

## **Recycling of hangings and furnishing fabrics waste to produce women's wear for achieve sustainability (applied study in Damietta city)**

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### **Abstract:**

Damietta city is characterized by global fame in furniture industry. Hangings and furnishing fabrics are associated with furniture industry. Hangings and furnishing workshops spread in Damietta city. These workshops have a lot of hangings and furnishing fabrics waste, which are got rid which make an ecological and economic problems. The aim of these research summarized in recycling hangings and furnishing fabrics waste from their workshops in Damietta to design and produce casual women's wear achieving sustainability. This study was applied on grade two students of ready-made garments department, applied arts in Damietta university in course of garments production technology. Students were divided into four groups: first group recycled veil hangings, second group recycled leather furnishing fabrics and hangings accessories, third group recycled furnishing fabrics resemble newspaper, fourth group recycled napkin of dining table. Opinions of garments experts were taken on these sustainable pack through questionnaire. The fourth group, which recycled napkin of dining table, had the best evaluation from garments experts in most quality elements in: design, recycling, body measurements, and sewing quality. Then the first group, which recycled veil hangings, had the second evaluation from experts with very less difference than the fourth group, and better than it in final finishing quality. The models which recycled characterized by suitable for suggested age category, giving aesthetic values, and accompaniment to fashion lines. These recycled models achieved economic benefit for product, ecologic method to get rid of waste, and aesthetic shape of product. They also achieved good fit of product, accurate in measurements, and accurate in pattern. The models characterized by good quality of stitches, good quality of seams, and proportionality between seams and design. These also characterized by good pressing, and attract customer's attention.

### **Keywords:**

Sustainability, Recycling, Hangings and furnishing fabrics waste, Casual women's wear

### **Introduction**

Damietta city is characterized by global fame in furniture industry. Hangings and furnishing fabrics are associated with furniture industry. Hangings and furnishing workshops spread in Damietta city. These workshops have a lot of hangings and furnishing fabrics waste, which we can't get rid of easily, which make an ecological and economic problems. The aim of this research is summarized in recycling hangings and furnishing fabrics waste from their workshops in Damietta to design and produce casual women's wear achieving sustainability.

### Experimental work

This study was applied on grade two students of ready-made garments department, applied arts in Damietta university in the course of garments production technology. Students were divided into four groups: first group recycled veil hangings, second group recycled leather furnishing fabrics and hangings accessories, third group recycled furnishing fabrics resemble newspaper, fourth group recycled napkins of dining tables. Opinions of garments experts were taken on these sustainable packs through a questionnaire.

### Results and discussion

#### Design quality:

Fig. 1 shows the design quality of the recycled models.

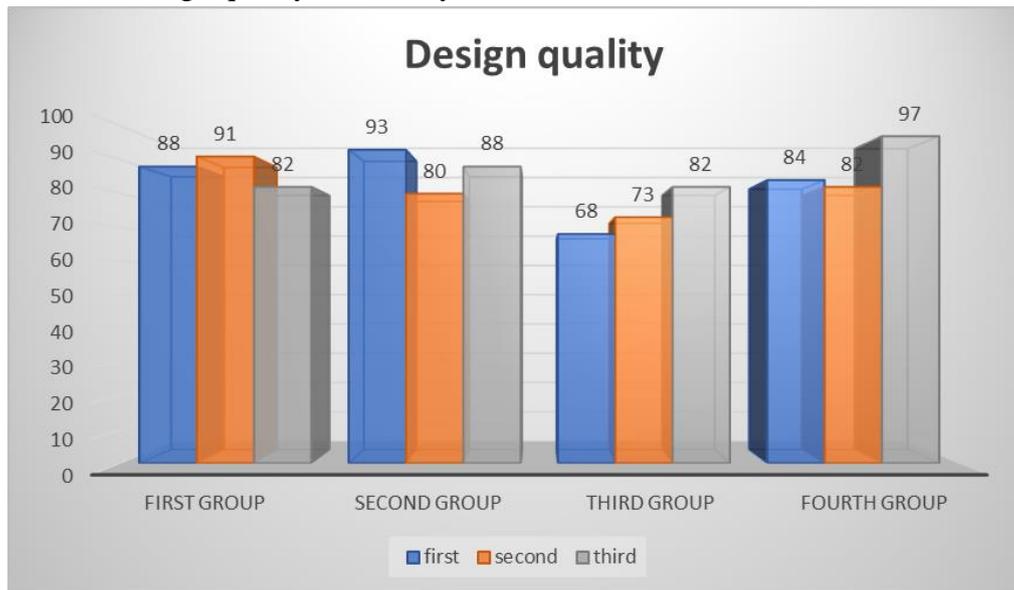


Fig. 1 design quality

#### Fabrics recycling quality:

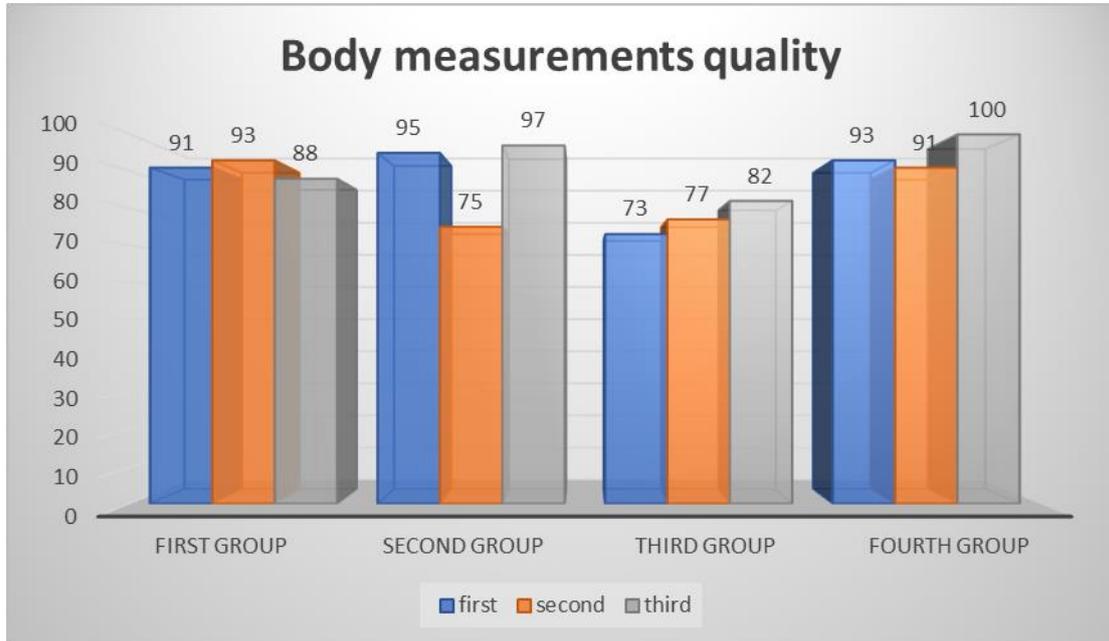
Fig. 2 shows the fabrics recycling quality of the recycled models.



Fig. 2 fabrics recycling quality

**Body measurements quality:**

Fig. 3 shows the body measurements quality of the recycled models.



**Fig. 3 body measurements quality**

**Sewing quality:**

Fig. 4 shows the sewing quality of the recycled models.



**Fig. 4 sewing quality**

### Final finishing quality:

Fig. 5 shows the final finishing quality of the recycled models.

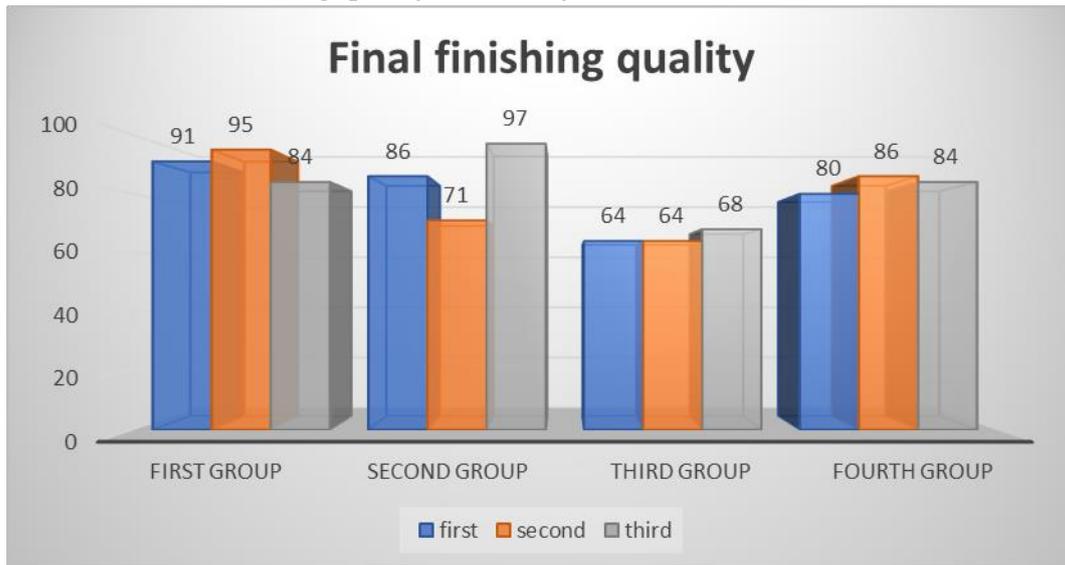


Fig.5 final finishing quality

### Conclusion:

The fourth group, which recycled napkins of dining tables, had the best evaluation from garments experts in most of the quality elements in: design, recycling, body measurements, and sewing quality. Then the first group, which recycled veil hangings, had the second evaluation from experts with a small difference from the fourth group, and exceed it in the final finishing quality. The models which were recycled are characterized by being suitable for the suggested age category, giving aesthetic values, and accompaniment to fashion lines. These recycled models achieved economic benefit for product, ecologic method to get rid of waste, and aesthetic shape of product. They also achieved good fit of product, accuracy in measurements, and accuracy in pattern. The models characterized by good quality of stitches, good quality of seams, and proportionality between seams and design. These also are characterized by good pressing, and attract customer's attention.

### Recommendations:

Researcher recommends to give more attention for discovering creative methods to achieve sustainability in apparel industry.

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