Antecedents and Mediating Role of Green Buying Behavior

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Abstract

Sustainability of the environment is one of the major issues both in developed and developing countries. There is an abundance of studies on green buying behavior. However, a few have studied the mediating role of green buying behavior. Thus, we have developed a new model that has five direct and three mediating relationships. This empirical research has used a snowball sampling technique for collecting the data. We distributed 400 questionnaires and received 377 valid responses. The study has used Smart PLS software for data analysis, including reliability, validity, and generating measurement and structural models. We found that green brands, green identification, and social influence are significant predictors of green buying behavior. Further, we find that the green brand image and green buying behavior promote green satisfaction. The results also suggest that green buying behavior mediates (1) green image and green satisfaction, (2) social influence and green buying behavior, (3) self-identification, and green satisfaction. We also found that consumers have a favorable attitude towards green buying behavior. However, there is a huge gap in consumers' attitude and actual buying behavior. Thus, marketers and practitioners need to develop strategies that would translate a favorable attitude towards actual buying behavior.

Keywords: *Green marketing, social influence, green brand image, self-actualization, green satisfaction.*

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Introduction

Economic development has increased consumers' affluence and contributed to global warming, depletion of natural resources, and acid rain (Joshi & Rahman, 2016). Consequently, firms' awareness of environmental sustainability has also increased significantly (Huang & Kung, 2011). Consumers also tend to have a favorable attitude towards brands that produce environment-friendly products (Moser, 2015; Dabija, Bejan & Grant, 2018). Thus, governments, policymakers, and NGOs in several countries encourage consumers to use environment-friendly products. Many countries also give tax rebates to firms that produce green products (Moser, 2015). Realizing its importance, many firms now allocate considerable resources to green branding. These firms understand that spending resources towards environment-friendly products will give them a competitive edge over others.

Green marketing, also known as environmental marketing, consists of "all marketing activities related to promoting environment-friendly products" (Dangelico & Vocalelli, 2017). Many researchers believe that green marketing is a tool that satisfies both consumers and organizational goals related to a sustainable environment (Groening, Sarkis & Zhu, 2018). Thus, firms that pursue green marketing ensure that their "product pricing, placement, and promotion " strategies focus on green marketing (Papadas, Avlonitis & Carrigan, 2017). There is an abundance of studies on green marketing. However, a few of them have identified the mediating roles of green buying behavior on green satisfaction. To fill this gap, we have developed a new model with five direct and three mediating relationships.

Literature Review

The literature on green buying suggests that factors such as psychographic, culture, and social norms promote favorable attitudes towards environment-friendly products. Many past studies have extended attitude models, including the Theory of Planned Behavior (TPB), to examine the effect of "norms, social influence, and behavioral control" on consumers' attitudes towards green marketing (Kim & Chung, 2011). For example, Kalafatis et al. (1999) develop a model based on the Theory of Planned Behavior, empirically tested on British and Greek consumers. The study concluded that both social norms and attitudes promote the purchase intention of environment-friendly products. Similarly, another comparative empirical research found that both Chinese and American consumers' attitude towards green products depends on factors such as "subjective norms, group conformance, and perceived behavioral control." The study also found that as compared to Chinese consumers, American consumers have a firm belief towards "saving resources" and tend to pay higher prices for environment-friendly products (Chan & Lau, 2002). The study also found that the gap between purchase

intentions and actual buying behavior for green products was less in American consumers than Chinese consumers. It also concluded that social norms are a strong predictor of green attitude for Chinese consumers compared to American consumers (Chan & Lau, 2002). Another empirical research on Korean consumers has documented that "injunctive norms and descriptive norms" promote environment-friendly behavior, while personal norms have a mediating effect on environment-friendly behavior (Park & Sohn, 2012).

Given the theoretical support, we have also extended the Theory of Planned Behavior for understanding consumers' green buying behavior. The developed model has five direct and three mediating relationships, depicted in Figure 1.
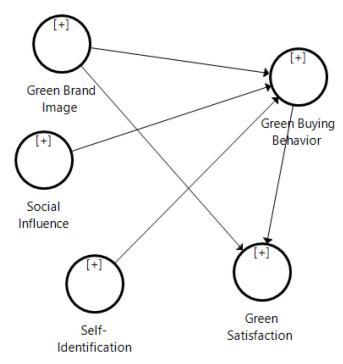

Figure 1: Conceptual Framework

Hypothesis Development

Green Brand Image and Green Buying Behavior

A brand that uses environment-friendly packaging and raw materials has a strong green image. A green image gives a competitive edge to a brand and motivates consumers to purchase environment-friendly products (Chen, Huang, Wang & Chen,

2020). Additionally, the green image also allows firms to penetrate in segments where conventional products cannot enter due to their product attributes. Chen, Hung, Wang, Huang, and Liao (2017) argue that a brand that adopts green marketing enhances its image and promotes purchase intentions. Thus, in the long run, both firms and brand benefits in terms of sustainability and growth.

Many past studies have examined the association between green brand image and green buying behavior and found that a green brand image is a significant precursor to green buying behavior (Gonçalves, Lourenço & Silva, 2016; Bukhari, Rana & Bhatti, 2017). Empirical research from Canada found that consumers who prefer a sustainable environment have a positive image of laundry products that use environment-friendly ingredients (Cherian & Jacob, 2012). Similarly, an empirical study found that Spanish consumers have a high opinion of a brand that promotes green marketing, translating into a positive buying behavior (Hartmann, Ibáñez & Sainz, 2005). Similarly, Rios et al. (2006), based on an empirical survey in Spain, concluded that consumers who are concerned about environmental sustainability have a favorable attitude towards brands that use eco-friendly products and packaging. A study on electronics products in Taiwan concluded that "green brand image, green satisfaction, and green trust are positively related to green brand equity." Thus, for sustainable growth and enhancing brand loyalty, firms should allocate considerable resources towards developing eco-friendly products (Qalati, Li, Mirani, Sohu, Hussain & Ahmed, 2020; Butt, Mushtaq, Afzal, Khong, Ong, & Ng, 2017).

H1: Green brand image promotes green buying behavior.

Green Brand Image and Green Satisfaction

In the present era, the market has become highly competitive, which has made it difficult for brands to differentiate themselves based on tangible factors (Bekk, Spörrle, Hedjasie, & Kerschreiter, 2016). Thus, many brands focus on enhancing their image, which is intangible and unique; therefore, competitors cannot imitate it. Brand image is consumers' perception of a brand's value proposition (Chen, 2010; Khandelwal, Kulshreshtha & Tripathi, 2019). Brand image is inclusive of "functional benefits, symbolic benefits, and experiential benefits." While extending this concept of brand image, many researchers have conceptualized green brand image as "a set of perceptions of a brand in a consumer's mind that links environmental commitments and environmental concerns." (Chen, Tien, Lee & Tsai, 2016). On the other hand, green satisfaction is "a pleasurable level of consumption-related fulfillment to satisfy a customer's environmental desires, sustainable expectations, and green needs" (Chen, Huang, Wang & Chen, 2020). Thus, many researchers believe that promoting a green brand image will satisfy consumers

concerned about environmental decay and significantly contribute to sustainable growth (Hwang, Cho & Kim, 2019).

For example, Corrigan (1996) pointed out that Ireland's growth increased since promoting a green image. Similarly, Hu and Wall (2005) suggest that countries that have focused on projecting an environment-friendly image have benefited from tourism growth. Consumers' concerns about environmental sustainability have increased significantly; therefore, they prioritize visiting those countries that promote an eco-friendly environment. Hwang, Cho & Kim (2019) indicate that firms that focus on the green image may not only have a competitive edge, but such firms would also be able to develop sustainable relationships with consumers. Therefore, we believe that firms that promote green marketing would have a strong base of satisfied customers concerned about eco-friendly products.

H2: Green brand image promotes green satisfaction.

Green Buying Behavior and Green Satisfaction

Consumer's green buying behavior refers to purchasing environment-friendly products. Consumers with a high orientation towards a sustainable environment not only buy green products, but they are also willing to pay premium prices for them (Wang, Wang, Xue, Wang & Li, 2018). Such consumers are not only satisfied with eco-friendly products, but they also motivate others to purchase them. There are many conceptualizations of green products (Juliana, Djakasaputra & Pramono, 2020). Most researchers believe that green products "have minimum carbon emissions, product packaging is decomposable, and product disposal itself is eco-friendly as it may not increase waste" (Imaningsih, Tjiptoherijanto, Heruwasto & Aruan, 2019).

Many past studies have extended the Theory of Planned Behavior for understanding the association between green buying behavior and green satisfaction attitude. They found that both are positively associated (Paul, Modi & Patel, 2016). Yadav and Pathak (2017) suggest that consumers do not appreciate firms that claim that they are concerned about the environment but do not practice green marketing. Green consumers are dissatisfied with such firms, but they also stop purchasing products of such firms (Chen, Tien, Lee & Tsai, 2016).

Pinzone, Guerci, Lettieri & Huisingh (2019) argue that green consumers not only focus on the ecological standards of a product, but they also see how their consumption behavior affects the environment. The authors also found that factors that contribute towards green buying behavior and green satisfaction are norms, values, and purchase

intentions. Joshi and Rahman (2015) indicate that green buying behavior also depends on factors such as "price, product availability, and green image." Additionally, they also suggest that consumers concerned about environmental and social problems motivate consumers to buy green products, and they are more satisfied by purchasing such products. Acebrón, Mangin & Dopico (2001) found that green buying and green satisfaction also depends on factors such as "consumers' habits, personal experience, and brand image."

Consumers' buying behavior depends on their needs, desire, and purchasing power (Binder & Blankenberg, 2017). Green consumers, as compared to other consumers, demand products that not only satisfy their personal needs but also their psychological needs (i.e., the products that are not harmful to the environment). Firms that can meet these social and psychological needs of green consumers will have a strong base of loyal and satisfied consumers.

H3: Green buying behavior promotes green satisfaction.

Self-Identification and Green Buying Behavior
Green self-identity, also known as "self-identity or personal identity" is a critical factor motivating consumers to buy environmentally friendly products. Self-identity indicates "how the individual perceives himself" (Gilal, et al., 2020). The two critical facets of self-identity in eco-friendly behavior are "generic and specific" behavior. Both of them individually and collectively affect consumers' environment-friendly behavior. Generic green self-identity refers to "consumers' overall self-perception based on their mental alignment with green consumers" (Jonell, Crona, Brown, Rönnbäck & Troell, 2016). Whereas, behavior-specific self-identity refers to "an individual's self-perception based on potential engagement in specific eco-friendly behavior, such as purchasing environment-friendly products" (Yusof, Awang, Jusoff & Ibrahim, 2017).

Gonçalves, Lourenço, and Silva (2016) suggest that environment-friendly products (EFP) satisfy consumers' self-identification needs and increase their satisfaction. Past research has documented the association "between self-identity and environment-friendly behavior." For example, Confente, Scarpi, and Russo (2020) argue that consumers who believe in consuming recyclable products tend to purchase more of them in comparison to others. Similarly, Sparks and Shepherd (1992) suggest that consumers who consider themselves "green consumers" have a favorable attitude towards organic foods.

H4: Self-Identification promotes green buying behavior.

Social Influence and Green Buying Behavior

Social influence is an individual's or group's ability to change others' attitudes and behavior in society. Given its importance, many marketers use this strategy for promoting their brands (Clark, Haytko, Hermans & Simmers, 2019). Many studies have documented that social influence is a strong predictor of green buying behavior (Varshneya, Pandey & Das, 2017; Johnstone & Hooper, 2016). Consumers concerned about environmental sustainability have a higher inclination to buy environment-friendly products and motivate others to accept them (Khare, 2019).

Consumers often buy green products because they want to affiliate themselves with people concerned about environment-friendly products. Associating themselves with such individuals enhances their self-esteem (Gonçalves, Lourenço & Silva, 2016). Consumers' green buying behavior also depends on their lifestyle and ethical values. For example, Jansson (2011) found that Swedish consumers' lifestyle is a predictor of environment-friendly products. A study on Egyptian consumers concluded that green consumption behavior depends on antecedents, such as altruistic values and concerns about a sustainable environment (Mostafa & El-Masry, 2013). Many consumers are skeptical about the functional performance of green products.

Additionally, consumers often are not able to distinguish between green and non-green products. Thus, social influence is important to (1) convince such consumers about the functional quality of green brands, and (2) help such consumers distinguish between green and non-green products (Khare, 2019). Clark, Haytko, Hermans, and Simmers (2019) found that early adopters of green products' norms and attitudes significantly differ from others. Thus, they suggest that consumers may develop a favorable attitude towards green products if they are less complex and easy to use. Thøgersen and Ölander (2003), in a study in Denmark, found that Danish consumer attitudes towards green products depend on universal personal values and concerns about a sustainable environment. Chan (2001) believe that antecedents such as "social influence, environmental concern, self-image, and perceived environmental responsibility" motivates adolescents to develop a favorable attitude towards environment-friendly products.

H5: Social influence promotes green buying behavior.

Indirect Hypothesis

Differentiation and sustainability of a brand based on functional attributes have become difficult as competitors quickly imitate tangible features (Chen, Huang, Wang & Chen, 2020). Given these constraints, many firms rely on intangible aspects such as brand image, which is unique and difficult to imitate. Past empirical studies on green

buying behavior have documented a "positive association between green brand image and green buying behavior" (Gonçalves, Lourenço & Silva, 2016). Cherian & Jacob (2012) found that consumers in Canada prefer to purchase those laundry products whose ingredients and packaging are eco-friendly. Similarly, Rios et al. (2006) based on an empirical survey found that Spanish consumers have a favorable attitude towards brands that adhere to environmental considerations.

Green consumers are satisfied with those brands that follow prescribed environment-friendly requirements. Additionally, such consumers ensure that their consumption patterns do not adversely affect the environment. There are several antecedents to green buying and green satisfaction, including society's norms and values. Many individuals do not have a favorable attitude toward green products as they do not have the cultural support for eco-friendly products (Paul, Modi & Patel, 2016). Despite having an optimistic attitude towards green products, many consumers cannot buy them due to their non-availability and non-affordability. Thus, to satisfy such consumers' needs, firms should ensure that their environment-friendly products are not very expensive (Chen, Tien, Lee & Tsai, 2016).

Self-identify is consumers' self-perception towards goods or services (Gilal, et al., 2020). Eco-friendly consumers have a favorable attitude toward green products. Similarly, consumers who have an optimistic attitude towards green products also consume them (Gonçalves, Lourenço, and Silva, 2016). Environment-friendly products affect consumers in two ways. They satisfy consumers' self-identification needs and personal satisfaction needs (Confente, Scarpi & Russo, 2020). Much past literature supports the association "between self-identity and environment-friendly behavior" (Sparks & Shepherd, 1992). Consumers concerned about environment-friendly products also prefer to consume recyclable products (Yusof, Awang, Jusoff & Ibrahim, 2017). Moreover, such individuals also like to consume organic foods (Sparks & Shepherd, 1992; Gilal et al., 2020).

Consumers' consumption behavior, besides other factors, is also affected by social influence (Clark, Haytko, Hermans & Simmers, 2019). Many studies have documented that social influence, directly and indirectly, affects green buying behavior (Khare, 2019). Marketers of conventional products usually focus on the target market for enhancing sales. Green marketers can also use the same strategy (Gonçalves, Lourenço, & Silva, 2016). Many studies have documented that all the facets of social influence, such as "peer pressure, obedience, leadership, persuasion, sales, and marketing" individually and collectively affect green buying behavior (Clark, Haytko, Hermans & Simmers, 2019). Most societies respect consumers who have a favorable attitude towards green products. Thus, many consumers buy green products as they believe that others will

respect them (Johnstone & Hooper, 2016).

Based on the above discussion, we have formulated the following indirect hypotheses:

H6: Green buying behavior mediates the relationship between green brand image and green satisfaction.

H7: Green buying behavior mediates the relationship between self-identification and green satisfaction.

H8: Green buying behavior mediates the relationship between social influence and green satisfaction.

Methodology

Population and Sample Size
This research's main objective was to examine consumers' attitudes towards green buying behavior in Mirpur, Azad Kashmir, Pakistan. Mirpur city is prosperous as compared to other cities of Pakistan due to foreign remittances from European countries. This study is cross-sectional and quantitative in nature. We distributed 400 questionnaires in 25 districts of Mirpur, of which we received 377 responses. The study used the snowball sampling technique for sampling purposes.

The respondents' profile indicates that 70% had at least one of their family members settled in Europe. We found that 30% of respondents' monthly household income is in the range of Rs. 30,000 to Rs. 40,000, while 30% had a household income from Rs.40,000 to Rs.50,000, 25% respondents' had a household income from Rs.50,000 to Rs.60,000, and the remaining 15% respondents' had a household income more than Rs.60,000. The male respondents were 55%, and females were 45%. About 55% of the respondents were single, and the rest were married. We found that 30% were in the age category of 18 to 25 years, 30% in the range of 26 to 35 years, and the rest were more than 35 years old. The profile also suggests that 50% of the respondents had an intermediate level of education, 30% had a bachelor's degree, and 20% had at least a master's education level. The respondent profile also suggests that 40% of the respondents have traveled to a foreign country at least once.

Scales and Measures
The questionnaire used in the study has two parts. Part one relates to demographics, which is on a nominal scale. The second part had five latent variables and 27 indicator

variables. This part of the questionnaire is based on the "Five-point Likert Scale, where one represents highly disagree, and five represents highly agree." The constructs used in the study had established internal consistency. Their Cronbach's Alpha values in the previous studies range between 0.75 to 0.85. A summary of constructs showing sources and the number of items is exhibited in Table 1.

Table 1: Constructs

Construct	Source	Items	Reliability Values*
Green Brand Image	Keller & Lane (1993)	5	0.70 to 0.87
Green Satisfaction	Oliver (1996)	4	0.76 to 0.90
Green Buying Behavior	Nath et al., (2013)	9	0.80 to 0.89
Social Influence	Teoh & Gaur (2018)	4	0.79 to 0.85
Self-Identification	Khare (2015)	5	0.70 to 0.84

Results

Descriptive Analysis

We have presented the results related to the descriptive analysis in Table 2, including univariate normality, internal consistency, and convergent validity.

Table 2: Descriptive Analysis

	Cronbach's Alpha	Mean	SD	Kurtosis	Skewness	Composite Reliability	AVE
Green Brand Image	0.848	3.860	1.130	1.870	1.450	0.908	0.768
Green Buying Beh.	0.882	3.891	1.341	-0.971	1.060	0.914	0.682
Green Satisfaction	0.862	4.253	1.172	-1.432	-1.330	0.899	0.642
Self-Identification	0.843	3.773	1.998	1.440	1.501	0.894	0.678
Social Influence	0.896	4.152	1.762	0.982	-0.981	0.928	0.763

The results illustrated in Table 2 show that the Skewness (SK) values range from -0.981 to 1.450. Skewness is highest for the construct green brand image (SK =1.450, Mean= 3.860, SD= 1.130), and the lowest for social influence (SK =-0.981, Mean= 4.152, SD= 1.762). Conversely, Kurtosis (KR) values range from -1.432 to 1.870. Kurtosis is lowest for green satisfaction (KR= -1.432, Mean= 4.253, SD=1.172), and the highest for green brand image (KR= 1.870, Mean =3.860, SD=1.130). Given these results, we have inferred that the constructs meet the requirements of univariate normality.

The study assessed internal consistency based on Cronbach's Alpha values, which range from 0.843 to 0.896. It is lowest for self-identification (α=0.843, Mean=3.773,

SD=1.998), and highest for social influence (α=0.896, Mean=4.152, SD=1.762). As all the Cronbach's Alpha values are greater than 0.60; therefore, we believe that the adopted constructs have required internal consistency (Ursachi et al., 2015). We also found that the highest AVE is for the construct green brand image (AVE=0.768, Mean=3.860, SD=1.130), and the lowest for the construct green satisfaction (AVE=0.642, Mean= 4.253, SD=1.172). Furthermore, the lowest composite reliability (CR) is for self-identification (CR=0.894, Mean= 3.773, SD=1.998) and highest for social influence (CR=0.928, Mean=4.52, SD=1.762). Given the composite reliability and AVE values, we have inferred that the theoretical relationships exist between latent and indicator variables (Kline, 2015).

Confirmatory Factor Analysis

The results related to CFA are illustrated in Table 3.

Table 3: Confirmatory Factor Analysis

	Green Brand Image	Green Buying Behavior	Green Satisfaction	Self Identification	Social Influence
1	0.872				
2	0.916				
3	0.839				
4	0.856				
5	0.801				
6		0.85			
7		0.895			
8		0.82			
9		0.773			
10		0.784			
11			0.839		
12			0.825		
13			0.788		
14			0.809		
15			0.74		
16				0.795	
17				0.825	
18				0.855	
19				0.818	
20				0.823	
21					0.892

22	0.875
23	0.903
24	0.822
25	0.802

The factor loadings of all the respective constructs' indicator variables are greater than 0.60, suggesting that they have a theoretical association.

SEM Results

The study has proposed five direct relationships and three indirect hypotheses tested through Smart PLS (bootstrapping). The summarized results are illustrated in Table 4, while the measurement and structural models are exhibited in Figures 2 & 3, respectively.

Table 4: Direct & Indirect Effects

	Beta	T Stat.	P Values	Results
Gr. Br. Image -> Gr. Buying Beh. (H1)	0.356	15.287	0	Accepted
Gr. Br. Image -> Green Satisfaction (H2)	0.171	6.16	0	Accepted
Gr. Buying Beh. -> Gr. Sat. (H3)	0.596	22.1	0	Accepted
Self-Identification -> Gr. Buying Beh. (H4)	0.146	6.962	0	Accepted
Social Influence -> Gr. Buying Beh. (H5)	0.428	17.223	0	Accepted
Gr. Br. Image -> Gr. Buying Beh. -> Gr. Sat. (H6)	0.212	12.197	0	Accepted
Self- Indent. -> Gr. Buying Beh. -> Gr. Sat. (H7)	0.087	6.336	0	Accepted
Social Influence -> Gr. Buying Beh. -> Gr. Sat.(H8)	0.255	14.551	0	Accepted

The results in the above Table show that all the relationships are significant at the 95% confidence level. Therefore, we have accepted all five direct and three indirect hypotheses.
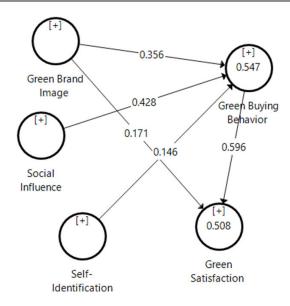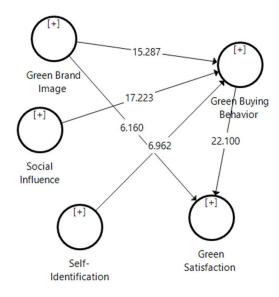
Figure 2: Measurement Model

Figure 3: Structural Model

Discussion

Based on theoretical support, we have proposed five direct hypotheses and three indirect hypotheses, which we empirically tested on data collected from Mirpur, Azad

Kashmir. The study has discussed the findings and their relevance to past literature in the following sections.

Hypothesis 1 states that "green brand image and green buying behavior are positively associated." The findings are in line with past empirical literature supporting this association (Chen, Huang, Wang & Chen, 2020; Gonçalves, Lourenço & Silva, 2016). For example, a study found that Canadian consumers prefer environmentally friendly brands (Cherian & Jacob, 2012). Conversely, Hartmann, Ibáñez, and Sainz (2005) found that Spanish consumers have a serious concern about environmental sustainability. Thus they prefer brands that use eco-friendly raw materials and packaging. A survey of electronic products in Taiwan concluded that "green brand image, green satisfaction, and green trust are positively related to green brand equity." Thus, firms that allocate resources on developing green products benefit in many ways. They can enhance their brand image and establish a sustainable relationship with customers. It also helps firms increase their performance and market share (Butt, Mushtaq, Afzal, Khong, Ong & Ng, 2017).

Our results support hypothesis 2, which states that "green brand image and green satisfaction are positively associated." Many past studies have documented that consumers' favorable attitude towards the environment positively correlates with the green image (Paul, Modi & Patel, 2016; Chen, Tien, Lee & Tsai, 2016). Joshi and Rahman (2015) suggest that consumers concerned about the environment have a strong willingness to pay a higher price for environment-friendly brands. A study documented that one of the reasons for the growth of tourism in Ireland was that it invested heavily in environmental sustainability (Corrigan, 1996). Similarly, Hu and Wall (2005) indicate that countries that have projected an environment-friendly image have benefited from tourism growth. Firms that realize consumers' concerns about environmental sustainability have started adopting eco-friendly practices. These efforts give firms a competitive edge and enhance their brand image (Chen, Tien, Lee & Tsai, 2016).

Hypothesis 3 postulates that "consumer buying behavior stimulates green satisfaction." Green consumers ensure that raw materials and packaging of products are environment friendly. Such consumers purchase green products themselves and inspire their friends and family to buy them (Paul, Modi & Patel, 2016). Yadav and Pathak (2017) found that some firms claim to have a higher orientation toward a sustainable environment. But in reality, their practices are not eco-friendly. This may hurt the reputation of firms. Green consumers have the following characteristics. They consume green products and also inspire others to buy them. They also ensure that their consumption behavior is not harmful to the environment (Chen, Tien, Lee & Tsai, 2016).

Hypothesis 4 states that "self-identification promotes green buying behavior." Our results are consistent with many earlier studies that also found that self-identification is a predictor of green buying behavior (Yusof, Awang, Jusoff & Ibrahim, 2017). An environment-friendly product affects consumers in two ways. It satisfies consumers' self-identification and personal needs (Confente, Scarpi & Russo, 2020). Gilal et al., (2020) and others based on empirical evidence have concluded, concluded that a high correlation exists between "self-identity and environment-friendly behavior" (Gilal et al., 2020). Such consumers have a high inclination to use recycled products than others (Confente, Scarpi & Russo, 2020). Moreover, consumers that value green consumption tend to buy organic food (Sparks & Shepherd, 1992).

We also found that "social influence affects green buying behavior," which is consistent with earlier studies (Varshneya, Pandey & Das, 2017; Johnstone & Hooper, 2016). Lifestyle and ethical values are essential facets of social influence. Both factors individually and collectively affect green buying behavior (Jansson, 2011). Empirical research on Egyptian consumers concluded that green consumption behavior depends on antecedents, such as altruistic values and concern for a sustainable environment (Mostafa, & El-Masry, 2013). Jansson (2011) suggests that some consumers believe that green products' functional performance is inferior to conventional products. Also, many consumers cannot differentiate between green products and traditional products. Thus, researchers recommend that firms practicing green marketing should focus on certain issues. They should improve consumer quality perception and educate consumers on why they should consume environment-friendly products (Khare, 2019). Early adopters of green products are innovative by nature; therefore, for them, it does not matter whether a green product is easy to use or not. However, late adopters are less innovative than early adopters. Thus, to motivate late adopters, the firm should ensure that the green product is easy to use (Clark, Haytko, Hermans & Simmers, 2019). The share of early adopters is nominal. Therefore, firms should target late adopters to increase the consumption of green brands. Chen et al. (2016) argues that antecedents such as "social influence, environmental concern, self-image, and perceived environmental responsibility" motivate adolescents to buy environment-friendly products.

Conclusion

Sustainability of the environment has become a problematic issue across the world. Given its significance, we have developed a new model that has five direct and three mediating relationships. We found that a green brand, green identification, and social influence are significant predictors of green buying behavior. Furthermore, green brand image and green buying behavior promote green satisfaction. The results also suggest that green buying behavior mediates (1) green image and green satisfaction, (2) social

influence and green buying behavior, (3) self-identification and green-satisfaction. The overall awareness of environmental sustainability in recent years has increased significantly. However, it has not increased the consumption of environment-friendly products. Factors such as high cost, non-availability, and low-quality perception about green products have contributed towards the low consumption of green products. Thus, policymakers and firms must focus on these issues to motivate consumers towards environment-friendly products.

Limitations and Future Research

The study has examined consumer attitudes towards green products based on a sample collected from one city, i.e., Mirpur. Future studies may extend the developed conceptual framework in other cities of Pakistan. Ethical considerations, moral values, and culture are important in green marketing and were beyond this study's scope. Other researchers may examine the effects of these factors on green marketing. Early adopters and late adopters have a different attitude towards products in general. Future studies can explore the perspectives of early and late adopters. We did not consider demographic factors. Future studies may examine how the attitude toward green marketing varies according to demographics.

Annexure 1

Green Brand

You can distinguish green brands in comparison to other brands because of their environmental commitment

Green brands have a strong reputation towards a sustainable environment

Some environmental characteristics of a green brand come in your mind when you consider a brans

You can quickly recall the green image of a green brand

You can easily recognize a green brand because of its environmental concern

Green Satisfaction

You are happy about the decision to choose this brand because of its environment commitment

You believe it is right to purchase this brand because of its environmental performance

Overall you are glad to buy this brand it is environment friendly

If you are happy to choose this because of its environment-friendly commitment

Green Buying Behavior

I buy green products because environmental awareness has increased

I buy green products because of green advertisement

I buy green products because of echo labeling

I buy green products because of peer groups

I buy green products because of legal enforcement

I buy green products because of tax credits

In my opinion, individuals by green product due to increased education level

In my opinion, most consumers buy green products positive change towards a sustainable environment

I buy a green product as it has a high perceived effectiveness

Social Influence

I learned so much about eco-friendly products from my friends and family,

Most members of my family will expect me to buy eco -friendly product,

I will follow the advice that I should buy eco-friendly products,

My friends recommend me that I should buy an eco-friendly product

Self-Identification

I read labels to see if contents are environmentally safe

I avoid buying products from companies who are not environmentally responsible

I recycle bottles, cans or glass

I compost garden waste

I take my bags to the market

I contribute money to environmental causes

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