

## **Suggested clothing designs that can be transformed for different looks for sustainability**

**Dr. Hemat Mohamed Fauomy Mohamed**

**Lecturer at Textile technology Faculty of Technology and Education - Beni Suef University**

[He\\_m21@yahoo.com](mailto:He_m21@yahoo.com)

### **Abstract:**

Transformable clothing for different looks is considered one of the applications of sustainable fashion, as it is an emerging trend that may provide possibilities for the consumption of clothes to be more sustainable, but consumers' perception of this concept does not exist, hence the idea of the research, which mainly focuses on presenting proposed designs for transformable clothes from the designer's perspective (The researcher) and measuring whether consumers value this type of clothing and what factors may motivate them to buy transformable clothes for the sake of sustainability. The research aims to present suggested design groups for clothes that can be transformed into different looks using auxiliary materials (such as zippers, buttons, tape). The outer clothing is suitable for women from the age of (20:35) and the research hypotheses stipulated:

- 1- There are statistically significant differences between the designs proposed in achieving the aesthetic aspect according to the opinions of specialists.
- 2- The presence of statistically significant differences among the proposed designs in achieving the functional aspect according to opinions of specialists.
- 3- There are statistically significant differences between the proposed designs in achieving the evaluation aspects according to the opinions of specialists and the target group.

The results have resulted in the achievement of the design groups, the degree of acceptance in the light of the assessment of the averages of specialists along with the aesthetic and functional side and the presence of statistically significant differences between the proposed design in achieving aspects of the evaluation according to the opinions of specialists and the target group. The most important recommendations of the research:

- 1- Conducting more academic studies linking the apparel industry with sustainability.
- 2- Spreading the culture of sustainability and its applications in the field of clothing through scientific seminars and conferences.

### **Key words:**

Transformable clothing, sustainability.

### **Introduction:**

The products presented in the art of designing clothes, which are the products that represent the products that represent a commercial offer, which are not just a new product for sale, the way they express themselves, and their way of life.

The latest ideas and designs in innovative and modern designs, fashion design ideas, modern and suitable designs for the home, modern and amazing designs of fashion, modern designs and suitable for clothing links linked to each other, in designing by wearing clothes in a simple way. More sustainable, widening the clothing cycle, clothing means this. (Hethorn & Ulasewicz, 2008).

Presentation, a series of shows, and a previous study (F, 2017) view that aimed to clarify the concept of sustainability in clothing and explain the social principles and behavior related to this concept, and the study (E, 2014) which aimed to explore sustainability as a vehicle for development while exploring sustainability and thinking about fashion development, as well as a study (Koo, Helen, 2012) developed as a bottom-up approach to understanding the type of changing jobs that people desire in sustainable clothing through an analysis of perceptions of access to clothing types, their values related to them, and a study (Hur, E, Cassidy, T, & Briony, T, 2013) that aimed at the consumer to develop ideas for sustainable clothing, the life cycle of the clothing product, and the study (Sabrin Abdel-Zahir et al. - 2020) aimed at creating clothing designs in the age group (18-25 years) inspired by Mondrian's geometric abstraction with a new vision that takes shape into account and improves the life cycle of the modular product.

It could be ready-of-being used, usable, able to be carried and to be able to continue to exhibit and measure things that could be bought, ready-to-turn garments for the sake of sustainability.

### **Research problem:**

**The research problem can be formulated in the following questions:**

- 1 -What is the possibility of submitting suggested designs for clothes to transform into different looks?
- 2- What are the opinions of the specialists in the designs?
- 3 -What is the degree of acceptance of consumables (the target group) in their designs?

### **Research Aims:**

- 1- Providing ready-to-wear designs for different looks.
- 2- Measuring the opinions of the design specialists.
- 3 -Determine the degree of consumables (the target group) for the designs.

### **Research Importance:**

- 1- Trying to help achieve the sustainability of clothing approaches.
- 2- The call for innovation through the concept of sustainability in the garment industry.

### **Research Methodology:**

This research was presented and it followed the analytical methodology of their suitability for the research objectives.

### **Research hypotheses:**

- 1- There are statistically significant differences among the proposed designs in achieving the aesthetic aspect, according to the opinions of specialists.
- 2- There are statistically significant differences between the proposed designs in achieving the functional aspect according to the opinions of specialists.
- 3- There are statistically significant differences between the proposed designs in achieving the aesthetic and functional aspect, according to the opinions of consumers (the target group).

### **Limitations of the objective research:**

- Presenting a set of suggested designs for women's outerwear suitable for the age (20-35), which can be transformed into different looks.

### **The research sample:**

- Specialists: there are (10) members of the teaching staff, they are professors, assistant professors, and teachers.

- Consumables (the target group): their number is (60) and they mean women from the age of (20:35) years.

### Research tools:

- 1- Using the CLO 3D Virtual Fashion program in making the proposed designs.
- 2- A questionnaire form to evaluate the proposed designs to find out the opinions of specialists with the aim of assessing the possibility of developing new designs of transformable clothes for different looks, and the questionnaire included an evaluation of (5) design groups of clothes that could be transformed for different looks, and the questionnaire was divided into two axes:
  - The first axis (the aesthetic aspect) deals with measuring the extent of achieving the aesthetic aspect of the proposed designs. The axis includes (6) phrases.
    - The second axis (the functional aspect) deals with measuring the extent to which the functional aspect of the proposed designs is achieved, and the axis includes (7) phrases.
  - The researcher used a three-point estimation scale (appropriate - somewhat appropriate - not appropriate) in which the answer is estimated at three degrees of proportionality, two degrees of proportionate to some extent, and one degree of inappropriate.
- 3- A questionnaire form to survey the consumers' opinion (the target group) in the proposed designs in order to reach the best results in terms of aesthetics and functionality, and it included 10 phrases, and the researcher used a three-point scale (agree - somewhat agree - disagree) in order to estimate the answer; it is three degrees of approval, two degrees of approval to some extent, one degree of disagreement.

### Main results:

- The best design group according to the opinion of the arbitrators in achieving the aesthetic aspect are No. (3) and (5), and the least of them is No.(١) .
- The best design group according to the opinion of the arbitrators in achieving the functional aspect are No. (3), (4), (5) and the least of them is No.(١) .
- The best design group according to the opinion of the target group in achieving the aspects of evaluation is No. (3) and the least of them is No.(١) .

### Research recommendations:

- 1- Conducting more academic studies linking the clothing industry with sustainability.
- 2- Spreading the culture of sustainability and its applications in the field of clothing through scientific seminars and conferences.

### References

- 1- Mohamad ,Alift Shawqi , khalil , Rsha Wajdiun , Abd Alzahr, Sabirin: " Eibtikar tasmimat malbasiat mustadamat lilnisa' mustawhat min lawhat mundrian " - bahath manshur bimajalat aleamarat walfunun - almajalid 5 - aleadad 23 - maqalat 32 - 2020.
- 2- Mohamad , Ranya Saed , Abd Alwahhab , Sana MOhamad : " Alzakharif alnuwbia kamasdar turathi liaibtikar tasmimat qalayid tuhaqiq alaistidama bial'azya' alnisayiya " - bahath manshur bialmajalat almisriat lilaiqtisad almanzili - almujalid alssadis

- 3- Oraby , Mirahan Furj : " Altasmim bidon faqid kahd tatbiqat almawda almustadamat fi sinaeat almalabis aljahiza "- bahath manshur bialmutamar alduwalii althani "Altanmia almustadamat ilmujtamaeat bialwatan alearabii " - 2017.
- 4- Commentary & Critique – Sustainability in High-end Fashion. Posted on August 9 2010 .1
- 5- Farrer, F ., (2017): - "Discussing Fashion Textiles Sustainability , In Shaping sustainable fashion : Changing the way we make and use clothes".
- 6- **Gong, M. and Rahman, O. (2015). Transformable garment: Sustainable fashion and mass customization. 2015 Global Fashion Management Conference, Florence, Italy. Vol. 2015 No. 6, pp. 523-537.**
- 7- Gwilt, A. and Rissanen, T. (Eds.). (2011). Shaping sustainable fashion: changing the way we make and use clothes. Routledge.
- 8- Hethorn, J., & Ulasewicz, C. (2008). Sustainable fashion: Why now? A conversation exploring issues, practices, and possibilities. New York, NY: Fairchild Books.
- 9- Huantian Cao , Rita Chang , Jo Kallal , Grace Manalo , Jennifer McCord , Jenna Shaw , Heather Starner (2014): Adaptable apparel: a sustainable design solution for excess apparel consumption problem ,Journal of Fashion Marketing and Management, Publication date: 4 March 2014.
- 10- Hur, E., Cassidy, T .& Briony, T.(2013) - "Seeding sustainability through social innovation in fashion design " Proceedings of the Crafting the future . In The Crafting the Future: The10th European Academy of Design Conference. The European Academy of Design.
- 11- Hur, E., (2014): "Design and optimization of a user engaged system for sustainable fashion" , Doctoral thesis , University of Leeds , School of Design
- 12- Koo, Helen. (2012). Design functions in transformable garments for sustainability. Retrieved from the University of Minnesota Digital Conservancy, <https://hdl.handle.net/11299/133808>.
- 13- Koo, H. S., Dunne, L., & Bye, E. (2014). Design functions in transformable garments for sustainability. International Journal of Fashion Design, Technology and Education, 7 (1), 10–20.
- 14- Osmud Rahman and Minjie Gong(2016): Sustainable practices and transformable fashion design – Chinese professional and consumer perspectives- [International Journal of Fashion Design Technology and Education](#) 9(3):233-247.