#### Treating Defects in Used Jeans Clothing By Using Hand Embroidery to Achieve Clothing Sustainability

#### Dr. Esraa Mahmoud Mohamed El-Etriby

Instructor in home economics - Specializing in clothing and textiles Faculty of Specific Education - Port Said University esooegypt4@gmail.com

## Abstract:

The current research aims to Treating defects in used jeans clothing by using hand embroidery, achieving sustainability for used jeans clothing, and reusing them instead of disposing of them, increasing the consumer lifespan of jeans clothing using hand embroidery, obtaining a value-added product (aesthetic, functional) and achieving sustainability, measuring the acceptance level of specialists and consumers for the implemented products.

The importance of research lies in contributing to achieving sustainability and protecting the environment in light of Egypt's vision 2030, providing solutions to Treating defects in used jeans clothing and improving their appearance using hand embroidery, enriching used jeans clothing in terms of aesthetics, innovation, and functionality, extending the lifespan of jeans clothing to reduce the need to purchase new clothes, contributing to reducing the amount of waste produced by the clothing industry and its negative impact on the environment. The researcher used the descriptive and experimental method to study the possibility of treating defects in jeans clothing using hand embroidery to achieve sustainability. The researcher selected a variety of used jeans clothing with different defects, Fifteen pieces of jeans clothing were processed using different threads, fabrics, and materials, The products were evaluated by a group of professors specialized in the field of clothing and textiles, as well as consumers, using a survey form the data was statistically analyzed using (SPSS.V26) software.

The research results have shown that there are statistically significant differences between the average evaluations of the implemented products in achieving (aesthetic aspect, innovative aspect, functional aspect, sustainability) according to the opinions of specialists, There are statistically significant differences between the averages evaluations of implemented products in achieving evaluation aspects (as a whole) according to the opinions of specialists, There are statistically significant differences between the average evaluations of implemented products in achieving evaluation items according to consumer opinions.

Based on the results, the researcher recommended supporting the state's 2030 sustainability direction through new approaches in the field of clothing and textiles, contributing to enhancing the aesthetic and functional level of used denim clothing, the necessity of devising new solutions for employing hand embroidery techniques, paying more attention to conducting further studies and research on treating defects in used clothing, promoting innovation in the field of sustainable design and developing recycling and reuse methods, create electronic platforms to support and provide design ideas for reusing used clothes instead of buying new clothes, focusing on exhibitions and providing outlets for selling the implemented products.

#### Keywords:

Treatment Clothes, Defects, Jeans fabrics, Hand Embroidery, Sustainability

### References:

- 1- Ahmed, Duaa Mohamed Mahmoud. (2022). Achieving economic sustainability for women's clothing made of natural leather through the integration of patchwork technique and the art of Kimi Cantrell, Journal of Architecture, Arts, and Humanities, Damietta University, Vol. 7, No. 6, December.
- 2- Ahmed, Sharif Mohamed Youssef. (2015). Utilizing leather scraps and denim fabrics in designing some clothing accessories, Master's thesis, Faculty of Home Economics, Menoufia University.
- 3- Aldajani, Norah Mohsen Mohamed. (2021). A design proposal for hand embroidery on traditional women's clothing to establish a small productive project, Journal of Arts, Literature, Humanities, and Social Sciences, European University of Arts and Humanities, Issue 70, August.
- 4- Al-Damanhouri, Mona Ibrahim. (2015). Enriching the aesthetic and artistic value of denim clothing in an economical way to serve small industries, Journal of Home Economics, Menoufia University, Vol. 3, No. 3, July.
- 5- Al-Zamil, Jawhara bint Abdulaziz. (2020). A proposed vision for sustainable development planning in Saudi society in light of Vision 2030, Journal of Educational Sciences and Humanities Studies, Taiz University, Soil Branch, Vol. 9, No. 4, April.
- 6- Al-Sari, Fatima Mohamed Hassan, Al-Ajmi, Nahla Abdel Ghani, Sarhan, Azza Abdel Alim, and El-etriby, Abeer Rabab. (2022). Utilizing the beauty of prominent embroidery in the implementation of multi-purpose clothing for pregnant women, Journal of Gender Education and Technology (Scientific and Applied Research), Kafr El-Sheikh University, Vol. 10, No. 26, June.
- 7- Al-Sayed, Nashwa Mohamed and Abdel Maqsoud, Enas Hamdi. (Year not specified). African symbols as a source of inspiration in designing children's clothing using various decorative techniques, Journal of Arts and Applied Sciences,

- Damietta University, Volume 5, Issue 2, July.
- 8- Al-Shahri, Laila Abdul Rahman Al-Dakhni, Amani Ahmed and Ibrahim, Samia Ali Mousa. (2021). The timing of displaying animated infographics and its impact on developing hand embroidery skills, Alexandria University, Vol. 16, No. 1, December.
- 9- Al-Fayoumi, Amal Mohamed. (2018). The effectiveness of cooperative learning in developing skills in recycling non-fashionable denim clothes among home economics students at the Faculty of Specific Education, Journal of Home Economics, Menoufia University, Vol. 28, No. 4, October.
- 10- Al-Masri, Hanan Abdel Nabi Al-Sayed (2022). Utilizing embroidery with dental floss as an approach to achieving sustainable development in university students' clothing, Journal of Research in the Fields of Specific Education, Minia University, Vol. 8, No. 43, November.
- 11- Anis, Ibrahim, Montasser, Abdel Halim, Atiya, Al-Sawalhi, and Ahmed, Mohamed Khalaf Allah. (2011). Al-Muajam Al-Wasit, Al-Sharq International Library, Vol. 5, Cairo.
- 12- Basyouni, Reham Basyouni Mohammedi. (2016). The possibility of recycling used denim clothes and utilizing the properties of leather materials to implement household furnishings, Scientific Journal of the Faculty of Specific Education, Menoufia University, Vol. 3, No. 8, October.
- 13- Gamal El-Din, Rasha Ahmed Mohamed, Abd El-Qawi, Ashraf Bahgat, Mohamed, Suzanne Abdel-Motah (2022). Clothing recycling skills in the subject of home economics necessary for preparatory stage female students in light of sustainable development dimensions, International Journal of Curriculum and Technological Education, Cairo University, Vol. 6, No. 8, March.
- 14- Hassan, Ragaa Mostafa Mohamed, Ibrahim, Fatma Mohamed Mashbi. (2023). Innovating decorative designs from ancient Diriyah embroideries for women's clothing using hand embroidery, Journal of Gender Studies and Research, Zagazig University, Vol. 9, No. 4, October.
- 15- Khuraz, Tahani. (2023). Technical specifications for the production of women's clothing to achieve the final use characteristics, Master's thesis, College of Designs and Home Economics, Qassim University.
- 16- Rehan, Iman. (2023). Embroidery as a new innovative approach in connecting metalwork and decoration. International Design Journal, Association of Designers, Vol. 5, Issue 1, April.
- 17- Sweilam, Aya Mohamed Hussein Mustafa. (2024). Utilizing hand embroidery techniques to add value to used clothing in the context of sustainable fashion practices, Scientific Journal of the College of Specific Education, Menoufia University, Vol. 11, Issue 37, January.
- 18- Taema, Naglaa Mohamed and Al-Nousani, Amira Adel Abbas and Zaghlool, Tarek Mohamed. (2024). Achieving sustainability for teenage clothing using handicrafts, Journal of Arts and Applied Sciences, Damietta University, Vol. 11, Issue 1, January.
- 19- Ashour, Hamdi Hassanein Ali, Zalt, Ali Al-Sayed, and Maamoun, Amal Abdel Samea. (2020). Design strategy to enrich children's clothing accessories through the integration of collage art and hand embroidery, Journal of Gender Education Research, Mansoura University, Issue 59, July.
- 20- Abdelhamid, Mohamed, Abdelraouf, Neshwa, and Al-Marakebi, Hagar Salah. (2023). The use of digital printing technology in creating innovative designs on different materials and using them in recycling evening dresses to achieve sustainability, Scientific Journal of the Faculty of Specific Education, Menoufia University, Vol. 10, Issue 35, July.
- 21- Abdelzaher, Sabreen, Wajdi, Rasha, and Shoukry, Alft. (2020). Creating sustainable clothing designs for women inspired by Mondrian's paintings, Journal of Architecture, Arts, and Humanities, Arab Society for Civilization and Islamic Arts, Vol. 5, Issue 23, September.
- 22- Abdulaziz, Sheikh Abdullah. (2020). Sustainability: Challenges and Opportunities, Al-Obeikan Library, Riyadh.
- 23- Abdellatif, Iman. (2010). Utilizing different printing and embroidery techniques on denim fabrics for teenage girl clothing, Master's thesis, Faculty of Home Economics, Menoufia University.
- 24- Atallah, Ahmed Ramzi Ahmed. (2016). Utilizing technological capabilities of machines and equipment to enhance the functional performance and aesthetic value of children's clothing made from denim material, Scientific Journal of Qualitative Education Sciences, Ain Shams University, Vol. 4, No. 4, December.
- 25- Atiya, Rania Nabil Kiki and Madi, Najlaa Mohamed Ahmed. (2019). Employing laser cutting technology to enrich the aesthetic aspect of denim clothing, Journal of Architecture, Arts, and Humanities, Arab Society for Civilization and Islamic Arts, Vol. 4, No. 16, July and August.
- 26- Aqeel, Al-Anoud and Madi, Najlaa. The art of crochet and hand embroidery to enhance the aesthetic aspect of women's abayas. College of Designs and Home Economics, Qassim University.
- 27- Akasha, Heba Mohamed. (2023). Innovation strategies in sustainable social entrepreneurship for startups in the textile retail and fashion industry, Journal of Architecture, Arts, and Humanities, Damietta University, Vol. 8, No. 9, October.
- 28- Ali, Azza Ibrahim, Saroukh, Safia Abdul Aziz, and Abu Eid, Anam Al-Sayed. (2007). Application of the Hardanger hand embroidery technique on some furnishings and the design, implementation, and evaluation of a training program on this embroidery technique for a sample from the city of Alexandria, Alexandria Journal of Scientific Exchange, Volume 28, (April-June).
- 29- Farid, Wajdi Rafat, Al-Khatib, Inas Abdel Hafez Ali, and Amin, Samia Hassanein Mohamed. (2023). The color and texture values of embroidery threads and their impact on denim fabrics, South-South Dialogue Journal, Assiut University, Issue 19, October Nineteenth Issue 2023 Assiut University.

- 30- Mohamed, Ramas Abdel Hamid Mustafa. (Year not provided). The role of influencing factors in embroidering some materials used for clothing and accessories and their impact on product quality, Master's thesis, Faculty of Home Economics, Helwan University.
- 31- Hekal, Rania Hosni and Labib, Samia Hamed. (2022). The possibility of using the direct drawing technique to enhance the aesthetic value of girls' denim clothing, Journal of Research in the Field of Qualitative Education, Minia University, Vol. 8, Issue 42, September.
- 32- Wazan, Dalia Abdullah. (2023). Achieving sustainability using heat transfer printing technology to treat textile damages, Saudi Journal of Art and Design, Princess Nourah bint Abdulrahman University, Vol. 3, Issue 3, December.
- 33- Gwilt, A. (2014). What prevents people repairing clothes? An investigation into community-based approaches to sustainable product service systems for clothing repair. Making Futures Journal, 3.
- 34- Hawley, Jana (2019) RECYLING: A SYSTEM PERSPECTIVE, Recycling in textiles, Wood head Publishing Limited, UK.
- 35- Karen Shah (2015): From Skip to Catwalk: An Investigation into Viable Pattern Cutting Techniques for Recycled Clothing", In: The Second International Conference for Creative Pattern Cutting, University of Huddersfield.
- 36- Manoj Kumar Para's & Rudrajeet Pal (2018): "Application of Markov chain for LCA: a study on the clothes 'reuse' in Nordic countries", Int J Adv. Manuf Techno 94, 191-201.
- 37- McLaren, A., & MacLauchlan, S. (2015) Crafting sustainable repairs: practice-based approaches to extend- in the life of clothes.
- 38- McQueen, R. H. Jain, ., McNeill, L. 5. & Kozlowski. A. (2022) the role of resources in repair practice: engagement with sell, paid and unpaid clothing repair by young consumers. Textile Research Journal, 00405175221123067
- 39- Youjiang Wang (2006): "Recycling in Textiles", wood head Publishing LTD, England Cambridge.
- 40- http://www.borronsbooks.com/cat/textile-pgt/textile-pg3.pdf
- 41- http://egyptiantextilemagazine.com/topicdetails.asp
- 42- https://www.almaany.com/ar/dict/ar-ar/%D8%B9%D9%8A%D8%A8
- 43- https://abhath.net/%D8%A7%D9%84%D9%82%D9%85%D8%A7%D8%B4-%D8%A7%D9%84%D8%AC%D9%8A%D9%86%D8%B2-%D8%AA%D8%A7%D8%B1%D9%8A%D8%AE%D9%87-
  - %D9%88%D8%A7%D8%B3%D8%AA%D8%AE%D8%AF%D8%A7%D9%85%D8%A7%D8%AA%D9%87/
- 44- https://zahrabrand.com/%D9%82%D9%85%D8%A7%D8%B4-
  - $\% \, D8\% \, A7\% \, D9\% \, 84\% \, D8\% \, AC\% \, D9\% \, 8A\% \, D9\% \, 86\% \, D8\% \, B2-\% \, D8\% \, A7\% \, D9\% \, 84\% \, D8\% \, B3\% \, D8\% \, B1-60\% \,$

  - %D9%88%D8%AA%D8%B3%D9%85%D9%8A%D8%AA%D9%87-%D8%A8%D9%87/

# Paper History:

Paper received February 08, 2024, Accepted April 04, 2024, Published on line May 01, 2024