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## Digital Processing of Autistic Children's Drawings to Make Use of them in the Design of Printed Fabrics for Children's Clothin

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### **Abstract:**

Saudi Arabia's vision 2020 has placed more emphasis on paying attention to groups with special needs, providing support to them, addressing all their difficulties and considering them as part of human wealth, which makes it necessary to develop, integrate and benefit from them in the society. Autistic children are a wealth that can be invested and benefited from their capabilities and potentials. Researchers point out that these children lack social interaction and communication. Many studies tried to enter their world, to break the barrier of social withdrawal and isolation they live in, and to draw their attention. Therefore, **the purpose of this study is** to reveal the supporting activities, specifically the art of drawing, which help develop autistic children's sensory perception and use it as an alternative method of communication, to adapt and utilize their drawings to develop digital designs through computer software to produce children's printed fabrics. The major research question is: How can artistic elements and vocabulary of autistic children's drawings be adapted and digitized to develop printed fabrics for children's clothing? **The current research aimed to** identify the artistic and aesthetic characteristics of autistic children's drawings for the 6-12 age group, to digitize the drawings through computer software to design printed fabrics for children's clothing, and to measure the degree to which specialists and children's mothers accept the designs developed from the autistic children's drawings to be marketed locally. The analytical descriptive approach was used in this study. The results showed statistically significant differences at a significance level of 0.05 between the 20 designs proposed by the researcher, based on the specialists' opinions on the appropriateness of designs in achieving the aesthetic and functional requirements. In addition, the results revealed statistically significant differences at a significance level of 0.01 among the 20 designs proposed by the researcher, based on the mothers' opinions on the appropriateness of designs in achieving the aesthetic and functional requirements.

### **Keywords**

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