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Science and Technology for Autism Remediation (STAR) Limited

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Frequently Asked Questions (<https://star-autism.com/en/faq/>)

RABI®: Frequently Asked Questions

Q1: What is the RABI® program?

Our research team uses social robots as a medium of instruction for teaching social skills (prosocial behavior, the comprehension and expression of emotions, conversational skills, etc.) as well as appropriate behavior in various circumstances to children with Autism Spectrum Disorder (ASD). We also use computational instructions and text-to-speech programs to manage conversations with children with ASD in real time. Role-play dramas increase the children's motivation to communicate and strengthen their language abilities. We also deliver sex education and anti-bullying lessons to minors with ASD.

Q2: What type(s) of children with ASD is RABI® suitable for?

A: The program is suitable for 3- to 18-year-olds with ASD whose verbal ability is at least 3 y  English



Q3: How does my child join the RABI® program?

A:

1. Registration

Parents/caretakers fill in a simple registration form. Next, our staff will telephone parents/caretakers to brief them on our services and arrange a video conference with Professor So.

2. Assessment

Professor So will meet each child along with parents/caretakers and preliminarily assess the child's social and language abilities.

3. Tailor-made RABI® course

Professor So will construct a RABI® program suitable for the child, and our staff will follow up on it with parents/caretakers. If necessary, Professor So will recommend that the child undergo our standardized assessments on ASD diagnoses, language skills and cognitive abilities.

Q4: What is taught during RABI® sessions?

A:

1. Role play: Robots act out a story to demonstrate social skills

2. Instruction: Tutors explain to children the social skills demonstrated by the robots

3. Tutor-led interactive games: Allows children to apply relevant social skills to interactive situations

(One of these games is a picture board game with dice, in which every step in the game requires the player to describe the event in a picture and the emotions in it, such as an angry experience)

Q5: How does RABI® effectively improve the social skills of children with ASD?

A: RABI® designs learning modes suitable for children with ASD based on theories of autism, such as:

1. The social motivation theory of autism, which states that children with ASD are intrinsically less interested in social engagement, including physical activities and conversations. Therefore a medium of instruction that increases such motivation is necessary.

2. The empathizing-systemizing theory, according to which it is necessary for individuals with ASD to have repetitive and consistent instructions, as well as have predictable conversations.

Robots can repeat programs according to its settings and present lesson content in an orderly, step-by-step fashion, and thus can communicate with children with ASD. Moreover, having no emotions or facial expressions, robots appear non-threatening, so they are especially suitable for emotion-sensitive children.

Numerous studies conducted by the Chinese University of Hong Kong show that the RABI® program is able to improve significantly the following skills in children with Autism Spectrum Disorders (ASD): gestural communication (1), joint attention (2), verbal imitation (3) and narrative abilities (4). These skills are key to daily social activity and communication. Besides, compared to conventional facilitator-led interventional therapy, therapeutic social robotics has been shown to develop eye contact between child and facilitator more effectively, and hence it improves the child's social skills.

Here is what parents have said after their children joined our program:

 English

<https://star-autism.com/en/testimonials/> (<https://star-autism.com/en/testimonials/>)

Q6: What is the primary therapeutic method used in RABI®?

RABI® introduces a novel therapeutic method —dramatic intervention. In this intervention, children play different roles and act out different characters with robots. During sessions, robots provide reminders and emphasis. When children with ASD are involved in such a way, they learn what their behaviors mean and how their responses affect other people. Then a human teacher facilitates various learning activities with the children where they apply the skills acquired to real-world settings.

Q7: How many sessions are there in a program term? How much does each session cost?

The annual RABI® program runs for two terms, each of which consists of 40 sessions. The session length is 30-50 minutes (depending on the child's abilities and attentiveness) and the price of each session is subject to the training method selected and any subsidies/funding invoked, ranging from \$150 to \$800+. Details may be found at <https://star-autism.com/en/rabi/> (<https://star-autism.com/en/rabi/regular>).

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