understanding the core drivers of individual behavior is the better way to understand the behavior of individual (Carfora et al., 2021).

Social value and SCB

Social value is based on social approval and enhancement of one's social identity. In collectivist societies such as Pakistan, one way to improve self-image is to associate with group norms and values. This implies that social values intrinsically motivates individuals to engage in SCBs. By doing so, one thinks that society would approve such behavior and he/she would be regarded as a better person. Sustainable products and practices—such as using reusable bags, driving electric vehicles, or supporting eco-conscious brands—can signal moral integrity and social awareness, thereby enhancing one's social image. By engaging in SCBs, an individual might believe that society would recognize and appreciate his/her actions.

Functional value and SCB

Functional value is rooted in practical benefits of a product or service such as durability, quality, efficiency, performance, and overall utility. When utility of a product in terms of environmental protection and sustainability is high, the functional value as perceived by the consumer also increases. If companies manufacture products that show tangible benefits to consumers such as protecting the environment, mitigating climate change, reducing waste, and recycling, the consumer might think that the functional value is high and as a consequence, he/she might engage in SCB. Sustainable products

that demonstrate superior functionality—such as energy efficiency, low maintenance costs, or extended product lifespan—can significantly influence consumption choices, especially among consumers who prioritize rational evaluation over emotional or moral considerations.

Mediating role of sustainable self-identity

The concept of sustainable self-identity has emerged as a significant psychological construct in understanding individuals' engagement in sustainable consumption behavior (Lavuri et al., 2023). Rooted in social identity theory and self-concept literature, sustainable self-identity reflects the extent to which individuals perceive themselves as environmentally conscious and identify with pro-environmental values and behaviors (Stets & Biga, 2003). Sustainable self-identity aligns with theories that emphasize the influence of self-concept and social identity on behavior (Araman & Mark-Herbert, 2023). Social identity theory posits that individuals derive a sense of self from group memberships and internalize group norms and values (Kim, 2016).

Sustainable self-identity involves the incorporation of environmental concerns and values into one's self-concept that leads to the integration of pro-environmental behaviors as expressions of identity (Song et al., 2023). Sustainable self-identity acts as a bridge between positive environmental attitudes and pro-environmental behaviors. Individuals who strongly identify with being environmentally conscious are more likely to translate their favorable attitudes into tangible sustainable actions (Shehawy, 2023). Individuals with a high pro-environment self-identity perceive sustainable behaviors as congruent with their self-concept, leading to increased motivation to engage in such behaviors (Quinn, 2008).

According to the theory of Value-belief-norms the behavior of individuals is determined by the attitude of individual which is determined by the preferences of individuals. In other words the values of individuals are the main determinants of individuals' actions through their attitudes. According to theory of Consumer Values by Sheth et al. (1991) that push individuals to purchase and not to purchase a product is determined by their preferences. Egoistic

Values refer to the values of individuals that show their individual actions to be the outcome of their self-interest like gaining personal benefits in form of financial gain or social recognition. Pro-environmental self-identity refers to the perception of individual about themselves to act in a way to protect the environment and save its resources by consuming less.

Pro-environmental identity aligns the action of individual with environmental values to make his pro-environmental behavior link to his self-concept. Environmentally friendly behavior is an altruistic action and seems more to be aligned with altruistic values than egoistic values. But if the alignment of pro-environmental identity is linked with personal benefits of individuals in the form of cost saving or energy saving may affect link the egoistic values with sustainable consumption behavior. Individuals often define themselves to be member of as a social group and in this way define their identities as shared group identity (Haslam et al., 2000). According to Social identity theory individual adopts certain behavior to maintain a positive self-identity.

Pro-environmental identity may be linked with egoistic values that individual may show pro-environmental behavior keeping in view their self-image in his group (Haslam et al., 2000). Some empirical evidence is there to show the relationship of egoistic values with pro-environment self-identity like the study of Mutum et al. (2021) investigated the relationship of Pro-environmental self-identity with environmentally friendly behavior. The study focused on the mediating role of social values, emotional values and health values. The finding of the study demonstrated that there was a positive relationship of emotional values and social values in mediating the effects of Pro-environmental self-identity and environmentally friendly behavior. The further findings of the study brought forth that functional values as mediating the relationship between pro-environmental identity and green purchase behavior had no effect. The study also demonstrated that consumer innovativeness was found to mediate the relationship between consumer values and pro-environmental identity.

Ahmat et al. (2022) state that altruistic values can influence environmentally friendly behavior. The study by Jia and Liang (2024) was focused on the

effects of environmental values on pro-environmental actions and the mediating role of pro-environment self-identity. The primary data for the study was gathered from the teenagers of the school .The results of the study concluded the positive association between environmental values and environmentally friendly behavior. The findings of the study also revealed that pro-environmental self-identity is confirmed to mediate between environmental values and environmentally friendly behavior.

Qasim et al. (2019) studied the association of social values and pro-environmental identity in the organic foods buying behavior. The findings of the study revealed that social values was not associated with the purchase of green foods link through the mediating role of pro-environmental Identity. The reason of the outcome was linked with the respondents who were from rural background where green foods were easily available and was not consider being the status symbol by their consumption. This current study is focused on the consumption of green products consumption of relatively durable nature like energy efficient appliances and the consumption behavior of electricity among the university students.

Individuals that are attached with environment often associated themselves with environment and show ecofriendly actions. Because the drive their self-identity by engaging in pro-environmental actions (Gil-Giménez et al., 2021). There are empirical studies like Wang et al. (2023) that show that

individual with ecofriendly emotions (pride) increase their pro-environment self-identity by exhibiting positive environmental behavior. The study of Barbarossa et al. (2017) conducted a study on the association of ethical emotions and pro-environmental actions with mediating role of green self-identity. The findings of the study revealed a positive emotion shape green self-identity which predict consistent eco-friendly actions(Kumar et al., 2023).Sustainable self-identity bridge emotional values with real sustainable consumption behavior (Kadic-Maglajlic et al., 2019).

Identity theory assumes that individual actions are associated with identity as the behavior of individual becomes the identity of individual in a group. And individuals get socialized and internalized the norms of the group and are required to act in compliance of these norms (Tajfel, 1979). Identity in the view of Udall et al. (2020) is expected to predict pro-environmental behavior if it in compliance with group identity. Individual consumers are expected to show eco-friendly behavior if they carry pro-environment identity or their group. They are expected to demonstrate pro-environmental behavior as behavior is linked with their group identity (Udall et al., 2021). Wild and Schulze (2024) studied the association of social identity and personal identity in determining ecofriendly behavior. The data was collected from educated youth. The findings of the study revealed that social identity was more important influencing sustainable behavior. Figure 1 presents theoretical framework of the study.

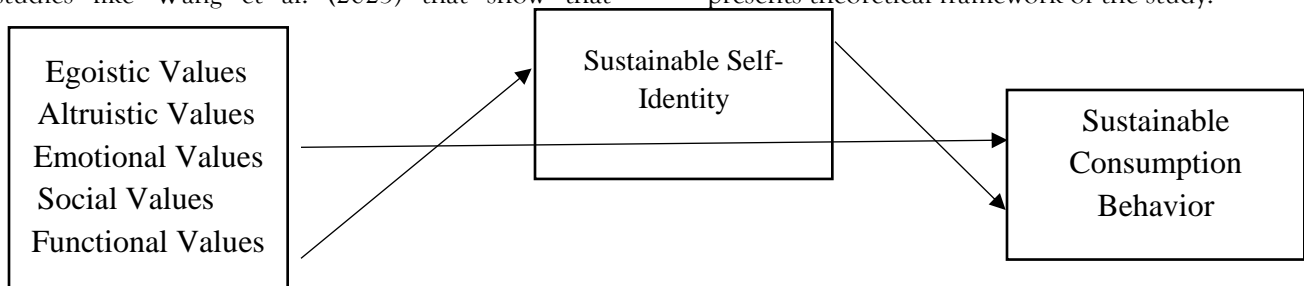


Figure 1: Theoretical Framework

Hypotheses

Based on above arguments, following hypotheses are proposed in this study:

H1a: Egoistic values positively affect sustainable consumption behavior.

H1b: Sustainable self-identity mediates the effect of egoistic values on sustainable consumption behavior.

H2a: Altruistic values positively affect sustainable consumption behavior.

H2b: Sustainable self-identity mediates the effect of altruistic values on sustainable consumption behavior.

H3a: Emotional values positively affect sustainable consumption behavior.

H3b: Sustainable self-identity mediates the effect of emotional values on sustainable consumption behavior.

H4a: Functional values positively affect sustainable consumption behavior.

H4b: Sustainable self-identity mediates the effect of functional values on sustainable consumption behavior.

H5a: Social values positively affect sustainable consumption behavior.

H5b: Sustainable self-identity mediates the effect of social values on sustainable consumption behavior.

Research Methods

Data Collection and Sample Selection

This study is quantitative in nature. Deductive approach is used because the purpose of the study is to test theory rather than developing it. In total, 10 hypotheses have been proposed. Data were collected from university students. A survey technique is used in which all items were adopted from previous studies. Seven constructs of this study are egoistic, emotional, social, functional, and altruistic values, sustainable self-identity, and sustainable

consumption behavior. In order to collect data, the researcher has to identify population and then draw a representative sample from the population. The population of current study is university students in Hazara Division. In total, there are four five major universities in Hazara Division (Hazara University, University of Science and Technology Havellia, COMSATS University Islamabad, Abbottabad Campus, and Pak-Austria Fachhochschule Institute of Applied Sciences and Technology, Mang). The researcher contacted Provost Office of each university to find out total number of students. In total, 17634 students are registered in various programs in these five universities. The next task is to determine sample size. Keeping margin of error to 5% and $p = 0.5$ and $z = 1.96$, a sample size of 376 is enough. The researcher distributed surveys among 600 university students. 120 questionnaires were distributed in each university. After several reminders, the researcher received 383 valid responses. 61% of the respondents were males and average age of respondents was 21.74.

Measurement instruments

This study has seven key variables. All variables were measured using previous scales. These scales were well-validated. Table 1 shows the number of items in each variable and source from which items were taken.

Table 1: Measurement Instruments

Construct	No. of Items	Source
Emotional value	6	Lin & Huang (2012)
Functional value	4	Lauri (2022)
Social value	3	Shethman & Gross (1991)
Egoistic value	3	Lavuri (2022)
Altruistic value	7	Lavuri (2022)
Sustainable Self Identity	6	Dermody et al. (2015)
Sustainable consumption behavior	12	Lee (2014)

Analysis

To test hypotheses, regression analysis was used. Before regression analysis, reliabilities of seven key constructs were checked. The Cronbach’s alpha values of all variables were above 0.7 value. This

implies that variables were reliable. Table 2 shows reliability values as well as correlations among variables. As expected, all correlations were positive which gives preliminary evidence to test hypotheses.

Table 2: Correlation Matrix

	1	2	3	4	5	6	7
1. Emotional value	(0.84)						
2. Functional value	0.09	(0.92)					
3. Social value	0.13	0.06	(0.87)				
4. Egoistic value	0.19	0.16	0.26	(0.84)			
5. Altruistic value	0.22	0.21	0.14	0.12	(0.78)		
6. Sustainable self-identity	0.29	0.34	0.42	0.49	(0.89)		
7. Sustainable consumption behavior	0.39	0.37	0.59	0.36	0.46	(0.85)	

Values in parentheses are Cronbach's alpha values

Table 3 shows direct effects. The effects of egoistic value ($\beta = 0.362$; t -value = 15.39; $p < 0.01$), altruistic value ($\beta = 0.264$; t -value = 18.96; $p < 0.001$), emotional value ($\beta = 0.299$; t -value = 22.89; $p < 0.05$), functional value ($\beta = 0.438$; t -

value = 34.96; $p < 0.01$), and social value ($\beta = 0.391$; t -value = 28.58; $p < 0.01$), on sustainable consumption behavior are all positive and significant, confirming H1a, H2a, H3a, H4a, and H5a, respectively.

Table 3: Direct Effects

Relationship	Beta value (β)	F-value	T-value
Egoistic value \rightarrow SCB	0.362**	25.67*	15.39**
Altruistic value \rightarrow SCB	0.264***	18.96**	12.85***
Emotional value \rightarrow SCB	0.299*	22.89**	14.63*
Functional value \rightarrow SCB	0.438***	34.96*	20.38**
Social value \rightarrow SCB	0.391**	28.58**	18.37*

Note: SCB is sustainable consumption behavior; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Mediating Effects

Table 4 shows the results for the mediating role of sustainable self-identity of the effects of egoistic, emotional, social, functional, and altruistic values on sustainable consumption behavior. According to this table, in model 1, sustainable self-identity is regressed with egoistic value. The model is found to be significant wherein there is a positive effect of

egoistic value on sustainable self-identity ($R^2 = .02$, $\beta = .22$, $T = 8.73$, $p < .05$). In model 2, sustainable consumption behavior is regressed with egoistic value. The model is significant wherein egoistic value leads to an increase in sustainable consumption behavior ($R^2 = .06$, $\beta = .26$, $T = 6.37$, $p < .05$). Likewise, in model 3, sustainable consumption behavior is regressed with egoistic value and sustainable self-identity simultaneously.

Table 4: Mediation Effects

Relationship	Model 1		Model 2		Model 3	
	SSI		SCB		SCB	
	Beta	t	Beta	t	Beta	t
Egoistic value	.22*	8.73	.26*	6.37	.18**	7.29
SSI					.28*	9.06
R^2	.02		0.06		0.17	

	ΔR^2		0.04		0.11		
				Indirect Effect	LLCI	ULCI	
				.1117	.2851	.3294	
Altruistic value	.29**	5.62	.55**	17.8	.26**	7.63	
SSI					.21	5.20	
R ²	0.08		0.19		0.35		
ΔR^2			0.11		0.16		
				Indirect Effect	LLCI	ULCI	
Emotional value	.34*	15.39	0.42*	.091	.006	.035	
SSI				19.29	0.37**	14.90	
R ²	0.19		0.28		.26	8.29	
ΔR^2			0.09		0.36		
				Indirect Effect	LLCI	ULCI	
Functional value	.26*	6.39	.31**	.1021	.008	.123	
SSI				7.06	.22*	7.29	
R ²	0.09		0.21		.14	5.28	
ΔR^2			0.12		0.37		
				Indirect Effect	LLCI	ULCI	
Social value	.24***	5.62	.43***	.072	.018	.281	
SSI				7.86	.21***	7.63	
R ²	0.08		0.16		0.17	6.69	
ΔR^2			0.08		0.21		
				Indirect Effect	LLCI	ULCI	
				.091	.006	.035	

Note: * $p < 0.05$; ** $p < 0.01$; *** $p < 0.00$; SSI is sustainable self-identity; SCB is sustainable consumption behavior

The model is significant showing that both egoistic value and sustainable self-identity have an increasing effect on sustainable consumption behavior ($R^2 = .17$, Beta = .18, T = 7.29, $p < .01$, & Beta = .28, T = 9.06, $p < .05$). Moreover, the inclusion of sustainable self-identity as a mediator between egoistic value and sustainable consumption behavior

aids significantly to the strength of the model by explaining 11% more variation in the dependent variable that is associated with the variation in independent variable ($\Delta R^2 = .11$). Similarly, the indirect effect of egoistic value on sustainable consumption behavior through sustainable self-identity is significant and does not contain zero

between lower and upper level confidence intervals (effect size = .1117, LLCI = .2851, ULCI = .3294). Therefore, in view of the above results, H1b is accepted. Moreover, H2b, H3b, H4b, and H5b are also accepted.

Discussion

This study has following findings. First, egoistic values of consumers positively affect sustainable consumption behavior. When an individual displays egoistic value based on the notion that one maximizes utility, personal benefits, and self-interest, his/her inclination to buy sustainable products and services increases. Egoistic individuals engage in sustainable consumption behaviors in order to satisfy personal interests and gains such as health, social status, cost savings, and self-image. By purchasing products and services that are sustainable, egoistically oriented individual might improve his/her image in eyes of the others and would also take into account the cost saving factor. Although they do not engage in SCBs due to love for humanity, environment, nature, and future generations, the intent to engage in such behaviors is usually for personal gains. For instance, purchasing energy-efficient appliances to reduce utility bills or choosing organic products for personal health reflect egoistically driven yet environmentally favorable actions. Second, altruism is found to enhance engagement in sustainable consumption behavior. Consumers with strong altruistic orientations show more sustainable patterns such as reusing, avoiding excessive power usage and take ethical stand for green products (Ribeiro et al. 2023). Altruistic values may prioritize the broader social and environmental implications of consumption choices over personal benefits (Turner et al., 2023). Altruistic value reflects a consumer's concern for the welfare of others, society, and the natural environment, often motivating actions that prioritize collective well-being over individual gain. There is a moral obligation towards the planet and future generations in altruistic values.

When an individual has altruistic value, he/she would think about the environment from the perspective of future generations. This increases moral obligation to save the planet from pollution and environmental degradation. One way to do so is

by engaging in SCBs. They would reduce waste usage and engage in behaviors that conserve energy and protect the natural environment. Another way to display greater level of altruistic orientated belief is through supporting pro-environmental products and services. These behaviors are often internalized as part of one's moral identity, making altruistic value a key predictor of sustained and consistent engagement with sustainability.

Third, social values of consumers promote sustainable consumption behavior. Social value builds around social approval and enhancement of one's social identity. In collectivist societies such as Pakistan, one way to improve self-image is to associate with group norms and values. This study found that social values intrinsically motivates individuals to engage in sustainable consumption behaviors. By doing so, one thinks that society would approve such behavior and he/she would be regarded as a better person. Sustainable products and practices—such as using reusable bags, driving electric vehicles, or supporting eco-conscious brands—can signal moral integrity and social awareness, thereby enhancing one's social image. By engaging in sustainable consumption behaviors, an individual might believe that society would recognize and appreciate his/her actions. Fourth, emotional values increase propensity to engage in sustainable consumption behavior. Emotional value is derived when an individual purchases a product or service for affective benefits. Any behavior that is promoting sustainable consumption would serve as a catalyst to enhance feelings of satisfaction, pride, fulfilment, and moral obligation. Emotional value appeals to an individual's internal emotional state and as a consequence, his/her engagement in sustainable consumption behaviors provides him/her with feelings of moral fulfillment. Consumers may engage in sustainable practices—such as recycling, choosing eco-friendly products, or supporting ethical brands—not solely for utilitarian or social reasons, but because such actions evoke positive emotions like self-respect, inner peace, or a sense of contributing to a greater good. On the contrary, if one does not engage in sustainable consumption behaviors, his/her feeling of guilt, disappointment, and moral dissonance would soar.

Fifth, functional values enhance sustainable consumption behaviors of consumers. Functional value is rooted in practical benefits of a product or service such as durability, quality, efficiency, performance, and overall utility. When utility of a product in terms of environmental protection and sustainability is high, the functional value as perceived by the consumer also increases. If companies manufacture products that show tangible benefits to consumers such as protecting the environment, mitigating climate change, reducing waste, and recycling, the consumer might think that the functional value is high and as a consequence, he/she might engage in sustainable consumption behaviors. Sustainable products that demonstrate superior functionality—such as energy efficiency, low maintenance costs, or extended product lifespan—can significantly influence consumption choices, especially among consumers who prioritize rational evaluation over emotional or moral considerations.

Sixth finding of the study is that sustainable self-identity mediates the effect of these values on sustainable consumption behaviors. This finding is in line with previous studies that found mediating role of self-identity on values-behaviours relationships (e.g., Ribeiro et al. 2023; Turner et al., 2023). Individuals that are attached with environment often associated themselves with environment and show ecofriendly actions. Because the drive their self-identity by engaging in pro-environmental actions (Gil-Giménez et al., 2021). There are empirical studies like Wang et al. (2023) that show that individual with ecofriendly emotions (pride) increase their pro-environment self-identity by exhibiting positive environmental behavior. The study of Barbarossa et al. (2017) conducted a study on the association of ethical emotions and pro-environmental actions with mediating role of green self-identity. The findings of the study revealed a positive emotion shape green self-identity which predict consistent eco-friendly actions (Kumar et al., 2023). Sustainable self-identity bridge emotional values with real sustainable consumption behavior (Kadic-Maglajlic et al., 2019).

Managerial Implications

This study offers several important implications for practitioners seeking to foster sustainable

consumption. Marketing strategies should be designed to emphasize **community welfare and collective well-being**, thereby resonating with consumers' **altruistic values**. Communicating the **social benefits** associated with sustainable products—such as their role in supporting environmental justice or local communities—can effectively motivate eco-conscious decision-making. Moreover, marketers must **highlight the functional value** embedded in sustainable products by underscoring attributes such as **durability, energy efficiency, and cost-effectiveness**. Empirical evidence suggests that consumers are more inclined toward sustainable alternatives when they perceive clear utilitarian benefits.

In parallel, organizations should craft campaigns that **foster emotional engagement** by reinforcing the **psychological satisfaction** consumers derive from making environmentally responsible choices. Emphasizing the **positive emotional experiences**, such as pride, moral gratification, or a sense of purpose, can substantially strengthen the affective appeal of sustainable consumption. Furthermore, businesses are encouraged to develop marketing narratives that enable consumers to **internalize sustainability as a key component of their self-concept**. Positioning individuals as “green consumers” who act in alignment with pro-environmental values may help bridge the **attitude-behavior gap**, thereby promoting consistency between beliefs and actions. Given that **egoistic values** (e.g., prestige or personal rewards) show limited influence on sustainable behavior, marketing efforts should **deprioritize purely self-serving appeals**. Instead, a **strategic integration of functional, emotional, social, and altruistic values** is recommended to enhance consumer engagement. Product developers should ensure that sustainable offerings are **holistically designed**, reflecting the diverse **value orientations** of environmentally conscious consumers. Embedding **social relevance, emotional resonance, and practical utility** into product design can significantly elevate consumer adoption and long-term loyalty.

Limitations and future research directions

This study has some limitations. First, data was collected from students only and that too from

university students. In order to better understand the millennial group, future studies should collect data from millennial other than students. Second, consumers of specific product or service such as garments, shoe, hotels, etc. were not analyzed in this study. It is suggested that future research studies should investigate one particular group of customers and compare them with each other. For example, what is the effect of these values on sustainable consumption behavior of customers of clothing and how are they different/similar to customers who buy food items? Third, data were collected from only one country. Future studies should extend this model to other countries. Fourth, in order to have a deeper understanding, boundary conditions such as moderating role of personality, self-efficacy, pro-environmental beliefs, environmental dynamism, should be examined.

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