Chapter 6

Discussion

Children with ASD have problems to know and understand the emotions of people around them and also have difficulty in trying to put across their feelings and emotions to people around them (Welch, 2012). The physiological change gives the several results related the stress response can be measured invasive method (Kushki et al., 2013). The biggest challenge in differentiating the children with other cultural anxieties from autistic children. The children are screen resultant for possible autism, or the high level of worry about autism with the family or clinician recommendation for additional evaluation must do. The diagnosis of this disorder will be the experience and ability of the clinicians practice to identify the characteristic of the autistic children details history taking from the parent; instruments used for assessment and direct observation.

The current practice in the diagnosis of Autism with the team of minimal inclusion of clinicians, the physician, and a multi-level team of clinical practitioner, psychologist, and speech-language pathologist. The other disciplines like therapy occupational, physical and audiology included as suitable for autistic children. The professional involved in diagnosis process for the autistic children should have clinical knowledge, specialized training and familiar with the behavior of autistic children. When the physician finishes a thorough developmental as well as family history of the child, it is important to have the knowledge about the possible risk factors autism, and probably related medical condition is essential for the child. Then physician can also do with the procedure to do the medical testing to check or rule out the conditions recommended by history as well as the physical examination. It is imperative to compare the social interaction and communication skills fo the autistic children to their chronological age, not their developmental age factors. The cognitive estimates can also be part of assist in distinguishing the various factors in autistic children. The results of cognitive estimations in a young child or non-verbal child might interpret with attention with the predictive weight is low.
The psychological evaluation also incorporated measures to estimate the autistic children social stimuli, emotional status, and behavior function. When autistic children's are prone to have impairments in social and they can also present with emotional impairments. Sometimes several additional diagnostic measures will overlap with those seen in autistic children. Cardiac rate and Galvanic skin response (GSR) can give the state of mind of the ASD individual during the cognitive evaluations (de Santos Sierra et al., 2011). The psychological estimation also measures and gives the impact of current adaptive function status. It is crucial to measures of adaptive functioning for diagnostic interpretation, planning of intervention, and record the data related to the response to intervention. Also, the component of a comprehensive calculation for autistic children is speech, language, and communication. The given communication deficits are a core feature of autistic children and will be presenting for differential diagnosis of autism must manage through speech-language assessments. The evaluation of child should measure the receptive and significant interaction using a uniform measure. Children with autism exposed to horseback riding therapy demonstrated with better sensory, social motivation, sensory sympathy, not as much of sedentary behaviors. These results provide a clear indication that horseback ride may be viable and suitable treatment options for autistic children (Bass et al., 2009). Visual clues will help to enhance the verbal instruction and will give clear information for the autistic children will produce the better result as well as increased understanding (Quill, 1995). Many studies have been carried out by applying particular teaching method for the autistic children in different parts of the world and in (Bass et al., 2009). They collected the autistic children’s data from Florida (United States) and applied different teaching methods for the autistic children in data and explained the Horseback ride one of the effective ways.

Physiological signal monitoring is one of the methods to predict the emotional status of the autistic children; sometimes the collected information may not be apparent. It is exceptionally well in cases of children with autism because they are socially inept. For example, autistic children might sometimes smile when they underwent with pain. Children with autism might show no face expression or a disinterested during the activity with peers (Welch, 2012). ANS will play a major role in controls all activities of the
physiological and sympathetic and parasympathetic branches, adaptively respond to the situation (Goodwin et al., 2006). The ANS is a typical response to anxiety and associated with ASD consistently with overarousal (Kushki et al., 2013).

The analysis can lead to identifying the content of PPG signal that is different for autistic children and controlled children. The pulse is not constant it keeps changing depending on the activity that one is doing. The pulse of a normal human being is around 65 to 75bpm. The pulse is not constant it keeps changing depending on the activity that one is doing. A study showing that the heart rate of the autism group is higher than the controlled group due to the higher stress levels. The GSR of autistic children is such that the signal is unpredictable, i.e., unable to predict when the child is stressed and when the child relaxed. It is due to the failure of the child to understand what other telling them and the confused mind state of the child leads to the instability of the signal.

The stress faced by the autism children is due to the failure to respond, understand and communicate with others of their peers makes them stressed their inability to express their emotion and needs given higher rates of the pulse. When a mental ability task given to autistic children, due to the abnormality in the brain, they tend to drift from the task given to them, and they are unable to concentrate on one thing at a time. They tend to get tensed and stressed out as compared to controlled children, which shows the increase in the ANS activity more predominantly, the Sympathetic Nervous System and hen the heart rate increases. Mohanaprakash et al., (2015) study discussed how an Android App can be used as mediator encouraging children with autism to break their isolation and importantly to facilitate interaction with other people. A human mediator does not need to speak many times to the child since the mobile application being an intermediary. Mobile Application stores the user database permanently. The mobile application is created only for one language (English). In our proposed work we developed a webcam based assistive technology as a mediator to interact with autistic children. It will overcome previous work limitations that are no need of restriction with the language and our system can be modified audio output to get attraction towards the mental task.
In this study, we have compared the different teaching and identify which teaching method was best and efficient for the autistic children. Physiological signals are easier for analyzing the problems faced by autistic children. The proper understanding of the issues and difficulties faced by the autistic children, parents, and caretakers, the non-invasive method is better and easier to acquire the signals from autistic children. The study will be very helpful to know children ability to perform the mental task it given for 180 seconds with the caretaker.