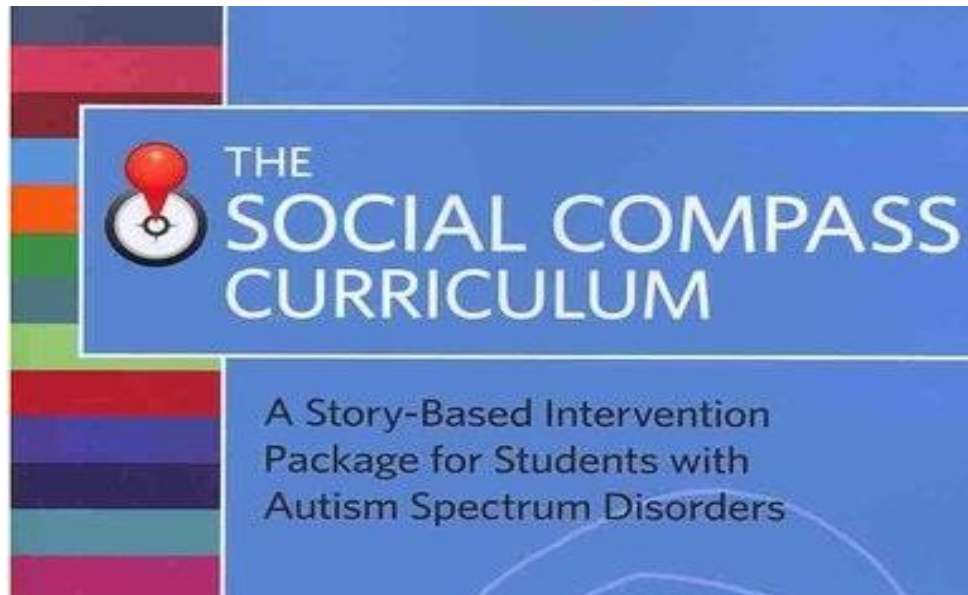


PERCEIVED ADOPTION OF THE MOBILE SOCIAL COMPASS

ABSTRACT



The Social Compass is a social skills curriculum for children with autism that combines visual supports, visual schedules and story-based interventions to develop age and functioning-level appropriate social skills. To augment the Social Compass curriculum, a Mobile Social Compass system was developed that extends the curriculum with a tool that allows children learn social support outside classrooms. The *Mobile Social Compass* is a mobile interactive system that uses a visual schedule to guide children throughout an interaction, helps them detect potential interaction partners, and gives them social cues. In this work, the results of a preliminary evaluation with potential users of the system are presented to determine how the design and development of the Mobile Social System can and should be improved in future iterations.

The objective is to evaluate the Mobile Social Compass's core characteristics, the potential users' intentions for using the system, and their perception of system utility and ease of use.

For a period of two months, seven focus groups with potential users were conducted, including fourteen children with autism aged between seven and ten, four teachers and four autism coordinators. Participants were presented with mock-ups of the Mobile Social Compass System and animations of four scenarios depicting the system's use. Each focus group lasted around one hour on average where

participants discussed changes for the system and examples of how the system might positive or negative impact children's interactions. Additional questions were posed to validate the findings and to gather new design insights for the system's redesign. Finally, participants were asked to answer a questionnaire aimed at predicting user acceptance based on the Technology Acceptance Model.

The results indicated that children perceived the system as fun, cool and appealing, a child commented: *"This system is really cool, I can't wait to use it."* The results from our predicted adoption showed that 94% of the participants would use the system, 91% believed the system would enhance their everyday interactions and 85% perceived the system would be easy to use. Autism coordinators had the lowest ease-of-use ratings, which could in part be because they were worried about liability issues or their capability to use and teach the system to the children. User training before system deployment might help alleviate this issue. Both children and teachers also gave us insights to improve our design by including mechanism for privacy management and a potential for a game-like interaction where children could earn points and rewards. This evaluation helped to improve the system's current prototype.

Mobile Social Compass system has been developed to help children with autism improve their social skills outside classrooms. The results of the evaluation demonstrate that overall the application was perceived to be efficient and useful in improving the quality of interactions held by children with autism.