

A Comparative Study of Ecological Consumer Behavior Amongst Consumers In India and Pakistan

Boyd Longwe

Lecturer – Marketing, ZCAS University, Zambia
boydlongwe@yahoo.com

ABSTRACT: The objective of this paper is to draw a comparison of ecological consumer behavior amongst consumers in India and Pakistan. This is achieved through the review relevant literature, cases, and reports in the context of the two Asian countries. Undeniably, India and Pakistan share similar ecological challenges, with transboundary environmental stressors apt to result in serious ramifications. For example, the worsening ecological landscape, such as caused by pollution, has resulted in the mutilation of India's and Pakistan's ecosphere. Reversing the impact of ecological degradation, evidently accelerated by the industrial development agenda of the two countries, is likely to hinge on change in the consumption patterns of households in India and Pakistan, consumer choices and lifestyles, and in consequence of this, ecological consumer behavior. This paper submits that ecological awareness is relatively low amongst consumers in India and Pakistan. Furthermore, ecological knowledge amongst consumers does not necessarily result in their commitment to ecological issues. Determinants of ecological consumer behavior in India and Pakistan include socio-demographics, interpersonal or peer influences, green self-identity, personal norms, ecological knowledge etc. The role of national governments and media has been found to be crucial in fostering an ecological culture amongst consumers and, in this case, this has been underplayed.

KEYWORDS: consumer behavior, ecology, ecological awareness, household consumption, industrial development, transboundary.

I. INTRODUCTION

The subject of ecological consumer behavior has gained prominence in recent years. Globally, the ecological debate has heightened and regenerated (Ahmed *et al.*, 2012). Global summits on climate change attest to this (COP26, Glasgow, UK, 2021; COP25, Madrid, Spain, 2019; COP24, Katowice, Poland, 2018 etc.). People are generally becoming more conscious of ecological protection in order to preserve and sustain future generations. The present condition concerning the state of the ecosphere has largely been attributed to today's industrialized and materialistic civilization (Shrivastava (1995). Pollution, global warming, and loss of biodiversity etc., are all effects of environmental deterioration. (Danish and Naved, 2016; Kaiser *et al.*, 2003; Speth, 1988). It is undeniable that today's ecosphere or natural system is confronted with a global 'ecological' catastrophe. This has reignited interest among researchers and academics, and as a result, a number of studies have been conducted.

The ecological landscape has in the last few decades undergone profound change (Jackson, 2005). For instance, environmental pollution, such as triggered by solid waste, water or air etc., notably has resulted from an ambitious industrialization global agenda. This might, in part, be the case of India and Pakistan. According to Batool and Saeed (2016), technology and industrial development etc., are believed to be causers of 'global warming'- arising from industrial pollution, and products that harm the planet. Shockingly, industrialization has had its own drawbacks. In view of the changing ecological landscape witnessed in recent years, certain things are certain to change i.e. hopefully for the better (Jackson, 2005). Undoubtedly, ecological damage has somewhat resulted into some ecological alertness and renaissance. In view of this, consumer behavior, for example in India and Pakistan is expected to alter dramatically over the next few decades.

II. OBJECTIVES

India and Pakistan have had a long trajectory of 'collective' ecological concerns and trans-boundary stressors. For instance, the economic and industrial activities of both countries have in the last decades reached heights that have caused much human apprehension. Their industrial development agendas have not necessarily been inconsequential. For example, industrial by-products, in India and Pakistan, have immensely contributed to

pollution, due to burning fossil fuels, use and release of toxic substances; loss of bio-diversity; depletion of the ozone layer, and global warming, an emerging threat of modern times.

In view of the current eco-spheric debate, this paper, gravitating on the case of India and Pakistan, seeks to achieve the following objectives:

- (1) Determine the degree of ecological awareness amongst consumers in India and Pakistan.
- (2) Identify key determinants of ecological consumer behavior amongst consumers in India and Pakistan.
- (3) Establish how attitudes influence ecological consumer behavior amongst consumers in India and Pakistan.
- (4) Identify the behavior types manifested amongst consumers in India and Pakistan, in exhibiting ecological consumer behavior.

Justification: While the ecological debate is generally a global phenomenon, India and Pakistan exist in the context of an unusual ecological quandary. India and Pakistan are environmentally vulnerable countries (German Watch, 2016). The ecological susceptibility of India and Pakistan appears to be compounded by a number of factors. These are such as 'high population' and 'rapid economic growth' (Wang *et al.*, 2013), 'transboundary ecological stressors (Rand, 2019), 'industrial development' (Wang *et al.*, 2013) etc. Being in an ecologically weak position, India and Pakistan are likely to suffer from the liabilities of 'huge environmental costs' (Furley, 1996; Weissman, 1993), 'pollution' (Shrivastava, 1995),

While much of the ecological stressors in India and Pakistan result from industrial production, the ecological crisis is largely blamed on patterns of consumption, consumer lifestyles, in a nutshell, consumer behavior (Hofmeister-Toth *et al.*, 2011). To reverse the damage imposed upon the Indian and Pakistani ecosphere, there is need to promote sustainable patterns of consumption. It is on this theme, on which this paper gravitates. In fact, new research interests in ecological consumer behaviour have been noted (Tilikidou, 2006).

On the basis of this paper, it is envisaged that findings of a comparative study of ecological consumer behavior amongst consumers in India and Pakistan would lead to:

- 1) Assisting the Indian and Pakistan governments in the formulation of environmental related policies and other interventions.
- 2) The reduction in consumption inclinations for products that harm the planet.
- 3) Shaping green marketing strategy, and green product positioning.
- 4) Informing theory and practice in ecological consumer behavior.

III. METHODOLOGY

This paper is based on a review of existing literature on ecological consumer behavior. Specifically, this paper is built on the basis of cases, reports and previous research studies on ecological consumer behavior in India and Pakistan.

IV. LITERATURE REVIEW

The world has in recent times, faced a number of ecological challenges. A number of writers have commented on the looming ecological crisis, requiring urgent responsive action (Jackson, 2005; Peattie, 1995; McCarty and Shrum, 2001; Ahmed *et al.*, 2012 etc.). The global environment has recently been intensely debated not only in highly industrialised countries, but also in developing countries. In view of some expected ecological alertness, ecological consumer behavior has gained prominence. Ecological degradation, resulting in global warming etc., has ignited the interest of researchers on ecological consumer behavior.

The global ecosphere has undergone profound change, to heights that threaten the continued existence of the planets' natural system and biodiversity. The present status of the eco-system is nerve-racking, requiring urgent responsive action. Environmentalists, for instance argue that the declining bio-diversity, the depleting ozone layer and global warming, all caused by air pollution, water pollution and solid waste pollution etc., have all become a common cause of human apprehension. Global warming has been identified as one of the emerging environmental threats of modern times.

The fading ecological fortunes rest on very specific antecedents. For example, a number of writers attribute the present ecological obliteration to factors such as - 'Industrial production' (Gutberlet, 2000), and 'Patterns of consumption' (Hofmeister –Toth *et al.*, 2011). 'Production' and 'Consumption,' according to this study, are

antecedent factors. For example, production presupposes the existence of production, and vice versa. Gutberlet (2000) argues that in the present, much consumption behavior supports industrial production. While industrial development has resulted in improvement in the quality of life in today's materialistic society, from an ecological perspective, industrial production bears huge environmental costs (Furley, 1996; Weissman, 19193).

Industrial Production: Industrial production is not without its own consequences. According to Shrivastava (1995), the consequences of industrial production, such as pollution, loss of bio-diversity etc., are negative, severe and potentially irreversible. For example, pollution is one of the derivatives from industrial production. Pollution denotes the presence of a substance in the environment that because of its chemical composition or quantity prevents the functioning of natural processes and produces undesirable environmental and health effects. While early concerns about pollution gravitated on sewer and soot, according to Speth (1988, p.262), contemporary debate on pollution rests on the following:

- (1) 'Large and growing releases of certain chemicals – principally from the burning fossil fuels – that are now altering the natural systems.'
- (2) 'Steady increases in the use and release to the environment of innumerable biocidal products and toxic substances.'

Pollution can be categorized as either 'Air' pollution, 'Water' pollution or 'Land' pollution, and can be propagated depending on the medium. Customary pollution categories (Ibid) are those that focus on the receiving media: air (emissions), water (effluents), and land (dumps and disposals). For example, mining activities in developing countries by multi-national corporations deform or deface the landscape (Gutberlet, 2000). The air, has been polluted due to the excessive use of pesticides, in agriculture, and the burning of fossil fuels, for combustion (Speth, 1988). All these have had had severe consequences on earth's natural settings i.e. the ecology. In view of the growing awareness to environmental issues, a number of industrial organizations remain restless or guilty – ridden.

Household Consumption Patterns: Another factor that is attributed to the present state of the planet's degradation is household's consumption patterns. While the subject of industrialization has been clearly debated, there is a wide area about which ecological woes are blamed on patterns of consumption amongst consumers (Hofmeister-Toth *et al.*, 2011). Choices about consumption are of great significance (Saeed and Bertsch, 2009). To save the planet from a host of environment issues, sustainable patterns of consumption are expected to be high on the agenda (Batool and Saeed, 2016). Undoubtedly, the present ecological dilemma is likely to resolve by balancing the levers of 'supply' (industrial production) and 'demand' (ecological consumer behavior).'

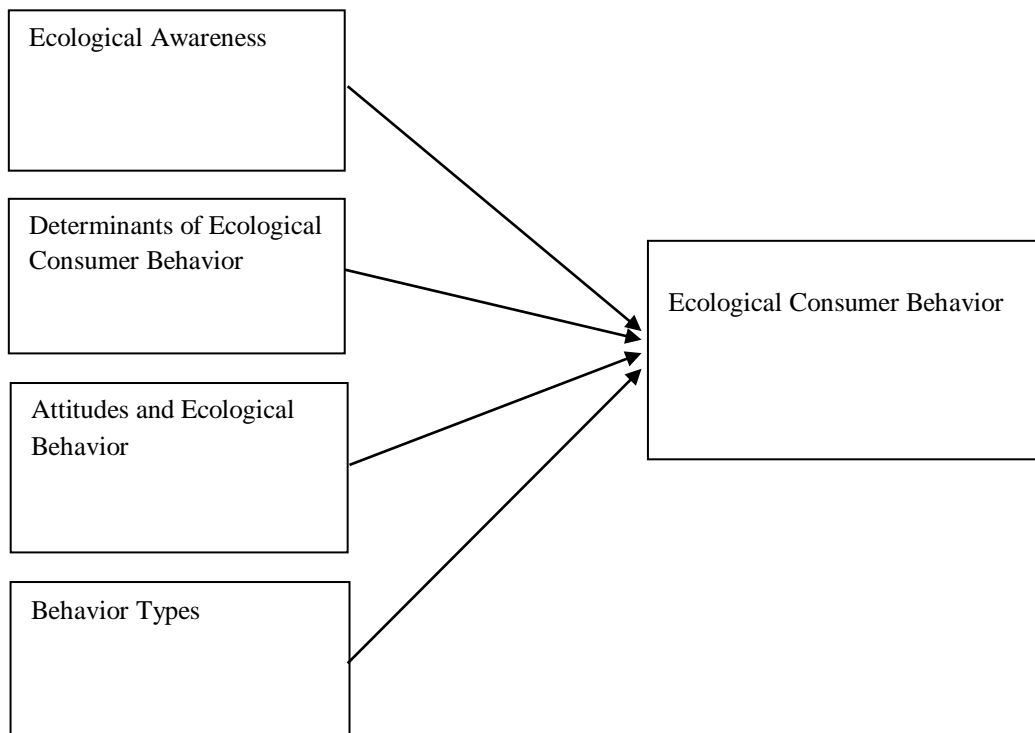
This paper tends to focus on an exploration of ecological consumer behaviour. New research interests in the field, have been noted (Tilikidou, 2006). In recent times, a number of studies have now been conducted on ecological consumer behaviour. These are highlighted in the table below:

Table 1: Previous Studies on Ecological Consumer Behavior

	Previous Studies	Source(s)
1.	<i>Ecological Awareness</i>	(Hoch and Deighton, 1999), (Park et al., 1994), (Grunert,1993), (Davies, 1993)
2.	<i>Attitudes & Intentions</i>	Straughan and Roberts (1999)
3.	<i>Consumer Decision Processes/Ecological Criteria</i>	Rahman and Haque (2011)
4.	<i>Behavior Type</i>	Meffert & Kirchgeorg (1993)
5	<i>Determinants of Ecological Consumer Behavior</i>	(Straughan and Roberts, 1999), (Meffert and Kirchgeorg, 1993)
6.	<i>Motivating Sustainable Consumption</i>	Jackson (2005)

Based specifically on four previous studies on ecological consumer behavior, (Hoch and Deighton, 1999; Park et al., 1994; Grunert, 1993; Davies, 1993; Straughn and Roberts,1999; Meffert and Kirchgeog, 1993 etc.), as highlighted in the table above, some conceptualization is depicted below:

Figure 1: Conceptualization on Ecological Consumer Behavior



The scope of ecological consumer behavior is wide (Ahmed *et al.*, 2012). It can be reasoned, in this conceptualization, that ecological consumer behavior has several constituents. These are such as ‘ecological awareness,’ ‘determinants,’ ‘attitudes,’ ‘behavior types,’ etc. These constituencies shape the structure, scope and objectives of this paper.

Ecological Awareness: As already indicated, ecological awareness is one of the variables shaping ecological consumer behavior of consumers in India and Pakistan. Ecological awareness implies ‘familiarity’ or ‘consciousness’ to the products’ likely effect on the environment (Rahmi *et al.*, 2017; Rizwan *et al.*, 2014). In view of this, a number of studies have been undertaken on ecological awareness, which have an import on this paper (Dispoto, 1977; Hoch and Deighton, 1989; Park *et al.*, 1994; Grunert, 1993; Davies, 1993) etc. Ecological awareness is likely to result in a change in consumer behavior (Batool and Saeed, 2016).

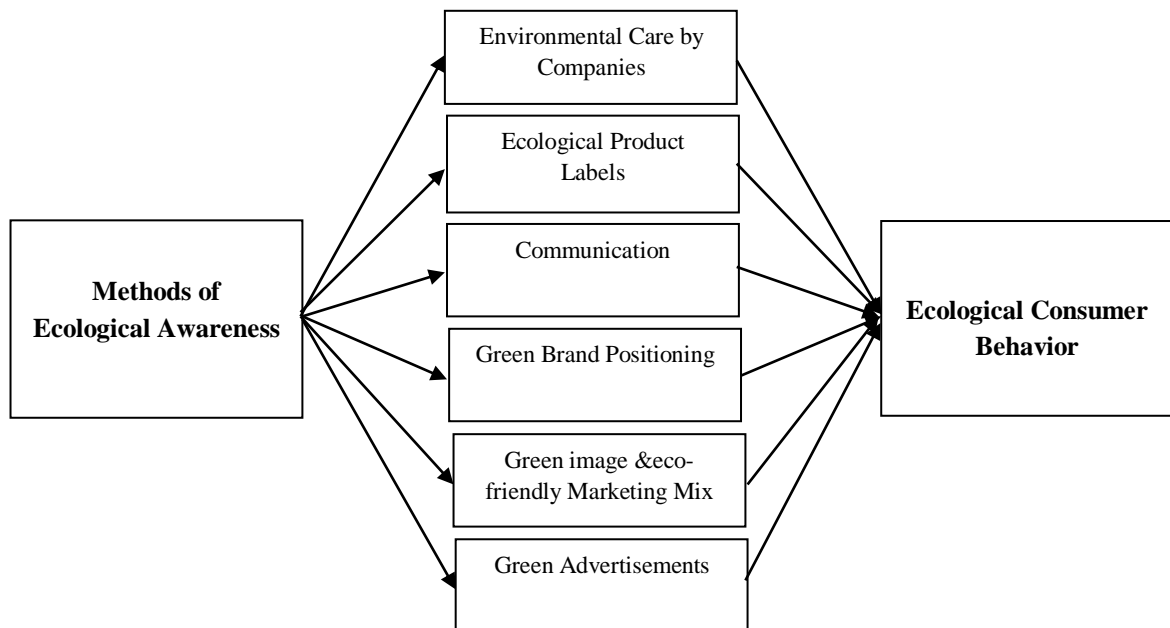
Ecological awareness is mediated and strengthened by some degree of ecological knowledge i.e. understanding of the environment by consumers (Rahmi *et al.*, 2017). Ecological awareness and knowledge lead to positive ecological attitudes (Davies, 1993). On this score, Park *et al.* (1994) found a positive relation between the degree of understanding and knowledge of ecology and responsible behavior towards the environment. This view has been supported by writers such as Laroche *et al.*, (2001), Schahn and Holzer (1990) etc.

According to a number of writers, ecological awareness can be created in a number of ways:

- Exhibition of environmental care by companies (Singh, 2016).
- Ecological product labels, and communication (D’Souza *et al.*, 2006).
- Green brand positioning (Hartmann *et al.*, 2005).
- Green image & environmentally friendly marketing mix (Singh, 2016).
- Green advertisements (Batool and Saeed, 2016).

This can be illustrated in the diagram below:

Figure 2: Methods of ecological awareness

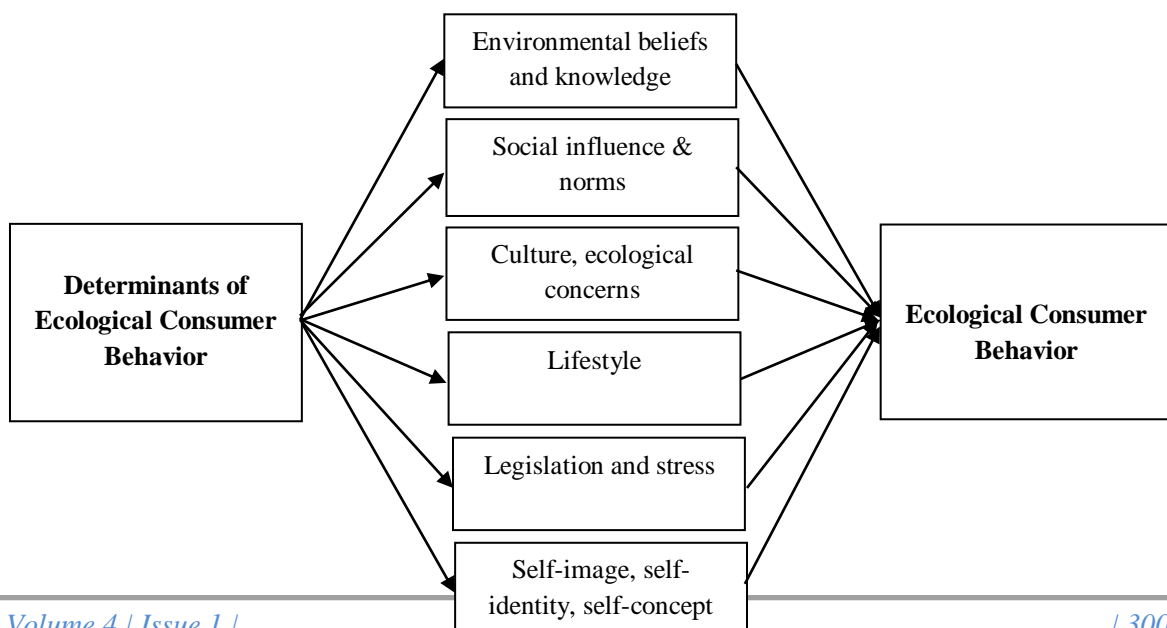


Determinants of ecological consumer behavior: Ecological consumer behavior, generally, is shaped by a number of determinants. For instance, a number of studies have indicated determinants likely to influence the consumers' ecological behavior. Such determinants are highlighted as follows:

- Environmental beliefs and knowledge (Mainieri *et al.*, 1997), (Kalantari *et al.*, 2007), (Chan, 2001).
- Social Influence and norms (Kalafatis *et al.*, 1999).
- Culture, ecological concerns (Chan, 2001).
- Lifestyle (Haanpaa, 2007).
- Legislation and stress (Kalantari *et al.*, 2007).
- Self-image, Self-identity, Self-concept (Lee, 2008), (Niinimaki, 2010).

The determinants of ecological consumer behavior are illustrated in the diagram below:

Figure 3: Determinants of ecological consumer behavior



Attitudes and ecological consumer behavior: This paper contends that ecological consumer behavior is likely to be affected by consumer’s attitudes towards green products (Soomro *et al.*, 2020). Consumer’s ecological attitudes represent their evaluation of products based on the perceived products’ inclination to environmental preservation (Berger and Corbin, 1992). Consumer attitudes and beliefs result from the consumers’ ecological awareness (Soomro *et al.*, 2020). This is mediated by some degree of ecological knowledge (Cheah and Phau, 2011). The degree of ecological knowledge is likely to strengthen a consumers’ attitude towards the environment.

Some studies have indicated a link between consumers positive ecological attitudes and positive ecological behavior (Rahmi *et al.*, 2017). It is generally held that consumers’ positive attitude is likely to lead to positive ecological consumer behavior. However, in some cases such correlation has been rather insignificant (Vermier and Verbeke, 2008). For instance, Soomro *et al.* (2020, p. 290), observe that, ‘Despite ... customers’ positive attitude to green products and sustainability, market share for green products remains limited to just 1-3% of the whole market.’

Behavior types: This paper discusses behavior types resulting from exhibiting ecological consumer behavior. Needless to say, most consumers with an ecological consciousness are capable of exhibiting some type of behavior. For example, Meffert and Kirchgeorg (1993) instituted a study of a typology of ecological behavior types. In light of this, the following behavior types were identified:

- Reducing consumption of traditional goods.
- Adjusting demand-purchasing eco-friendly products instead of traditional ones.
- Consuming environmentally efficient goods.
- Participation in recycling, in separate waste collection.
- Environmentally conscious complaints or protests.

Notwithstanding, a number of ecological consumer behavior studies have been undertaken, specifically depicting the case of India and Pakistan. These are such as undertaken by Livemint (2019), Kay *et al.* (2017), Miro *et al.* (2019), Hammad *et al.* (2015), Uddin and Khan (2016), Soomro *et al.* (2020), Singh (2016) etc. Studies on ecological consumer behavior relevant to the Indian and Pakistani contexts, are depicted in the table below:

Table 2: Ecological Consumer Behavior from Indian/Pakistani Context.

	Previous Studies	Source(s)
1.	Pakistan Raises India’s Violation of Indus Water Treaty with World Bank	Livemint (2019)
2.	Deadly Air Pollution Becomes a Common Enemy for Rivals India and Pakistan	Kay <i>et al.</i> (2017)
3.	Transboundary Environmental Stressors on India Pakistan Relations	Miro <i>et al.</i> (2019)
4.	Study of Consumers’ Different Buying Behavior in Pakistan	Hammad <i>et al.</i> (2015)
5.	Green Purchasing Behavior of Young Indian Consumers	Uddin and Khan (2016)
6.	Exploring the Green Purchasing Behavior of Young Generation in Pakistan	Soomro <i>et al.</i> (2020)
7.	Indian Ecological Consumer Market Profile	Singh (2016)

V. FINDINGS AND ANALYSIS

In view of the review of literature, the discussion of the findings and analysis in this paper are categorized in the following sequence – (1) Ecological awareness (2) Determinants of ecological consumer behavior (3) Attitudes and ecological consumer behavior (4) Behavior types.

Ecological Awareness amongst Consumers in India and Pakistan: The first objective of this paper interrogates the degree of ecological awareness amongst consumers in India and Pakistan. Miro *et al.* (2019) argue that India and Pakistan, are confronted with a number of a number of environmental stressors. This can be attributed to their (India and Pakistan) ambitious industrial development agendas (Synovate Survey, 2012). India and Pakistan have serious ecological concerns resulting from the deterioration of their ecological resources such as quality of water, and air etc. (Park *et al.*, 1994). Such resources are key to the welfare of both Indian and Pakistani citizens.

India: Indian's economy is projected to be one of the largest economies by 2025 (Mckinsey and Company, 2017). This poses serious ecological concerns amongst the Indian citizens. For example, economic development comes with its own ecological ramifications (Miro *et al.* (2019). Consequences of ecological deterioration in India due to economic and industrial development are likely to be high (Park *et al.*, 1994). In view of this, there is need to create a fair amount of ecological awareness amongst Indian consumers.

A study undertaken by Singh (2016) indicates that 71.5% of Indian consumers are aware of key environmental issues. These are such as industrial by- products, pesticides, pollution etc. It is hoped that ecological awareness can translate into positive ecological consumer behavior. However, Saeed and Bertsch (2009) observe that India's level of ecological awareness does not resonate with its ecological commitment. Such disjoint between ecological awareness and commitment is perturbing (Ibid).

According to the study conducted by Hoerisch (2002), ecological awareness amongst Indian consumers is achieved through a number of ways:

- Mass media (such as TV, Newspapers, Radio etc.)
- Institutional media (environmental awareness in learning institutions etc.)
- Traditional media (Family, Friends, Neighbors, Activists etc.).

Pakistan: In Pakistan, ecological pressures have lately been on the increase (Batool and Saeed, 2016). Notable environmental stressors in Pakistan include pollution, fading bio-diversity, noise, pesticides, industrial by-products etc. (Islamic Republic of Pakistan, 2008). This has been accelerated by growth in economic and industrial development activities. In view of the growing Pakistan population, Pakistan is certainly ecologically vulnerable. For instance, according to the Global Climate Change Risk Index, Pakistan is ranked 8th in the world (German Watch, 2016). There is need to build resilience to future environmental shocks and phenomena.

At the same time, some ecological awareness has been noted amongst Pakistani consumers in recent years (Batool and Saeed, 2016). Despite some growing ecological awareness, there still remains unawareness amongst a relatively large population (Gabol and Ahmed, 2012). Ecological knowledge is assumed to affect some degree of ecological consumer behavior (Batool and Saeed, 2016). Consumers' ecological consumption decisions are to a large extent affected by some degree of ecological knowledge or awareness (Ibid). Ecological knowledge affects how consumers process and interpret information and assess products (Alba and Hutchinson, 1987).

In view of the study conducted by Soomro *et al.* (2020), Malik *et al.* (2019) etc., the following inferences are of interest in the exploration of ecological awareness in Pakistan:

- Ecological consumption is relatively a new phenomenon in Pakistan.
- There is currently inadequate literature of ecological consumer behavior.
- The media (Radio, Magazines, Bulletins and TV) play a significant role in influencing ecological consumer behavior.
- Traditional media (as highlighted above) do not adequately promote green products.
- In Pakistan curriculum, learning institutions do not offer environmental related subjects.
- The Pakistan Government involvement in spearheading environmental campaigns, and building an environment culture is relatively low.

The study conducted by Soomro *et al.* (2020), in some aspects, resonates with the work of Malik *et al.* (2019), along the following common threads:

- Pakistani consumers are not necessarily bothered about environment protection and sustainability. This is attributed to low levels of ecological awareness and knowledge.
- Learning institutions in Pakistan offer little or no environmental awareness programs.

Key information pertaining to the degree of ecological awareness amongst consumers in India and Pakistan is highlighted in the table below:

Table 3: Ecological awareness amongst consumers in India and Pakistan

	India	Pakistan
Ecological awareness	‘Relatively fair’ (Singh,2016)	Relatively low (Soomro et al., 2020),
Media	<ul style="list-style-type: none"> ▪ Mass media (TV, Newspapers, Radio etc.) ▪ Institutional media (learning institutions etc.) ▪ Traditional media (Family, Friends, Neighbors, Activists etc.). 	<ul style="list-style-type: none"> ▪ The media (Radio, Magazines, Bulletins and TV) ▪ In Pakistan curriculum, learning institutions do not offer environmental related subjects. ▪ The Pakistan Government involvement in spearheading environmental campaigns, and building an environment culture is relatively low.
Other Key Findings	<ul style="list-style-type: none"> ▪ 71.5% awareness level of key environmental issues (Singh,2016) ▪ Ecological awareness does not resonate with commitment. (Saeed and Bertsch, 2009) ▪ Commitment to the environment is affected factors such as culture, attitudes (Saeed and Bertsch, 2009) 	<ul style="list-style-type: none"> ▪ Unawareness amongst a relatively large population (Gabol and Ahmed, 2012). ▪ Ecological consumption is relatively a new phenomenon in Pakistan (Soomro et al., 2020; Malik et al., 2019) ▪ There is currently inadequate literature of ecological consumer behavior. (Soomro et al., 2020; Malik et al., 2019)

Determinants of ecological consumer behavior: There are a number of determinants of ecological consumer behavior amongst consumers.

India: An investigation by Khare (2014), identifies the following determinants of ecological consumer behavior in amongst Indian consumers:

- Personal norms.
- Social environmental norm.
- Peer influence.
- Green self-identity.
- Past green behavior and past green attitudes.

Another study by Jain and Kaur (2006) establishes socio – demographics as determinants of ecological consumer behavior of Indian consumers. It is important to note however that a study conducted in India by Naz and Magda (2019), found a weak or insignificant influence of socio-demographic factors (education level, gender, and income level) on consumers’ willingness to pay for green products. This view is echoed by Bui (2005, p.22) stating that, ‘... findings are still relatively mixed with some demographic characteristics showing more consistent results than others.’

Pakistan: In Pakistan, ecological consumer behavior has been influenced by a number of determinants. These are such as:

- Demographics (Gender i.e. young consumers aged between 15 - 32 years, male and females, Income etc.). (Soomro *et al.*, 2020)
- Interpersonal influences (Cheah and Phau, 2011)
- Ecological knowledge (Mostafa, 2019)
- Trust (Joshi and Rahman, 2015)

- Media exposure (Kim *et al.*, 2019)
- Product information (Cheung and To, 2019)

A précis of the determinants of ecological consumer behavior amongst consumers in India and Pakistan is highlighted in the table below:

Table 4: Determinants of ecological consumer behavior in India and Pakistan

Determinant (s)	India	Pakistan
<ul style="list-style-type: none"> ▪ Personal norms ▪ Social environmental norm ▪ Peer influence ▪ Green self-identity ▪ Past green behavior and past green attitudes. ▪ Socio-demographics (education, gender, income) 	✓	
<ul style="list-style-type: none"> ▪ Demographics (Gender, income etc.). ▪ Interpersonal influences ▪ Ecological knowledge ▪ Trust ▪ Media exposure ▪ Product information 		✓

Attitudes and ecological consumer behavior: A number of writers generally assume a connection between attitudes on ecological consumer behavior. These are such as Rahmi *et al.* (2017), Vermier and Verbeke (2008), Soomro *et al.* (2020) etc. From an Indian and Pakistan perspective a study of attitudes and ecological consumer behavior was conducted by Ahmad *et al.* (2012). In their study, they draw an interesting parallel between consumers’ ecological attitudes in India and Pakistan. The following are the key points:

- An educated individual is likely to have a positive attitude to green products. In view of this, a purchase decision is highly likely.
- In taking a purchase decision price and quality are not the major discriminator between green and traditional products.

A synopsis of consumers’ attitudes towards ecological products is depicted in the table below:

Table 5: Consumer attitudes towards ecological products in India and Pakistan

India	Pakistan
<ul style="list-style-type: none"> ▪ Ecological conscious consumers are ready to pay more for purchasing green products. 	<ul style="list-style-type: none"> ▪ An educated individual is likely to have a positive attitude to green products. ▪ In taking a purchase decision price and quality are not the major discriminator between green and traditional products.

Behavior types: There are various behavior types employed in exhibiting ecological consumer behavior.

India: A study undertaken by Singh (2016) profiles the India ecological consumer market, into the following segments or clusters:

- Cluster 1 – ‘Environmentally conscious’ (Comprise 71.5% of the population in this study, and are ecologically conscious and do possess a fair amount of ecological knowledge on key ecological issues).
- Cluster 2 – ‘Comfort zones’ (Comprise 11.11% of the population in this study, and mostly take initiative for environmental preservation only in settings where such purchase decisions result in making a saving. They are not necessarily interested in reading eco-friendly product labels.
- Cluster 3 – ‘True environmentalists’ (Comprise 71.5% of the population in this study, and are ecologically conscious and do possess a fair amount of ecological knowledge on key ecological issues).
- Cluster 4 – ‘Undeciders’ (Comprise 17.39% of the population in this study, and are likely to be converted by an organizations’ ecological effort or initiative).

Pakistan: Unlike India, this paper portends that little or no literature exists on profiling behavior types that ensue amongst Indian consumers, in exhibiting their ecological consumer behavior. Generally speaking, this signifies directions for future research on ecological consumer behavior in Pakistan.

VI. CONCLUSION AND RECOMMENDATIONS

Conclusion: While the degree of ecological awareness amongst Indian consumers is relatively high, ecological awareness in Pakistan is fairly low. This paper infers that Indian consumers are slightly better on ecological awareness than their Pakistani counterparts. India’s advantage in this area can be attributed to the robust use of media (TV, newspapers, radio), learning institutions for environmental awareness, and activists, neighbors and friends. As in India, media play a significant role for environmental awareness in Pakistan. However, such traditional media do not adequately promote green products. Furthermore, learning institutions do not offer environmental related subjects and the Pakistan Government’s involvement in environmental awareness is relatively low. Pakistani consumers are not necessarily bothered about environment protection and sustainability.

In this paper, a number of determinants of ecological consumer behavior in India and Pakistan have been identified. Most of such determinants intersect. These are such as peer or interpersonal influences, demographics, ecological knowledge and attitudes. Other determinants such as green self-identity, product information, media exposure are also important determinants of ecological consumer behavior. It is worth noting that, the use of demographics as a determinant of ecological consumer behavior has been found to yield inconsistent results.

While little research has been conducted on behavior types in exhibiting ecological consumer behavior in Pakistan, behavior types in India are categorized as ‘Environmentally conscious,’ ‘Comfort zones,’ ‘The environmentalists,’ and ‘The undeciders.’ From a general perspective, some ecological behaviors are directed at environmental protection and preservation. These may involve such things as consuming green products, recycling, reduced consumption of traditional products etc. Unfortunately, some ecological consumer type is generally the ‘uncommitted’ – lacking ecological consciousness.

Recommendation: India and Pakistan share common transboundary environmental issues. Undeniably, the ecosphere has profoundly affected their natural setting or system. Such change, in India and Pakistan, has precisely been accelerated by economic growth and industrial development. Industrialization is cited as being the culprit for solid waste, water and air pollution, which have devastating effects to humanity. To arrest this situation, there is need to encourage ecologically responsible behavior i.e. ecological consumer behavior.

In view of the findings in this paper, and in view of the severity of the ecological crisis confronting India and Pakistan, it is recommended that:

- Both Governments, from India and Pakistan, should be deeply involved in developing and promoting environmental awareness campaigns, through the development of both policy and environmental frameworks.
- Learning institutions should be given the lee-way to teach environmental related subjects.
- There is need to develop legislation that is intended to discourage irresponsible ecological behavior from manufacturers etc.

- Governments can provide tax incentives to manufacturers of green products perhaps also on green advertising etc. Hopefully, benefits that result can be passed on to consumers for positive ecological consumption.
- Manufacturers need to be encouraged to adopt green product positioning strategies and developing ecologically engineered marketing mixes, in particular.

This paper suggests the following future research directions on ecological consumer behavior:

- The disjoint between ecological awareness and ecological commitment amongst consumers in India etc.
- Ecological knowledge as a mediating factor in ecological consumer behavior.
- Why socio – demographic variables are inconsistent as determinants of ecological consumer behavior.
- Why positive ecological attitudes do not necessarily result in positive ecological consumer behavior.
- Antecedent conditions to ecologically conscious consumer behavior.
- Comparing ecological consumer behavior between ‘older people’ and ‘young adults.’

REFERENCES

- [1]. Ahmed, J., Ali, I., Grigore, G.F., Stancu, A. (2012), Studying Consumers’ Ecological Consciousness – A Comparative Analysis of Romania, Malaysia and Pakistan. *Amfiteatru*. Vol. XIV. No. 31.
- [2]. Alba, J.W., Hutchinson, J.W. (1987), ‘Dimensions of consumer expertise’, *Journal of Consumer Research*, Vol.36, No.7, pp.23 -31.
- [3]. Batool, I., Saeed, M.S., (2016). Analysis of Factors Influencing Green Consumption Behavior, A Comparison of Pakistani and Canadian Consumers. *Journal of Culture, Society and Development*. Vol 23, pp. 27-35.
- [4]. Bui, M.H. (2005). Proceedings of the Annual Meeting of the Association of Collegiate Marketing Educators.
- [5]. Danish, K.M. and Naved, K.M. (2016), “Environmental concern to attitude towards green products: evidences from India”, *Serbian Journal of Management*, Vol. 11 No. 2, pp. 159-179.
- [6]. German Watch (2016)
- [7]. Islamic Republic of Pakistan (2008). Country Environment Analysis Asian Development Bank Report.
- [8]. Joshi, Y., Rahman, Z. (2015), Factors affecting green purchase behavior and future research directions’, *International Strategic Management Review*, Vol. 3 Nos ½, pp. 128 -143
- [9]. Kaiser, F.G., Doka, G., Hofstetter, P. and Ranney, M.A. (2003), “Ecological behavior and its environmental consequences: a life cycle assessment of a self-report measure”, *Journal of Environmental Psychology*, Vol. 23, pp. 11-20
- [10]. Khare, A., (2014). Antecedents to green buying behaviour: a study on consumers in an emerging economy. *Indian Institute of Management-Rohtak, Rohtak, India*.
- [11]. Kim, W.H., Malek, K., Roberts, K.R. (2019), ‘The effectiveness of green advertising in the convention industry: an application of a dual coding approach and the norm activation model’, *Journal of Hospitality and Tourism Management*, Vol. 39, pp. 185 -192.
- [12]. Laroche, M., Bergeron, J. and Forleo, G.B. (2001), “Targeting consumers who are willing to pay more for environmentally friendly products”, *Journal of Consumer Marketing*, Vol. 18 No. 6, pp. 503-20.
- [13]. Laroche, M., Bergeron, J., Barbaro-Forleo, G. (2001) ‘Targeting Consumers who are willing to pay more for Environmentally Friendly Products’, *Journal of Consumer Marketing*, Vol.18, No.6, pp. 503-520.
- [14]. Malik, M.I., Mir, F.N., Hussain, S., Hyder, S., Anwar, A., Khan, Z.U., Nawab, N., Shah, S.F.A., Waseem, M. (2019) Contradictory results on environmental concern while re-visiting green purchase awareness and behavior. *Asia Pacific Journal of Innovation and Entrepreneurship*. Vol. 13 No. 1, 2019. Pp. 17–28.
- [15]. McKinsey and Company (2017). The ‘Bird of Gold: The Rise of India’s Consumer Market,’ San Diego. CA. McKinsey Global Institute.
- [16]. Miro, M.E, Marlier, M.E, Richard, S. Girven, R.S (2019) Transboundary Environmental Stressors on India Pakistan Relations: An Analysis of Shared Air and Water Resources. California: RAND Corporation.
- [17]. Mostafa, M.M. (2009) ‘Antecedents of Egyptian consumers’ green purchase intentions’, *Journal of International Consumer Marketing*.

- [18]. Muhammad Hammad, M., Mirzady, M, Abouie, M.H (2015) Study of Consumer's Different Buying Behavior in Pakistan, *Research Journal of Recent Sciences*. Vol. 4(5), 54-60
- [19]. Uddin, S.M.F, Khan, M.N (2016) Green Purchasing Behavior of Young Indian Consumers. *Global Business Review* 17(6) 1-11.
- [20]. Rahmi, D.Y., Rozalia, Y., Chan, D.N., Anira, Q., Prima, R. (2017). Green brand image, green awareness, green advertisement, and ecological knowledge in improving green purchase intention and green purchase behavior on creative industry products.
- [21]. Rizwan, M., Mahmood, H., Tahir, A. (2014). An empirical study about green purchase intentions. *Journal of Sociological Research*. Vol 5, No.1, pp. 121- 134
- [22]. Roberts, J.A. and Bacon, D.R. (1997), 'Exploring the subtle relationships between environmental concern and ecologically conscious consumer behavior', *Journal of Business Research*, Vol. 40, pp. 79-89.
- [23]. Schahn, J., Holzer, E., (1990). Studies of individual environmental concern. *Environment and Behavior*.
- [24]. Schlegelmilch, B, B., Bohlen, G.M., Diamantopoulos, A. (1996), The link between green purchasing decisions and measures of environmental consciousness. *European Journal of Marketing*, 30 (5), 35 - 55.
- [25]. Singh, D.P, (2016), Indian Ecological Consumer Market Profile. *Global Business Review*. 12 (3) 447-457.
- [26]. Singh, K., Saeed, M., Bertsch, A. (2009) Awareness and Concern Towards the environment: An Explorative Study of Indian Consumers, *Journal of the Academy of Business & Public Policy*, Volume 1(2), Spring 2009, ISSN 1948-2361 (print), 1948-237X (online) and in the Conference Proceedings of the International Conference on Business and Public Policy, Rockford, IL, ISSN 1948-2272 (print), 1948-2280 (online)
- [27]. Singh, K., Saeed, M., Bertsch, A. (2009) Awareness and Concern Towards the Environment: An Explorative Study of Indian Consumers, *Journal of the Academy of Business & Public Policy*, Volume 1(2), Spring 2009, ISSN 1948-2361 (print), 1948-237X (online) and in the Conference Proceedings of the International Conference on Business and Public Policy, Rockford, IL, ISSN 1948-2272 (print), 1948-2280 (online)
- [28]. Soomro, R. B., Mirani, I.A., Ali, M.S., Marvi, S. (2020), Exploring the green purchasing behavior of young generation in Pakistan: Opportunities for green entrepreneurship. *Asia Pacific Journal of Innovation and Entrepreneurship*. Vol. 14. No. 3, 2020, pp. 289 -302.
- [29]. Soomro, R.B., Mirani, I.A., Sajid Ali, M. and Marvi, S. (2020), 'Exploring the green purchasing behavior of young generation in Pakistan: opportunities for green entrepreneurship', *Asia Pacific Journal of Innovation and Entrepreneurship*, Vol. 14 No. 3, pp. 289-302.
- [30]. Speth, J.G. (1988), 'Environmental pollution: A Long - term Perspective. World Resources Institute environmentally friendly products', *Journal of Consumer Marketing*, Vol. 18 No. 6, pp. 503-20.
- [31]. Synovate Survey (2012), 'Reveals latest green habit and consumption across the world', available at: www.Iposs-na-com/newspolls/pressrelease.aspx?id (accessed: 15th April, 2021)
- [32]. Vermier, I., Verbeke, W. (2008), 'Sustainable food consumption among young adults in Belgium: theory of planned behavior and the role of confidence and values' *Ecological Economics*, Vol 64 No.3, pp. 542 -553.

Notes

Boyd Longwe holds a Postgraduate qualification in Marketing from the Chartered Institute of Marketing (CIM, UK). He also holds a BA (Hons) degree in Business Studies (Marketing), University of Greenwich, UK. Boyd further holds an MA degree in Marketing, University of Northampton, UK, and an MSc degree in Project Management, University of Zambia (UNZA). He is currently pursuing his PhD in Marketing. Boyd has previously held various Marketing positions in companies such as Unilever, El Sewedy/Zesco (Zambia Electrometer Limited) etc., and he is a distinguished Marketing Academic, currently working as a Lecturer at ZCAS University, Zambia.

VIII. ACKNOWLEDGEMENTS

In writing this paper, I am grateful to my family and colleagues for their support in my resolve to write this paper. I dedicate this work to the late Dr. Kwesi Atta Sakyi, for his encouragement and support in pursuit of scholarly wisdom and knowledge.