

## Article

# Leveraging Buyers' Interest in ESG Investments through Sustainability Awareness

Muhammad Khuram Khalil <sup>1,2,\*</sup>  and Rashid Khalil <sup>1,3,\*</sup> <sup>1</sup> Department of Management Studies, Middle East College, Knowledge Oasis, Muscat 124, Oman<sup>2</sup> Faculty of Environmental Management, Prince of Songkla University, Songkhla 90110, Thailand<sup>3</sup> College of Business, University Utara Malaysia, Bukit Kayu Hitam 60610, Malaysia

\* Correspondence: mkhalil@mec.edu.om or khuramkhalil93@gmail.com (M.K.K.); rkhalil@mec.edu.om or rashid\_khalil@oyagsb.uum.edu.my (R.K.)

**Abstract:** Currently, organizations often take into consideration the environmental, social, and governance (ESG) principles by following a more inclusive approach together with potential other emerging practices that attract more consumers who have particular affiliations with the environment. This study investigates the influence of social and environmental sustainability awareness practices on impulse buying through a proposed set of hypotheses. The hypothetical model is based on (441) valid responses from Omani buyers via an online research survey. Data were processed using CFA and SEM techniques. Results indicate that social and environmental sustainability awareness has a productive relationship with green trust that strengthens impulse buying. Environmental sustainability awareness positively links with green altruism, which further enhances the impulse. By taking gender as a moderator, it has an encouraging impact on social and environmental sustainability awareness. Environmental sustainability awareness and green altruism have a constructive relationship within males rather than females. Based on the unique connection between sustainability practices and impulse buying, the current study's results indicate that if firms take appropriate steps to implement sustainability practices in their operations, sustainability commitment can promote the environmental and social well-being of consumers and the establishment of trust. Such practices enable companies to achieve their sustainability reporting goals and SDGs. Social and environmental sustainability practices protect from the harmful effects of social and environmental influences in mitigating the uncertainty of consumers' buying behavior. Such productive sustainability practices compel buyers to purchase products impulsively at premium prices. The study strongly recommends policymakers and marketers focusing on environmental and social sustainability awareness and green altruism.

**Keywords:** social sustainability awareness; environmental sustainability awareness; impulse buying; ESG; structural equation modeling



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## 1. Introduction

Consumers have shown their concerns about social and environmental safety in recent years due to the deleterious effects of COVID-19 and climate action. Consumers are aware of environmental degradation caused by the ingredients used for everyday product usage [1]. As the cause of environmental pollution and degradation, consumers have become seriously conscious about their consumption patterns for the protection of the environment, and their interest and intention toward sustainable offerings have grown to such an extent that they are ready to pay more for such products [2]. Apart from relying on and satisfying their personal needs in terms of social and environmental safety, the consumer has become a key concern [3]. There is a chance that the buyer's purchase decisions are likely to be influenced by this increasing awareness and their inclination toward impulse buying [4]. Furthermore, firms emphasize sustainability practices due to strict environmental regulation mechanisms and increasing stakeholders' pressure regarding environmental

sustainability [5]. Organizations voluntarily adopt social and environmental sustainability awareness practices in response to these emergent problems, including stakeholders' and consumers' expectations.

The sustainability practices have achieved remarkable attention [6–8]. Consequently, companies are striving for sustainability practices to meet the concern of consumers and to support the longevity, survival, and profitability of the company [9]. Moreover, the effective adoption of these social and environmental sustainability awareness activities enhances the brand image and reputation of the company in the public [10,11]. Certainly, it develops the trust of consumers and employees (Khan et al. 2019). In this regard, sustainable competitive advantage has been increased in the recent era of intense competition with rivalry markets. Consumers believe that a firm is responsible for environmental and social sustainability challenges, and they are more customer-oriented and have a loving commitment to the firm. There are several detailed intensions of the business in sustainability practices. Companies are engaged in environmental and social sustainability awareness practices to increase brand image and corporate identity as Microsoft and Coca-Cola introduce their sustainability practices and implementation processes for community social and environmental protection [12]. Furthermore, reputed luxury brands such as Gucci, Cartier, Armani, and Canelar are dedicated to social and environmental sustainability awareness practices in their marketing communication [13]. Hence, it is necessary to add a social and environmental sustainability awareness paradigm in measuring green altruism and trust for a better understanding of the impulse buying behavior of consumers.

The background of impulse buying 50 years ago was an emerging phenomenon. Unfortunately, the researchers have been far-flung to explore in-depth. It is recommended that the phenomenon of impulse buying is still very mysterious and needs further investigation [14]. The phenomena of impulse buying have been grouped into two concepts, the first one is consumer behavior, and the second one is psychology. In the last decades, psychologists have stated that consumers have varying tendencies regarding their impulse purchases. Economists have pointed out that impulse buying is an important source of revenue for the company. As suggested by Thürmer et al. [15], more than half of the buying of USA consumers between 18 to 20 is done impulsively.

Furthermore, in April 2020, the average spending of an American shopper for impulse buying was \$183, which is now up by 18% [16]. As reported by Muratore [17], 80% of consumers impulsively buy luxury products. It might have a positive psychological impact on the consumer to purchase the product impulsively. It is stated that impulse buying is influenced by internal and external stimuli such as situational, demographical, and product-related factors [18]. The more hedonistic product categories there are, the more consumers will buy impulsively [18]. Shoppers become more impulsive when they receive more discounts on products [17]. Researchers have discovered that the demographic factor of individuals, such as the education, gender, and age of shoppers, influence impulse purchases [19]). Impulse buying can be skewed by any effective strategy companies put specifically to receive customer considerations.

Prior studies have overlooked the exploration of sustainability in different industrial and academic streams. Most of these studies have focused only on the economic aspect of sustainability to maximize the wealth of investors and stakeholders, rather than on social and environmental sustainability practices. Economic sustainability usually refers to the long-term survival of companies rather than consumer welfare [20]. In this regard, we decided to ignore economic dimensions in the current study. Furthermore, sustainability and impulse buying have been discussed in different academic research in different streams. Unfortunately, researchers have been far-flung to explore the mutual relationship between sustainability practices and impulse buying. There is a research gap in aspects of sustainability practices and impulse buying. There is a shortage of research questions, and their answers, such as How do social and environmental sustainability awareness practices influence impulse buying? How will sustainability practices impact gender-based differences toward impulse buying? How do these edges embrace the consumer to purchase

the product of that organization? What is the major influence of altruism's pro-social and pro-environmental features on impulse buying?

There is a growing awareness that these two paradigms can have a mutual relationship. This is the aim of the current study: to explore the influence of sustainability practices on impulse buying. The study introduced two types of research problems. The first research problem originates in the recent era due to huge industrialization. The world outbreak of COVID-19 has had a worse impact on Omani firms' sustainability in the market. The second type of research is orientated within the fact that Omani consumers are quite unaware of the claims and benefits of social and environmental sustainability practices on their buying decisions due to little consideration or the non-implementation of social and environmental sustainability awareness practices in Omani firms. In response to these emerging problems, the current study adopted a novel framework of sustainability practices such as social and environmental sustainability awareness as mediators of green altruism and green trust to intend consumer impulse buying. Particularly, this study determines that social and environmental awareness has a positive impact on purchase intentions and a significant impact when environmental sustainability awareness, social sustainability awareness, and impulse buying intentions are assessed through green altruism and trust mediators [3]. Altruism is a powerful motivational factor that motivates consumers to purchase an eco-friendly brand with no negative environmental and social impact [21]. Further, altruism helps shoppers monitor their buying behavior to use the eco-friendly brand for sustainability development. As Hayat et al. [22] explained, half of the sales are done impulsively in shopping malls. Based on the arguments of prior studies, there is an increasing rate of impulse buying toward sustainable luxury brands. If the firms take more sustainability initiatives such as awareness and knowledge, this pattern attracts the shoppers to purchase products impulsively.

## 2. Literature Review

### 2.1. Theoretical Framework

The research study clearly explains that consumers' impulse buying behavior exaggerates different environmental and social problems. Therefore, our research tries to fill this gap by using the stakeholder theory demarcated with a new concept. Sustainability practices and stakeholder theory have been interconnected by defining the co-relationship between firms' social and environmental awareness toward consumers [23]. This theory was introduced by Freeman, who elaborated this theory on the perspective of firms. According to this theory, a stakeholder is any individual or group who can cause affect or effect, by gaining the organization's "objective". In this regard, it is also important that consumer suppliers can seek any action against directors who work as the firm's agent if they do not do their jobs effectively [24].

According to stakeholder theory, if firms want to be successful, they must share information and expectations of their primary stakeholders such as employees, government, and consumers [25]. The main stakeholders, such as employees, suppliers, consumers, and investors, would like to share their rewards with a company that has good sustainability practices by giving them support in business and sharing their criticism if the company only focuses on making a profit by becoming attached with sustainability activities [26,27]. A study conducted by Barnett et al. [28], supported the idea that 92% of consumers know that their behavior regarding purchases is influenced by the awareness of sustainability practices done by firms. It is a primary concern, and almost 86% of buyers think about health issues and the environment while considering a product. The study of Khalil and Muneenam [6] is based on the findings that consumers ranked social sustainability awareness as the basic element in sustainability practices that companies should understand. In addition, Carroll's study of sustainability describes that environmental sustainability awareness is also one of the main foundations of sustainability practices toward consumer satisfaction. Despite this, the consumers also feel dissatisfied if the company is not taking it seriously to keep their products away from environmental pollution. Today, consumers are highly aware of the

environment, which can be seen in their buying decisions. According to Parmar et al. [25], sustainability practices have four dimensions: social and environmental awareness is one of the most prominent dimensions, as well as the philanthropy, ethical, and legal dimensions. Social and environmental sustainability awareness practices are more important to be practiced over time for consumers. All organizations must perform sustainability practices in the future.

Khalil et al. [26] highlighted that the external sustainability tag of business influences consumers' purchase willingness. Thus, business community does not ignore the importance of sustainability awareness while making for their business. In this way, they can attract their consumer purchase behavior. They must contact their consumers and inform and motivate them about their related business activities through a different means of communication. It is a way to create a common understanding and coherence among certain issues [29]. If a firm is constantly in touch with the consumers, it has two positive impacts.

On the one hand, they can meet the need of consumers while increasing the consumers' purchase intention. Meeting the consumers' needs through the firms' social and environmental sustainability awareness practices can enhance consumers' motivation, social, economic, and environmental well-being, and consumer trust toward firms [30]. In this regard, stakeholder theory has two perspectives for symmetrical sustainability communication strategy: keeping in touch with the consumer and having collaborative and interactive communication. In this way, they can inform themselves about firm sustainability initiatives toward sustainable society development [31]. In addition, an organization's sustainability communication strategy with its buyers and suppliers can enhance the firm's marketing capability [32]. It has been shown that the organization's marketing capability positively impacts consumers' purchase ability and loyalty toward firms. In this way, a psychological bond is created between the firm and the consumer. This strategy can increase firms' sales by controlling the consumers' impulse buying behavior.

### *2.2. The Influencing Factors of Impulse Buying*

In previous research studies, researchers have indicated numerous factors which have remarkable effects on impulse buying. These factors which influence impulse buying can be described in four ways, i.e., external stimuli, internal stimuli, social interaction, and factors associated with product quality [33]. From a product-related point of view, these influence impulse buying. The key factors of impulse buying include product quality, product performance, and product price [34].

It is indicated that consumers exhibit a more impulsive response when they offer special discount offers on products while purchasing them (Muratore 2016). Before impulse buying, usually more than 85% of impulse purchasers check out all coupons or deals about products [35]. Furthermore, in the context of the external stimuli, the factors related to store atmospheres, such as sales staff, screen, colors, light, music, store cleanliness, impulse buying trends, and store crowd, stimulate the consumers to buy impulsively [36]. Social and individual personality traits (such as cognitive psychology value) significantly impact impulse buying. Concerning internal factors, consumer personality traits are greatly associated with impulse purchasing [37].

## **3. Hypothesis Development**

### *3.1. Social, Environmental Sustainability Awareness, and Green Trust*

Practitioners and researchers pay special attention to understanding the worth of social and environmental sustainability awareness practices. There are many ways through which researchers have determined social sustainability. Most of these social sustainability definitions acknowledge the fact that social sustainability is a human system that is based on a comprehensive set of core ethical values or principles (such as trust, justice, fair dealing, and equity) that further promotes the perpetual conditions for the welfare of human being and humanity, particularly for the most vulnerable groups or individuals [38]. In this regard, social sustainability cannot be confined to the sphere of just luxurious life but

also aims to avail the basic mandatory prerequisites to protect humanity from systematic collision [39]. Based on these arguments, the theme of sustainability has become the topmost priority for all sorts of luxurious life at the consumer and global levels. Previous studies have indicated that consumers are more concerned with the feature of the product, which has a particular social impact on them [40].

From the social system point of view, social sustainability purely identifies the worth of trust as the most dominant value in a vital human system [41]. Thus, it was clear that consumers were much more aware of the qualities in the domain of social sustainability than in any other domain [40]. In this way, social sustainability awareness enhances the trust and interest of consumers to pay more for purchasing products. Furthermore, Kim [42] identified that social sustainability exposure had positive effects in developing the trust of consumers and their understanding of the reputation of firms. Trust is positively linked to the buy-back intentions of consumers [43].

Similarly, Dhir et al. [44] stated that environmental sustainability awareness is directly and actively linked with the green trust of consumers. In this way, green trust actively promotes the willingness of consumers to consume eco-friendly products, which are being proven as environmental protection parameters [43]. Green trust contributes to the mediation and satisfaction of consumers through social and environmental sustainability awareness and impulse buying. In this context, the current research study employed the theory of planned behavior and integrative social contract theory.

According to Sila [45], integrative social contract theory inspires the consumer and predicts consumer behavior through which responsible corporate citizens must participate in performing their responsibility to meet the expectations of society. The aim of integrative social contract theory lies in taking prosperity-based initiatives such as free quality of education, good health and well-being of society, and philanthropy-based initiatives to strengthen firms, society, and consumers. For example, UK-based manufacturing firms have shifted their production units to generate self-protective items such as hand sanitizers, masks, and ventilators to donate their products rather than sell them [46]. Consumer trust is developed and promoted when firms take indicatives based on community social development in this context. In addition, trust greatly inspires consumers to buy the products impulsively [22].

Furthermore, the theory of planned behavior also facilitates consumers in creating environmental awareness and critical thinking regarding environmental protection and sustaining green products, which further creates positive thinking among consumers to buy products impulsively [47]. Therefore, the firms' exploration of environmental protection commitment also leads to the development of green trust among consumers. Hence, based on the above discussion, we propose:

**Hypothesis 1 (H1):** *Awareness of social sustainability has a positive association with green trust.*

**Hypothesis 2 (H2):** *Green trust is likely to increase impulse buying behavior of consumer.*

**Hypothesis 3 (H3):** *Awareness of environmental sustainability has a positive association green trust.*

### 3.2. Environmental Sustainability Awareness and Green Altruism

The idea of green altruism shows that it causes happiness to take care of other people. Green altruism is the practice of increasing society's social and environmental well-being without expecting any return [48]. Several studies have shown that environmental sustainability awareness also positively affects consumer purchase intention when the green altruism mediator examines social and environmental awareness [49]. For this purpose, green altruism is taken as a mediator. There has never been a study in which altruism has been a mediator influence on impulse buying. In this vein, altruism is expected to promote collaboration between the organization and the consumer [49]. Most pro-environmental and pro-social behavior can be explained in this way because of the unique nature of altru-

ism [50]. Awareness of the environment is an understanding of environmental problems and issues because environmental awareness has a profound effect on an individual's attitude toward purchasing environmentally friendly products which have no detrimental effect on the environment [51]. It is the moral responsibility of human beings to protect their environment [43]. It is noticed that different values play an important role in improving consumers' norms and behavior toward green products, and green altruism has a major impact on consumer purchasing intention [52]. It is also proposed that altruism directly and indirectly influences consumers' environmental norms that impact their intention to buy eco-friendly products [53]. This positive correlation between environmental awareness and green altruism leads to impulse buying behavior.

The current study emphasizes exploring the relationship between environmental sustainability awareness and impulse buying with green altruism in the light of motivational theory. According to Zheng et al. [54], based on motivation theory to understand the factors that influence consumers' motivation values and ultimately motivate them to buy impulsively. The basic theme of motivation theory is to seek consumers' reasons, motivations, and choices toward purchase intention. Motivational theory is classified into two motivational factors: extrinsic and intrinsic [55]. Intrinsic (internal) factors such as a natural fondness for the green environment and the positive environmental impact of intrinsic influence consumer motivation to create purchase intention for the green brand [56]. While extrinsic factors consider social stimuli such as social interaction and awareness to create extrinsic motivation to purchase the products because of company discounts or appreciation from friends, family, or society. Motivation theory proposes that the consumers' buying intention would increase when they had greater motivation through environmental and social stimuli. Furthermore, altruism motivates consumers to consume environmentally friendly products and enhances prestige and reputation [57]. Hence, we propose:

**Hypothesis 4 (H4):** *Awareness of environmental sustainability has a significant association with green altruism.*

**Hypothesis 5 (H5):** *Green altruism is likely to increase the impulse buying behavior of consumers.*

### 3.3. Gender as A Moderator

Researchers have identified gender as an important mediator variable for impulse buying motives [58]. We incorporated gender as a key moderator variable in the current study to fill the research gap. Because it is so important, it plays a vital role in influencing the relationship between sustainability practices and impulse buying. Furthermore, Parsad et al. [36] stated that gender is directly linked with impulse buying. From a psychologist's point of view, every single individual keeps a unique tendency to adopt and act impulsively. Numerous research studies on the impulse buying behavior of consumers indicate that buyers usually differ in their liking of impulse buying [19]. It has been proven that in purchasing luxurious products, women have been found as more impulsive buyers than men [37]. According to social role theory, generally, women focus more on the economic benefits of purchasing products than men [59]. In addition, women are more conscious, referencing and assessing the prices and rewards of products when they are engaged in impulse buying activities [42].

Meanwhile, women are more concerned about intangible rewards and are also more likely to receive the benefits of sale promotions in impulse buying [52]. The male participant has shown a greater tendency of impulse purchasing and using new products in the context of environmental protection than women [15]. One group may attract itself toward activities associated with financial advantages, while the second group may demand the firms to establish sustainability practices [47]. It has been verified from the theory of planned behavior that an individual establishes their general perception, mindset, inner subjective norms, and behavioral social approach. In addition, it was also observed that

men were more engaged in impulse buying than women [35]. Hence, we proposed the following hypotheses:

**Hypothesis 1a (H1a).** *The moderation effect of gender positively influence social sustainability awareness and green trust.*

**Hypothesis 2a (H2a).** *The moderation effect of gender positively influence environmental sustainability awareness and green trust.*

**Hypothesis 3a (H3a).** *The moderation effect of gender positively influence green trust and impulse buying.*

**Hypothesis 4a (H4a).** *The moderation effect of gender positively influence environmental sustainability awareness green altruism.*

**Hypothesis 5a (H5a).** *The moderation effect of gender positively influence green altruism and impulse buying.*

#### 4. Research Methodology

This empirical study took two broader sustainability practices: environmental and social sustainability awareness. In the current era, the awareness of sustainability is growing among consumers. Therefore, the services providers need to know the dynamic preferences of the consumers [60]. The measurement of this study was divided into three sections. Independent variables of study such as environmental and social sustainability awareness were included in the first section. The four items of social sustainability awareness were adopted from [3]. The mediators and dependent variables are included in section two, such as green trust and green altruism. The four items of green trust were adopted from [61]. Three items of green altruism were adopted from [62]. The five-items of impulse buying were adopted from [63]. The third section is included. In addition, socio-economic characteristics such as gender, age, income, and respondents' 'education' were controlled for possible alternative effects on our model [64].

##### *Questionnaire and Data Collection Method*

All the above-listed constructs contain at least four items. The first questionnaire was formulated in English and then translated into the local language. To ensure the validity of the content, two experts re-translated it into English [65]. In this study, a five-point Likert scale was used to measure the questionnaire material from 'strongly disagree' to 'strongly agree'. All the organized research questionnaires of this study were posted on the Google form. This free online survey platform is widely adopted in current academic research. According to data reported [66], by the end of 2021, 95.2% of the young population will become regular internet users. The target population for the current study was university students and young consumers of Oman. It has been observed that younger shoppers are more impulsive than older ones. The demographic details of the participants are: 77.3% male and 27.7% female. The participants by age group are: 28.8% less than 20 years, 20–30 years formed 61.9%, and 30–40 years 8.2%, respectively. Out of 441 participants, 20.2% have intermediate education, 39.2% hold a bachelor's degree, and 36.3% have a master's degree. We could have approached 700 concerned shoppers through purposive sampling. The target population of 700 was sampled at a 95% confidence level with a  $\pm 5\%$  confidence interval, meaning the sample size was 250 respondents or more. Out of 700, only 451 responses were received through the online survey method. Six out of eleven resulted in extreme missing values, and five participants only filled two values for one variable. After a critical evaluation, a total of 441 responses were considered for valid analysis.

## 5. Results and Analysis

### 5.1. Reliability and Validity of Data

A Cronbach's alpha was employed to check the accuracy and reliability of data. As shown in Table 1, Cronbach's alpha values were greater than the threshold value of 0.70 and considered acceptable based on Zameer et al. [67] recommendation. Similarly, CFA was utilized to measure the factors' interrelationships. Model fitness was also checked through CFA analysis such as GFI (0.90), CFI (0.93), AGFI (0.87), NFI (0.88), CMIN/DF (2.015), RMR (0.06), and RMSEA (0.48), and considered acceptable following Zaman et al. [67], see in Table 2. Further, we employed a structural equation modeling (SEM) approach via AMOS 21 for theoretical framework analysis. Based on previous studies, SEM provides better estimation results as compared to other approaches [68,69]. To draw comprehensive conclusions from the current study, communicating social and environmental sustainability awareness practices on impulse buying, we applied SPSS and AMOS 21 for empirical analysis. We adopted a structural equation model using Amos 21 and used the two-step process of analysis below [69]. First, we performed a confirmatory factor analysis (CFA) to test the validity of the measurement. Second, we used a structural equation model to test our proposed hypotheses simultaneously. Bacon et al. [70] explained that large samples were unusually used for AMOS. SEM applications published to fit the model are typically used in 200–400 cases where 10–15 variables are observed. Baron and Kenny [71] explained the generally accepted method for estimating mediation moderation (the term they introduced), which shows the interaction effect of Y and X and W, on Y, introducing the mediator of that effect. Biesanz et al. [72] proposed that the partial posterior method is believed to have strong power for measuring mediation, but this method has not been commonly adopted. However, SEM is widely used. Falk and Biesanz [73] reported that the partial posterior technique is also said to be a part of SEM. Therefore, for the indirect approach and mediation evaluation, structural equation modeling was used in this study.

**Table 1.** Statistical measures of constructs.

Constructs	Items	Cronbach' Alpha	Factor Loadings	AVE	CV
Social Sustainability Awareness	I am aware that the firms are carefully implementing social practices for social development.	0.847	0.70	0.52	0.848
	I am aware that my personal safety and health is affected due to the products I use.		0.67		
	I believe that social influence can enhance the awareness of an individual his/her about environment.		0.71		
	I will not buy that product because I am aware product is not updated according to my social needs.		0.72		
	I believe that some products serve as community development.		0.81		
Environmental Sustainability Awareness	I know about my personal obligations toward climate change and the environment.	0.887	0.71	0.56	0.88
	I am aware that overall environmental levels of awareness can be influenced by individuals.		0.71		
	I am aware of environmental problems, and I always try to purchase products that are not harmful for my family to use.		0.77		
	I always buy that product because I am aware environmental and ethical impact of that product.		0.74		
	I am aware of the environmental changes that the whole world is going through.		0.77		
	I believe that green items save energy and are less harmful.		0.80		

Table 1. Cont.

Constructs	Items	Cronbach' Alpha	Factor Loadings	AVE	CV
Green Altruism	I always feel proud when I utilize green products.	0.857	0.70	0.50	0.85
	I am always cooperative with others to solve the social issues in the society.		0.76		
	I believe that green consumption will help future generations protect the environment and aid the well-being of society.		0.77		
	I always give direction to strangers.		0.60		
	I often buy green products as I think I am accomplishing my task for society.		0.68		
	I have donated goods with concerns for others' well-being.		0.70		
Green Trust	I believe that green environmental images of products are usually reliable.	0.854	0.77	0.52	0.86
	I believe that overall, the environmental claims of the product are generally trustable.		0.77		
	I believe that the performance of the brand is in accordance with my ethical expectations.		0.73		
	I always believe that an organization that is engaged in sustainability practices is fully transparent.		0.67		
	When an organization steps forward for the welfare of society and the betterment of environment, it will be trustworthy for me to purchase its items without prior planning.		0.66		
Impulse Buying	I always purchase the products spontaneously.	0.831	0.85	0.51	0.86
	I always purchase the products without prior planning.		0.67		
	"I look it" describes me: I purchase it.		0.64		
	Usually when I go shopping, I also buy things which I had not intended to buy.		0.67		
	I like to purchase things impatiently.		0.75		
	Suddenly, when I absorb that a firm is engaged in environmental initiatives, I will buy the product without prior thinking.		0.68		

Table 2. Model fitness.

Index	Value Measured	Cut-Off Value	Benchmark Study	Decision
CFI	0.99	>0.90	Bentler [69]	Adequate
GFI	0.99	>0.80	Hu and Bentler [74]	Adequate
NFI	0.98	>0.90	Anderson and Gerbing [75]	Adequate
TLI	0.97	>0.75	Sivo et al. [76]	Adequate
RMR		<0.08	Byrne [77]	Adequate
RMSEA	0.05	<0.06	MacCallum et al. [78]	Adequate
CMIN/DF	2.426	<5.0	Zameer et al. [67]	Adequate

### 5.2. Model Analysis

To develop a theoretical model with social and environmental sustainability awareness practices on impulse buying, we initially developed model A to check the mediation of green altruism green trust with social and environmental sustainability awareness to explore consumer impulse buying behavior.

Model B is developed to investigate the moderator effect of gender on impulse buying with the mediation effect of green trust and green altruism shown in Table 2. All the

resultant values obtained from both models meet the standard of goodness fit index values, which were quite authentic and satisfactory. The results of model as  $CMIN/DF = 2.426$ ,  $CFI = 0.994$ ,  $NFI = 0.989$ ,  $GFI = 0.993$ ,  $TLI = 0.978$ ,  $RMSEA = 0.057$ . The above-mentioned calculated values met the threshold and the standardized estimated values [61].

### 5.3. Hypotheses Testing

The results indicated that social sustainability awareness had a positive association with green trust mentioned in Figure 1 and Table 3. H1 and H2 are accepted between estimated standardized values ( $\beta$  is 0.12,  $p$  is 0.002) of social sustainability awareness along with green trust and the estimated standard values ( $\beta$  value is 0.316,  $p < 0.000$ ) of green trust along with impulse buying. Missimer et al. [39] recommended that firms raise their social sustainability awareness to guarantee the good health and safety of the consumer along with developing self-esteem (within the family, friend, and social group) and in return, to promote the consumer's trust toward the firm. Certainly, this social sustainability communication strategy inspires the individual to make impulse purchases. H3 and H2 are accepted between the estimated standards values ( $\beta$  is 0.60 and  $p$  is 0.000) of environmental sustainability awareness along with the estimated standards values of green trust ( $\beta$  is 0.31 and  $p$  is 0.000). Environmental sustainability awareness positively influences green trust, and H3 and H2 are significant. In this context where the firms are replicating their environmental sustainability awareness, this provides solid evidence for consumers that firms are strongly committed to protecting the environment from the harmful effects of climate action changes and global warming threats. These eco-friendly initiatives create consumer green trust [79]. These green imitations taken by firms regarding environmental protection are a major source of impulse buying. H4 is accepted with estimated standard values as ( $\beta$  is 0.603 and  $p$  is 0.000).

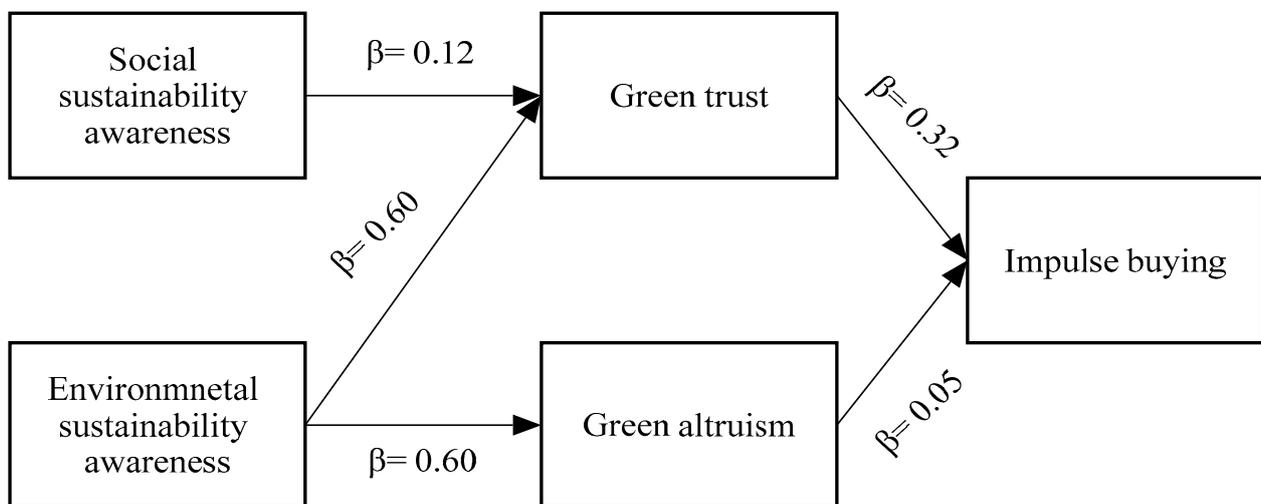


Figure 1. Estimated path.

Table 3. Hypothesis testing.

Hypothesis Testing		B	SE	CR	p	Decision
H1	Social sustainability awareness→green trust	0.12	0.042	3.03	0.002	Supported
H2	Green trust→impulse buying	0.31	0.107	15.85	0.000	Supported
H3	Environmental sustainability awareness→green trust	0.60	0.024	14.821	0.000	Supported
H4	Environmental sustainability awareness→green altruism	0.60	0.047	0.865	0.000	Supported
H5	Green altruism→impulse buying	0.046	0.227	5.921	0.387	Rejected

The relationship between environmental sustainability awareness and green altruism is very encouraging in this regard. Zhang et al. [80] stated that when an altruistic indi-

vidual observes that an organization seriously executes its environmental sustainability responsibility, it will be preferable to purchase products from such green altruism trusted firms. Green altruism promotes consumers' feelings of positivity, happiness, and satisfaction. Consumers engage with firms involved in executing awareness practices such as environmental sustainability [81].

Therefore, the effects of the altruism traits of individuals, such as love and belonging, on self-environmental responsibility result in consumers buying and using the brands of these firms impulsively. H4 and H5 are rejected because they do not meet the standard values, such as H5, where  $\beta$  is 0.046 and  $p$  is 0.387, wherein  $p$  is higher than the standard values. The effect of altruism on Omani societies was found in social recognition rather than pro-environmental intention, and was more influenced when they received appreciation from social actors and discounted products or coupons [82]. In this, there is no relationship between green altruism and impulse buying.

#### 5.4. Moderation Analysis

Mediating variables are variables that interfere with the influence between two variables. In the current research, the authors studied how gender moderates the effect of social environmental sustainability awareness, green trust, and green altruism on impulse buying. There was no relationship between green altruism impulse buying and impulse buying in Omani people's (women) gender seen in Figure 2 and Table 4. The standardized estimated values of H5a  $\beta$  is 0.22,  $p < 0.024$ , and the estimated values of H4a  $\beta$  are  $-0.005$ ,  $p < 0.949$ . Thus, H5a and H4a are insignificant. Li et al. [59] stated that Omani (men) have a greater level of green altruism, but Omani (women) are more risk averse and greatly influenced by social benefits more than the value of social benefits. Omani (women) give more importance to social benefits (when firms offer gifts, prizes, bonuses, and price discount offers). Thus, in this context of the external motivation of firms, it inspires them to buy the products Li et al. [47].

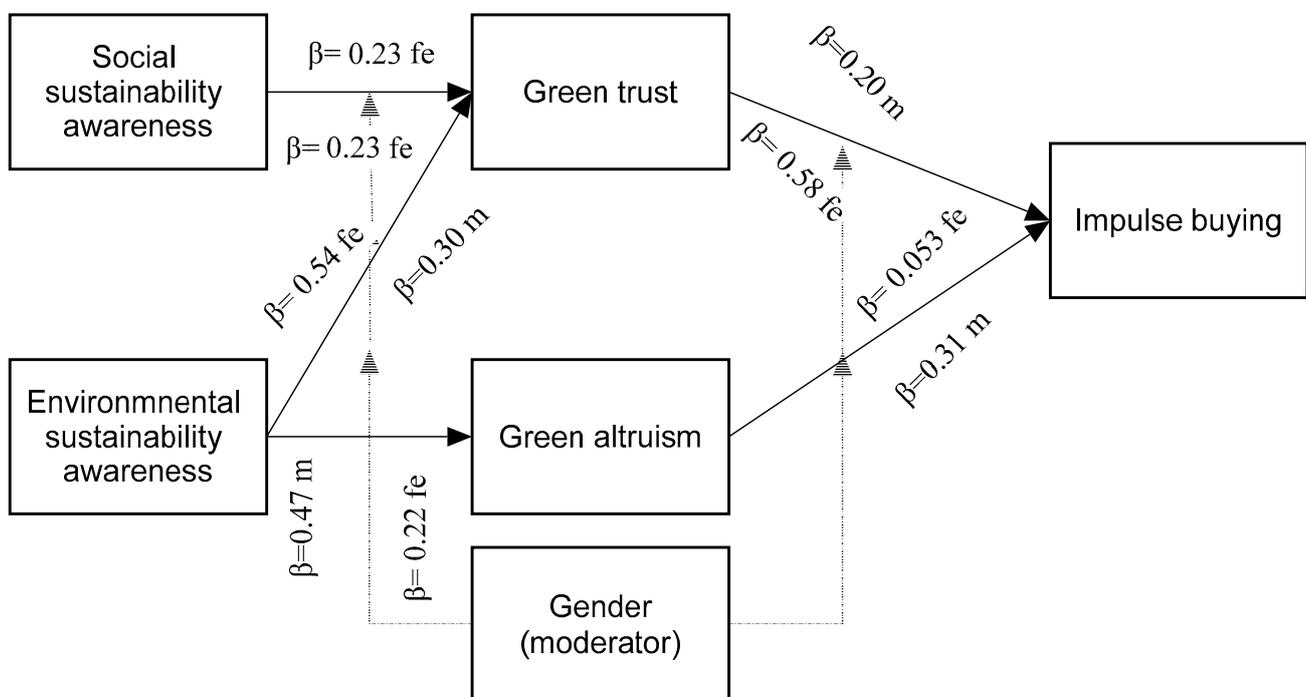


Figure 2. Estimated path with moderation.

Therefore, there is no mutual relationship between our proposed hypothesis that green altruism and impulse buying in the context of women are rejected. H4a and H5a are accepted between estimated standardize values ( $\beta$  is 0.468,  $p < 0.000$  and H5a  $\beta$  is 0.308

$p < 0.000$ ). H4a and H5a are significant. There is a mutual relationship between green altruism and impulse buying in Omani men. Omani individuals are famous for their affection for green altruism in terms of environmental benefits and tend to be interested in them while shopping [80].

**Table 4.** Moderation analysis.

Gender Moderation Influence (Female)		B	SE	CR	<i>p</i>	Decision
H1a	Social sustainability awareness→green trust	0.23	0.085	3.023	0.003	Supported
H2a	Green trust→impulse buying	0.58	0.125	6.761	0.000	Supported
H3a	Environmental sustainability awareness→green trust	0.54	0.62	6.794	0.000	Supported
H4a	Green altruism→impulse buying	−0.005	0.096	−0.064	0.949	Rejected
H5a	Environmental sustainability awareness→green altruism.	0.22	0.100	2.257	0.024	Supported
Gender Moderation Influence (Male)						
H1a	Social sustainability awareness→green trust	0.16	0.050	3.23	0.000	Supported
H2a	Environmental sustainability awareness→green trust	0.30	0.043	5.80	0.000	Supported
H3a	Green trust→impulse buying	0.19	0.060	3.60	0.000	Supported
H4a	Environmental sustainability awareness→green altruism	0.46	0.044	9.76	0.000	Supported
H5a	Green altruism→impulse buying	0.30	0.054	5.68	0.000	Supported

In this sense of green thinking, males make more impulse buying decisions. The standardized estimation values between social sustainability awareness and green respectively male and female are 0.16 and 0.23, and the values between green trust and impulse are 0.58 and 0.19. Thus, hypotheses H1a and H2a are accepted. When organizations take initiatives in terms of the social well-being of consumers and society, such as the development of green societies Lu Zhang et al. [80] in these aspects, Omani consumers usually harmonize more with these initiatives of firms, which leads to the development of consumer trust that motivates them to buy products impulsively. Similarly, the standardized estimation of green trust and environmental sustainability for males and females is 0.30 and 0.54, and the values between green trust and impulse buying are 0.580 and 0.195. According to Kim [41], the green trust of consumers has been greatly enhanced through the establishment of environmental sustainability centers for firms taking responsibility toward protecting the environment through proper handling of industrial wastes and climate change action, which has a significant effect on consumers to buy products impulsively.

## 6. Conclusions

This present study, with a novel idea of sustainability practices, was conducted to investigate the impact of sustainability (social and environmental) awareness practices on green trust and green altruism to find how sustainability awareness practices affect the impulse buying behavior of consumers. According to the best of our knowledge, no research study is present on the impacts of social and environmental awareness practices on impulse buying. Based on the unique connection between sustainability practices and impulse buying, our research results indicated that if firms take appropriate steps to implement sustainability practices in their operations, then sustainability commitment will promote the environmental and social well-being of consumers and the establishment of trust. Such practices enable organizations to achieve their sustainability reporting goals and SDGs. ESG and environmental sustainability practices protect from the harmful effects of social and environmental influences in mitigating the uncertainty of consumers' buying behavior. Such productive sustainability practices compel buyers to purchase products impulsively at premium prices. The outcomes of the research also confirms that social and environmental awareness practices have greatly influenced the emotional mindset of consumers. Thus, the firms must adopt such practices to attract the intention and feelings of consumers'. Their objectives should be to enhance the self-interest of consumers in their impulse buying behavior rather than external benefits.

## 7. Theoretical Implication

Today, consumers' buying decisions have become completely dependent on the availability of the social and environmental sustainability information they received or observed from different sources during a panic situation. Thus, this study develops valuable information on the research topic, and shares a better understanding of and places importance on various initiatives in the context of the impulse buying behavior of consumers. In today's studies, no open discussion has been found to inform consumers about social and environmental sustainability awareness and develop the willingness and purpose of consumers' impulse buying. Several research studies have been executed on sustainability practices and the impulse buying behavior of consumers in the stream of acquisition of an interest in different situations. Still, no mutual relationship between sustainability practices and the impulse buying of consumers was found. To fulfill this huge reach gap, green altruism and green trust have been taken as the mediators to find out the effect of social and environmental sustainability awareness practices on the impulse buying behavior of consumers. This is the crucial theoretical contribution of our current research study. This important combination of variables builds the consumer's trust, and environmental affection makes them impulse buyers.

In this regard, green altruism plays an imperative role in promoting consumer green thinking, leading to pro-environmental intention that compels the buyer to buy products impulsively [18]. This psychology of consumers generates firms' brand evangelism as well [54]. Furthermore, it is suggested that numerous environmental and social issues have been increased, so consumers have become more conscious about product selection and the protection of their environment as well. Our study's two major sustainability practices positively encourage a relationship with consumer trust. This mechanism represents the special relationship between the organization's responsibility to provide environmental and social awareness, with the mediation effects of green trust, green altruism, and impulse buying. Our research affirms that consumers do not care about charity benefits or less price/discounted products. They prefer social and environmental sustainable protection. The investigation of this research is significantly helpful for managerial personnel in making strategic and sustainable planning to meet the current and future needs of consumers and achieve the aims of sustainable development goals (SDGs).

### 7.1. Managerial Implication

Immense advancement in industrial growth with inadequate sustainable practices, particularly in South Asia, has rectified the ecological degradation and consumption of wastage. These ineffective industrial sustainable practices adversely affect consumers' consumption and buying patterns. That is why firms must give more importance to buying behavior, preference, and domestic requirement of consumers in the rivalry competitive market along with the performance of organizations in terms of social and environmental sustainability awareness practices. Furthermore, firms need to retain the trust and satisfaction of consumers in a critical panic situation. In this scenario, we have developed a novel theoretical model to explore the effects of social and environmental sustainability awareness practices on impulse buying and the mediation effect of green trust and green altruism. Our research findings indicated that social and environmental sustainability awareness practices positively influence green trust that inspires consumers to buy the product impulsively.

Furthermore, environmental sustainability awareness has a significant influence on green altruism. The traits of consumers in terms of attraction to green altruism with green initiatives of firms enable them to become more impulse buyers. Our research findings indicate significant insights for marketers, government, organizations, and policymakers. The organization emphasized the need to strengthen its social and environmental protection by executing effective commitments to sustainability practices.

This commitment will be achieved through reducing industrial wastage, controlling hazardous emissions of CO<sub>2</sub>, and energy saving. In this regard, firms' managerial authori-

ties must focus on transforming their traditional operational patterns into eco-innovation initiatives, including social and environmental sustainability. In addition, firms should pay more serious attention to promoting environmental and social awareness along with TBL awareness among the consumers to avail guidance for consumers to align their purchase behavior with environmental and social protection concerns. Similarly, the following outcomes of our research study must be considered by marketing managers when designing ads. Firstly, product features must be highlighted and promote awareness of the green environment, which will solve the issues associated with social and environmental sustainability. For instance, the hair oil advertisement of Merico effectively highlighted the fact that when customers buy the product of their company (Panda et al. [3], they contribute toward solving social sustainability issues such as educating poor children) Further, HUL is engaged in promoting awareness among the public that resources are not equally accessible to all, and those who avail the access must utilize these resources most appropriately. That is why social and environmental sustainability awareness enables consumers to buy the products impulsively.

Secondly, the marketing managers identify the self-motivated buyers to engage them in green landscaping activities such as establishing a clean and green environment through indoor and outdoor beautification, and practically participating in tree plantation and growing perennials (plants, trees, and flowers). Consumers respond quite willingly to such green social and environmental marketing initiatives. Such social and environmental awareness conveys the message that firms are responsible for sustaining a green, clean, and healthy environment, and providing a hygienically green working environment. Ultimately, this mechanism completely fulfils the expectations and requirements of stakeholders, society, employees, and consumers. Thus, sustainability practices in terms of social and environmental awareness are significant for an organization in developing a prominent image of the organization and inspiring the consumers to buy the products impulsively.

Meanwhile, the offers such as green rewards, bonuses, discounts, free recreational trips, and appreciation of products greatly motivate consumers to buy the products impulsively [42]. In this scenario, we recommend promoting these green rewards to achieve green trust and green altruism, including protection from the current situation of social and environmental deterioration. In addition, on behalf of the current model analysis, it has been observed that green trust and green altruism certainly contribute a significant role to fulfilling the research gap. Furthermore, research findings have suggested that marketers should adopt green trust and green altruism as an appropriate marketing communication strategy for both existing and potential consumers to buy the products impulsively. Green altruism inspires consumers to buy the products impulsively and has a prominent impact on green brand evangelism. In this scenario, firms can acquire the potential to achieve their competitive edge and save their marketing expenses.

### *7.2. Research Limitations and Future Directions*

Although this current research study presents innovative contributions, some limitation still exists there despite such a contribution, such as this study emphasizing only two sustainability practices (i.e., social and environmental awareness). Furthermore, it is quite unfair to say that sustainability practices have no further implication or significant impact on the impulse buying behavior of the consumer. Meanwhile, this research has been conducted within the context of the consumer's point of view rather than the marketer's point of view. In addition, the use of other sustainability practices such as economic sustainability awareness when executed in developing countries will certainly make it able to achieve diversified outcomes shortly.

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