

# Technology-based aids for people affected by Autism Spectrum Disorder (ASD)

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Individuals affected by Autism Spectrum Disorder(ASD) are often unable to communicate in an appropriate way, they show strong difficulties in social interactions and in manifesting their affective states. The conventional techniques, used to improve the performances of these people in the everyday tasks, are observation-based and can require a lot of effort in terms of time and money, with limited results. Technology-assisted therapies can result more powerful and fast.

Our aim is to analyze the current technology-based solutions that can help therapists in the treatment of people affected by ASD. These solutions exploit the joint use of human intelligence and artificial intelligence to improve the powerfulness of therapies and to allow a better integration of these individuals in the society. Examples of these type of aids are Virtual Assistants and Agents as therapeutic tools, wearable technologies or VR headset to help them in everyday communication and to improve their fundamental and social skills. An interesting field that can be analyzed is the use of robotic avatar instead of a therapist, in order to increase the usefulness of a therapy, improving the response and the interaction time of the disabled user.