



## REUSING BOUTIQUE WASTE IN THE FORM OF APPAREL - SHRUGS

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### ABSTRACT

*Rising concern with textile waste leads to health and environmental issues in the world. Thus, the consumers and producers have been looking for the environmental friendly clothing. The research done on the "Reusing boutique waste in the form of Apparel - Shrugs" was carried out in Ambala and Ludhiana city. An interview schedule was prepared for the purpose of collection of data related to the utilization of boutique waste from 100 respondents through purposive random sampling technique. The problem studied focuses on how left over fabric from boutique considered as waste can be best managed to prevent the problems that waste causes to the environment. The study introduced the outcome of the utilization of the fabric from boutique in such a way so that it will reuse the waste fabric. The study focused mainly on identifying waste fabrics that could produce apparel and utility items. In this context, waste fabrics included pieces of cotton, silk, blends of cotton fabrics from boutiques and old cloths that are no more of use to their owners.*

**KEYWORDS:** Reuse, Boutique Waste, Utilization.

### INTRODUCTION:

Textiles have a long and distinguished history in the world. Textiles have an assortment of uses, the most common of which is for clothing. Textiles are made from many materials, with two main sources: natural and synthetic. Textiles are made in various strengths and degrees of durability. The textile industry is one of the world's largest industries. The production of textiles over the years has contributed to significant textile waste. Old clothes that we throw away take up precious space in landfill sites, which is filling up rapidly.

Textile waste is a material that is deemed unusable for its original purpose by the owner. Waste includes fashion and textile industry waste, created during clothing production. Textile or apparel **waste** is generally categorized as pre-consumer or post-consumer waste. The pre-consumer waste consists of by-product material from the yarn, textile and apparel industries. Post-consumer textile waste mainly originates from household sources and consists of garments or textiles which the owner no longer needs it (Bairagi N 2014).

Apart from this, huge amount of the textile waste is also generated from the Boutique and Fashion Houses. The good news of reusing textile waste, by diverting textile waste away from landfill and prolongs the lifecycle of the textile material..

The hand-made designs were created for the designing of Apparel items and the developed designs of Apparel Items were shown to boutique holders. On the basis of the boutique owner's preferences, the most preferred designs and least preferred designs were selected and constructed for further study.

Yogita Agrawal, Shyam Barhanpurkar and Ajay Joshi (2013) states that textile industry is among the most essential consumer goods industry. However, textile industry is also accused of being one of the most polluting industries. Not only production but consumption of textiles also produces waste. Commercially, textile waste generation is influenced by the production of textile goods. Higher the production is, the greater the amount of waste. This is in turn a function of consumer demand, which is influenced by the state of the economy. While this may have a limited impact on the waste production in the manufacturing sector; it can have a much greater influence on the production of household textile waste. To counter the problem, textile industry has taken many measures for reducing its negative contribution towards environment. One of such measures is textile recycling, the reuse as well as reproduction of fibers from textile waste.

As reported by Rinku Agrawal and Madhu Sharan (2015) waste management is the concept which helps to save environment, to reduce the cost and other monetary benefits to company and people in different way. It is the basic need for any industry and local people to have pollution less environment. It is like two way benefits of saving resources as well as following government norms and regulation. Waste minimization is instrumental in decreasing pollution load and to some extends production costs. Waste can be managed at two levels i.e. at Industrial level and at Household level. Waste management at Industrial level: Non hazardous Textile Waste at Industrial level generally includes fibers, yarn, cut off fabric pieces, defective fabrics with construction, extra fabric cutting, contributed by various industries and factories at large. 10-15% of Waste produced by industries is hazardous and the generation of hazardous wastes is increasing at the rate of 2- 5 % per year. Waste management at Household level: Hazardous waste at household level generally includes products like paper, aluminum cans, metals, steel cans and tires batteries thrown by the local public at large.

Textile *reuse* refers to various means for prolonging the practical service life of textile products by transferring them to new owners Fortuna and Diyamandoglu, (2017), with or without prior modification (e.g. mending). This can for example be done through renting, trading, swapping, borrowing, facilitated by, for example, second hand shops, flea markets, garage sales, online marketplaces, charities and clothing libraries. Belk (2014) analyzed that in the academic literature, various forms of reuse have been conceptualized in terms such as collaborative consumption, product-service systems, commercial sharing systems and access-based consumption.

L. Divita & B. G. Dillard (1999) studied the Interest in recycling textile waste that has grown over the last two decades because of increasing costs associated with disposal in landfills and increasing concern for protecting the environment. It was done to determine the level of support for recycling textile waste by Missouri sewn products manufacturers, and to examine the relationship of independent variables with the level of support for textile recycling.

Purna Jain & Charu Gupta (2016) states that in present life style it cannot limit the production but it can find out infinite alternative ways of recycling to reduce the burden on nature. These eco-friendly ways are very important not only to save nature but to secure our future generations. In recent years the social conscience has become more sensitive to environmental issues, especially in developed nations.

Katkar and Bairgadar (2010) did a study in the design of products that are easy to recycle is seen in the development of eco-friendly products. Waste should be avoided both in the production process and when disposing of products. In addition, material substance should, at the end of product life, be suitable to be returned into the material cycle (recycling). Products consisting of only one material in a single system (non-composite) are easy and pure to re-use. With them, it is not generally necessary to separate the product structure prior to processing. This is why single-material systems are preferable when it comes to the design of products easy to recycle.

## OBJECTIVES

The current trends of reusing and refashioning of textiles with Boutique waste is considered to be the adaptable textile, the present study has been planned with the following objectives:-

- To identify boutique waste fabrics that can be used to produce garments and accessories.

- To enhance the concrete knowledge related to textile waste.
- To assess the amount of fabric waste generated in the Boutique.
- To bring fabric waste back into production.
- To analyze the various applications of waste fabric.
- To Re-design of used clothing.

### METHOD AND MATERIAL

The present study is experimental study. Reusing of boutique waste is the basis of the study. In this study, waste minimization techniques were adopted to create a range of fashion products such as apparel items for women. The study was conducted to the selected participants that are boutique holders of two cities namely Ambala and Ludhiana. Hundred respondents were selected randomly from two cities and Questionnaire was framed for data collection. After pretesting, data collection was done. Most preferred designs of Apparel item were selected and prepared from boutique waste.

Initially, the development of designs of Apparel items such as was done. The investigator developed twenty designs for apparel item such as shrugs. On the basis of information collected from the respondents, the designs were selected.

Then the selection of designs of most preferred apparel item such as shrugs from boutique waste was done to know the preferences regarding the designs. Therefore, the developed designs of apparel item were shown to boutique holders. On the basis of the boutique owner's preferences, the most preferred designs were selected for the preparation of apparel items.

Moreover, the study was planned to minimize textile waste from boutique. The textile waste from boutique in form of scraps was collected by the investigator at the time of conducting the interview. The content of waste creates apparels items through process of reusing.

After that, the most preferred first three designs of apparel items were prepared such as shrugs. Preferred trimmings were used to prepare the items by using boutique waste.

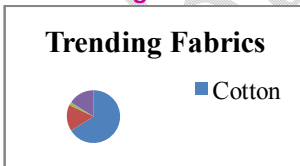
To study the consumer acceptability of the prepared items, a sample of 100 respondents were selected. The respondents were also asked about their liking or disliking for the idea of reutilization of boutique waste. The items were evaluated on the basis of the parameters include utility, functionality, serviceability, trimmings and their overall appearance on a five point scale ranging from Excellent to Average.

The data collected through interview and observations were analyzed and interpreted. The data was tabulated, percentages and scores were calculated.

### RESULT AND DISCUSSION

The results of the study have been discussed under the following categories:-

- **Trending fabrics**



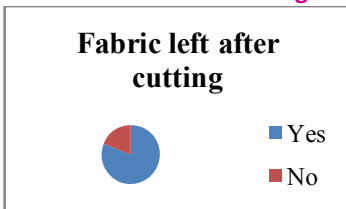
The data revealed from the above table that maximum number of respondents (66%) preferred that cotton fabric is in trend. Similarly, number of respondents for blends of cotton and all fabrics are same i.e. (16%) and minimum number of respondents (2%) preferred that silk fabric is in trend.

• Amount of fabric taken from the clients



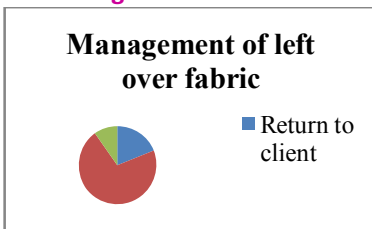
It is observed from the above table that number of respondents (44%) preferred that they take fabric as per requirement. Similarly, (44%) of respondents preferred that they take fabric according to the design and minimum number of respondents (12%) preferred that they take extra fabric.

• Fabric left after cutting



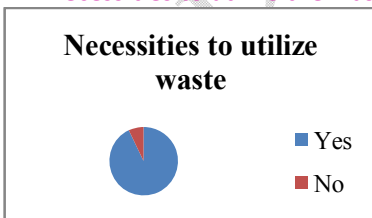
Preferences of the respondents about the fabric left after cutting is maximum i.e. (81%) and the preferences of the respondents about the fabric not left after cutting is minimum i.e. (19%).

• Management of left over fabric



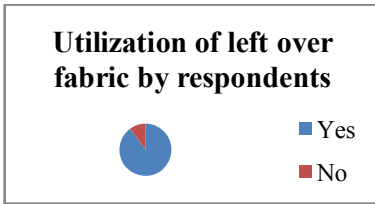
The above table revealed the information that maximum number of respondents (71%) preferred that they manage the left over fabrics and (19%) of respondents who preferred that they return the left over fabric to the clients and minimum number of respondents (10%) preferred that they throw the left over fabric.

• Necessities to utilize the waste



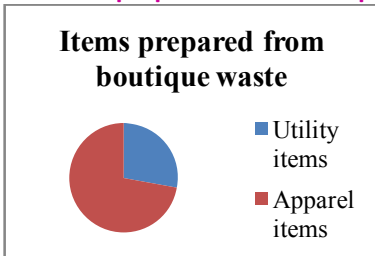
Majority of the respondents (93%) preferred that the fabric which is left should be utilized and minority of the respondents (7%) preferred that the fabric which is left should not be utilized.

- **Utilization of left over fabric by respondents**



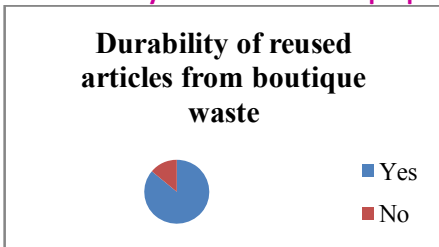
Preferences of respondents regarding the utilization of the left over fabric are (90%) and preferences of respondents regarding the non utilization of the left over fabric are (10%).

- **Items prepared from boutique waste**










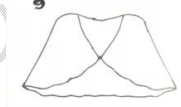


It is examined from the table that number of respondents (28%) preferred that only utility items can be prepared from boutique waste, similarly number of respondents (72%) preferred that only apparel items can be prepared from boutique waste.




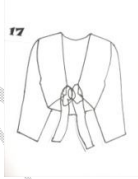


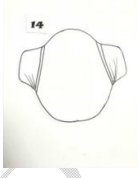
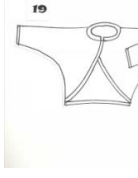

- **Durability of reused articles prepared from boutique waste**



The result shows that the maximum number of respondents (86%) preferred that the articles made from boutique waste are durable and minimum number of respondents (14%) preferred that the articles made from boutique waste are not durable.

• Preferences for Shrugs made out of Boutique waste

S No.	Design No.	Design Sheet	Score	Rank	S No.	Design No.	Design Sheet	Score	Rank
1.	1		452	I	6.	6		361	XVI
2.	2		364	XV	7.	7		330	XIX
3.	3		388	V	8.	8		403	IV
4.	4		406	III	9.	9		335	XVIII
5.	5		385	IX	10.	10		386	VIII

S No.	Design No.	Design Sheet	Score	Rank	S No.	Design No.	Design Sheet	Score	Rank
11.	11		365	XVII	16.	16		394	VII
12.	12		353	XX	17.	17		387	X
13.	13		430	II	18.	18		399	V
14.	14		393	VIII	19.	19		380	XV
15.	15		382	XIV	20.	20		361	XVIII

The preferences was found from the above table that number of respondents (90.4%) gives the highest scores/ rank to design number 1 that can be prepared from waste fabrics. Similarly, number of respondents (83.4%) gives the second highest scores/ rank to the design number 13 that can be prepared



from waste fabrics and number of respondents (81.2%) gives the third highest scores/ rank to design number 4 that can be prepared from waste fabrics.

• **Designed shrugs from Boutique Waste**

**Design no. 1**



**Design no. 13**

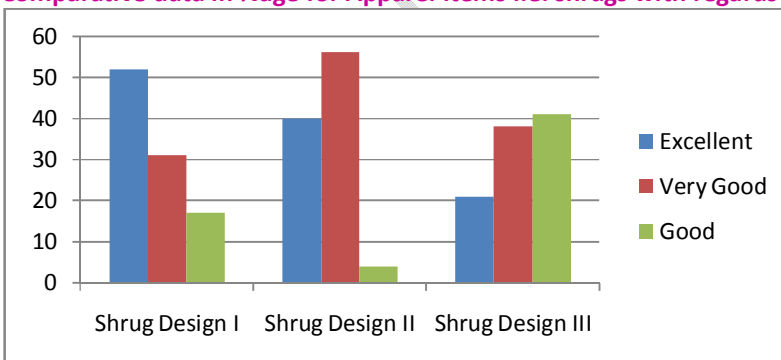


**Design no. 4**



• **Preferences for consumer acceptability for Developed Shrugs:** Under this, the consumer’s preferences are considered for various developed products with regards to parameters.

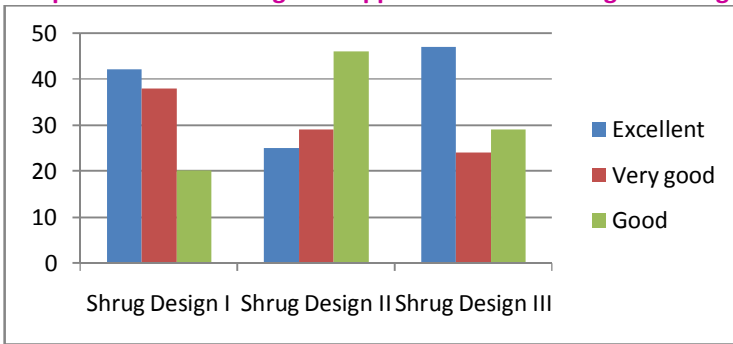
**Comparative data in %age for Apparel Items i.e. shrugs with regards to Utility as a parameter**



The table depicts that the majority of the respondents graded excellent to Shrugs design-I (54%), Very good to Shrug design-II (56%) and Good to Shrug design-III(41%) with regards to utility as a parameter.

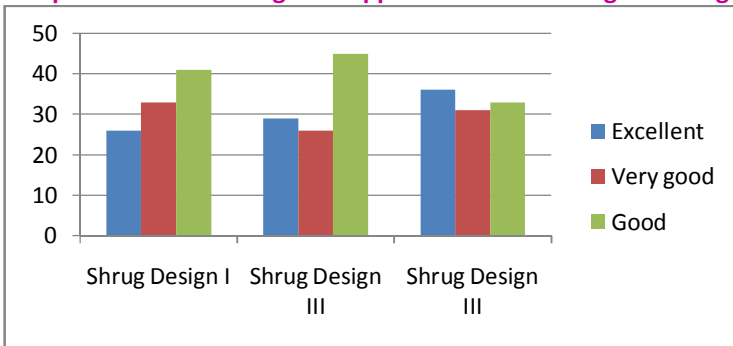


**Comparative data in %age for Apparel Items i.e. shrugs with regards to Functionality as a parameter**



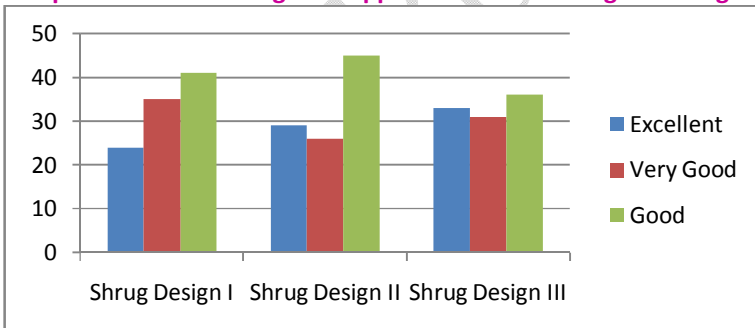
The data revealed from table that the majority of the respondents graded excellent to Shrugs design-I (42%), good to Shrugs design-II (46%) and excellent to shrugs design-III (47%) with regards to functionality as a parameter.

**Comparative data in %age for Apparel Items i.e. shrugs with regards to Serviceability as a parameter**



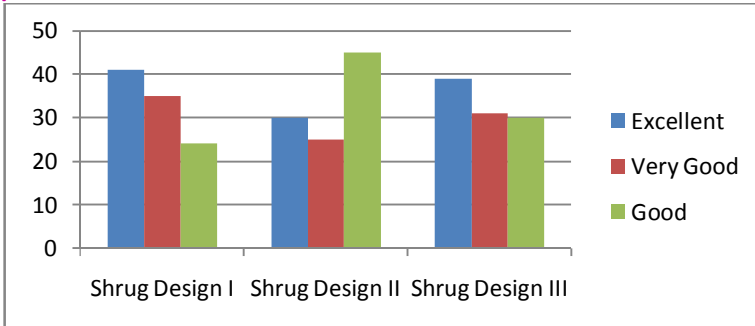
The result shows that the majority of the respondents graded good to Shrugs design-I (41%), good to Shrugs design-II (45%) and excellent to shrugs design-III (36%) with regards to serviceability as a parameter

**Comparative data in %age for Apparel Items i.e. shrugs with regards to Trimmings as a parameter**



Maximum number of the respondents graded good to Shrugs design-I (41%), good to Shrugs design-II (45%) and good to shrugs design-III (36%) with regards to trimmings as a parameter.

### Comparative data in %age for Apparel Items i.e. shrugs with regards to Overall Aesthetic Appeal as a parameter



Preferences was found that maximum number of the respondents graded excellent to Shrugs design-I (41%), good to Shrugs design-II (45%) and excellent to shrugs design-III (39%) with regards to overall aesthetic appeal as a parameter.

### SUMMARY

The present study cope with the development of apparel items form boutique waste fabrics, it would provide a boutique owner's, a new idea for utilizing different waste fabrics to produce new products along with different trimmings to start with very less investments. Moreover, the investigator found out that innovative apparel items created by using boutique waste are liked by everyone. Apart from it, this will help to minimize some of the textile waste produced by boutique holders who are contributing socially towards environment protection. Thus, it will help in sustainable development and stops land fillings.

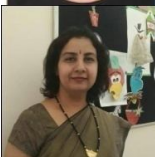
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