

P54: Supporting the personal autonomy of children with autism spectrum disorder: a software system design and development

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Introduction: Technology attracts the interest of children with ASD. Health professionals and developers are interested to design programs facilitating daily lives of individuals with ASD. However, some special requirements must be considered on software design process for people with ASD.

Objectives: To describe principles and decision making of an interactive software design process for children with ASD.

Materials and Methods: This research focused on software development and design process, studying scientific evidence and consultation/testing done by specialists, children with ASD and their families. Data were collected using observation, interview, group discussions and field notes.

Results and Discussion: The study developed a design guide that includes evidences, basic ideas and suggestions for ASD Module. It was translated into 10 guidelines for consider when developing technology for people with ASD (ex: software and its contents are based on a person's abilities, desires and interests; the information is displayed in a multimodal way, visual and auditory, and it is adapted according to the sensory style preferred by each child). Future research is need, focused on quantitative measures of large samples of children with ASD' responses to stimuli related to software design, and also about the meaning that children with ASD, families and professionals give to technology as therapeutic tool.

Conclusion: These guidelines for technology design provide useful information for researchers, developers, social/healthcare professionals and families, aiming to help children with ASD to easier understanding daily life.

References

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