

Apparel Design for Plus-Size Females in Scope of Recycled Fabric Manipulation Techniques

Dr. Rasha Wagdy Khalil

Assistant professor, Apparel Design Management and Technology Dept., Faculty of Applied Arts, Helwan University, Egypt, rasha_wagdi@yahoo.com

Abstract:

Nowadays, there is an increasing interest of plus size models with different body shapes in fashion shows all over the world. Therefore, the acceptance of plus size body shapes is increasingly common in the foreign societies. In addition, fabric is a key variable in fashion design in terms of colors, weights, patterns, and textures. The recycled fabric manipulation techniques provide various opportunities for creative fashion designs yet devise sustainable formulation for the dimensions of plus size females. The study problem is to support plus size Egyptian females to gain better acceptance in the Egyptian society and define the best fabric manipulation techniques to be applied in plus size fashion design in scope of sustainable fashion design. Therefore, the study aims to examine the potential of using recycled fabric manipulation techniques for plus size females in the age group (20-30) in scope of recycled fabrics through the aesthetics of fabric manipulation techniques. The importance of the study is to provide the market of plus size apparel with contemporary innovative casual cardigan designs using recycled fabric in scope of fabric manipulation aesthetic and functional aspects to achieve better acceptance for plus size females in the Egyptian society. The study follows the descriptive analytical and experimental methodologies. The designs were based on an interview and a survey for plus size females in the age group (20-30) to determine their problems and requirements concerning the cardigan design. The interview included 45 females while the survey included 460 females. The study relied on exploring three innovative techniques of fabrics manipulation and apply them on nine fashion designs for plus size females in the age group (20-30). A questionnaire was applied on 34 specialists in the fashion field and another questionnaire was applied on 45 plus size females to find out the best designs and fabric manipulation techniques suitable for the target age group with the target size. Accordingly, the major results of the research were determined through the statistical data analysis using SPSS-PC statistical program package version 27, the three designs which got the highest acceptance levels in the two questionnaires were implemented using recycled fabric manipulation techniques. The final results proved that the best technique of fabric manipulation between all three techniques is Ripple Knife Pleats, followed by Reverse Applique, and then Layering and Slashing.

Keywords:

Apparel Design- Plus Size Females- Fabric Manipulation- Recycling- Body Shape

References:

1. Ahmed, O., and Elsayed, N.,)2019(. Fabric manipulation as a fashion inspiration source for children's clothes. *International Design Journal*, 9(4), pp.79-91. Available At: https://idj.journals.ekb.eg/article_82560_a0b6b3a073bdf355f7e19ac239057c77.pdf [Accessed: 19th Oct 2022]
2. Ahmed, S.M.,)2020(. Using Eco-friendly materials to achieve the sustainability in the clothing industry. *Journal of Architecture, Arts and Humanistic Science*, 5(22), pp.157-174. Available At: <https://aaciaegypt.com/wp-content/uploads/2020/06/Using-Eco-friendly-materials-to-achieve-the-sustainability-in-the-clothing-industry.pdf> [Accessed: 13th Oct 2022]
3. Ali, S.,)2018(. Design treatments for a slim woman's body pattern inspired by the art of optical illusion. *Journal of Specific Education Research*, (49), pp.357-398 Available At: https://journals.ekb.eg/article_137733.html. [Accessed: 19th Oct 2022]
4. Al-Shammari, A.,)2019(. Data on the synthesis of textile materials and their compatibility with the green environment. *Journal of the College of Education for Girls for Humanities.1* (25). Available At: <https://journal.uokufa.edu.iq/index.php/ewjh/article/view/8947>. [Accessed: 14th Oct 2022]
5. Assoune, A.,)2020(. The Fashion Industry Catastrophic Contribution to Climate Change. Available At: <https://www.panaprium.com/blogs/i/fashion-climate-change>. [Accessed: 11th Oct 2022]- Kostiak, Y., 2022. Active Colour Forecast A/W 24/25. Available At: <https://www.wgsn.com>. [Accessed: 13th Oct 2022]
6. Attia, S.,)2022(. Paranoiac decorations as a source of shopping bags Paranoiac decorations as a source of shopping bags production in a way production in a way of blending waved materials and un waved ones. *Journal of Specific Education Research*, No (67) , pp. 593-643. Available At: https://mbse.journals.ekb.eg/article_248699_6243572b52678dcad5b72b558f44e3c7.pdf [Accessed: 12th Oct 2022]
7. Barakat, M.,)2020(. Benefiting from folk art and combining different materials in the production of contemporary textile artifacts. *Journal of Specific Education Research. Issue 57*, pp.251-270. Available At: https://journals.ekb.eg/article_131083_54039f8274dfdd10588239366dcde014.pdf. [Accessed: 18th Oct 2022]
8. BBC, (2022). From New York to Instagram: The history of the body positivity movement, Available At: <https://www.bbc.co.uk/bitesize/articles/z2w7dp3> [Accessed: 17th Nov 2022]
9. BoF, (2022). The state of fashion 2023. McKinsey & Company.
10. Burns, A., (2022). Rethinking fabric: The application of fabric manipulation techniques in fashion design education. *International Journal of Art & Design Education*, 41(1), pp.66-80. Available At: <https://onlinelibrary.wiley.com/doi/full/10.1111/jade.12375z>. [Accessed: 17th Oct 2022]

11. Büttner, A.J. and Linardi, M.A., (2019). Female Plus Size Consumer Challenge. Available at: https://www.researchgate.net/publication/333759903_Female_Plus_Size_Consumer_Challenge [Accessed: 17th Oct 2022]
12. Christel, D.A. and Dunn, S.C.W.N., (2018). What plus-size means for plus-size women: A mixed-methods approach. *Studies in Communication Sciences*, 18(2), pp.339-352. Available At: <https://www.hope.uzh.ch/scoms/article/view/j.scoms.2018.02.009>. [Accessed: 13th Oct 2022]
13. Constance, P. and Eirini, B., 2019. Plus-Size Fashion: A Comparative Study of Southern vs. Northern European Perspectives on Fashion. *European Business & Management*, 5(2), p.14. Available At: https://www.researchgate.net/profile/Eirini-Bazaki/publication/334171316_Plus-Size_Fashion_A_Comparative_Study_of_Southern_vs_Northern_European_Perspectives_on_Fashion/links/5d3724a8a6fdcc370a59a0d9/Plus-Size-Fashion-A-Comparative-Study-of-Southern-vs-Northern-European-Perspectives-on-Fashion.pdf. [Accessed: 17th Oct 2022]
14. Dion, D. and Tachet, B., 2020. Dynamics between market categories: A study of the (in) visibility of the plus-size fashion market. *Recherche et Applications en Marketing (English Edition)*, 35(1), pp.62-83. Available At: <https://journals.sagepub.com/doi/pdf/10.1177/2051570719863648>. [Accessed: 17th Oct 2022]
15. Gyi, D., Masson, A. and Hignett, S., (2019). Plus size and obese workers: anthropometry estimates to promote inclusive design. *Ergonomics*, 62(9), pp.1234-1242. Available At: <https://www.tandfonline.com/doi/abs/10.1080/00140139.2019.1622791>. [Accessed: 17th Oct 2022]
16. Herpen, I., 2023. Available At: <https://www.irisvanherpen.com/collections/seijaku>. [Accessed: 15th Jan 2023]
17. Kostiak, Y., (2022). Active colour forecast A/W 24/ 25. Available At: <https://www.wgsn.com>. [Accessed: 17th Oct 2022]
18. Qurashi, W. (2021). 'Fabric manipulation techniques with optical illusion as design solutions for different woman's body types', *International Design Journal*, 11(3), pp. 411-421. Available At: https://idj.journals.ekb.eg/article_164304_e2fe68bc2a6d93fc5532fbf8deef2865.pdf [Accessed: 17th Oct 2022]
19. Robinovich, J., Bosma, H., van der Borne, B., Ossa, X., Muñoz, S. and Krumeich, A., (2021). Is a 'culture of plus-size women' the independent effect of neighborhood disadvantage on female BMI? A cross-sectional study in two Chilean Municipalities. *Social Science & Medicine*, 280, p.114019. Available At: <https://www.sciencedirect.com/science/article/abs/pii/S0277953621003518>. [Accessed: 17th Oct 2022]
20. Shiva, H., (2021). A Study On Factors Influencing Plus Size Fashion Apparel. *International Journal of Human Resource Management and Research*, (9), 66-73. Available At: https://www.researchgate.net/publication/350799897_A_Study_On_Factors_Influencing_Plus_Size_Fashion_Apparel. [Accessed: 19th Oct 2022]
21. Shweikhi, J., Hiba, N., and Zarzour, Z., (2020). Recycling as one of the directions of the green economy. Available At: <http://dspace.univ-eloued.dz/handle/123456789/10580>. [Accessed: 13th Oct 2022]
22. Small, A., (2017). *Textile Artist: Layered Cloth, The: The Art of Fabric Manipulation*, Search Press.
23. Sokolowski, S.L., Silbert, J. and Griffin, L., (2019). How the US Sport Performance Apparel Industry Sizes Up to Female Plus Bodies. 10th Int. Conference and Exhibition on 3D Body Scanning and Processing Technologies, Lugano, Switzerland, 22-23 Oct. Available At: <https://www.3dbodyscanning.org/cap/papers/2019/19222sokolowski.pdf>. [Accessed: 14th Oct 2022]
24. Thompson, M.L., (2020). Plus-size men: Perceptions of available clothing and models used to market the clothing (Doctoral dissertation, Iowa State University). Available At: <https://www.proquest.com/openview/e0632643b18753e02211ecff4ea0aac1/1?pq-origsite=gscholar&cbl=18750&diss=y> [Accessed: 15th Oct 2022]
25. Tiggemann, M. and Anderberg, I.,)2020(. Muscles and bare chests on Instagram: The effect of Influencers' fashion and fitspiration images on men's body image. *Body Image*, 35, pp.237-244. Available At: <https://www.sciencedirect.com/science/article/abs/pii/S1740144520304046>. [Accessed: 14th Oct 2022]
26. Wolff, C.,)1996(. The art of manipulating fabric, *Interweave*.
27. Yousry, R., Al-Naqiti, Al,)2022(. Recycling the outputs of training and practical tests in the Clothing and Textile Department to implement pieces of clothing for girls. *Journal of Specific Education Research*, (65), pp.481-513. Available At: https://journals.ekb.eg/article_219181.html. [Accessed: 13th Oct 2022]
28. Zancu, S.A., Rodgers, R.F. and Enea, V.,)2019(. Self-determined motivation for eating behavior regulation and sociocultural influences among Romanian fashion models. *Body image*, 31, pp.150-159. Available At: <https://www.sciencedirect.com/science/article/abs/pii/S1740144518304509>. [Accessed: 15th Oct 2022]

Paper History:

Paper received November 16, 2022, Accepted February 4, 2023, Published March 1, 2023