



## About the journal

[Editorial policy](#)

[Instructions for authors](#)

[Cobiss](#)

[All issues](#)

[2020 OnLine-First](#)

[2020](#)

[2019](#)

[2018](#)

[2017](#)

[2016](#)

[2015](#)

[2014](#)

[Volume 11 Issue 4](#)

[Volume 11 Issue 3](#)

[Volume 11 Issue 2](#)

[Volume 11 Issue 1](#)

[2013](#)

[2012](#)

[2011](#)

[2010](#)

[2009](#)

[2008](#)

[2007](#)

[2006](#)

[2005](#)

[2004](#)

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[Cited by](#)

## A novel educational game for teaching emotion identification skills to preschoolers with autism diagnosis

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Emotion recognition is essential in human communication and social interaction. Children with autism have been reported to exhibit deficits in understanding and expressing emotions. Those deficits seem to be rather permanent so intervention tools for improving those impairments are desirable. Educational interventions for teaching emotion recognition should occur as early as possible. It is argued that Serious Games can be very effective in the areas of therapy and education for children with autism. However, those computer interventions require considerable skills for interaction. Before the age of 6, most children with autism do not have such basic motor skills in order to manipulate a mouse or a keyboard. Our approach takes account of the specific characteristics of preschoolers with autism and their physical inabilities. By creating an educational computer game, which provides physical interaction with natural user interface (NUI), we aim to support early intervention and to enhance emotion recognition skills.

**Keywords:** autism, facial emotion recognition, gesture-based interaction, Kinect, natural user interface

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In a game as in the leading preschooler's activity some actions are performed which otherwise he would be able to do after some time. Performing an action, even a disadvantageous one, a child does not learn any new experience related to completion of emotional intention which was realized in process of this action [2; 307]. That is why a game teaches children to direct their thoughts and actions towards a certain goal, helps to develop purposefulness. In game a child starts feeling as a part of the group, to assess actions and doings of his comrades accordingly. A novel educational game for teaching emotion identification skills to preschoolers with autism diagnosis. **ABSTRACT** Emotion recognition is essential in human communication and social interaction. Children with autism have been reported to exhibit deficits in understanding and expressing emotions. Those deficits seem to be rather permanent so more. **ABSTRACT** Emotion recognition is essential in human communication and social interaction. Children with autism have been reported to exhibit deficits in understanding and expressing emotions. Those deficits seem to be rather permanent so intervention tools for improving those impairments are desirable. Educational interventions for teaching emotion recognition should occur as early as possible. It is argued that Serious Games can be very effective in the areas of therapy and education for children with autism. However, those computer interventions require considerable skills for interaction. Before the age of 6, most children with autism do not have such basic motor skills in order to manipulate a mouse or a keyboard. Our approach takes account of the specific characteristics of preschoolers with autism and their physical inabilities. By creating an educational computer game, which provides physical interaction with natural user interface (NUI), we aim to support early intervention and to enhance emotion recognition skills. **Keywords:** autism, facial emotion recognition, gesture-based interaction, Kinect, natural user interface. **About the Author.** Patricia Howlin is Principal Clinical Psychologist at the Maudsley Hospital, London, working mainly with autistic children and those suffering from pervasive developmental disorders. Her publications include Teaching Children with Autism to Mind-Read (with Patricia Howlin and Simon Baron-Cohen, Wiley, 1999). Read more. Product details. The system to teach emotions is wonderful. However, there are some obsolete notions, like using "normal" instead of "regularly developing". Putting this aside, it is a wonderful resource!