

ПЛАТФОРМА 2. СЕКЦІЯ 2. ТЕНДЕНЦІЇ РОЗВИТКУ АРТ І ФЕШН-ДИЗАЙНУ

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DESIGN EVALUATION OF SUSTAINABLE FASHION

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Sustainable products can be found in existing and new fashion companies, using different design strategies based on trends such as circularity and fair trade. However, there is a gap in research between the product appearance of a sustainable fashion design and consumer perception referring to both consumer needs of ethical and fashionable. This study focuses on the needs and the perception of ethical fashion leaders for the design of sustainable garments. The paper suggests the usage of semantic differentiation for Kansei word pairs to evaluate the design. As a result, an application for linen fabric is discussed.

Keywords: design, image, sustainability, perception

INTRODUCTION

In our globalized and digitalized world, consumers have becomemore easily influenced and more demanding. On the one hand, information and products are widely available; the choice is huge due to many alternatives, available for reasonable prices. Some brands have managed to spread and become popular globally. [1] The global fashion industry has a positive impact on economy. On the other hand, globalization and digitalization are creating challenges and ethical issues. The fashion industry has a big negative environmental and social impact in terms of energy and water consumption, air and water pollution, as well as exploitation of workers. As consumers' concern is growing, so is the availability of sustainable products. Besides ethical brands, the conventional and luxury fashion ones are offering sustainable products or communicating their commitment towards recycling or other environmental friendly processes.

Traditional influencing factors are product attributes such as price, brand or quality, as well as design. As described by the authors before [2], the appearance of sustainable fashion is an important factor in consumer perception [3]. Discussing important garment evaluation criterion, one of the most important is style [3, 4]. Colour/pattern, and fabric are other important criteria [3]. When it comes to sustainable fashion, products should be ethical and environmental friendly. There are different product solutions which can reduce the environmental impact. Sustainable practices are organic or low impact fibres, reuse of materials, or green design [5, 6].

Some researchers state that ethical fashion should also be attractive [7], fashionable [8], and trendy [9] to attract a larger target market. Thus, consumer perception of sustainability and design attributes are discussed in this study, focusing on the influence of design and style in terms of a novel application of Kansei Engineering.

PURPOSE

Previous studies are focusing on general product attributes, not focusing on the design, style and the emotions. However, these are important factors influencing consumer perception and behaviour. Design and appearance must be understood by brands and marketers to successfully design eco fashion products. Therefore, the purpose of this paper is to define the importance of design of sustainable fashion products, and the target group, being consumers that are both fashion and ethical leaders.

RESULTS & DISCUSSION

This study focuses on the example of linen products. To analyse the appearance, the approach uses Kansei for the design evaluation. Kansei in design can express emotions of users towards the visual appeal, and is thus related to psychological factors. Mainly, promotion of sustainability focuses on the usage of eco-materials and a lower environmental impact in general; nevertheless, the perception of sustainable fashion is still linked with misconception about quality and design and requires a change in perception. To address this gap, we applied Kansei Engineering and as a result, we identified the main descriptors focusing on linen products.

The findings from this study are the design parameters and based on this approach, studies can be created, investigating the consumer perception using Kansei Engineering to translate emotions. Based on a quiz¹ of The European Confederation of Linen and Hemp (CELC)[10], see Table 1, semantic word pairs are adapted, see Table 2.

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¹http://europeanflax.com/eng/quizz

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Table 1 – Quiz of The European Confederation of Linen and Hemp (CELC) used to create awareness regarding linen fabric and its characteristics

- 1. Flax is an exotic plant
- 2. Linen shirts irritate the skin
- 3. Linen fabrics have a rough hand
- 4. Linen fabrics wrinkle easily
- 5. Linen fabrics fade quickly
- 6. Linen garments are often transparent
- 7. We can wear linen garments only in summer
- 8. Sleeping in linen is better for your health
- 9. Linen fabrics, only for inside the home?
- 10. Linen fabrics are expensive
- 11. Linen is only for textiles?

Table 2 – Semantic word pairs used to describe linen fabric

Material	Surface	Form	Colour
exotic – native	rough – soft	formal – enjoyable	dull – bright
transparent – opaque	wrinkled – even	elastic – stiff	
light – heavy	irregular – regular	occasional – usual	
summery/cool - wintery/warm	dry – moist	fashionable – functional	
healthy – unhealthy			
expensive – cheap			

DISCUSSION & CONCLUSIONS

The study suggests that the fashion industry should provide emotions to also attract young sustainable consumers. The limitations are that descriptors are different for diverse sources of sustainable garments, and ranking will also differ accordingly. Organic products might be more costly and consumers might be more willing to pay a higher price but for a higher quality of material, whereby recycled products might have a lower quality of the material. It has been seen that recycled products can have a premium

price when emotions are involved such as experienced with the Swiss brand FREITAG, selling bags and accessories made from truck plans, thus offering a unique and cool product. To conclude, evaluation of design is important to define its success, and can be done by selecting the right criterion and evaluators to analyse Kansei or human emotions. In studies, the combination of fashion and ethical has been less considered, as well as the perception of design and appearance of sustainable fashion products. This study suggests a methodology to evaluate sustainable fashion products based on emotions.

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REFERENCES

- 1. Scriven, J.: The Impact of Globalization on the Consumer. Neumann Bus. Rev. Spring, (2014)
- 2. Wagner, M.M., Curteza, A., Thomassey, S., Zeng, X.: The Appearance of Sustainable Fashion Products. Curr Trends Fash. Technol Text. Eng. 2, (2018)
- 3. Eckman, M., Damhorst, M.L., Kadolph, S.J.: Toward a Model of the In-Store Purchase Decision Process: Consumer Use of Criteria for Evaluating Women's Apparel. Cloth. Text. Res. J. 8, 13–22 (1990). doi:10.1177/0887302X9000800202
- 4. J North, E., de Vos, R., Kotzé, T.: The importance of apparel product attributes for female buyers. J. Fam. Ecol. Consum. Sci. /Tydskrif vir Gesinsekologie en Verbruikerswetenskappe. 31, (2003)
- 5. Caniato, F., Caridi, M., Crippa, L., Moretto, A.: Environmental sustainability in fashion supply chains: An exploratory case based research. Int. J. Prod. Econ. 135, 659–670 (2012)
- 6. Wagner, M., Chen, Y., Curteza, Antonela Thomassey, S., Perwuelz, A., Zeng, X.: Fashion Product Solutions and Challenges for Environmental and Trend Conscious Consumers. J. Fash. Technol. Text. Eng. 0, (2017). doi:10.4172/2329-9568.S3-010
- 7. Joergens, C.: Ethical fashion: myth or future trend? J. Fash. Mark. Manag. An Int. J. 10, 360–371 (2006). doi:10.1108/13612020610679321
- 8. Gam, H.J.: Are fashion-conscious consumers more likely to adopt eco-friendly clothing? J. Fash. Mark. Manag. An Int. J. 15, 178–193 (2011). doi:10.1108/13612021111132627
- 9. D'Souza, C., Gilmore, A.J., Hartmann, P., Apaolaza Ibáñez, V., Sullivan-Mort, G.: Male eco-fashion: a market reality. Int. J. Consum. Stud. 39, 35–42 (2015). doi:10.1111/ijcs.12148
 - 10. CELC: Europeanflax, http://europeanflax.com