



RESEARCH PAPER

Promoting Green Purchase Behavior among the Youth: A Goal Framing Theory Perspective

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ABSTRACT

All nations are confronting environmental hazards like climate disruption, ecospheric warming, and other hazards. Ecological deterioration has become an obstacle for the whole planet. Studies results suggest that the main contributors of environmental pollution are unsustainable consumption. In this research we explore how individuals can be inspired to adopt green purchase behavior through the Goal framing theory perspective. The GFT is an environmental psychology theory which motivates individuals to adopt sustainable consumption behavior by adopting its goal frames. In this study we explore the behavior of youth in adopting sustainable behavior. Data was collected from the main cities of Pakistan and were able to collect 485 surveys. Out of these some of the responses were rejected and then we were left with 449 respondents. The survey result shows that the most important goals influencing green purchase behavior were normative goals and hedonic goals. Gain goals was also significant but in an indirect way. Another variable e-worm did not positively moderate between normative goals and green purchase behavior. The study has many implications which are very crucial in comprehending the customer psychology in green purchase intention.

KEYWORDS Goal Framing Theory, Green Consumption, Gain Goals, Normative Goal, Hedonic Goals, Global Warming, Climate Change, E-Word of Mouth

Introduction

The contemporary survey of Intergovernmental Panel on Climate Change (IPCC, Portner et al., 2022) suggests that the public faces a broad array of ecological hazards, consisting of weather alteration, damage to ecological diversity, and overall warming. Furthermore, the report and other prior studies suggest that there is an imminent need to take action and one of the key difficulty is altering customer buying and consumption habits (Aschemann-witzel et al., 2019; Portner et al., 2022; Willett et al., 2019). Stimulating user behavior change is hard, as consumers claim to give worth to the environment, they refrain from immersing in green consumption behavior. This has been termed as the attitude-action inconsistency (Elhaffar et al., 2020). Furthermore, individuals display discrepancies in their utilization of organic food (Onwezen, 2022) and in their inspiration in different settings (for e.g.in home or outside) (Verain et al., 2021). Therefore, individuals are not always persistent as they assert to value the environment however their actions are not in conformity with what they value. It is very important to comprehend these contradictions to back green consumption (Prothero et al., 2011). We suggest that the discrepancies in consumer behavior are not because the consumers are illogical, but it is in harmony with goal framing theory which explains that varied goals are activated at diverse point in time. We suggest that the goal framing theory has the capacity to comprehend the consumer discrepancy in behavior and further back green consumption behavior.

Eco friendly devouring has become very important for both academics and specialists (Idrees et al., 2021). Non-eco friendly utilization has formed hazardous influence not only on the ecology but also on individual health (Hameed et al., 2021; Yadav & Pathak, 2016). Food particularly organic food, is the key cause of energy i.e. (supplier of nutrients) and aids in preserving the essential health of the people. Therefore, it is necessary that the crop cultivation must be properly manipulated to conserve the habitat (Fleseriu et al., 2020). Organic food production refers to producing food without synthetic compost and insecticides or breeding animals without steroids or growth hormones drugs (Seyfang, 2006). Manufacturing without synthetic chemicals benefits not only the environment but also reduces the consumption of energy by 40% (Bostan et al., 2019).

The top five organic food manufacturers in the world are USA, China, Spain, Austria and Argentina (FIBL, 2018). With global sales around US \$ 90 billion in 2016 90% of the natural food is being eaten up by the advanced countries (Asif et al., 2018), however, the global south or the less developed nations have very low utilization of organic goods (Akbar et al., 2019). The organic food usage is very low in Pakistan as compared to high income nations and this unhealthy consumption results in several ailments (Mughal & Faisal, 2018).

The economic survey of Pakistan (2020-2021) recommends the farming industry as playing a critical role. The sector contributes 20% to the GDP and gives 38.5% job openings. Moreover, livestock, is an evolving branch of agriculture, contributing around 60% to the supply chain enhancement of agriculture and 11.5% to the GDP (M. H. Khan, 2021). Other available statistics depict natural farming in Pakistan is contributing only 0.1% to the global manufacture. Therefore, encouraging the right devouring demeanor will increase the manufacturing and utilization of natural food in the country.

This research adopts the environmental psychological viewpoint and is based on hedonic, normative and affective scope of a person's organic devouring behavior. The Goal framing theory brings all the three goals (gain, hedonic and normative) in one context. These aspirations control the individual manners in a particular context. The Goal framing theory suggests that the principal goal holds the inspiration and reasoning process and is dependent on the situational and environmental clues.

Individuals in emerging nations eat organic food for several reasons some of which are care for the atmosphere and wellness (Akbar et al., 2019). The demand and accelerated expansion of organic products calls for a emphasize on the advertising of needed user inspirations (Hameed et al., 2019). There are fewer quantitative studies available in the organic food consumption discussing consumer inspiration in the context of Pakistan. We contend that endorsing the correct etiquettes will give necessary outcomes not only for users but for manufactures of natural food.

Literature Review

Gain Goals

Consumer purchase selections are intricate and their attitude plays a crucial role in assessing a good (Keller, 2001). Consumer behavior is shaped by cognitive inspirations (Kim et al., 2007). This research assumes the three inspirations deliberated by the Goal Framing Theory (GFT), namely gain, hedonic and normative. The term "to protect and advance one's possessions" has been utilized in GFT for gain goal in the situation of eco-friendly conduct (Lindenberg & Steg, 2007a). Gain goals make individuals conscious about prospects and hazards and aid people enhance their possessions (Chakraborty et al., 2017). Hameed & Khan (2020) suggests that the emphasis of the gain goal is to expertly use the prevailing capabilities and avert them from lessening. Improving individual gains is a significant inspiration in the green utilization situation (Bamberg et al., 2015; Bamberg & Möser, 2007).

Various concepts are connected to this goal to safeguard individual belongings such as cost and benefit i.e. the theory of planned behavior (Ajzen, 1991). The TPB believes that selfishness of the people inspires them and they involve themselves in the loss and gains of substitutes (Waris & Hameed, 2020). Furthermore, the behavior is the aftermath of aims and many factors influence purposes. One of the influencing factors of intentions is attitude, which is a positive and negative assessment i.e. cost and benefit. Many environmental related researches have effectively proven that attitude is a crucial contributor to the behavior or intention (Jaiswal & Kant, 2018; Yadav & Pathak, 2016). The GFT assumes that individuals are inclined to involve themselves in sustainable behavior when they feel that the advantages outweigh the costs. So we construct the following hypothesis:

H1: Gain goals positively influence green purchase intentions

H2: Intentions positively mediate between gain goals and behavior

Hedonic Goals

Lindenberg (2001) describes hedonic goals as to “feel well”. The idea has been additionally explained in GFT as to “experience wellness at current moment”. Hedonic goals are associated to some means and these means transpire in accomplishing societal and bodily relief (Etienne, 2011). Thus, this goal can be accomplished by upgrading the sentiments or spirits of the person(s). Customer feelings such as delight, dignity, embarrassment, repentance, etc are conditions of sensible feelings and result from any external stimuli or assessment (Baumeister et al., 2007; Watson & Spence, 2007). This research assumes favorable feelings i.e self-confidence, contentment, and enthusiasm as likely future feelings, since customers struggle for encouraging feelings and avert damaging ones derived from their choices (Connolly & Zeelenberg, 2002). The attention of these goals is restricted, once the needed state of a person is accomplished or enhanced, the goals are reached (Frijda et al., 1989).

Mirica (2018) suggested that customer sentiments are a crucial element of their purchasing performance. Rezvani et al. (2018) established hedonic goals as a correct forecaster of green buying manner. When hedonic goals were analyzed in a relative research of household and hotel settings it was found to be more appropriate in the resort atmosphere (Miao & Wei, 2013). The researchers discovered that green consumption behavior during travel was dependent on consumer moods as traveling sometimes compromised luxury and delight. Rezvani & Jansson (2016) confirmed that constructive sentiments are to be emphasized than the adverse emotions as they have a substantial effect on green utilization. This research utilizes hedonic goals as a mediating variable between gain and normative goals and buying intentions. In a prior study Schuitema et al. (2013) have utilized hedonic goals as a mediating variable between utilitarian values and etiquettes. The outcomes of the research reveals that constructive gain goals encouraged elevated expectations that influenced intention. hat constructive gain goals have a positive influence on the ecological behavior.

Research on constructive and undesirable attitudes was carried out by Rezvani and Jansson (2016), who deduced that optimistic sentiments are to be emphasized than the unfavorable sentiments since their impact is high on green behavior. Based on the model of Steg et al., (2014) this research uses hedonic goals as a mediating variable linking gain, normative goals, and buying intentions. The second intervening role of hedonic goals was suggested between normative goals and user intentions (Hameed & Khan, 2020). Onwezen et al. (2013) suggested that normative goals are the assessment of green utilization, which may produce expected sentiments. Additionally, the authors suggested that when individual norms and conduct are consistent, hedonic goals can be activated, impacting the intentions. Their research outcome suggested a constructive relationship between normative goals and aims in the setting of organic food.

H3: Hedonic goals positively influence green purchase intentions

H4: Hedonic goals positively mediate between gain goals and intentions

H5: Hedonic goals positively mediate between normative goals and intentions

Normative Goals

Lindenberg (2001) describes normative goals from the environmental psychology perspective as to “perform suitably”. This idea was derived from the Norm Activation Model (Schwartz, 1977) which states the greater the degree of personal norms activation in an individual, the higher the chances of evolving green purchases (Onwezen et al., 2013). The NAM emphasized that individual norms vary from communal norms in the manner that personal norms are related to individuals and vary from person to person, however societal norms are associated to a communal group. Thøgersen (2002) suggested that individual norms is the logic for buyer selection between ecological or non-ecological utilization. Hameed & Khan (2020) categorized varied functions of individual norms in a green consumption setting. Miao & Wei (2013) findings suggested individual norms as a critical element in forecasting green performance in home context. Chakraborty et al. (2017) findings also suggested a significant function of normative goals in stimulating green purchase intentions.

Consumer while buying organic food may be concerned about their health and therefore, their feelings may be directed by consideration for eco-friendliness to impact the conduct (Hameed & Khan, 2020; Harland et al., 1999). A research carried out by DeGroot & Steg (2009) stated that moral norms are very closely connected to green purchase intentions. Out of all the three goals normative goals are the most crucially connected to green purchase demeanor. Onwezen et al. (2013) suggested that if etiquettes and customs are consistent, hedonic goals can also be stimulated, therefore a likelihood of interactive relationship exists.

Khan et al. (2022) findings suggested normative goals to be the dominant predictor of intentions to purchase hybrid cars. The study results also showed that normative goals not only influenced green purchase behavior but also reported a positive mediating relationship via hedonic goals to impact green purchase intentions. The same results very reported direct and indirect both in low-price goods (Khan et al., 2023). Thus, we suggest the subsequent hypothesis:

H6: Normative goals positively influence green purchase intentions

H7: Hedonic goals positively mediate between normative goals and green purchase behavior

Electronic Word of Mouth

Electronic Word of Mouth is the term used to define web-based discussions, assessments, and recommendation on green practices, environmentally friendly brands, and goods (Ding et al., 2024). Consumers express their views on different online platforms like online forum, blogs, and online product evaluation to tell their fondness concerning environmentally responsive goods (Erkan & Evans, 2016). Since e-WOM is easily available and everlasting in the digital world, it has a considerable influence on consumer decision process as compared to traditional word of mouth (Nguyena et al., 2025). The e-WOM is more relied upon as compared to advertisements, it is obvious that e-WOM is important in persuading consumer attitudes. Consumers are inclined to rely on consumer created content, professional comments, and peer evaluations when evaluating the accuracy of a brand’s conservational assurance (Habib & Hamadneh, 2021). This aspect is specifically

applicable in the realm of green marketing where doubts about green washing (incorrect sustainability assertion) weakens consumer trust (Ding et al., 2024). This suggests that the foundation of e-WOM like friends, professionals or trustworthy influencers have a very important role in forming shopper green purchase behavior.

H8: Electronic Word of Mouth positively moderates between Normative goals and Green purchase behavior

Green Purchase Intentions

Green Purchase Intentions describes an individual’s upcoming tendency to buy goods that are consistent with ecological protection (Nelson Geovany Carrión Bósquez et al., 2023). Ecological buying intention is the prologue to behavior and it mentions an intentional action plan that guides a person to achieve a particular goal (Sheng et al., 2019). As intention is the first step to buying, several scholars have established attitude as a crucial factor impacting the intention to buy a green product (Ndofirepi & Matema, 2019). Scholarly literature has used different words like “green consumption”, “green buying”, “acceptance of environmental goods” to define the various buying behaviors that are consistent with the conservation of the environment (Nelson Geovany Carrión Bósquez et al., 2023). Ecological consumption is referred to as eco-friendly attitude and cognizance of environmentally conscious hazards (Sun et al., 2018). Liobikienė & Bernatoniene, (2017) suggest that green devouring does not emphasize on reducing the acquiring of goods by shoppers, its key goal is to lessen the ecological influence.

Various past researches have approved that ecological conservation has directed end-users to actively contribute in ecological utilization (Kashif et al., 2017; Wang et al., 2016). Moreover, there is a wide opening between green purchase intent and behavior (Bósquez & Arias-Bolzmann, 2022). Conversely, millennials are considered the largest population who are concerned about the environment and they are more inclined towards goods that are ecologically friendly (Bósquez & Arias-Bolzmann, 2022). Millennials are considered to be more environmentally friendly, and they also try to influence others to accept similar buying patterns, and this can be verified by their special interest in this particular consumption (Nelson Geovany Carrión Bósquez et al., 2023)

H9: Green Purchase Intentions Influences Green Purchase Behavior

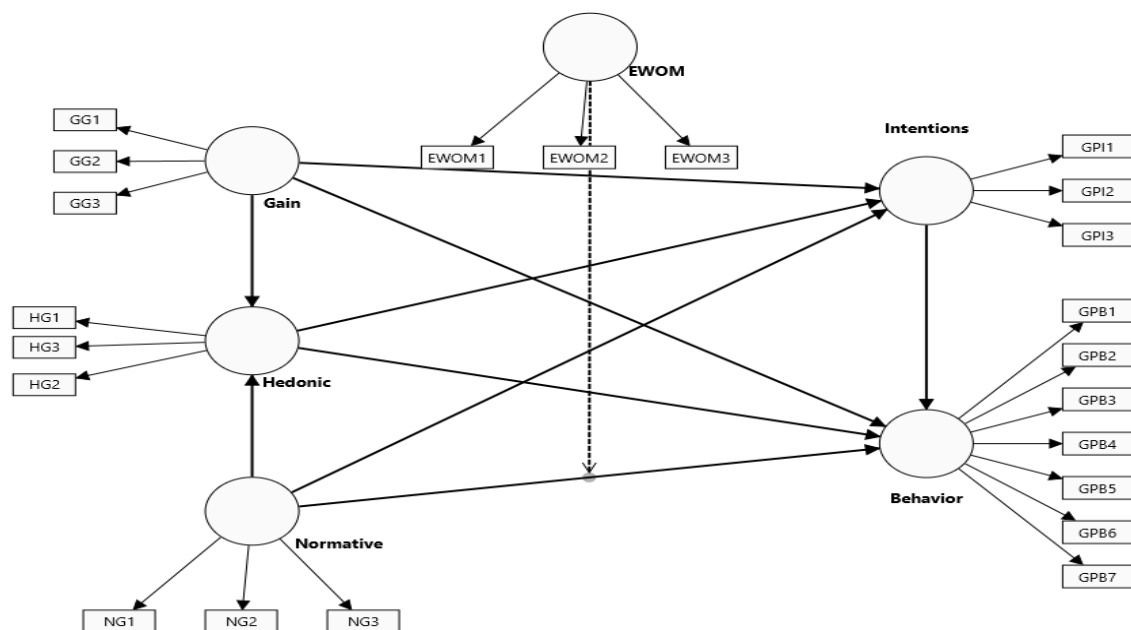


Figure No 1: Conceptual Framework

Material and Methods

Sample

The sample selected for this study were mainly university going students as prior research studies show that the youth have great concern for the environment (Yadav & Pathak, 2016). Sampling technique used was convenience and data were gathered mainly from leading universities of Karachi as well as an effort was made to collect data from other parts of Pakistan like Lahore, Islamabad, Bahawalpur and other major cities. Initially data of 485 respondents was collected, however after removing certain responses were removed and a total of 449 replies were selected for data scrutiny. The demographic divide was that half of the respondents were females and half were males. Data was collected from both public and private universities.

Measures

For the data collection scales were adopted from notable researches done in past. A likert scale was used to collect observations from participants. The numeric 1 represented completely disagree and 5 symbolizing totally confirm. Scales of (Schuitema et al., 2013) was used for both gain goals and hedonic goals. For normative goals the scale of (Harland et al., 1999) was used. For intentions scale of (Chan, 2001) was used and for behavior scale was adopted from (Lee, 2008). For e-word of mouth scale was adopted from (Jaini et al., 2020)

Data Analysis

The data interpretation was done by using PLS-SEM. The PLS-SEM carries out the analysis via 1.) Measurement Model 2.) and Structural Model. In the measurement prototype results of reliability, validity were obtained whereas in structural model the hypothesis were tested.

Results and Discussion

The threshold value of Cronbach alpha was 0.7 and it was within the value of 0.7. The threshold value for AVE should be greater than 0.5. Concerning the results are concerned all the values of AVE are greater than 0.5 clearly signifying that the data is illuminating the variance better than the error in the data. The values of VIF are below 5 suggesting that the data is clear from Multicollinearity issues. The discriminant validity has been reported using the -Fornell & Larcker (1981) and by using HTMT as given in table 2. All the top values of the discriminant validity are larger than values underneath and the left side figures clearly signifying the data is showing variance of its own construct. Therefore, as per the standard of Fornell & Larcker (1981) the data is free from the problem of discriminant validity (Hair Jr et al., 2017).

Table 1
Reliability and Validity

Construct	Item	Loading	CA	CR	AVE	R-Sq	VIF
E-word of Mouth	EWOM1	0.85	0.726	0.843	0.643		1.64
	EWOM2	0.82					1.37
	EWOM3	0.73					1.41
Gain Goals	GG1	0.79	0.748	0.856	0.664		1.47
	GG2	0.83					1.54
	GG3	0.83					1.47
Green Purchase Behavior	GPB1	0.75	0.85	0.885	0.526	0.502	1.76
	GPB2	0.81					2.09

	GPB3	0.67					1.56
	GPB4	0.70					1.72
	GPB5	0.67					1.64
	GPB6	0.74					1.87
	GPB7	0.72					1.64
Green Purchase Intention	GPI1	0.88	0.864	0.917	0.786	0.498	2.16
	GPI2	0.90					2.36
	GPI3	0.88					2.19
Hedonic Goals	HG1	0.87	0.873	0.922	0.797	0.488	2.01
	HG2	0.91					2.80
	HG3	0.90					2.55
Normative Goals	NG1	0.81	0.762	0.863	0.678		1.69
	NG2	0.87					1.91
	NG3	0.79					1.38

Table 2
HTMT Table

	Behavior	EWOM	Gain	Hedonic	Intentions	Normative
Behavior						
EWOM	0.649					
Gain	0.223	0.205				
Hedonic	0.639	0.502	0.330			
Intentions	0.693	0.497	0.224	0.747		
Normative	0.676	0.572	0.357	0.848	0.796	

Table 3
Fornell-Larcker Criterion

	Behavior	EWOM	Gain	Hedonic	Intentions	Normative
Behavior	0.725					
EWOM	0.524	0.802				
Gain	0.186	0.166	0.815			
Hedonic	0.568	0.413	0.267	0.893		
Intentions	0.616	0.408	0.185	0.650	0.887	
Normative	0.562	0.442	0.272	0.694	0.648	0.824

Hair Jr et al. (2017) gives preference to HTMT against all other methods. As per the standard, all the figures are smaller than standard value of 0.85. As per the threshold value there was no discrepancy found in the data as it can be seen in table 2. Therefore, after the HTMT and the Fornell Larcker criterion we may claim that the data is free from the problem of discriminant validity.

The PLS-Algorithm applied the bootstrapping making 5000 subsamples to test the model (Hair et al., 2019). The results of the hypothesis are presented below in Table 4.

Table 4
Direct Relationships

Hypothesis	Relationship	β	T statistics	P values	Results
H1	Gain -> Intentions	-0.0238	0.6528	0.5139	Not Supported
H3	Hedonic -> Intentions	0.3895	7.5278	0.0000	Supported
H9	Intentions -> Behavior	0.3247	5.2201	0.0000	Supported
H6	Normative -> Intentions	0.3848	7.5337	0.0000	Supported
H8	EWOM x Normative -> Behavior	-0.0321	1.0299	0.3031	Not Supported

The above table shows the acceptance and rejection of the direct hypothesis. The first hypothesis H1: Gain goals have a constructive impact on green purchase aims has not been supported. In the H1 hypothesis the t-value =0.9528 and p-value>0.05 hence the

hypothesis is rejected. The verge values of $t=1.96$ when $p\text{-value} < 0.05$ (Hair Jr et al., 2017). When we compare these threshold level with other hypothesis, we find that three direct hypothesis have been accepted. In the H3 hypothesis the $t\text{-value} = 7.52$ and $p\text{-value} < 0.05$ so this hypothesis is accepted. The third direct hypothesis green purchase intentions influence green purchase behavior has been validated. The $t\text{-value}$ is 5.2201 and $p\text{-value} < 0.05$ therefore the hypothesis is accepted. The fourth hypothesis normative goals influence green purchase intentions is also accepted, $t\text{-value}$ is 7.5337 and $p\text{-value} < 0.05$. The last hypothesis E-word of mouth positively moderates between normative goals and ecological buying conduct has not been accepted $t\text{-value}$ is 1.0299 $p\text{-value} > 0.05$.

Table 5
Indirect Relationship

Hypothesis	Relationship	Original sample (O)	T statistics (O/STDEV)	P values	Results
H7	Normative -> Hedonic -> Behavior	0.106	2.533	0.011	Supported
H4	Gain -> Hedonic -> Intentions	0.033	2.216	0.027	Supported
H5	Normative -> Hedonic -> Intentions	0.261	6.645	0.000	Supported
H2	Gain -> Intentions -> Behavior	-0.008	0.625	0.532	Not supported

The table 5 above shows the indirect relationship. From the table above we can see that three of the hypotheses have been supported and one of the hypotheses have not been supported. The H7 hypothesis hedonic goals mediate between normative goals and behavior have been supported. The $t\text{-value} = 2.533$ and $p\text{-value} < 0.05$. The H4 hypothesis has also been approved with $t\text{-value}=2.216$ and $p\text{-value} < 0.05$. The H5 hypothesis hedonic goals mediate positively between normative goals and green purchase intentions has also been validated. The $t\text{-value} = 6.645$ and $p\text{-value} < 0.05$. The last indirect hypothesis intentions mediate between gain goals and green purchase behavior has not been approved. The $t\text{-value}=0.625$ and $p\text{-value} > 0.05$.

Discussions

The study deliberated on the role of different goals of the goal framing theory on green purchase intentions and behavior (Lindenberg & Steg, 2007b). The research also tested the interaction of e-word of mouth between normative goals and sustainable buying behavior as recommended by (Wijekoon & Sabri, 2021). Broadly the results of different goals mostly back the prevailing works on GFT and recognized that GFT is applicable not only in costly goods but also in low-end goods like natural food (Chakraborty et al., 2017). For the gain goals two hypothesis were proposed one direct and the other indirect. In both the relationship the result was not significant. This is not in conformity with the GFT and established that consumer's helpful qualities are pertinent in low end product categories like organic food (Lindenberg & Steg, 2007a; Miao & Wei, 2013; Rezvani et al., 2018).

Moreover, the outcomes of gain goals should also be considered in mediation as one indirect hypothesis was suggested using gain goals as an external construct. One indirect relationship was proposed which is mediated by hedonic goals and is supported (Hameed & Khan, 2020). The findings of this hypothesis propose that gain goals can impact the customer feelings that influence the individual to develop intentions for buying organic food. This is in consistence with GFT, individual customers expressive characteristic was discovered as the dominant among the inspirational factors in environmental research like high end goods (Hameed & Khan, 2020).

The impact of normative goals on intents was discovered significant and this is consistent with the GFT (K. Khan et al., 2022; Lindenberg & Steg, 2007a). There were two indirect relations proposed for normative goals and in both relations normative goals was

an external variable. Both of these relationships were significant and are consistent with prior studies (Khan et al., 2022, 2023). The relation of two main variables of TPB construct was also significant as we see that ecological buying intentions are positively influencing green purchase behavior (Ajzen, 1991).

The interaction effect of e-word of mouth between normative goals and environmentally conscious consumption was insignificant. Prior studies show a positive moderating relationship of e-word of mouth on green buying conduct (Jaini et al., 2020). Another hypothesis using intentions as an intervening variable between gain goals and ecological purchase behavior was also irrelevant. This was contrary to results of previous researches (Khan et al., 2022).

Conclusions

The research depicts that as mentioned in the GFT, hedonic, gain goals and normative goals influence environmentally friendly demeanor (Lindenberg & Steg, 2007a; Steg et al., 2014). Of all the inspirational factors both hedonic and normative goals were discovered to have a noteworthy impact on ecologically conserving buying intent and behavior. As far as gain goal is concerned its direct interaction was not significant however its indirect effect with hedonic goal was significant. The moderating role of e-word of mouth between normative goals and ecological buying behavior was also found insignificant.

Implications

The research has various suggestions for the legislators. Both hedonic and normative goals had a constructive influence on the green buying intent and behavior. This has an implication for the policy makers as they can stress on different aspects of these motivations to inspire people to act more environmentally friendly. The significance of gain goals with the help of other goals had also important implications as consumers may be attracted to green goods if some other goals are attached to it. Like if an organic food is marketed like giving best nutritional value and the individuals who consume it get a good nutritional value some hedonic effect may be added that the taste of this food is very good. So in this way the consumers may be lured to consume such goods. The mediating role of normative goals through hedonic goals was significant, which implies that the individual standards of the citizens of Pakistan govern the temperaments. Moreover, other elements associated to the normative goals are religion supremacy and the household structure in the south Asian culture. Consequently, these factors along with individual beliefs must be considered while making approaches to encourage green expenditure behavior (Mathras et al., 2016)

Recommendations

This research utilized new variables like electronic word of mouth. However, for future research it is recommended to utilize religious based variables to see how these interact with normative goals to promote sustainable consumption behavior. Moreover, future studies can also integrate different values as given by (Schwartz, 1977) in the goal framing theory to see how these interact with different goals to produce green consumption behavior. In future researchers may also consider using some cues which may either strengthen or weaken the goals of the goal framing theory. For example, if government may provide litter boxes in every area, then what is the impact of this particular cue on the individuals living in that area. Similarly, other cues like not taking care of proper disposal of litter by individuals may also undermine the efforts of other individuals who want to adopt an ecological friendly behavior.

Last but not the least, the behavioral cost of engaging in eco-friendly behavior can also be seen whether it strengthens the goals of the GFT or weakens them.

References

- Akbar, A., Ali, S., Ahmad, M. A., Akbar, M., & Danish, M. (2019). Understanding the Antecedents of Organic Food Consumption in Pakistan: Moderating Role of Food Neophobia. *International Journal of Environmental Research and Public Health*, 16(20), 4043.
- Aschemann-witzel, J., Ares, G., Thøgersen, J., & Monteleone, E. (2019). Trends in Food Science & Technology A sense of sustainability? – How sensory consumer science can contribute to sustainable development of the food sector. *Trends in Food Science & Technology*, 90(February), 180–186. <https://doi.org/10.1016/j.tifs.2019.02.021>
- Asif, M., Xuhui, W., Nasiri, A., & Ayyub, S. (2018). Determinant Factors Influencing Organic Food Purchase Intention and the Moderating Role of Awareness: A Comparative Analysis. *Food Quality and Preference*. <https://doi.org/10.1016/j.foodqual.2017.08.006>
- Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, 27(1), 14–25. <https://doi.org/10.1016/j.jenvp.2006.12.002>
- Bamberg, S., Rees, J., & Seebauer, S. (2015). Collective climate action: Determinants of participation intention in community-based pro-environmental initiatives. *Journal of Environmental Psychology*, 43, 155–165. <https://doi.org/10.1016/j.jenvp.2015.06.006>
- Baumeister, R. F., Vohs, K. D., DeWall, C. N., & Zhang, L. (2007). How Emotion Shapes Behavior: Feedback, Anticipation, and Reflection, Rather Than Direct Causation. *Personality and Social Psychology Review*, 11(2), 167–203. <https://doi.org/10.1177/1088868307301033>
- Bósquez, N. G. C., & Arias-Bolzmann, L. G. (2022). Factors influencing green purchasing inconsistency of Ecuadorian millennials. *British Food Journal*, 124(8), 2461–2480.
- Bostan, I., Onofrei, M., Gavrilută, A. F., Toderascu, C., & Lazăr, C. M. (2019). An integrated approach to current trends in organic food in the EU. *Foods*, 8(5), 144. <https://doi.org/10.3390/foods8050144>
- Chakraborty, A., Singh, M. P., & Roy, M. (2017). A study of goal frames shaping pro-environmental behaviour in university students. *International Journal of Sustainability in Higher Education*, 18(7), 1291–1310. <https://doi.org/10.1108/IJSHE-10-2016-0185>
- Chan, R. Y. K. (2001). Determinants of Chinese Consumers' Green Purchase Determinants of Chinese Consumers' Green Purchase Behavior. *Psychology & Marketing*, 18(August), 389–413.
- Connolly, T., & Zeelenberg, M. (2002). Regret in Decision Making. *Current Directions in Psychological Science*, 11(6), 212–216. <https://doi.org/10.1111/1467-8721.00203>
- de Groot, J. I. M., & Steg, L. (2008). Value orientations to explain beliefs related to environmental significant behavior: How to measure egoistic, altruistic, and biospheric value orientations. *Environment and Behavior*, 40(3), 330–354. <https://doi.org/10.1177/0013916506297831>
- DeGroot, J. I. M., & Steg, L. (2009). *Morality and Prosocial Behavior: The Role of Awareness, Responsibility, and Norms in the Norm Activation Model* *Morality and Prosocial Behavior: The Role of Awareness, Responsibility, and Norms in the Norm Activation Model*. 37–41. <https://doi.org/10.3200/SOCP.149.4.425-449>

- Ding, K., Yun, X., Huang, T., & Chong, W. (2024). Recommend or not : A comparative analysis of customer reviews to uncover factors influencing explicit online recommendation behavior in peer-to-peer accommodation. *European Research on Management and Business Economics*, 30(1), 100236. <https://doi.org/10.1016/j.iedeen.2023.100236>
- Elhaffar, G., Durif, F., & Dubé, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: a narrative review of the literature and an overview of future research directions. *Journal of Cleaner Production*, 275, 122556. <https://doi.org/10.1016/j.jclepro.2020.122556>
- Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions : An extended approach to information adoption. *Computers in Human Behavior*, 61, 47–55. <https://doi.org/10.1016/j.chb.2016.03.003>
- Etienne, J. (2011). Compliance Theory : A Goal Framing Approach. *Law & Policy*, 33(3), 305–333.
- FIBL. (2018). *The World of Organic Agriculture Statistics and Emerging Trends*. FiBL, IFOAM - Organics International. <https://www.fibl.org/en/shop-en/1076-organic-world-2018>
- Fleseriu, C., Cosma, S. A., & Bocănet, V. (2020). Values and planned behaviour of the Romanian organic food consumer. *Sustainability (Switzerland)*, 12(5), 1722. <https://doi.org/10.3390/su12051722>
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement. *Journal of Marketing Research*, 18(1), 39–50.
- Frijda, Nico H., K., Peter, ter S., & Elisabeth. (1989). Relations among emotion, appraisal, and emotional action readiness. *Journal of Personality and Social Psychology*, 57(2), 212–228.
- Habib, S., & Hamadneh, N. N. (2021). Influence of Electronic Word of Mouth (eWOM) and Relationship Marketing on Brand Resonance : A Mediation Analysis. *Sustainability*, 13(12), 6833.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hair Jr, J. F., Matthews, L. M., Matthews, R. L., & Sarstedt, M. (2017). PLS-SEM or CB-SEM : updated guidelines on which method to use Marko Sarstedt. *International Journal of Multivariate Data Analysis*, 1(2), 107–123.
- Hameed, I., & Khan, K. (2020). An extension of the goal-framing theory to predict consumer's sustainable behavior for home appliances. *Energy Efficiency*, 13(7), 1441–1455. <https://doi.org/10.1007/s12053-020-09890-4>
- Hameed, I., Waris, I., & Amin ul Haq, M. (2019). Predicting eco-conscious consumer behavior using theory of planned behavior in Pakistan. *Environmental Science and Pollution Research*, 26, 15535–15547. <https://doi.org/10.1007/s11356-019-04967-9>
- Hameed, I., Waris, I., & Zainab, B. (2021). Factors influencing the sustainable consumer behavior concerning the recycling of plastic waste Factors influencing the sustainable consumer behavior concerning the recycling of plastic waste. *Environmental Quality Management*, 32(2), 197–207. <https://doi.org/10.1002/tqem.21815>

- Harland, P., Staats, H., & Wilke, H. A. M. (1999). Explaining pro-environmental intention and behavior by Personal Norms and the Theory of Planned Behavior. *Journal of Applied Social Psychology, 29*(12), 2505–2528.
- Idrees, W., M, D., & Irfan, H. (2021). Promoting environmental sustainability: the influence of knowledge of eco-labels and altruism in the purchase of energy-efficient appliances. *Manage Environment Quality, 32*(5), 989–1006.
- Jaini, A., Quoquab, F., Mohammad, J., & Hussin, N. (2020). "I buy green products, do you...?": The moderating effect of eWOM on green purchase behavior in Malaysian cosmetics industry. *International Journal of Pharmaceutical and Healthcare Marketing, 14*(1), 89–112. <https://doi.org/10.1108/IJPHM-02-2019-0017>
- Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour : A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services, 41*(November 2017), 60–69. <https://doi.org/10.1016/j.jretconser.2017.11.008>
- Kashif, U., Hong, C., Naseem, S., Rehman, K. U., & Andleeb, S. (2017). Assessment of millennial organic food consumption and moderating role of food neophobia in Pakistan. *Current Psychology, 42*(2), 1504–1515.
- Keller, K. L. (2001). The Evolution of Integrated Marketing Communications. *The Evolution of Integrated Marketing Communications*. <https://doi.org/10.4324/9781315872728>
- Khan, K., Hameed, I., Akram, U., & Hussainy, S. K. (2023). Do normative triggers and motivations influence the intention to purchase organic food? An application of the goal-framing theory. *British Food Journal, 125*(3), 886–906. <https://doi.org/10.1108/BFJ-11-2021-1194>
- Khan, K., Hameed, I., Hussainy, S. K., & Riaz, K. (2022). Consumers' Sustainable Consumption of Hybrid Cars: An Application of Goal-Framing Theory in the Pakistani Market. *Transportation in Developing Economies, 8*(2), 1–14. <https://doi.org/10.1007/s40890-022-00169-0>
- Khan, M. H. (2021). Bovines for (e)sale: How Sindh's rural women are becoming skilled entrepreneurs. *Dawn News*. <https://www.dawn.com/news/1638399>
- Kim, H. W., Chan, H. C., & Chan, Y. P. (2007). A balanced thinking-feelings model of information systems continuance. *International Journal of Human Computer Studies, 65*(6), 511–525. <https://doi.org/10.1016/j.ijhcs.2006.11.009>
- Lee, K. (2008). *Opportunities for green marketing: young consumers*. 26(6), 573–586. <https://doi.org/10.1108/02634500810902839>
- Lindenberg, S. (2001). Social Rationality versus Rational Egoism. In *In Handbook of sociological theory* (pp. 635–668). Springer US. <https://doi.org/10.1007/0-387-36274-6>
- Lindenberg, S., & Steg, L. (2007a). Normative , gain and hedonic goal frames guiding environmental behavior. *Journal of Social Issues, 63*(1), 117–137. <https://doi.org/10.1111/j.1540-4560.2007.00499.x>
- Lindenberg, S., & Steg, L. (2007b). *Normative , Gain and Hedonic Goal Frames Guiding Environmental Behavior*. 63(1), 117–137.

- Liobikienė, G., & Bernatoniene, J. (2017). Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review. *Journal of Cleaner Production*, 162, 109–120. <https://doi.org/10.1016/j.jclepro.2017.05.204>
- Mathras, D., Cohen, A. B., Mandel, N., & Mick, D. G. (2016). The effects of religion on consumer behavior: A conceptual framework and research agenda. *Journal of Consumer Psychology*, 26(2), 298–311. <https://doi.org/10.1016/j.jcps.2015.08.001>
- Miao, L., & Wei, W. (2013). Consumers' pro-environmental behavior and the underlying motivations: A comparison between household and hotel settings. *International Journal of Hospitality Management*, 32, 102–112. <https://doi.org/10.1016/j.ijhm.2012.04.008>
- Mirica, C.-O. (2018). JUDGMENTS AND DECISION MAKING IN CONSUMER BEHAVIOR: THE USE OF PSYCHOPHYSIOLOGICAL MEASURES TO INVESTIGATE EMOTIONS AND COGNITIVE RESPONSES. *Economics, Management, and Financial Markets*, 13(4), 39–45.
- Mughal, H. A., & Faisal, D. F. (2018). UNDERSTANDING OF ORGANIC FOOD SYSTEM THROUGH ORGANIC FOOD COMPETITIVE MODEL (OFCM). 3(2), 1–23.
- Ndofirepi, T. M., & Matema, S. C. (2019). Exploring Green Purchasing Behaviour among College Students in a Developing Economy. *Southern African Business Review*, 23, 1–25. <https://doi.org/10.25159/1998-8125/4624>
- Nelson Geovany Carrión Bósquez, Arias-Bolzmann, L. G., & Quiroz, A. K. M. (2023). The influence of price and availability on university millennials' organic food product purchase intention. *British Food Journal*, 125(2), 536–550.
- Nguyena, T. H.-H., Pilík, M., & Pham, N. T. (2025). Firms' green knowledge sharing and tourists' green electronic word-of-mouth intention: a two-wave time-lagged study of moderated mediation model. *Journal of Sustainable Tourism*, 33(3), 416–435.
- Onwezen, M. C. (2022). The application of systematic steps for interventions towards meat-reduced diets. *Trends in Food Science and Technology*, 119(August 2020), 443–451. <https://doi.org/10.1016/j.tifs.2021.12.022>
- Portner, H. O., Roberts, D. C., Tignor, M., Poloczanska, E.S., Mintenbeck, K., Alegría, A., Craig, M., Langsdorf, S., Loschke, S., Moller, V., & Okem, A., R. (2022). Climate change 2022: Impacts, adaptation, and vulnerability. Contribution of working group II to the sixth assessment report of the intergovernmental panel on climate change, Cambridge University Press. *Climate Change*.
- Prothero, A., Dobscha, S., Freund, J., William, E., Luchs, M. G., & Ozanne, L. K. (2011). Sustainable Consumption: Opportunities for Consumer Research and Public Policy. *Journal of Public Policy and Marketing*, 30(1), 31–38.
- Rezvani, Z., & Jansson, J. (2016). Cause I'll Feel Good! The Influence of Anticipated Emotions on Consumer Pro-environmental Behavior. *Rediscovering the Essentiality of Marketing*, 117–125. <https://doi.org/10.1007/978-3-319-29877-1>
- Rezvani, Z., Jansson, J., & Bengtsson, M. (2018). Consumer motivations for sustainable consumption The interaction of gain, normative and hedonic motivations on electric vehicle adoption. *Business Strategy and the Environment*, 27(8), 1272–1283. <https://doi.org/10.1002/bse.2074>
- Schuitema, G., Anable, J., Skippon, S., & Kinnear, N. (2013). The role of instrumental, hedonic and symbolic attributes in the intention to adopt electric vehicles. *Transportation*

Research Part A: Policy and Practice, 48, 39–49.
<https://doi.org/10.1016/j.tra.2012.10.004>

Schwartz, S. H. (1977). *NORMATIVE INFLUENCES ON ALTRUISM* '.

Seyfang, G. (2006). Ecological citizenship and sustainable consumption: Examining local organic food networks. *Journal of Rural Studies*, 22(4), 383–395.
<https://doi.org/10.1016/j.jrurstud.2006.01.003>

Sheng, G., Fang, X., Siyu, G., Hong, P., & Siyu, G. (2019). The Role of Cultural Values in Green Purchasing Intention: Empirical Evidence from Chinese Consumers. *International Journal of Consumer Studies*, 43(3), 315–326. <https://doi.org/10.1111/ijcs.12513>

Steg, L., Bolderdijk, J. W., Keizer, K., & Perlaviciute, G. (2014). An Integrated Framework for Encouraging Pro-environmental Behaviour: The role of values, situational factors and goals. *Journal of Environmental Psychology*, 38, 104–115.
<https://doi.org/10.1016/j.jenvp.2014.01.002>

Sun, Y., Liu, N., & Zhao, M. (2018). Factors and mechanisms affecting green consumption in China: A multilevel analysis. *Journal of Cleaner Production*, 209, 481–493.
<https://doi.org/10.1016/j.jclepro.2018.10.241>

Verain, M. C. D., Snoek, H. M., Onwezen, M. C., Reinders, M. J., & Bouwman, E. P. (2021). Sustainable food choice motives: The development and cross-country validation of the Sustainable Food Choice Questionnaire (SUS-FCQ). *Food Quality and Preference*, 93, 104267. <https://doi.org/10.1016/j.foodqual.2021.104267>

Wang, S., Fan, J., Zhao, D., & Yang, S. (2016). Predicting consumers' intention to adopt hybrid electric vehicles : using an extended version of the theory of planned behavior model. *Transportation*, 43(1), 123–143. <https://doi.org/10.1007/s11116-014-9567-9>

Waris, I., & Hameed, I. (2020). An empirical study of consumers intention to purchase energy efficient appliances. *Social Responsibility Journal*, 17(4), 489–507.
<https://doi.org/10.1108/SRJ-11-2019-0378>

Watson, L., & Spence, M. T. (2007). Causes and consequences of emotions on consumer behaviour: A review and integrative cognitive appraisal theory. *European Journal of Marketing*, 41(5–6), 487–511. <https://doi.org/10.1108/03090560710737570>

Wijekoon, R., & Sabri, M. F. (2021). Determinants that influence green product purchase intention and behavior: A literature review and guiding framework. *Sustainability (Switzerland)*, 13(11), 1–40. <https://doi.org/10.3390/su13116219>

Willett, W., Rockström, J., Loken, B., Springmann, M., Lang, T., Vermeulen, S., Garnett, T., Tilman, D., & Declerck, F. (2019). *The Lancet Commissions Food in the Anthropocene : the EAT – Lancet Commission on healthy diets from sustainable food systems*. [https://doi.org/10.1016/S0140-6736\(18\)31788-4](https://doi.org/10.1016/S0140-6736(18)31788-4)

Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production*, 135, 732–739. <https://doi.org/10.1016/j.jclepro.2016.06.120>