Consumer's Attitude Towards Green Supply Chain Practices and Its Impact on Their Intentions to Buy at Fast Food Restaurants in Bahawalpur, Pakistan

¹ Sabeen Shahid Rehmani, ² Sulaman Hafeez Siddiqui

¹ The Islamia University of Bahawalpur Pakistan, sabeen.shahid.rehmani@gmail.com

² The Islamia University of Bahawalpur Pakistan, sulman.siddiqui@iub.edu.pk

ARTICLE DETAILS	ABSTRACT
History <i>Revised format: May 2019</i> <i>Available Online: June 2019</i>	<p>Financial The purpose of this study is to find the impact of consumer perception on green supply chain practices in fast food places in South Punjab, Pakistan. Green supply chain practices focus on assimilating environmental thinking into the conventional supply chain, including areas like product design, material sourcing and selection, manufacturing processes, delivery of the final product as well as end-of-life management of the product after its useful life. To put it simply, green supply chain practices deal in creating an environmentally friendly supply chain that will result in an organization that not only sustains itself, but also the environment around it. This research work was conducted in South Punjab, Pakistan to see whether or not people perceived green supply chain practices important and whether that would affect their decision to dine at a certain place. To serve the purpose of the research, the data was acquired from the general population of South Punjab. The respondents included students from intermediate, people who held jobs, housewives etc. with a sample of 260 chosen randomly. The overall findings state that consumer perception is significantly affected by green supply chain practices in the fast food industry. The research is limited due to the time constraints, financial constraints and limited availability of the data. The results of this research study may not generalize to other province of the Pakistan as the study is conducted only in the context of South Punjab.</p>
Keywords <i>Green Supply Chain Management (GSCM), Consumer Perception (CP)</i>	
JEL Classification: <i>R41, R49, D11</i>

© 2019 The authors, under a Creative Commons Attribution-NonCommercial 4.0

Corresponding author's email address: sulman.siddiqui@iub.edu.pk

Recommended citation: Rehmani, S. S. & Siddiqui, S. H., (2019). Consumer's Attitude Towards Green Supply Chain Practices and Its Impact on Their Intentions to Buy at Fast Food Restaurants in Bahawalpur, Pakistan. *Sustainable Business and Society in Emerging Economies*, 1(1), 55-64

DOI: 10.26710/sbsee.v1i1.1006

1. Introduction

Sustainability has been a crucial aspect of any business' longevity, especially for global companies, it is essential for them to put in the work to sustain themselves. There are many ways to sustain oneself; one of them being via green practices.

The term green supply chain management (GSCM) has been defined as the integration of environmental concerns into supply chain management practices. (Zhu & Sarkis, 2004). It incorporates all the elements of a traditional supply chain along with other processes such as product design, material sourcing and selection, manufacturing and production, operation and end-of-life. Out of the multiple ways through which an environment's sustainability could be maintained, the concept of GSCM was brought forth for businesses.

Green supply chain management has been noted to be a potential solution for the improvement of environmental performance. Thanks to the advent of industrialization, commercialization and capitalism, the need for the incorporation of GSCM in today's world - a world that is struggling with issues such as global warming, water crisis, plastic problems, forest fires and so much more – into the fabric of business operations is crucial as well as vital.

Due to the alarming upsurge in global warming and other issues, people (producers and consumers alike) have started paying attention. People are more environmentally and socially sound than before. Western countries, the States, Malaysia and many others are working to make sure that businesses run smoothly while causing as little damage to their surroundings as possible. Numerous research and studies have been done over the years to find out how to incorporate green practices into business operations in a manner that won't have an adverse effect on the profits and improve the image of the business. In the world of business research, the focus revolves around sustainability and how to further the green agenda. Many areas of a business can be modified to be made more eco-friendly, but in this study, we're going to look at it from a supply chain point of view.

Problem Statement:

Aside from environmental factors, consumer and stakeholder pressure plays a significant part in making the companies turn to adoption of green practices (Khan & Qianli, 2017). Sure, there are issues with adoption of green performances. If it's been found out that the business in question are polluters then no one will want to buy from them. And implementation of green measures is costly and can cause a drain on company profits. On the other hand, environment friendly practices in supply chain not only lead to increased environmental performance but also enhance economic performance. (Zhu & Sarkis, 2004)

Studies have shown that consumers find products more desirable when they perceive that a firm uses green management systems, engages in resource recovery efforts, and behaves in socially responsible ways. However, in some cases, when consumers see high-priced green products, they tend to disregard these efforts completely.

For example, the paper McDonalds uses in its packaging does not come from deforestation and is biodegradable. The cost of that paper is covered by the money McDonalds charges its customers. Often customers would think that 'it's too expensive' and go for the less expensive and not so friendly alternative.

Research Gaps:**Theoretical Gap:**

Green supply chain management is a constantly evolving field. There's much to explore and learn, many gaps to be discovered and filled. Handfield's (Handfield, Walton, Seegers, & Melnyk, 1997) research showed that it studied the application of its principles across the customer order cycle whereas Sarkis focused on its incorporation into the conventional supply chain and took into account reverse logistics as well. (Zhu & Sarkis, 2004)

This study will seek to fill the gap between Green Supply Chain Practices and Practices and their Impact on Consumer Perception. Previous researches shows that a myriad of variables and dimensions were chosen to measure the impact of green supply chain management and practices in different contexts. In

this research, we will be using relevant theories and other variables such as green products, selection of products based on their life, recycling and pollution control.

Contextual Gap:

This research is being carried out in the South Punjab area of Pakistan. This study will seek to fill that gap so we can know the attitude of consumers towards food places that implement green practices as compared to the ones who do not implement them.

Research questions

The main objective of this study is to measure the impact of green supply chain management on consumer perception:

- To check the impact of on green supply chain practices on consumer perception
- To investigate the association between consumer perception and green supply chain practices

Research objectives

- What is the impact of green supply chain practices on consumer perception in the fast food sector?
- What is the relationship between consumer perception and green supply chain practices?

2. Literature Review:

Why is conservation of resources important? Logically speaking, on a surface level, the answer to that might seem simple. Why shouldn't we preserve the environment around us? Why shouldn't we give back to Mother Earth as she gives to us? You'd be surprised, that such a basic concept, wasn't this easy to comprehend in the earlier times. In the seventeenth century, an English cleric by the name of Thomas Malthus wrote a book called an Essay on the Principle of Population, in which proposed a theory which would later be come to known as the Malthusian Theory of Population Growth. (Harley, n.d)

The essence of the theory is that population growth increases exponentially, meaning the greater the birth rate, the higher the rate of population growth. Now, you might think that's basic math but bear in mind this was the seventeenth century, they had other issues to worry about; like religion and politics and basic hygiene. Before that it was the rats with the plague. Malthus was among the first to highlight the dangers of excessive population growth. If left unchecked, populations can outgrow their resources which will lead to issues such as scarcity. The theory posed two types of 'checks' that can reduce a population's growth rate: preventive and positive. Preventive checks are voluntary actions people can take in order to keep from adding to population growth. Moral restraint is key here.

Positive checks on the other hand are things which may lead to the shortening of an average lifespan like disease, warfare, famine, poor living and work environments. If not controlled, these things could lead to 'a Malthusian catastrophe,' which is a forced return of a population to basic survival. A famous example of this is the Irish potato famine of the 19th century. Another incident of note is when in the 1850s, a carnie peddler named George Gale, heard of California redwood tree, which was said to have been 600 years old around the time Jesus was present. Upon seeing magnificent tree, he ordered it to be cut so it could be displayed in his sideshow. The public outrage to this was huge. Imagine chopping down a tree that is almost something of a public landmark, along with the pinnacle of conservation, and someone just comes along and chops it off for personal gratification and gain.

Incidents like these are what gave rise to the green movement (Lallanilla, 2018) and are the reason why we need measures that protect the environment around us and sustain it. In order for humanity to go on without being on the brink of extinction we need to take care of the environment we live in. And one way to do that is undertake green measures in whatever manner possible. Especially today when global warming is a serious issue, the rainforests are depleting, pollution is increasing, population growth is out of control etc. Everyone does their part to protect the environment, businesses as well.

Several studies use different dimensions to study green supply chain management. One paper used green manufacturing, green purchasing, green information systems, cooperation with customers, and eco-design to study the impact of green supply chain management on the performance of firms. (Khan & Qianli, 2017) Pakistan, despite its tumultuous struggle for continued, steady existence is also getting on the green train. According to PakistanToday, the country is in the top five for those whose highest mortality rate is due to pollution. (AGENCIES, 2019) Among the many detrimental effects of pollution, one is shortening of life expectancy. The article stated if the top five countries mentioned would invest in air pollution control, the mortality rate would fall considerably. In the past years, several companies and businesses have come forward with their green initiatives for a Naya Pakistan. After former Minister for Climate Change, Mushahidullah revealed the devastating figure of 55 billion plastic bags used by Pakistan in January 2018, (Yawar, 2018) several businesses have joined together for a pro-environmental movement. Sapphire switched out plastic bags for biodegradable ones. A bonus feature of these bags is that you can plant them! Time Store, a local store in Bahawalpur, has swapped out plastic bags for clothed ones, which customers can purchase for Rs. 25/- only. Such measures will encourage consumers to bring their own bags from home, cutting down significantly on plastic bag consumption. It will also stir a sense of warmth and sincerity towards the brand implementing these practices. They will curry favor.

Another thing you might be wondering by now. Do consumers even invest in green supply chain management? A question posed and answered by Dara Schniederjans and Christopher Starkey where they conducted an empirical assessment using data from previous researches, the theory of planned behavior and other factors that affect the purchase intention of a consumer to make a model that later revealed that yes, green practices did matter to consumers while making purchases. Their approach was to pose a scenario to the respondents, which stated that there were two types of shirts. One type of shirt had a label boasted that it was transported using energy efficient fuel. The other had no label. Both shirts had the same make, design and color. Majority of the consumers chose to wear the one with the label. (Schniederjans & Starkey, n.d.)

According to Webster's Revised Unabridged Dictionary (1913), perception has been defined as an idea, a notion that has been formed by the human consciousness by collecting ideas, beliefs, and knowledge regarding a certain thing based on which decisions about it are made later. To perceive, is to adapt reality and mold it according to our personal standards. Philip Kotler posed that individuals can have different perceptions of the same thing due to three things: selective attention, selection distortion and selective retention. Selective attention is the tendency for people to screen out most of the information to which they are exposed. Marketers work hard to catch the attention of their customers so they can get past those filters and into their heads (Kotler, 1999).

Selective distortion occurs when stimuli is not perceived in the way senders wanted it to be perceived. If five people saw the same shampoo ad, chances are not all of them will remember similar details. One might focus on the design while the other would remember the jingle. Selective retention (also known as selective memory) is a process through which some information is stored in the brain (and is thus available for retrieving) and other information is disregarded (and is thus forgotten). Both the storing and discarding are dependent on the bias of the consumer (Stroud & Choi, 2017).

Customer perception is affected by a number of factors:

- Price
- Quality
- Packaging
- Brand reputation
- Values and ethics
- Online and offline presence

Perception plays a vital role in the grand scheme of things. After all, it is the consumer's perception that makes or breaks an organization, that changes the game and forces businesses to reevaluate their stance. Similarly, the inverse is also true. How a business practices, will be of interest to their stakeholders. Their vested interest will be shaped by how you choose to run the show.

Jiayao Hua and their co-authors (Hu, Liu, Yuen, Lim, & Hu, 2019) conducted a research on whether green supply chain practices really did attract consumers and postulated that companies should emphasize the social benefits of green products and address these society practices to attract and motivate more consumers because people are observed to take action when there is the promise of societal acceptance involved. Still, it is important to remember that overtime, a consumer's motivations can change and affected by the increasing trend of environmental protection awareness and in the future, more consumers will go actively addressing environment concerns and implementing green practices.

3. Conceptual Framework:

After extensive perusal of literature, our framework was developed which comprises of the following:

3.1 Purchase of Green Products:

In 2018, Sdrolia and Zarotiadis published a paper that explained the various definitions of green products. The paper covered everything from origin to implementation in various literatures and evaluated all present definitions. It cited the famous Andrea K. Moser, who has defined green products as “products that are less or not at all harmful for the environment in comparison to a substitute of the same product category,” (Sdrolia & Zarotiadis, 2019)

Johnstone and Tan defined them as products that consumers identified as environmentally friendly, whether due to the types of materials used, the production process, packaging, promotion, and so on.” A point worth noting is that in a study conducted in Karachi last year, consumers in Pakistan did buy green products they did complain about how expensive they were as compared to other products.

3.2 Product Life Selection:

The product life cycle has five stages: introduction, growth, maturity, saturation, and decline. A conventional product follows that cycle, but for a green product the aim is to prolong the maturity stage.

By buying products with extended life cycles, it will put less stress on the business as less production would mean a decrease in the amount of emissions, thus lessening the carbon footprint (National Renewable Energy Laboratory, 2016).

3.2 Recycling

Collection of waste products so that they can be repurposed so they can be consumed again is referred to as recycling. (Cousineau, n.d.) Laurent Cousineau states that recycling is the best way to reduce your ecological footprint. Selling raddi or scrap, is the go-to recycling method used in Pakistan which has been popular since time immemorial. People hand over used paper (in the form of old newspapers, used books, or any other paper that is to be discarded), old boxes, and other old items to hawkers who take these to the junkyard where they are disposed or reused.

3.3 Pollution Control

The process of reduction and elimination of toxicities and pollutants in the environment via environmental agencies from the water, the air and land by setting discharge limits is pollution control. A Forbes article cited a recent study found out that the link between mental disorders and air pollution was getting stronger, especially in children. (DiSalvo, 2019) Supply chain practices contribute to the increase or decrease in pollution and green supply chain management ensures that the level of contamination is contained.

3.4 Consumer Perception

The process of selecting, organizing and interpreting sensations into a meaningful whole. (Madichie, 2012)

H1: Consumer perception has a positive impact on green supply chain practices.

H2: Consumer perception has a negative impact on green supply chain practices.

H3: Purchase of Green Products has a positive impact on consumer perception.

H4: Purchase of Green Products has a negative impact consumer perception.

H5: Product life selection has a positive impact on consumer perception.

H6: Product life selection has a negative impact on consumer perception.

H7: Recycling has a positive impact on consumer perception.

H8: Recycling has a negative impact on consumer perception.

H9: Pollution control has a positive impact on consumer perception.

H10: Pollution control has a negative impact on consumer perception.

4. Methodology

4.1 Research design and analysis

Social surveys and experiments are frequently viewed as prime examples of quantitative research and are evaluated against the strengths and weaknesses of statistical, quantitative research methods and analysis. (Broadhurst, Holt, & Doherty, 2012) As with previous researches, SPSS IBM 20 was used to run tests on the data.

4.2 Sample size and technique

The sample size for this study was 260. A total of 260 responses were recorded. The data was obtained via online questionnaire survey drafted with the help of Google Docs. Respondents of various ages, genders, working or studying in various institutes of different nature in the South Punjab region were selected. Random sampling was used.

4.3 Survey Instruments

The questionnaire that was developed was a close ended questionnaire that was given out to the relevant population. The questions were set on a five-point Likert scale in the following order:

- Strongly Disagree: 1
- Disagree: 2
- Neutral: 3
- Agree: 4
- Strongly Agree: 5

The questionnaire was split into two parts: the first one focused on gathering background information of the respondents; gender, age, education and nature of institution whereas the second one focused on questions drafted based on the variables and dimensions of the research: The questions were based on the following:

- Purchase of Green Products
- Product Life Selection
- Recycling
- Pollution Control
- Consumer Perception

A total of nineteen questions were asked, eighteen of which were based on the variables and the last one, the nineteenth question, which was included as an optional question, to check how many of the respondents were vegan.

5. Results and Discussion

5.1 Correlation:

Correlations						
		Average_PGP	Average_PLS	Average_R	Average_PC	Average_CP
Average_PGP	Pearson Correlation	1	.224**	.240**	.399**	.488**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	260	259	260	260	259
Average_PLS	Pearson Correlation	.224**	1	.356**	.079	.199**
	Sig. (2-tailed)	.000		.000	.205	.001
	N	259	259	259	259	258
Average_R	Pearson Correlation	.240**	.356**	1	.021	.195**
	Sig. (2-tailed)	.000	.000		.733	.002
	N	260	259	260	260	259
Average_PC	Pearson Correlation	.399**	.079	.021	1	.574**
	Sig. (2-tailed)	.000	.205	.733		.000
	N	260	259	260	260	259
Average_CP	Pearson Correlation	.488**	.199**	.195**	.574**	1
	Sig. (2-tailed)	.000	.001	.002	.000	
	N	259	258	259	259	259

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation test measures the relationship between two variables during the analysis. Not only does it measure the strength of the relationship but it also determines the direction it's headed in; whether positive or negative. Pearson correlation was used to check the nature of the relationships between the variable and to determine if any variable had covariance with another variable in the study (meaning said variables moved in the same direction if subject to change). The correlation coefficient (the resulting value) ranges from +1 to -1.

PGP: Purchase of Green Products

CP: Consumer Perception

PC: Pollution Control

R: Recycling

PLS: Product Life Selection

There is a significant relationship between purchase of green products and consumer perception. The Pearson chi square value for the relationship between purchases of green products on consumer perception was 0.488 which indicates there is strong and positive relationship. There is a significant impact of Product life selection & consumer perception The Pearson value for the relationship between product life selection and consumer perception is 0.224, making it the weakest but positive relationship. There is a significant relationship between pollution & consumer perception. The correlation between pollution control and consumer perception, is the highest at 0.399, which is a moderate and positive relationship. There is a significant relationship between recycling & consumer perception. The correlation coefficient between recycling and consumer perception is at 0.240. Overall, the variables overall have a positive correlation with each other, with varying degrees of strength but the strongest relationship was seen to exist between green supply chain management and consumer perception.

5.2 Regression Analysis

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.492	.267		1.841	.067
	Average_PGP	.273	.054	.273	5.087	.000
	Average_PLS	.053	.046	.060	1.158	.248
	Average_R	.091	.045	.104	2.007	.046
	Average_PC	.444	.050	.462	8.927	.000
a. Dependent Variable: Average_CP						

The coefficient table of the variables explains the criteria of the acceptance and rejection of the hypothesis. If the significant value less than 0.005 the null hypothesis will be accepted and if the significant value is more than 0.05 the hypothesis will be rejected as there is no impact found. As in above table the significant value for purchase of green products (Average_PGP) is 0.000 which means it is positively impacting consumer perception (Average_CP) so our hypothesis, H3, has been accepted, whereas H4 has been rejected. The significant value for Product Life Selection (Average_PLS) is 0.248 which means that it is negatively impacting consumer perception (Average_CP) which means our hypothesis, H6 has been accepted whereas H5 has been rejected. The significant value for Recycling (Average_R) is 0.046 which means that it is positively impacting consumer perception (Average_CP) which means hypothesis, H7, has been accepted and H8, rejected.

6. Limitations and Future Recommendations

The thesis is conducted to find the impact of green supply chain practices on consumer perception in South Punjab. The thesis began with the discussion of green practices in the supply chain area of business and made its way down to how consumers play a part in it. This is business. Consumers affect each and every part of it, not just what you see on the surface and vice versa. Business practices DO have an effect on what the consumer believes, thinks and does. In the past, there have been studies conducted on

integration of green practices into different areas of business and the green supply chain is a relatively newer phenomenon than its other counterparts. Within context of South Punjab, this is relatively new. Also, the validity of the instrument was verified. Should anyone want to conduct research in this area of study, it can be applied in future searches.

The findings conclude that there is a positive impact of green supply chain practices on consumer perception. Out of all the areas used to measure the relationship, there is one where it falls short, which is product life selection. However, we cannot ignore the strong links between pollution control, purchase of green products and recycling. If restaurants focused on more waste management practices and worked those practices into their daily activities it would help them cut down on costs and reduce the damage they cause to the environment by dumping. By buying green products, using them and advertising their usage, companies will bring consumer attention to these products which in turn will generate and shape consumer perception into a more favorable one.

However, there are limitations in various forms. Even though the search results have shown awareness, there is limited awareness among the male gender. It might be 2019 and more women are coming into the workforce, but gender disparity is still a problem in Pakistan. Even today, resources and opportunities are not distributed equally across all genders. Men and women aside, the transgender population is not even considered, and even though this research was gender inclusive, the response from their side was minimal. Overall, the response from the general population was better than initially expected in regards to awareness, but understanding and implementation of green supply chain management and its practices is limited.

Another thing of note that should be mentioned is another optional question that was included in the questionnaire. Veganism is another green practice that has been on the steady rise lately. Out of 260 respondents, 168 respondents (64.6%) responded that they were not vegan, but the remaining 92 (35.4) responded that they were. This does not have any bearing on the framework or results, but it should be noted that veganism is another thing to consider in the long-term and can be used as a dimension in future studies..

7. Conclusion

The situation is in front of you. Climate change, the ever looming threat of an imminent water crises, the increase in pollution... things aren't looking good and Pakistan needs to wake up and do something before the sustainable front is too late to save. Changes begin with the first step, no matter how small it is. Governments need to develop programs and implement at a basic primary level, starting from schools, colleges, universities and making their way to organizations and institutions so people know the worth of taking the green way. Laws need to be drawn up regarding what green practices food businesses should implement into their supply chains and other areas. Regular checks should be made. Green supply chain management should be made mandatory. For other researches who will look into this topic of study later, look for more dimensions that could have an impact on green supply chain management and consumer perception in context of new variables and in other areas of Pakistan across specialized categories of the population and other industries.

References