

Informatics Institute of Technology

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**Age based Dyscalculia, ADHD, Low Working Memory  
and Anxiety detecting system**

A dissertation by

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**Abstract**

Numeracy skills or mathematical skills is an essential factor for any individual from their early stages as it plays a vital role in their learning curriculum. Dyscalculia can be identified as a specific learning disorder for calculation or numerical skills which is hard to be diagnosed as it co-exists with other disorders such as Attention Deficit Hyperactive Disorder (ADHD), low working memory and anxiety. Therefore, Dyscalculia can be misinterpreted and be challenging to diagnose. Many therapists or parents lack in understanding the root cause of Dyscalculia and how to provide the necessary treatments for these disorders. It is important to identify these in the early stages and provide the necessary treatments as it could further develop unknowingly and cause many issues. If a person has the above disorders that person won't like social gatherings or to be exposed as public since they consider themselves different from the other normal human beings which will lead to mental instability. Most of the individuals who are suffering from these 4 disorders like to live alone, not attend school or any learning activities as they feel like they have lack of knowledge. These individuals face difficulties in finding friends and opening a similar topic to speak about. The main reason for the cause of these disorders could be impacts on them before their birth or lack of brain development after birth. Currently there are very few advanced methods used to diagnose these disorders as most of the therapists try to diagnose these by observing the specific individual. However, unlike many other disorders these can be cured if the correct treatments are given and followed. Therefore, it is important to recognize the disorder in built in these individuals at its early stages and provide the necessary treatments before it falls into the high-risk level.

Keywords – Dyscalculia, ADHD, Low Working Memory, Anxiety, Mobile Application