

DISPOSAL BEHAVIOUR AND PRACTICES OF POST-CONSUMER APPAREL WASTE

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ABSTRACT

With the rapid changes in fashion trends and the impact of fast fashion, the overconsumption of clothing has a significant environmental impact on society and the Youth are the stylish shoppers who have a strong tendency to follow the latest fashion and trends. Hence, this is very important to understand how young fashionable consumers are disposing of their unwanted clothes. In this study, a survey was conducted among 100 young college-going respondents, and the result shows that clothing disposal behavior is much more affected by the attitudes of the consumers towards the changing fashion trends, their family income, and their philanthropic awareness toward clothing disposal. Moreover, the attitude towards the disposal of clothing is thoroughly influenced by environmental economic factors. The findings revealed that youth in India are not so much aware of apparel waste management practices that are helping to sustain the environment so there is an emergence to understand their disposal behavior and also an urgent demand to give awareness regarding clothing disposal behavior.

KEYWORDS: Apparel, waste, Management, Disposal, Behaviour

1.0 INTRODUCTION

The apparel and textile industry is one of the most ancient and established industries. The textile industry is a major contributor to many national economies. The Indian textile industry is no exception to this. It occupies a unique position of its contribution to the Indian economy in employment, industrial production and exports. Textile production is one of the largest segments of the Indian economy as it contributes its role about 14% to the economy of the country. It is one of the largest segments of the Indian economy accounting for 14% of the industrial production. The textile industry is closely related to agricultural and rural areas and it is the most important industrial entrepreneurship employing about 35 million people.

The structure of the Indian textile industry is quite complex. These range from hand-spun khadi and woven traditional textiles on handlooms at cottage industry to modern and sophisticated capital-intensive industrial sectors and synthetic fiber manufacturing units. The Indian textile industry has diversified from manufacturing traditional items to fashion items for international markets (Chavan, 2001).

The textile and apparel industry is one of the most essential consumer goods industries. Although, it is considered as the second most polluting industry as the oil industry is the first most polluting industry. Due to the advancement of technologies, industrialization, rapid evolution of fashion, there is enormous production of textiles and production is always associated with some form of pollution and waste. Only the production process of the industries does not generate wastage but also the consumption of textiles produces a lot of wastage i.e., clothing. This leads to the need for the effective management of textile waste.

Low prices stimulate consumption and today's race to the bottom prices have triggered a shopping frenzy, where clothing consumers are buying, storing and throwing out millions of garments each year (Cline, 2012). According to the Statistic of Central Pollution Control Board, the waste generated throughout India is about 6.23 million tons (Agarwal et al., 2015). In the current way of life, we cannot limit production but we can find out infinite ways to reduce the burden on nature.

1.1 Reasons for increasing in textile waste generation-

- **Industrialization-** Industrial revolution leads to the growth of the textile industry. Due to the many new technologies, machinery and innovations keep coming to the global market. This leads to the mass production of textile and clothing. Many synthetic fibers are produced and have become popular in the market and are used more in production. This increases textile production which results in various pre and post-consumer textile waste.
- **Contemporary lifestyle** - The lifestyle of people in India is very much influenced by western culture. Youth keep themselves updated with current fashion trends and change their clothing accordingly. Fast fashion plays an important role in increasing textile waste. Fast fashion can be defined as clothing those are available at a low price, considered to be disposable (Claudio, 2007). The term fast fashion includes mass-produced cheap and low-quality clothes that have a shorter life span.
- **Lack of consciousness towards the environment-**
Consumers purchase clothing according to the latest fashion and dispose of them soon without even thinking that ultimately clothes end up in the landfill. Also, consumers are not conscious and aware about reusing the waste clothes in another form till its end life.
- **No strict government policies-**
The policies in India towards environmental welfare are not strong enough to control the pollution caused by textile and clothing.
- **Lack of consumer's textile care knowledge-**
Due to lack of textile care knowledge, improper washing and maintenance practices are followed which degrade the clothes and reduces the expected life of the textile and clothing. Therefore, clothes are disposed of earlier than the actual life which ultimately leads to more purchasing of garments.
- **Lack of awareness and concern towards textile reuse-** People are not aware and conscious about reusing the textile waste in other forms or for other purposes till the end of its life to reduce the consumption to some extent.

Consumers garment with higher frequency leading to overconsumption which increases disposal rate even if the cloth is still wearable. This affects the environment it' these arc disposal into landfills.

1.2 Textile waste management

"Management" means managing things optimally for the use of resources, which can help to save time, cost and resources. In the context of waste, waste management involves managing waste in any that can reduce, utilize and suggest innovations from the waste (Agarwal et al., 2015).

Waste management is the set of activities and actions required to manage waste from its inception to final disposal. Waste management is defined as the collection, transportation, processing, disposal of waste produced by consumers, as well as monitoring and regulations to reduce their effect on people and the environment. It also includes the legal and regulatory framework for waste management, including guidance on recycling, reuse etc. It is very important to form effective policies that balance production with the environment.

According to Agarwal et al., (2015), textile waste can be dealt with at the Industrial level as well as Household level. The process of waste management is a difficult and vast task as to manage the waste due to the involvement of scientific knowledge, logistical planning and understanding to make a balance between the negative impact on the environment and the cost-effectiveness of the management process.

1.3 Textile waste processing

Textile waste in landfills is a concern at the moment that offers a wide scope of textile waste processing. The textile waste processing practices should be cost-effective and not more expensive than using new material. As the textile industries are now becoming more sustainable and ethical, then textile processing cannot be ignored as it is a process that contributes to generating textile waste. Processing of textiles can be done in various forms so that these wastes can be used as some useful products and can be prevented from going into landfills. The textile waste can also be converted into various innovative and functional products

either by up-cycling or recycling techniques. Recycling is a process of breaking down the products into its first raw materials to produce new-fangled products. Recycling is very technical work performed at the industrial level.

Up-cycling can be defined as the process of creating a useable and beautiful product from waste or unwanted items in some way to add value. It gives an old item a new purpose. It is also known as -creative reuse. In India, people are not much aware of the up-cycling practices and its benefits. Also, there is a lack of government support and participation in promoting the up-cycling-based research work and the upliftment of the communities and people working with up-cycling-based activities.

There are many Indian brands like Doodlage, Tnntab, KaSha, House of Wandering Silk, Pero, Mehra Shaw, Conserve, Eco Wing, Jagger, AM.IT who are taking initiative towards up-cycling. These brands use the untouched, not worn, barely worn clothing of wardrobe or good quality second-hand clothing and turning them into trendy up-cycled or recycled clothing. They are also using sari fabrics, plastic bags, tire tubes, seat belts, tents, parachutes, marble slurry, waste cotton cloth, tin and industrial waste like fabric scraps to re-invent into different garments and products like bags, scarves, fashion accessories etc.

1.4 Clothing disposal

Clothing disposal is considered one of the major concerns of the current scenario. Clothing and textile disposal have gained a lot of attention from previous times. According to Laitala (2014), clothing disposal is referred as to getting rid of undesired garments at the end of the garment's stage with its present owner.

Clothing consumption is completely different from housing consumption, the disposal of housing occurs relatively infrequently as the inventory and usage of housing is stable and constant. With this perspective, it can be clearly said that clothing consumption is much more complicated, as the fiber passes from many stages to construct the fabric so it is much more complicated than that of food or housing.

Lee et al., (2013) have also emerged that the people that people have difficulty with disposal of fashion items as the items are somewhere related to any life event, sometimes the people have an emotional attachment with their garments as who had given them. Sometimes people think that this specific clothing is the reflection of their personality at that definite stage of life.

1.5 Reasons for clothing disposal

There are several reasons for the disposal of clothing by consumers.

- Poor fit
- Out of style
- Boredom or tired of garment
- Helping needy people
- Lack of storage space
- Damaged or worn out

1.6 Practices of clothing disposal

The practices of clothing disposal are referred to the practices used by the people to dispose of their clothing. It is the decision made by the consumer to adopt a particular method or practice to dispose of the garment that is no longer of use. To get rid of their no-longer-needed textiles, consumers have several disposal options:

- Donation
- Give away to family members and friends
- Resale
- Reuse
- Discard

Therefore, it is important to develop the literature on consumers in India as the country also makes up huge apparel markets and produces large waste by conducting this research, the researcher aims to provide data to encourage further research on this upcoming and essential subject in India.

2.0 METHODOLOGY

The present study was planned to understand Indian consumer's clothing disposal behaviour in terms of reasons for disposal, various practices of disposal and motivational factors behind their disposal. Due to paucity of time, the research was conducted on Agra women only in the age group of 18-30 years.

2.1 Pilot study

A preliminary survey was conducted to assess the clothing disposal behaviour of the consumer. For this, an interview schedule was formulated. Pre-testing was carried out on a sample of 12 college-going girls of DEI.

2.2 Research design

The study was carried out to explore the types of consumers and their clothing disposal behaviour by identifying reasons for disposal, modes of disposal and their concern about sustainability and up-cycling.

2.3 Locale of the study

D.E.I., Agra was conveniently selected to carry out the research. It is considered appropriate for the study as it is an institute where people belonging to different income groups and shows distinct buying and discarded behaviour.

2.4 Sample selection

Conveniently, a sample of 100 females (18-30 years) was selected for the study. The samples were further segregated based on their age group as shown in Table.

Table 2.1: Segregation of the sample on the basis of their age-group

Category	Age Group (in years)	Number of Respondents
A	18-20	37
B	21-24	38
C	25-30	25

An interview schedule was administered to the selected samples of DEI, Agra. The majority of the respondents were from the Department of Home-science. The age group 18-30 was selected as the younger generation frequently purchases their garments

and changes the style than older people. Moreover, the female respondents were solely selected because studies revealed that women purchase more frequently and they are also more interested to adopt new fashion and new trends than males.

2.5 Tools for data collection

To obtain the required data, an interview schedule was formulated and was further administered to the women of Agra. The interview technique was used as it gave a better understanding of the questions. The interview schedule had questions related to the following broad categories:

- General profile and shopping pattern of the respondent
- Reasons for disposal
- Practices of clothing disposal
- Concern for environmental issues
- Awareness and experience with up-cycling

3.0 RESULTS AND DISCUSSIONS-

The interview schedule was arranged into 3 different parts. The first part dealt with the reasons for disposing and clothing disposal behaviour. The second part dealt with the concern about environmental sustainability and in the last sections, consumers were asked about the up-cycling practices. The responses were carefully analyzed and the results are discussed below.

3.1 Reasons for disposing of clothes

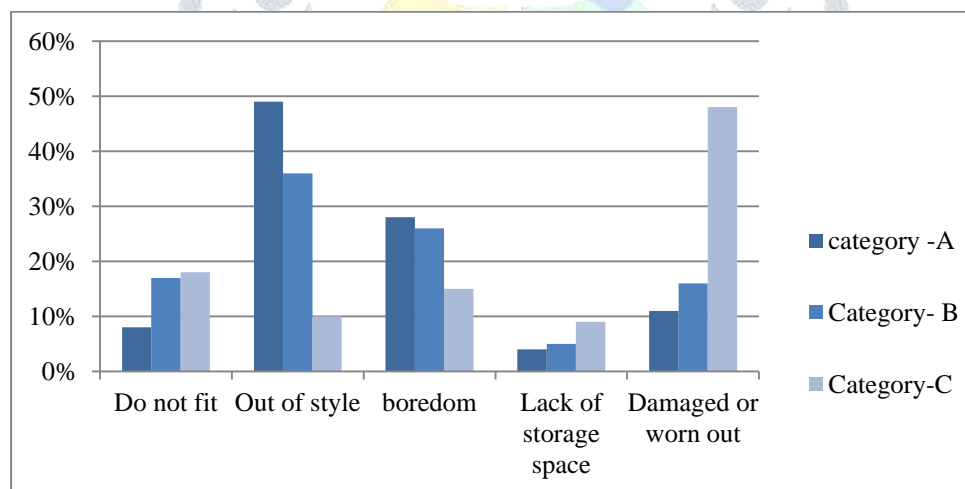


Figure 3.1: Reasons for disposing of clothes for (Category-A, B and C)

For Category-A (18-20 years)

It was analyzed that the respondents of this category were more fashion conscious and change their clothing with changing trends. Only 4% of respondents felt that lack of storage space is also a reason for the disposal of clothes as they purchased clothing frequently and did not want to overstuff their cupboard.

For Category-B (21-24 years)

Category-B also has the same results as category –A, that they disposed of garments that are out of style. They also seemed to be more fashion-conscious and disposed of clothing when outdated. The boredom of clothes was a second major reason for disposing of clothes among respondents. The 5% of respondents dispose of clothing because they did not have sufficient storage space for clothing.

For Category-C (25-30 years)

Like the above 2 categories, category C had different results. Most of the respondents (48%) of Category-C were involved in quality-related disposal. Respondents felt that they dispose of their garments only when they get damaged or worn out. 15% of the respondents disposed of clothing by getting bored or tired of them as they wear it a couple of times.

3.2 Clothing disposal practices

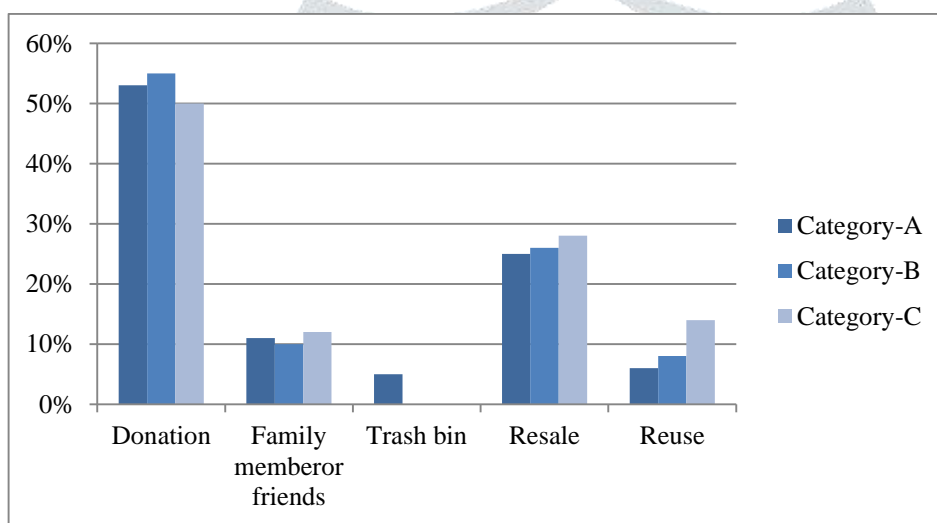


Figure 3.2: Disposal practices of clothes for (Category-A, B and C)

For Category A (18-20 years)

The results indicated that 53% of the total category-A respondents used donation practice of disposal behaviour. Only 5% of the respondents tossed their clothes direct into the trash bin.

For Category-B (21-24 years)

It was observed that 55% of the total respondents were engaged in donating their clothes as a practice of disposal. The reuse practice of clothing disposal is chosen only by 8% of the respondents.

For Category- C (25-30 years)

The results indicated that the disposal practice chosen to throw apparel in the trash bin shows similar outcomes to category A and B that no one threw their apparel direct into the trash bin. This shows that they have a positive sustainable attitude by using other practices for disposal. It was also found that reselling to bartanwala/bartanwali was the common reselling practice followed by Indian consumers.

3.3 Concern about Environment Sustainability

The respondents were asked questions related to concerns about environmental sustainability and consciousness. Their environmental concern was analyzed in conjunction with their clothing disposal behaviour. The results showed that environmental concern affects their clothing disposal behaviour.

The respondents of category-A and Category-B mentioned that they were well-known about the negative impact of textile waste generation but there is a lack of awareness among the consumers regarding this and its side effect on environmental pollution levels in India. The youth of India is highly influenced by the fast fashion era which has changed their purchasing behaviour and is not conscious of the adverse effect of clothing waste on the environment. They never mind disposing of the clothes soon. While analyzing data it was observed that few of the respondents mainly postgraduates and research scholars are concern about the side-effects of textile waste generation but still their concern is not their main motivation for clothing disposal behaviour.

3.4 Concern about Up-cycling

It was observed that most of the respondents were unaware of the term up-cycling except a few. Most of them commonly referred to up-cycling practices as recycling. The researcher had to explain the term and its importance and after understanding the concept of “Up-cycling”, the respondents felt that up-cycling is a good way to make the best use of the disposed or unwanted clothing.

Respondents who followed up-cycling practices responded. that they up-cycle those garments which are damaged or worn out and those clothing items that are less used or out of fashion. For them, the economic concern as well as desire to create something new out of waste and also the economic concern is the motivation for following up-cycling practices. Most respondents liked the idea of up-cycling and would also like to encourage friends and family members about up-cycling practices by showing them up-cycled products and making them aware of products from unwanted clothes and their reuse.

4.0 CONCLUSION

After collecting the data, all three categories were studied and analyzed further as a whole of 100 samples (Figure 3.3).



Figure 3.3: Types of shoppers

These 100 samples are further divided into 3 categories of shoppers based on responses obtained (Table 4.1).

Table 4.1 Categories of consumers towards clothing

Category	Average purchasing rate	Wearing duration	Major disposal reason
Shopaholics	Twice or more in 1 month	1 season or maximum 2 season	<ul style="list-style-type: none"> • Out of style • Boredom • Lack of storage space
Moderate buyers	Once in a month or two months	2-3 season	<ul style="list-style-type: none"> • Damaged or worn out • Size problem • Boredom
Minimalists	Once or twice in 6 months	3 season or till the life of the clothes	<ul style="list-style-type: none"> • Damaged or worn out • Size problem

- **Shopaholics:** The 17% of the respondents were shopaholics and observed to be those who are involved in high purchasing rate. Their purchasing rate was twice or more in a month. The participants of both above 10 lakh and 5-10 lakh family annual income were involved in high purchasing frequency. The major discarded reasons for the clothes for shopaholics were out of style and boredom.
- **Moderate buyers:** 58% of respondents were moderate buyers out of 100 who were involved in a moderate purchasing rate. On average, they purchase clothes once a month or once in 2 months. Participants with family annual income between 5-10 lakh were involved in moderate purchasing. For them, damage or worn, fit issues were the major reasons for disposal of clothes and also boredom for respondents with family annual income above.
- **Minimalist:** 25% of the respondents were minimalists who were involved in very less purchasing rate. On average, they purchase clothes once or twice in 6 months. This category majorly involved respondents with family annual income less than 5 lakhs and few respondents having between 5-10 lakhs. On average they wore clothes for 2-3 seasons or till the clothes were in wearable condition. The major disposal reasons were damaged, worn out and do not fit.

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