A Brief Overview on How Social Robots Can Assist Treating Psychological Disorders Among Students

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Abstract

The intervention for common psychological disorders such as Autism Spectrum Disorder (ASD) tends to rely on reducing social cues, which could result in a decrease in treatment efficiency when patients are interacting with a human therapist. Social robots, which are considered capable of interpreting human social cues and adapting their behaviours to achieve their goals, are frequently used for educational purposes and are increasingly being considered as a tool for mental therapy among school children and beyond. Combining multiple findings from numerous studies ranging from 2014-2024, the current review used databases such as PsycINFO, PubMed, and IEEE Xplore to identify potential papers with methodology from both qualitative and quantitative. Keywords/phrases such as "social robots", "human perception on robots", "autism and robots", and "robotic psychotherapy" were used in locating suitable journal articles for further investigation. After carefully examining the kinds of literature, some common themes emerged: Students tend to perceive humanoid and semi-humanoid robots to be more efficient and easily acceptable when providing counselling services rather than non-humanoids; Robot Assisted Therapy (RAT) shows better responses and appreciation than traditional classic therapies in treating mental illness; cultural differences may influence the overall efficiency of the use of social robots in different nations. These findings suggest that social robots hold significant potential for improving mental health interventions, particularly in educational environments.

Keywords

Social Robots, Autism, Psychotherapy