

## Creating Sustainable Educational Clothing Designs for Children with Learning Disabilities Using the Biomimetic Strategy

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### Abstract:

**The research aims** to study the characteristics of children with learning disabilities in early childhood using the biometric strategy in the sustainable design to create sustainable educational clothing designs. Also measuring the acceptance of consumers (mothers - supervisors) in the field of clothing and textiles for the educational clothing designs and implementing innovative designs that achieved the highest degrees of acceptance from the research samples. **Methodology:** The study followed the descriptive analytical approach with the application in the research, and the sample was limited to (57) distributed among (specialists - consumers " the mothers of children – the supervisors in centers of learning difficulties"). The chosen categories were (15) professors, associate professors, and assistant professors in the field of fashion design, consumers (the mothers of children with learning difficulties), and they are (31). Lastly, consumers (the supervisors of children with learning disabilities) and they are (11). Their opinion was taken on the proposed designs, and the used tools included two questionnaires; one directed to the specialists in the field of fashion design. The other one directed the consumers (mothers and supervisors of the children with learning disabilities) to measure the degrees of acceptance of the proposed sustainable educational clothing designs. **The results** show that there is a correlation relationship between the order of both specialists and consumers (children's mothers) regarding the axes and items of the questionnaire has reached (0.991), which is a statistically significant value at the level (0.01), and that is a direct relationship. It indicates that there is an excellent agreement between their opinions. There is also a correlation between the order of specialists and consumers (children's mothers) in the light of axes and items amounted to (0.991), which is a significant value at the level (0.01) statistically. It indicates there is a direct relationship and a great agreement between their opinions. There is a correlation between the order of consumers (children's mothers) and consumers (supervisors) in the light of the axes, and items of the questionnaire amounted to (0.796), which is statistically significant value at the level (of 0.01). It is a direct relationship that indicates a great agreement between their opinions. The biomimetic strategy was employed successfully in designing sustainable educational clothing for children with learning disabilities especially, and in fashion design industry in general.

### Keywords:

Biomimetic, Sustainability, Children with Learning Disabilities, Sustainable Educational Clothing Designs

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