Co-design of scenarios for interacting with a NAO robot in treating autism spectrum condition

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Abstract

Training socio-cognitive skills of children with Autism Spectrum Condition (ASC) is exploring with great interest social robots. In fact, research results show that these robots are well received by children and this opens the possibility to be adopted effectively in treating ASC. Here we show the co-design process followed to design and develop an innovative digital platform that enables interactive activities between a child with ASC and a NAO robot. Main characteristic of this process is strong collaboration and a progressive refinement of both technical and functional requirements to take into account both clinical needs and technological possibilities, with the aim of producing a platform that can show, on one side, a robust behavior and, on the other side, provide tasks that are useful and relevant for the clinics.

Keywords

Human-Robot Interaction (HRI), Autism Spectrum Conditions, Smart Objects, Interactive Co-design, Emotional Intelligence

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