

RESEARCH THEME

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Title of the doctoral research Light and color in games

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Abstract

Toys and games are as ancient as humanity itself; moreover, they represent a significant segment of the industrial world of contemporary society. Games engage a vast portion of people, regardless of age, gender, social status, or nationality. Games are an extraordinary means of support for the education and growth of younger generations and for the support and even care of older generations. Numerous studies have demonstrated that games can exert multiple beneficial effects on individuals with and without disabilities.

An essential aspect of game design is how users perceive these products, especially concerning the elements related to visual perception. Light and color are often used merely as simple parameters in game design, when in reality, they can be determinants in the narrative of the experience or for visibility, aiding accessibility in the case of disabilities such as color blindness or visually impaired users.

The research aims to broadly analyze the world of games and toys from the perspective of light and color, perception of stimuli, and how these factors influence physiology, psychology, and user experience in users with visual disabilities or without. The goal is to analyze various aspects of games and toys (both traditional and digital), identify typical issues, and promote the identification of solutions, tools, and best practices for design.

Keywords Light, Color, Game Design