Innovating Women's Outerwear Designs for Special Bodies in light of TRIZ Theory

Sahar Aly Zaghoul Aly
Associate Professor of Fashion Design, Department of Fashion Design, College of Designs, Qassim University, Saudi Arabia
Professor of Fashion Design, Department of Clothes and textile, College of Home Economics, Helwan University, Sah.ali@qu.edu.sa

Maram Muhammad Abdulkarim Al Jarbou
Doctor of Philosophy student in clothing design and production track Fashion Design, Department of Fashion Design, College of Designs, Qassim University, Saudi Arabia, 392200484@qu.edu.sa

Abstract:
This research aims to study the partial physical defects of a woman’s body that are of a special nature (partial physical defects), to benefit from the principles of TRIZ Theory of Inventive Problem Solving, to identify the foundations that international fashion designers have addressed when designing clothes that suit some physical defects, to provide design proposals for outer clothes features of bodies of a special nature (partial physical defects) in light of TRIZ theory. The descriptive approach was used and applied for being suitable to achieve the research objectives. The tools included a questionnaire to measure the opinions of specialists, a questionnaire to measure the opinions of female consumers, and the results resulted in the following:
1- There are statistically significant differences at the level of (0.01) between the opinions of specialists for the proposed designs with regard to aesthetic aspects, design No. “2” obtained the preference over the designs for partial defects “chubby arm,” followed by designs (first, third, fourth), and Design No. “3” The highest score is for the designs of partial defects “big tummy”, followed by designs (second, first, fourth). As for designs of partial defects “large chest”, design No. “3” received the highest score, followed by designs (second, first, fourth).
2- There are statistically significant differences (0.01) between the opinions of specialists for the proposed designs with regard to functional aspects when, and Design No. “1” achieved the preference for designs for partial defects “chubby arm”, then followed by designs (second, third, fourth), and Design No. “3” took the lead for designs of partial defects “big tummy”, followed by designs (second, first, fourth). As for designs of partial defects “large chest”, design No. “3” achieved first place, followed by designs (fourth, second, first).
3- There are statistically significant differences between the opinions of consumers at a significance level (0.01) for the proposed designs. By reviewing the opinions of consumers in terms of the preference of the designs for partial defects “chubby arm”, design number “1” achieved first place, then it was followed by the designs (second, third, Fourth), Design No. “3” came in the lead for designs of partial defects “big tummy,” followed by designs (second, first, fourth). As for designs of partial defects “large chest,” design No. “3” achieved first place, followed by designs (fourth, second, first).
4- There is a correlation between the ranking of the proposed designs by both professionals and consumers, amounting to (0.876), which is a statistically significant value at the level of (0.01), and it is a direct relationship that indicates the presence of great agreement between their opinions.

Keywords:
Innovation - women's outer clothes - Bodies with a Special Nature - Triz Theory

References:
2- Abu Al-Ghaith, Y. F. (2010). The comprehensive encyclopedia in obesity treatment, Dar Al Yaqeen for Publishing and Distribution, Cairo.
4- Abu Jado, S. M. (2012). TRIZ program for developing creative thinking, Debono Center for Teaching Thinking, Jordan.
7- Al-Ahwal, A. S. (2019). The effectiveness of a proposed program based on the principles of TRIZ theory of innovative solutions to problems in treating some difficulties, Journal of Educational and Psychological Studies, 13(1), Sultan Qaboos University, Oman.
8- Al-Arfaj, M. A. (2016). Optical illusion art as a source of Fashion designS in innovation to address the Problems of body types Of women, Master Thesis, College of Design and Home Economics, Qassim University, Qassim.


22- Asiri, J. M. (2019). A proposed program based on TRIZ theory to develop the skills of creative solution to chemical problems among female students, Reading and Knowledge Magazine, 217, Faculty of Education, Egyptian Society for Reading and Knowledge, Ain Shams University, Cairo.


28- Jiang, J. (2013). School of Mechanical and Power Engineering, Harbin University of Science and Technology Harbin, China.


36- Rabah, Z. O. (2018). Employing the features of the Sumerian civilization in women's evening fashion designs, international design magazine, 8(2), Scientific Society of Designers, Cairo.


39- Shehata, M. A. (2022). The effectiveness of TRIZ theory strategies in developing mathematical connections among primary school students, College of Education Journal, 10(30), Faculty of Education, Al-Arish University, Cairo.

40- Taima, N. M. and Afifi, G. S. (2018). Design elements and their use in designing home clothing to treat body defects,
Citation: Sahar Aly, Maram Al Jarbou (2024), Innovating Women’s Outerwear Designs for Special Bodies in light of TRIZ Theory, International Design Journal, Vol. 14 No. 1, (January 2024) pp 75-93

International Design Magazine, 8(1), Scientific Society of Designers, Cairo.
42- https://www.eliesaab.com (5 April 2020)
44- https://theproteinprincess.com/tag/ab-separation (8 March 2020)
46- https://www.webteb.com/articles (5 April 2020)
47- https://www.webteb.com/multimedia/slideshows (6 April 2020)
48- https://nutritionqa.com/muscle-separation (7 June 2020)
49- https://www.spectrumhealth.org (4 October 2021)
50- https://www.alroeya.com (3 August 2021)
51- https://bestbuynbeautysupplymiami.com (10 June 2020)
52- https://www.valentino.com (17 October 2021)
54- http://www.dolcegabbana.com (1 June 2020)

Paper History:
Paper received August 26, 2023, Accepted October 18, 2023, Published on line January 1, 2024