

Autism Emotion Recognition Web-Application

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Children with autism spectrum disorder (ASD) often find it difficult to understand other people's emotions and facial expressions. However, it is possible to train them with DVDs, quizzes and exercises, etc so that they are able to recognize these emotions. A web-app has been developed for these autistic children in age group 8 - 14 for the betterment of their emotion recognition skills. A number of psychiatrists were consulted. Experiments and research papers published by authentic organizations were studied. The already present apps were analyzed in great depth and their pros and cons were considered and it was seen that 63% of Pakistani population living in rural areas are not able to understand English language and thus couldn't use such applications. After an ample amount of research, a web-application for the betterment of emotion recognition skills of autistic children was developed. All four basic emotions i.e. happy, sad, angry, fear along with some complex emotions i.e. irritated, disgusted, tired and confused were covered in the web-application. An Urdu language interface was introduced in the web-app for making it more user-friendly and easy to use in Pakistan. An experiment to test proper functioning of web-app also received affirmative results. This project will be able to "train" the autistic children with their emotion recognition deficiency in an interactive way and shall prove to be beneficial for particularly Pakistani rural population where a majority of autistics are being treated in a brutal manner and also in several other Non-English speaking countries, after being adapted in their local languages.