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Identify development disorders that occur in children during their first five years of life using video mining

Depression predictor tool for preschoolers based on daily activities

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ABSTRACT

Depression is a serious psychological issue that can influence in individuals of all ages, including teenage students and toddlers. It can be difficult to realize that very young children can experience the depression effects. As per the American Academy of Child and Adolescent Psychiatry, around 11% of youthful children experience the effects of depression at any given point in time. Detection is one of our most important defenses to helping those who show the symptoms of depression. While we have many tools at our disposal to detect it in adults and even more mature children and teenagers, there is a gap around detection it in very young children.

Through an depth of literature study and in depth of survey it is justified that phycologists have done research in the area of preschool depression and research findings highlighted that identified preschool depression is important to ensure the child future mental health. And identifying depression in these children can be done by detecting their behaviors in day to day life. It is clearly mention in the Child Behavior Check List, the facts to be identified in the depressed preschoolers.

Clinical Depression Bio Meter Address the above problem of identifying preschooler depression by analyzing child activities, and predict future depression status of the child and at the same time it suggest treatment plans for parents according to child currant depression status. HMM model approach was used to predict currant depression status according to the given child activities. The HMM was design according to the sign and symptoms related to the CBCL. Time series approach has taken to predict future depression status by analyzing child depression history data. The system accurate to overall 74% of predicting depression in three sub categories, depress, clinical range and normal range. Identifying and treats this mental in the beginning of early age will decrease the number of depression percentage of youth in the world and CDBM will helps to improve world children mental health

Key words:

Preschool depression, Preschool mental disorders, Hidden Markov Model, Time series analysis, Classification models, Probabilistic Classification models