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Child Behaviour Analyzer

A dissertation by

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Abstract

According to the worldwide WHO statistics, more than 20% of Children and adolescents are affected from a mental illness. Several psychological studies show that most of the mental disorders are starting from childhood and in many cases continue to adulthood. Attention-deficit hyperactivity disorder (ADHD) is recognised as the most common behavioural disorder in school aged children. The worldwide ADHD prevalence is estimated as 5-10% of children in any condition.

Detection is one of the most important defences to helping those children who express disruptive behaviours or any other symptoms of ADHD. While there are many tools or applications to detect adult mental health conditions, there is a gap around detection in children and early adolescent. Especially when it comes to behavioural disorders like ADHD there are many barriers to identifying disorder and seeking proper treatment.

Child Behaviour Analyzer address the above problem of identifying ADHD in children and adolescent by analysing their behavioural symptoms. As well the solution will address the reliability problem of SNAP-IV rating scale which is widely used in ADHD clinical diagnosis. Support vector machine (SVM) classification model approach was used to predict the current ADHD status of the children.

Key words:

Childhood mental disorders, Behavioural disorders, Attention- deficit hyperactivity disorder, Data mining. Classification models