

Readymade Garment Disposal Behaviour and Environmental Awareness among Young Online Fashion Consumers: A Study of Ulhasnagar

Kirti Anil Aswani¹, Ravikiran Garje²

^{1,2} K.C. College, HSNC University, Mumbai, Department of Economics

Abstract—The expansion of online fashion shopping has changed not only the manner in which consumers purchase readymade garments but also their post-consumption disposal practices. The present study examines garment disposal behaviour among young online fashion consumers in Ulhasnagar, with particular focus on the primary disposal methods used by consumers and the association between gender and environmental awareness regarding textile disposal. The study is based on primary data collected from 100 young consumers aged 18–24 years. Descriptive statistics were used to analyse demographic characteristics, online garment purchasing frequency, garment-use period and disposal practices. A Chi-square goodness-of-fit test was used to examine whether the four identified disposal methods were selected equally, while Pearson's Chi-square test of independence was employed to examine the association between gender and environmental awareness.

The findings show that donation was the most frequently reported disposal method (45%) in Ulhasnagar, followed by disposal through domestic/municipal waste (25%), handing garments down to friends or relatives (21%), and household repurposing (9%). The Chi-square goodness-of-fit test showed a statistically significant difference in the distribution of disposal methods, $\chi^2 (3) = 26.880$, $p < 0.001$. With respect to environmental awareness, 52.46% of male respondents and 51.28% of female respondents were aware of textile disposal. Pearson's Chi-square test showed no statistically significant association between gender and environmental awareness, $\chi^2 (1) = 0.013$, $p = 0.909$. The findings indicate that garment disposal practices are unevenly distributed, with donation being the most commonly reported channel, while gender was not significantly associated with environmental awareness.

Index Terms—Online Fashion Shopping, Garment Disposal Behaviour, Textile Waste, Environmental

Awareness, Young Consumers, Ulhasnagar, Sustainable Consumption

I. INTRODUCTION

The growth of e-commerce has significantly changed the fashion retail environment. Online platforms provide consumers with greater access to apparel, frequent product launches, promotional offers and convenient purchasing. These developments are closely associated with the growth of fast fashion, where shorter product cycles and rapid changes in consumer preferences can contribute to increased clothing consumption (Bhardwaj & Fairhurst, 2010). The environmental implications of clothing consumption do not end with purchase. The manner in which garments are retained, reused, donated, discarded or repurposed determines their post-consumption pathway. Previous research has examined clothing disposal behaviour and has identified disposal, donation, reuse and recycling as important consumer choices (Morgan & Birtwistle, 2009; Laitala, 2014). Research has also shown that convenience, environmental concerns, economic considerations and social influences can affect clothing disposal decisions (Joung & Park-Poaps, 2013).

Online fashion shopping is particularly relevant to younger consumers because digital platforms make apparel easily accessible and facilitate frequent purchasing. The transition from conventional retail to online purchasing therefore raises questions not only about consumption frequency but also about what happens to garments after consumers stop using them. Ulhasnagar provides a relevant local context for studying these issues because of its strong association

with garment trading and consumption. However, limited empirical attention has been given to the post-consumption disposal behaviour of young online fashion consumers in the city. The present study therefore focuses on two specific dimensions: the disposal channels used by young consumers and the relationship between gender and environmental awareness concerning textile disposal.

II. REVIEW OF LITERATURE

Bhardwaj and Fairhurst (2010) examined the evolution of the fashion industry and discussed the emergence of fast fashion, highlighting the importance of low cost, flexibility, speed and rapid product cycles in contemporary fashion retail. Their work provides a background for understanding the changing consumption environment in which clothing is purchased and replaced more frequently.

Morgan and Birtwistle (2009) specifically examined young fashion consumers' disposal habits. Their study considered clothing disposal, reuse and recycling and highlighted the relationship between fashion consumption and the growing problem of textile waste.

Joung and Park-Poaps (2013) investigated factors influencing clothing disposal behaviour among college students. Their study considered resale, donation, reuse and discarding and found that different motivations, including environmental, economic, charity and convenience concerns, influence disposal behaviour.

Laitala (2014), in a synthesis of research on clothing disposal behaviour, noted that consumers commonly use different disposal channels and that convenience is an important factor influencing clothing disposition. The review also identified donation, reuse, recycling and disposal as important areas for understanding clothing end-of-life behaviour.

Weber, Lynes and Young (2017) examined consumer textile waste management and considered disposal channels such as donation, resale, swapping, take-back and disposal. Their findings demonstrate that consumers with different levels of fashion interest may manage unwanted textiles differently.

Kollmuss and Agyeman (2002) discussed the gap between environmental knowledge and actual pro-environmental behaviour. Their framework is relevant to clothing disposal because environmental awareness

does not necessarily translate into a particular environmentally preferable behaviour.

III. RESEARCH GAP

Existing research has examined clothing disposal behaviour, fast fashion and environmental attitudes in different populations. However, there is comparatively limited localized evidence concerning young online fashion consumers in Ulhasnagar. In particular, the distribution of disposal methods and the relationship between gender and environmental awareness regarding textile disposal require further empirical examination. The present study addresses this localized research gap using primary survey data

IV. OBJECTIVES OF THE STUDY

1. To examine the primary garment disposal methods favoured by young online fashion consumers in Ulhasnagar.
2. To assess whether environmental awareness regarding textile disposal differs significantly between male and female young consumers.

Hypotheses Of the Study

Hypothesis 1: Garment Disposal Methods

H₀: There is no significant difference in preference among the various garment disposal channels selected by young online fashion consumers in Ulhasnagar; that is, all disposal methods are selected equally.

H₁: There is a statistically significant difference in the distribution of garment disposal channels selected by young online fashion consumers in Ulhasnagar.

Hypothesis 2: Gender and Environmental Awareness

H₀: There is no significant association between gender and environmental awareness regarding textile disposal among young consumers in Ulhasnagar.

H₁: There is a significant association between gender and environmental awareness regarding textile disposal among young consumers in Ulhasnagar.

V. RESEARCH METHODOLOGY

5.1 Research Design

The study adopts a quantitative, descriptive and analytical research design. It examines the disposal practices of young online fashion consumers and the

association between gender and environmental awareness.

5.2 Population and Sample

The target population comprises young consumers in Ulhasnagar who purchase readymade garments through online shopping platforms. The study is based on a sample of 100 respondents aged 18–24 years.

The sample consisted of 61 male respondents (61%) and 39 female respondents (39%). The age distribution was 24% in the 18–20 years group, 48% in the 20–22 years group and 28% in the 22–24 years group.

5.3 Data Collection

Primary data were collected through a structured questionnaire. The questionnaire covered gender, age, online garment purchasing frequency, garment-use period, primary garment disposal method and environmental awareness regarding textile disposal. The disposal question asked respondents to identify their single most frequent primary disposal method.

5.4 Variables

The study considered:

- Gender
- Age group
- Frequency of online garment purchases
- Garment-use period
- Primary garment disposal method
- Environmental awareness regarding textile disposal

The environmental-awareness item assessed whether respondents were aware that rapid purchasing and disposal of garments can contribute significantly to landfill pollution.

5.5 Statistical Techniques

Frequencies and percentages were used for descriptive analysis.

A Chi-square goodness-of-fit test was used to examine whether the four disposal methods were equally preferred. With 100 respondents and four categories, the expected frequency under the null hypothesis was 25 for each category.

A Pearson Chi-square test of independence was used to examine the association between gender and environmental awareness.

The level of significance was set at 5% ($\alpha = 0.05$).

VI. RESULTS AND DATA ANALYSIS

Respondent Profile

Variable	Category	Frequency	Percentage
Gender	Male	61	61%
	Female	39	39%
Age	18–20 years	24	24%
	20–22 years	48	48%
	22–24 years	28	28%

The largest age group was 20–22 years, representing 48% of respondents.

Online Garment Purchasing Frequency

Purchasing frequency	Frequency	Percentage
Rarely/only when necessary	14	14%
Approximately once a month	27	27%
Bi-weekly/twice a month	41	41%
Weekly or more frequently	18	18%
Total	100	100%

The largest proportion of respondents (41%) purchased readymade garments online on a bi-weekly or twice-a-month basis.

Garment-Use Period

Garment-use period	Frequency	Percentage
6 months–1 year	42	42%
1–2 years	47	47%
2 years and above	11	11%
Total	100	100%

The largest proportion (47%) reported using online-purchased garments for 1–2 years before stopping their use.

Garment Disposal Behaviour: The observed distribution of primary garment disposal methods was:

Disposal Method	Observed Frequency	Percentage
Domestic dustbin/municipal waste	25	25%
Donation	45	45%
Hand down to friends/relatives	21	21%

Repurpose for household purposes	9	9%
Total	100	100%

Donation was the most frequently reported disposal method, accounting for 45% of respondents. Domestic/municipal waste accounted for 25%, handing garments down to friends or relatives accounted for 21%, and household repurposing accounted for 9%.

Chi-square Goodness-of-Fit Test

Under H_0 , the four disposal methods were assumed to have equal expected frequencies of 25 each.

The calculated result was:

$$\chi^2(3) = 26.880, p < 0.001$$

The critical value at the 5% level with 3 degrees of freedom is 7.815. Since the calculated value exceeds the critical value and $p < 0.05$, H_0 is rejected.

Therefore, there is a statistically significant difference in the distribution of garment disposal methods. The responses are not equally distributed across the four disposal channels.

Gender and Environmental Awareness

The distribution of environmental awareness was:

Environmental Awareness	Male	Female	Total
Aware	32	20	52
Not aware	29	19	48
Total	61	39	100

The awareness rate was 52.46% among male respondents and 51.28% among female respondents. The difference was approximately 1.18 percentage points.

Pearson Chi-square Test

The Pearson Chi-square test produced:

$$\chi^2(1) = 0.013, p = 0.909$$

Since $p > 0.05$, H_0 is not rejected. Thus, the study does not provide statistically significant evidence of an association between gender and environmental awareness regarding textile disposal

Summary of Hypothesis Testing

Hypothesis	Statistical Test	Result	Decision
H_0 : Disposal methods are selected equally	Chi-square goodness-of-fit	$\chi^2(3) = 26.880$, $p < 0.001$	Reject H_0

H_0 : Gender is not associated with environmental awareness	Pearson Chi-square	$\chi^2(1) = 0.013$, $p = 0.909$	Do not reject H_0
---	--------------------	--------------------------------------	---------------------

The first hypothesis indicates a statistically significant difference in the distribution of disposal methods, whereas the second hypothesis does not show a statistically significant association between gender and environmental awareness

VII. DISCUSSION

The findings demonstrate that young online fashion consumers do not use the four identified garment disposal channels in equal proportions. Donation was the most frequently reported method, accounting for 45% of the sample. This finding is consistent with previous literature identifying donation as an important channel through which consumer's dispose of unwanted clothing (Morgan & Birtwistle, 2009; Joung & Park-Poaps, 2013).

The presence of domestic/municipal waste disposal among one-quarter of respondents also indicates that a substantial proportion of garments may enter conventional waste streams after consumers stop using them. Previous research has emphasized that convenience and other situational factors can influence clothing disposal decisions (Joung & Park-Poaps, 2013; Laitala, 2014).

The study also found no statistically significant association between gender and environmental awareness. The awareness rates were very similar for males and females. The findings also illustrate the importance of distinguishing between environmental awareness and actual behaviour. Awareness was measured through a single survey item, while disposal behaviour was measured separately.

VIII. FINDINGS OF THE STUDY

1. The sample consisted of 61% male and 39% female respondents.
2. The largest age group was 20–22 years, accounting for 48% of the sample.
3. Bi-weekly/twice-a-month online garment purchasing was the most common purchasing frequency, reported by 41% of respondents.

4. The largest proportion of respondents (47%) used their online-purchased garments for 1–2 years.
5. Donation was the most frequently reported primary garment disposal method, accounting for 45%.
6. Domestic/municipal waste was reported by 25% of respondents, handing garments down to friends or relatives by 21%, and household repurposing by 9%.
7. The Chi-square goodness-of-fit test showed a significant difference in the distribution of disposal methods, $\chi^2(3) = 26.880$, $p < 0.001$.
8. Environmental awareness was reported by 52.46% of male respondents and 51.28% of female respondents.
9. Pearson's Chi-square test showed no statistically significant association between gender and environmental awareness, $\chi^2(1) = 0.013$, $p = 0.909$.

IX. CONCLUSION

The study examined garment disposal behaviour among young online fashion consumers in Ulhasnagar, focusing on the primary disposal channels and environmental awareness in relation to gender.

The results demonstrate that garment disposal practices are not equally distributed among the four disposal channels examined. Donation was the most frequently reported method at 45%, followed by domestic/municipal waste at 25%, handing garments down to friends or relatives at 21%, and household repurposing at 9%. The significant Chi-square goodness-of-fit result confirms that these disposal methods were not selected in equal proportions.

The study also examined the relationship between gender and environmental awareness regarding textile disposal. The awareness rates among male and female respondents were 52.46% and 51.28%, respectively. The Pearson Chi-square result was not statistically significant, indicating that gender was not significantly associated with environmental awareness in the surveyed sample.

The study therefore provides localized evidence concerning post-consumption garment behaviour among young online fashion consumers in Ulhasnagar. The findings suggest that donation represents an important disposal pathway, while a proportion of garments continues to enter

domestic/municipal waste streams. At the same time, the findings do not establish a statistically significant gender-based difference in environmental awareness.

Implications of the Study

The findings have implications for consumers, educational institutions, retailers and local waste-management stakeholders. Greater attention to garment reuse, donation and repurposing can contribute to extending the useful life of clothing. Educational initiatives can also emphasize the relationship between consumption, garment longevity and responsible disposal.

For local stakeholders, the findings provide an initial empirical basis for considering textile-specific awareness programmes and collection mechanisms. However, the present study does not directly evaluate the effectiveness of particular interventions; therefore, such measures should be examined in future research.

X. LIMITATIONS OF THE STUDY

The study has the following limitations:

1. The sample size is limited to 100 respondents.
2. The study is geographically restricted to Ulhasnagar.
3. The respondents belong to the 18–24 age range represented in the questionnaire.
4. The study uses self-reported responses, which may be affected by respondent recall or social-desirability effects.
5. Environmental awareness was measured using a single categorical awareness item; therefore, it should not be interpreted as a comprehensive measure of environmental knowledge or environmental attitude.
6. The study examines reported disposal methods but does not directly measure the actual quantity of textile waste generated.
7. The cross-sectional design does not establish causal relationships between online shopping, environmental awareness and disposal behaviour.

XI. SCOPE FOR FUTURE RESEARCH

Future studies may extend the sample to a larger and more diverse population and include respondents from

different age groups and geographical areas. Further research may examine the relationship between online purchase frequency, garment lifespan, environmental awareness and disposal behaviour using larger samples and multivariate statistical techniques. Studies may also incorporate additional disposal channels such as textile recycling, resale, exchange and retailer take-back programmes. A longitudinal study could provide further evidence on how changing online fashion consumption affects garment-use duration and end-of-life behaviour.

REFERENCES

- [1] Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*, 20(1), 165–173.
<https://doi.org/10.1080/09593960903498300>
- [2] Joung, H.-M., & Park-Poaps, H. (2013). Factors motivating and influencing clothing disposal behaviours. *International Journal of Consumer Studies*, 37(1), 105–111.
<https://doi.org/10.1111/j.1470-6431.2011.01048.x>
- [3] Kollmuss, A., & Agyeman, J. (2002). Mind the gap: Why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental Education Research*, 8(3), 239–260.
<https://doi.org/10.1080/13504620220145401>
- [4] Laitala, K. (2014). Consumers' clothing disposal behaviour – a synthesis of research results. *International Journal of Consumer Studies*, 38(5), 444–457. <https://doi.org/10.1111/ijcs.12088>
- [5] Morgan, L. R., & Birtwistle, G. (2009). An investigation of young fashion consumers' disposal habits. *International Journal of Consumer Studies*, 33(2), 190–198.
<https://doi.org/10.1111/j.1470-6431.2009.00756.x>
- [6] Weber, S., Lynes, J., & Young, S. B. (2017). Fashion interest as a driver for consumer textile waste management: Reuse, recycle or disposal. *International Journal of Consumer Studies*, 41(2), 207–215. <https://doi.org/10.1111/ijcs.12328>