Textile Recycling Practices Prevailing In Kanpur City

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ABSTRACT

Textile recycling is one of most favorable method of reusing, reprocessing of used clothing, whereas Fibrous material and clothing scraps available from the manufacturing process. In huge quantity the textile recycling industry is one of the oldest and most established recycling industries in the world. Throughout the world, used textile and apparel products are salvaged as reclaimed textiles and put to new uses. This study was carried out in Kanpur city. The total hundred numbers of respondents were selected from the different houses and areas. A descriptive research design was adopted for the present study. Textile in municipal solid waste are generally found mainly in the form of discarded clothing, although other sources include furnishing from furniture, carpets, tires, foot mat and nondurable goods such as bed sheet and towels. Interview schedule developed to collect the data regarding their needs, and for knowing the recycle practices are existing in the household. The tools used for this purpose was the interview schedule. After designing the articles as per the respondents needs and preferences. Respondents having awareness and interest in training and learning of textile recycled products as rank first with mean score of 1.82 and out of 17% respondents only 8% respondents uses only curtains for recycle purpose, although 39% respondents sold their reused/recycled textile to the moving wanders, Whereas only 28% respondents were donating. Their textiles for reuse to the poor people available nearly their homes.

Keywords: Discarded cloths, Household women, designing

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INTRODUCTION

Textile recycling is the process of reusing and reprocessing of used clothing, Fibrous materials and clothing scraps available in the manufacturing units. The textile recycling industry is one of the oldest and most established recycling industries in the world. Although since past the used textile and apparel products are salvaged as reclaimed textiles and put to new uses. Koch and Domina (1999) has stated that now few researchers have stressed the importance of identifying ways to reduce the post-consumer textile and apparel waste which was previously used as landfill product. Consumer education is a key to reducing waste. Recycling is the reuse, remanufacturing, or reprocessing of a material or product with the aim of reducing waste. In terms of textiles, recycling can cover many different areas; such as recycling of clothing as whole garments. This could be achieved through charity shops or via the vintage clothes market or through the reuse of clothing items which have been reworked, printed over or re-cut, to be resold. The 'make-do and mend' approach is supposed to extend the useful life of an item or product, for example by darning some old wool socks, or reusing a material or product or giving it another function, such as turning old curtains into a designers clothing material. By up-cycling textiles in this way, we can offer garments a second life and prevent them from ending up in landfill. Upcycling refers to reuse of a garment where its quality remains the same or is increased by the new process, attempting to counter the common problem of recycling practices and reducing the quality of the original materials, as occurs when glass is recycled. Upcycling is a process where waste or useless products are converted into new useful materials or products of equal or better quality or with a higher environmental value. It is taking waste and maintaining or improving the quality of it by making something new. The goal of recycling is to prevent the wastage of potentially useful materials by making use of existing materials. Celia Stall-Meadows and Cynthia Goudeau (2012) has stated that nearly 100% textile and apparel were recycled in a household. Divita. L. (1996) has reported that the textile recycling industry is able to process 93% of the waste without generation of hazardous products. Whereas Hawley (2000) has stated that textile sorting companies acquire sort, process, export and market pre and post consumer textile products for various markets. Morley et al (2009) has stated that fabrics are basically

shredded before they are used in sound insulation for cars, mattress filling and in making industrial rags. When used textiles replace virgin textiles in these applications it provided the environmental benefits. Similarly Stall-Meadows, C. and Peek, G. (2010) has posed the problem of solid waste having measure amount of waste textile and advised for 100% recycling of this waste textile materials.

METHODOLOGY

A descriptive an experimental research design survey purposive sampling and simple random sampling method was used to collect data regarding, recycle practices existing in the household about old garments, utility article and other textile products such as foot mat, bags, basket etc. The tools used for the purpose was the interview schedule. This study was conducted on 100 household women of age group between 20-40 years and above. Pared market, shiwala, nawabganj was selected to conduct the present study. The data from the interview schedule were tabulated and presented through diagram. From the tabulated data simple percentage were worked out to know the background information, existing clothing practices, and preferences of respondents. The waste textile articles such as old stockings, denim, old sari, and waste cloths were utilized to prepare utility articles. Based on survey and questionnaire total number of 7 sketches were drawn for the respondents. Articles were constructed by taking into consideration the availability of waste textiles. Waste textile material was used to prepare different articles such as new garments, bags, foot mat, tie dress, basket and runner. The designs were made according to their house work, clothing practices and preferences. Articles designs were finalized by taking into consideration the views of a panel of judges.

RESULTS AND DISSCUSIONS

Preference for Awareness of textile recycling

Respondents having awareness and Interested in attending the training of learning of

textile recycling product ranked first (Fig.1) with mean score of 1.82. Second rank were about having awareness to make products by hand knotting techniques with mean score 1.71, Respondents were having awareness of knowledge about textile recycling ranked third with mean score of 1.53. Fourth rank were obtained by uses of recycled textiles by the respondents with a mean score of 1.47 and last (fifth rank) of the respondents were having awareness regarding experiences related to clothing and textile field.

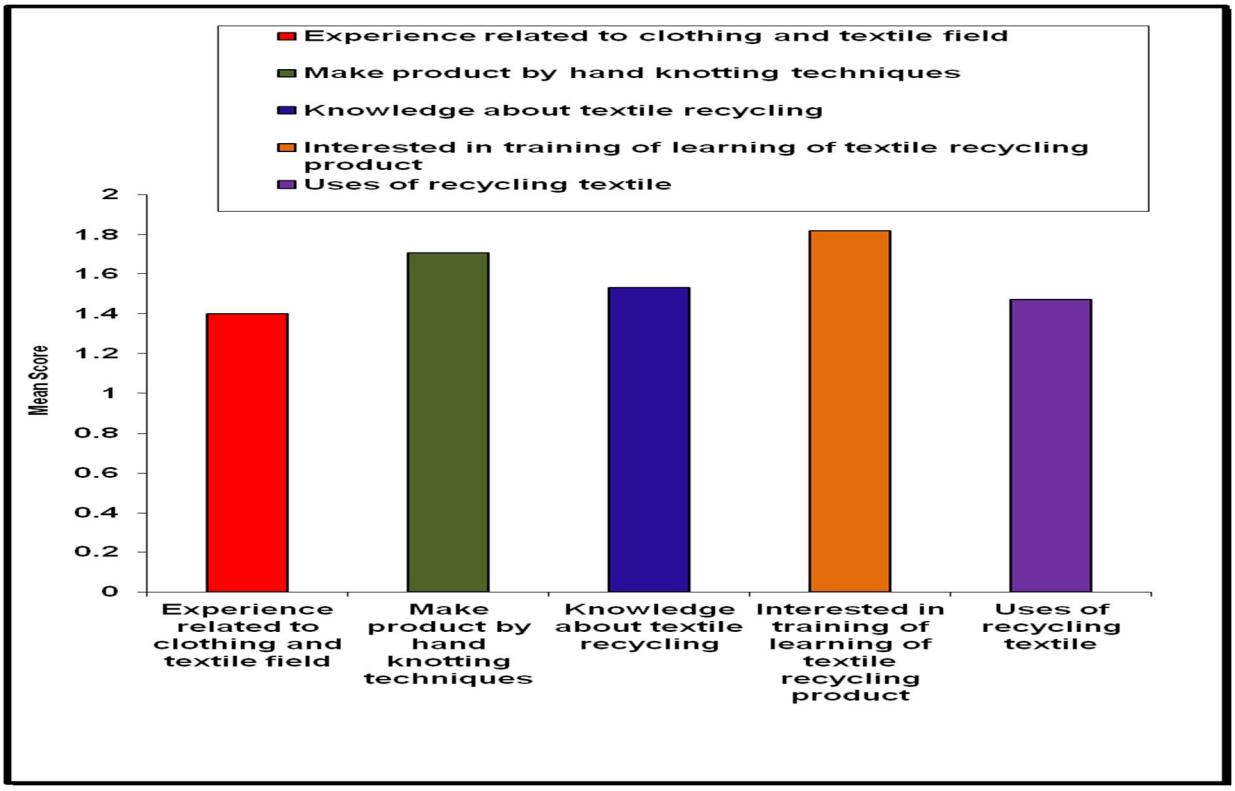

Fig.1: Preference for Awareness of textile recycling

Preference for Reuse of Textile

Results were also highlighted (Table.1) that 39 percent of the respondents sold reused/recycled textiles, and whereas only 28 percent of the respondents were donating their textiles for reuse.

Table.1: Distribution of respondents on the basis of their Reuse of Textile

S.No.	Reuse of textile	Frequency	Per cent
(i)	Home	33	33
(ii)	Sell	39*	39*
(ii)	Donate	28	28

Preference for Type of Textile Recycled Product

It was found that 63 percent of the respondents (Fig.2) were learning the manufacturing of utility articles by recycled textile clothing, and only 23 percent of the respondents were manufacturing utility as well as decorative items from recycled textile.

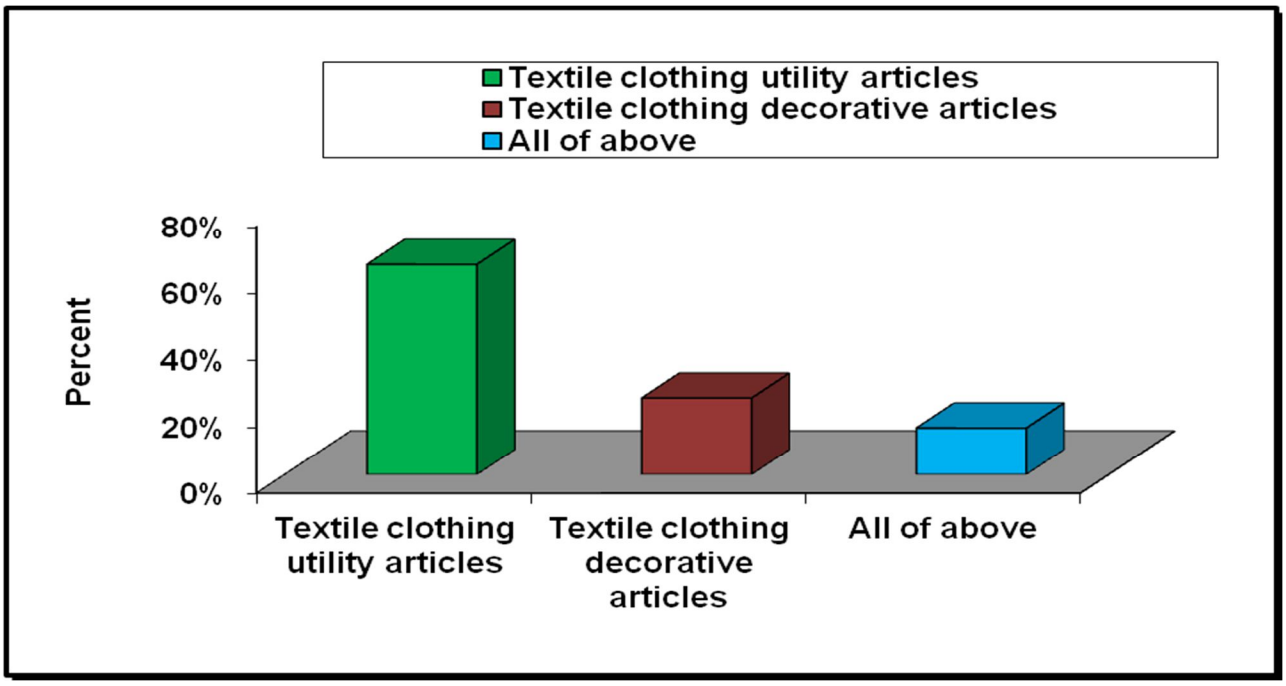

Fig.2: Preference for Type of Textile Recycled Product

Preference for Uses of Textile

During the investigation it was found that 53 percent of the respondents (Table. 2) were buying textiles according to their needs. Whereas 47 percent respondents were found having their purchasing practices according to fast changing fashion.

Table.2: Distribution of respondents on the basis of uses of textile

S. No.	Uses of textile	Frequency	Per cent
(i)	According to need	53*	53*
(ii)	According to fast changing fashion	47	47

Preference for Classification of Recycled Product

Classification of product (Fig. 3) were bags (32 per cent), (23 per cent) carpets, followed by (20 per cent) Dari, (15 per cent) were from foot mats while only (10 per cent) were any other product. It is revealed that majority of the classification of product were most preferred such as bags, carpets, Dari or foot mat where as any other product was last preferred.

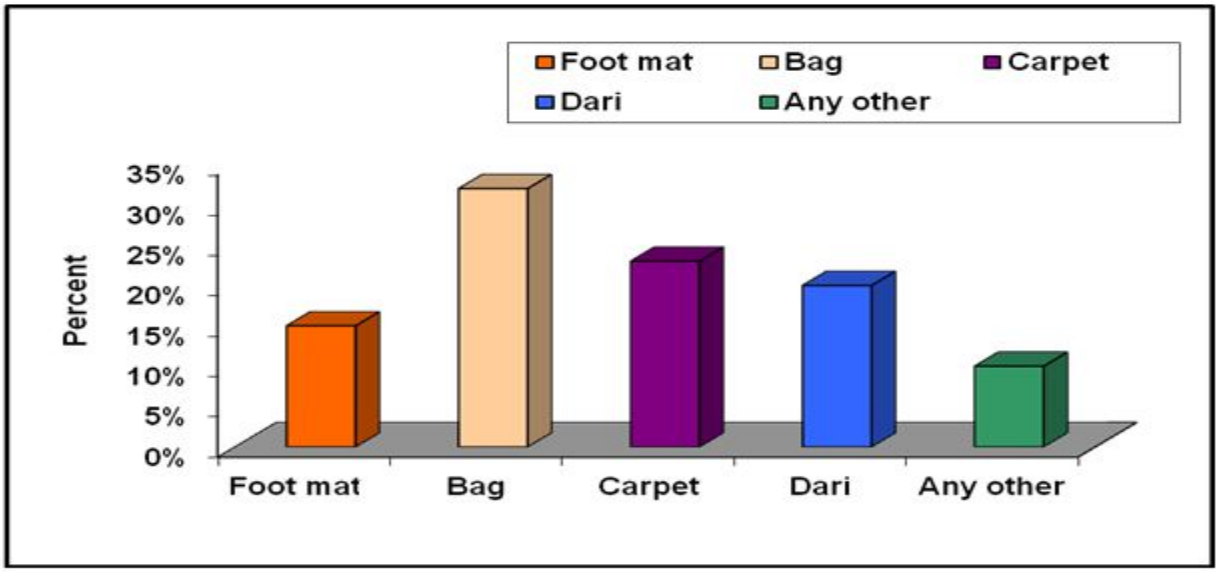

Fig.3: Preference for Classification of recycled Product

Preference for Packaging

It was found that 44 percent of the respondents (Table.3) were packaging recycled items (carpets, dari, foot mats, bags) in bundles for selling, and only 21 percent of the respondents were packaging (Bags, quilt, jute articles etc.) in cardboard boxes.

Table.3: Distribution of respondents on the basis of their packaging system

S.No.	Packaging	Frequency	Per cent
(i)	In bags	35	35
(ii)	In cardboard	21	21
(iii)	In bundles	44*	44*

Preference for Barriers in Marketing

Distribution of respondents according to the constraints/ barriers in marketing (Fig.4) was due to lack of market (Rank I), and the last (Rank IV) was due to lack of equipments.

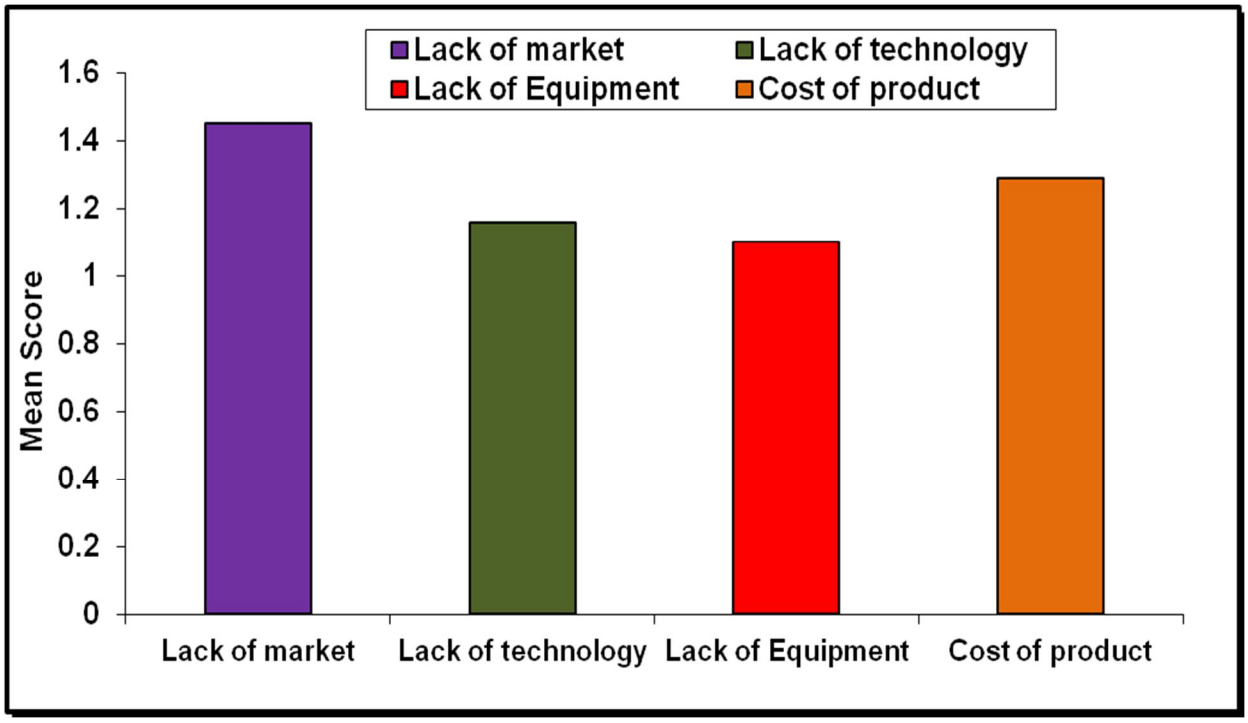

Fig.4: Preference for Barriers in Marketing

After the construction the acceptability of the new products and garments were observed. Suitability of each feature of the articles were tested on a three point rating such as unsatisfactory, satisfactory and highly satisfactory. Depending on the number of features in the used articles, these rating were assigned scores for each article by the respondents.

Fig. 5 Denim bag and skirt: Denim trousers were used to construct the bag and a mini skirt. Bag and skirt was stitched employing sewing machine.

Fig. 6 Foot mat and basket: Old discarded socks and sarees of different colour were utilized to make foot mat and basket using braiding and hand knitting techniques with stitching by hand.

Fig. 7 Tie dress: Old ties of various colours was stitched side by side to make a one piece garment.

Fig.8 Skirt: Old medium size shirt was used to stitch a small size skirt with buttons on fronts.

CONCLUSION

The main purpose of this study was used to prepare different articles from waste textile materials. According to the needs the articles were designed which includes Denim trousers for construction the bag and a mini skirt, whereas Old discarded socks and sarees of different colours were utilized to make foot mat and basket, old tie dress and old shirt used to construct the skirt. Articles prepared were like a new garments, bags, foot mat, tie dress, basket and runner. Assessment of acceptability was done by a panel of judges. Majority of the judges preferred foot mat, made of stockings (Rank I) followed by denim bag and skirt, tie dress and basket. The present study gives a clear picture about needs along with existing clothing practices and preferences of respondents, recycle practices existing in the household for utilizing the old garments, utility articles and other textile products such as foot mat, bags, basket etc.

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