Using gamification tools in creating design techniques for building products for autism children

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Abstract:

The increasing prevalence of autism spectrum disorder makes it imperative for designers to help these children by designing their own products that include some gaming strategies that can make using these tools easier and more enjoyable for them. Because of the difficulty of using available design techniques to design products suitable for developing the skills of autistic children. Products for autistic children suffer from difficulties in use that parents and treatment specialists face. In addition, it is not suitable for the nature of the consumer, who needs products that contribute to helping them overcome their daily problems. Therefore, the research aims to build a clear vision of design techniques that help in designing products that can help children with autism spectrum disorder. And explore the most important design techniques that influence generating design ideas using play techniques to help autistic patients. As well as choosing the most valid and effective techniques in the field of designing toy products especially for autistic children. By determining its capabilities and capabilities in achieving the desired goal and what are the obstacles that the designer or user may face, as this study assumes that a clear model of the design process can be built using game techniques suitable for product designers. Game design techniques can also be used in designing products for autism, facilitating the designer's work. Also, designing products in an organized manner according to gamification techniques is beneficial for autistic children, as products designed using gamification techniques support the families and specialists treating autistic children in performing their mission in simplifying the burden of daily problems facing these children. Using an inductive and descriptive approach (analytical - survey - statistical) - experimental to find a comprehensive and clear model that can be considered one of the design techniques using play techniques to help designers in the field of teaching product design to special groups. It can also be useful in designing and producing products that can help rehabilitate children with autism spectrum disorder using the most valid design methods.

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