# CONSUMER BEHAVIOR TOWARDS PAPER BAGS DURING SHOPPING: A QUALITATIVE STUDY ON PAKISTANI GROCERY CONSUMERS

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#### Abstract

Existing theories hardly focused on Pakistani grocery store consumers attitudes toward paper bags. The use of paper bags in Pakistani grocery stores is discussed in this research, as well as how it may persuade consumers to use them or what effect they may have on the local environment. Initiatives to use paper bags contribute to a reduction in pollution in the nation. The study's goal is to raise consumer awareness about the need to switch away from plastic bags. According to the findings of this study, people's lifestyles will alter. Paper bags can replace plastic bags, which will cut down on their consumption. Paper bags will help keep the environment clean and less polluted. The main focus of this issue is the implementation of paper bags in the grocery sector. This article is divided into various sections that each cover in depth all information related to the topic. The study on the use of paper bags for supermarket shopping reveals how consumers behave when using paper bags and also to limit the use of plastic bags. This research is qualitative in nature and involved conducting interviews. This research report also includes a methodology section where we detail all of the individuals from various fields that were interviewed. In order to reduce the usage of plastic, this paper discusses how paper bags are used in everyday shopping and human behavior.

Keywords: Paper Bags, Plastic bags, Consumer Awareness, Environment

#### INTRODUCTION

Policies to reduce the use of plastic bags have been more prevalent during the past ten years, particularly through bans and pricing schemes. While the initial ban on plastic bags went into effect in 1974, more than 100 more bans on plastic bags have been devised and enacted in various forms just in the previous ten years. In order to reduce the use of plastic bags and shift the focus to paper bags, many Asian nations became interested in a global ban on plastic bags (Nielsen et al., 2019; United Nations Environment Programmed, 2018). This increased the number of nations with a plastic bag policy to 127 (Nielsen et al., 2019; UNEP, 2018). Paper is effective in lowering pollution in the country where it is used, even when paper bag production costs are excessively expensive. To change the conversation to paper bags, which are created from renewable pulpwood from trees, go here. Paper bags, on the other hand, are produced by cutting down trees, which harms both plants and animals. Additionally, energy derived from coal or natural gas is used to generate it. After using enormous quantities of energy from fossil fuels, electricity, various chemicals, etc., the resulting pulp will be transformed into a paper bag by numerous equipment and procedures. Additionally, they are recyclable and biodegradable, and they may both be used to make corrugated cardboard. There is a lot of attention on how damaging plastic is to the environment. In Pakistan as well as other parts of the world, awareness programs are being run.

The Government of Sindh once again forbade the use of polythene shopping bags in Karachi during a meeting that was presided over by Chief Minister of Sindh Murad Ali Shah earlier. Section 144 will be

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used to implement the restriction starting on October 1st, 2019. However, not much has been done to offer consumers alternatives to plastic in terms of products. The well-known Imia Super Market (Defense) has reportedly joined the #SayNoToPlastic initiative. They are hoping that this tiny move will contribute to a wider effort to combat environmental pollution. They have taken the initiative to sell items in paper bags rather than plastic bags in response to consumer demand.

Though one of the most frequent uses of plastic is for shopping, a supermarket is perhaps the greatest place to start this transformation. It is also fantastic to see Pakistani firms embracing the #NoPlastic trend and causing their consumers' lifestyles to drastically shift as a result. Saying "no" to plastic encourages consumers to use paper bags instead of plastic ones when shopping. For the convenience of their consumers, major brands like J., Khari's, and others use paper bags in Pakistan. According to our calculations, paper bags are frequently used in other nations, but they are rarely used in Pakistan's grocery stores. Instead, shoppers frequently use plastic bags in general stores, which is bad for the environment.

The existing theories hardly ever focused on Pakistani grocery store patrons' attitudes toward paper bags.

In this study, we talk about using paper bags in general stores to inform consumers about how important it is to protect the environment from the usage of plastic bags.

The importance of research is that as a result of the effort described above, people's healthy and ecological lifestyles will change. Paper bags can replace plastic bags, which will cut down on their consumption. Paper bags will help keep the environment clean and less polluted.

Following are the research objectives as per research statement based on problem statement:

- Give awareness of paper bags to consumer
- Reduce the number of plastic bags among people
- Attract consumer's behavior towards paper bags
- Implementation of paper bags on grocery stores Following are the research questions formulated based on the problem statement of the research:
- How paper bags impact on the environment?
- How consumers adopt paper bags?
- How to implement paper bags in grocery stores?

#### LITERATURE REVIEW

Plastic garbage production is out of control, and the pollution it causes has reached a crisis level that requires immediate attention. Estimates indicate that the amount of plastic waste in the ocean will outweigh that of fish in terms of share (Hughes, 2019). Because they are contaminating the oceans and upsetting food systems, these discarded plastic materials constitute a major threat to the ecology (Boyle, 2019). A research study suggests that identifying the source of plastic pollution and substituting it with an alternative that meets the same needs in a sustainable way could result in a long-lasting and workable solution (Nair & Sangeetha, 2019). Another study examined paper as a sustainable, nontoxic, and biodegradable replacement to ordinary plastic (Burton, 2019). However, the full life cycle study does not support the paper as a workable option in terms of long-term sustainability.

Due to the negative effects that conventional plastics have on the environment, the economy, and society, researchers are currently focusing on the creation of bio-based plastics (Ojha & Kapoor, 2019). Because they are produced from renewable biomass, bio-based polymers have a lower carbon footprint than their fossil-based equivalents (Karan et al., 2019). Poly Lactic Acid (PLA), also known as

polylactide, is thought to be the most promising biodegradable material among these bioplastics (Nampoothiri et al., 2010). Currently, PLA made from corn for commercial use is successfully produced by a global corporation called Nature Works. The Semipro software database has life cycle inventory data (eco-profiles) for Nature works available (Vince et al., 2007).

When it comes to the plastic bag ban legislation, consumers have garnered more attention than governments, despite the fact that both are working to promote sustainable consumer habits. The consumer behaviors and how they might be changed and explained are a major focus of the literature on the subject (Ari & Ylmaz, 2017; Madera et al., 2016; Mogomotsi et al., 2019; Mokhtar et al., 2019; Nurulhaq ,2019; Soraya et al., 2021). The majority of explanations have been based on behavioral theories including the Theory of Planned Behavior (Ari & Ylmaz, 2017), Learning Theory (Jakovcevic et al., 2014), the Theory of Normative Social Behavior (Borg et al., 2020), and Nudge Theory (Almandine, 2020; Lim, 2020). However, several researches have concentrated on the opposing viewpoint, situating the analysis of the plastic bag ban within the political ecology paradigm (Njeru , 2006). The justification for comprehending the politics of a plastic bag ban is that effective population governance is essential for changing people's behavior toward sustainability (Patterson et al., 2017).

These are what Foucault refers to as the governance procedures that make the actual governance "thinkable" and "practicable" (Anderson, 1998). Because the change, though initiated outside, takes root in the people' rationalities and appears to be the result of internal decision, such tactics result in long-lasting behavioral changes (Agrawal, 2005). As a result, according to Foucault, the purpose of the government is not to impose laws on its citizens but rather to shape their behaviour so that it conforms to predetermined norms. This is done by using tactics rather than laws to direct activity and by using laws themselves as means to achieve specific goals (Foucault, 1979; Foucault, 2000). This definition of governance strategies is used in the current study to examine how consumers view the ban on plastic bags and how well they evaluate the government's reasoning behind it. In brief, the goal of the current study is to comprehend the effectiveness of govern mentality in the example of Pakistan's ban on plastic bags and how well that ban is reflected in consumer behavior.

# METHODOLOGY

This research is being conducted by a qualitative methodology. In order to guide research using a thematic approach for information gathering in subjective evaluation, a model of grounded theory based on the idea of human relatedness has been adopted. An individual meeting has been chosen for this study. Because of tending to requests that should have been discussed at a gathering and the reasonable likelihood that there wouldn't be another occasion to meet a particular section, semi-structured interviews were chosen. Purposive sampling was used for this study's sample size. Purposive sampling is considered to be more accurate than subjective testing in a large marketplace when people from various fields are present. The needs of several health-related area segments were the focus of this investigation. The adoption of thematic analysis was motivated by how easily themes and sub-themes may be discovered. Themes can be viewed both inductively and deductively in thematic analysis.

It is a flexible strategy that may be used in a variety of research investigations. For instance, it combines actual techniques that are typical of most abstract assessment, including theme coding in grounded theory hypothesis speculation. To find pertinent publications exhibiting primary and secondary research from peer-reviewed journals, as well as government and intergovernmental reports, three different databases (ProQuest, Google Scholar, and Elsevier) were employed. These databases were searched using a combination of the phrases "behavioral," "influence," "supermarket," "plastic bag," and

"nudge." The publications only covered the years 2008 through 2019. The choice to start in 2008 was made as a result of Thales and Sunstein's publishing of and popularization of the nudge hypothesis (2008). For relevance, past research on supermarkets and their behavioral implications will be incorporated.

Table 1					
Sampling Framework					
Sampling Framework based on following people belong to different fields					
Sales man					
Store owners					
Consumers					
Interview Characteristics					
Profession	Interviewee	Gender	Method		

Profession	Interviewee	Gender	Method
Sales man	MJ-01	Male	In person
Store owners	KI-02	Male	In person
Consumers	JO-03	Female	In person
Consumer	Ту-04	Female	In person
Sales man	WE-05	Male	In person
Store owner	QA-06	Male	In person
Sales man	JK-07	Female	Skype
Consumers	IL-08	Male	Skype
Store owner	MN-09	Male	Skype
Consumer	RE-10	Male	Skype

# RESULTS

# Theme 1: Paper bags are ecologically friendly in characteristics.

"...The usage of paper bags also has several advantages for the environment. They are maintainable and can be used repeatedly..." TY-04

Poor solid waste management degrades the quality of the soil, the air, and the water (Das et al., 2019).

"...Biodegradable and recyclable Paper bags can be delivered to a paper mill and recycled into new paper because they are manufactured from a natural resource that is renewable..." JO\_3

Both biodegradable and non-biodegradable garbage are included in solid waste. Waste that cannot decompose includes plastics, rubber, metals, etc. In Pakistan, single-use plastic bags have created a variety of environmental risks. Plastic shopping bags made up roughly three-quarters of the rubbish left in the communal containers after recyclable elements were extracted from Lahore, the provincial capital of Punjab, according to research (Masood et al., 2014).

# Sub Theme 1. Ecological Advantage

"... Paper bags naturally deteriorate when they are accidentally left in the natural environment..." JO-3.

Due of the length and kind of their disintegration, single-use plastic bags have turned into a menace to the environment. In addition, non-renewable, non-sustainable energy sources are used in the production of plastic. Only 9% of all plastic ever created has been recycled; the remaining 94% continues to damage the environment despite the enormous environmental cost of plastic, from its creation to disintegration (United Nations Environment Programme, 2018).

# Sub Theme 2. Friendly Biodiversity Environment

"...It breaks down far more quickly than plastic, making it less likely to become litter and endanger wildlife..." TY-04

Wildlife suffers a direct and fatal consequence of plastic contamination. Each year, thousands of seabirds, sea turtles, seals, and other marine mammals die from consuming or being entangled in plastic (Xanthos & Walker, 2017).

#### Theme 2: Consumer Awareness and Attitude towards paper bags

"...Consumers are encouraged to buy a bag so they can protect the environment. Consumers are more likely to identify with the bag's message if there is an environmental message, icon, or green fabric or imprint on the bag..."MN-09

Consumers' pro-environment attitudes are positively correlated with their environmental knowledge (Agyeman & Badugu, 2017). However, if the information relating to attitudes is not repeated, attitudes may not necessarily convert into behavior (Glasman & Albarracin, 2006).

Since Pakistan's ban is relatively new compared to its neighboring nations, it is vital to comprehend how customers feel about the government's ban in order to make it durable (Zaheer et al., 2021).

# Sub Theme 1. Consumer Awareness

"...Many paper bags are more resilient to weight or pressure than plastic bags..."QA-06

Although there was a lack of effective enforcement of the ban and information regarding the ethical and moral costs of using plastic bags, consumer behavior was positively impacted by interventions such as awareness campaigns, cashback programmes, pricing plastic bags, and providing alternatives to packaging, which incentivized people to carry their own bags (Gupta, 2011).

# Theme 3: Implementation of Paper Bags in grocery stores

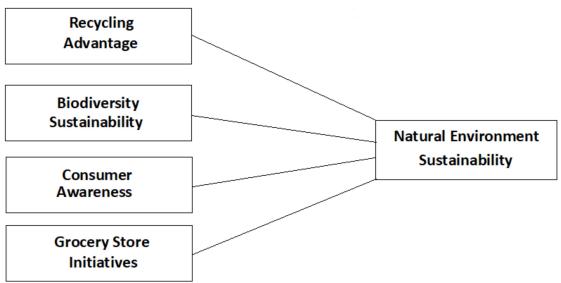
"...Paper bags are biodegradable and recyclable, but polythene bags are not biodegradable and are detrimental to animals, hence paper bags should be preferred instead..."RE\_10

The Sustainable Development Goals (SDGs) number 12 recognizes the significance of the general public's consumption patterns and aims to make them more sustainable (United Nations General Assembly, 2015). As a result, policies like awareness campaigns, rewards for using alternative bags, and some levies are directed at people who use these plastic bags.

# "...The government is about to take a bold first move toward getting rid of this environmental risk and public blight..."IL-08.

The most often used laws in the world are levies and partial or total bans on single-use plastic bags (Xanthos & Walker, 2017). The shift in consumer behavior toward more environmentally friendly purchase habits is cited as the justification for enacting bans and levies (Jakovcevic et al., 2014; Ritch et al., 2009). In 2017, the Khyber Pakhtunkhwa provincial administration, which was in power at the time, outlawed the production and use of single-use plastic bags and levied hefty fines on those who violated the prohibition (Umer et al., 2018).

#### Theoretical Framework



*Figure 1:* Biodegradable Natural Environment Sustainability Model (BioNES Model)

# CONCLUSION

The usage of paper bags also has several advantages for the environment. They are maintainable and can be used repeatedly. They can be recycled and decomposed naturally. Paper bags can be delivered to a paper mill and recycled into new paper because they are manufactured from a natural resource that is renewable. Paper bags are frequently recycled in their whole. Paper recycling does not pose the same danger as recycling plastic, which releases incredibly harmful and toxic fumes into the sky. Paper can be recycled quite readily and is much more biodegradable than plastic. However, it frequently winds up in landfills where it takes up more space and degrades more slowly than the same weight of plastic. Due to the restriction, the majority of markets only offered cloth bags or paper bags, and each time a client went shopping, they were charged a fee for these bags (Zaheer et al., 2021). Pakistan is a developing nation in South Asia and has the sixth-largest population in the world and the fastest rate of urbanization in the area, both of which have been linked to an increase in the production of solid garbage (Chen, 2018; Senzige & Makinde, 2016). In some of Pakistan's largest cities, households produce between 1.896 kg and 4.29 kg of waste per day on average, of which between 31% and 49% is not collected (Mahar et al., 2007). The government outlawed single-use plastic bags in August 2019 to combat the high levels of plastic pollution and their pronounced impacts in Islamabad, the capital of Pakistan.

In Pakistan, almost all big grocery stores are preferring and serve their customers through paper bags. Every grocery store in Pakistan now has a special consideration to ensure that its store meets the environmental parameters to the fullest. The best evidence for this is to ensure the use of paper bags for Pakistani consumers. Plastic bags have been used in Pakistan for a long time as pollution has increased, but over time, not only the state-of-the-art grocery stores but also government have made the use of paper bags mandatory for sustainability of environment. Consumer awareness is also on the use of paper bags in Pakistan. Over time, the shopping style of Pakistani consumers has changed considerably and is playing its full role in the new generation environment.

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