ABSTRACT

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Dyslexia is a learning difficulty in language that goes through lifetime. Hence, people who have this learning difficulty can be of children and adults.Unlike autism, those who suffer dyslexia has normal IQ or above. This means that they can learn, work and have great life achievements just the same as their normal counterparts do. Treated correctly, those who have dyslexia can overcome their weakness and moreover can become an outstanding person that contributes to their community and the nation. Such treatment is however can only be given if one has been successfully identified as dyslexic. Identifying dyslexia in children is easier compared to adults due to adults have been able to identify their own way to compensate their weakness.

Identifying adult with dyslexia is best done with a game that designed based on Executive Function and equipped with a generator to generate multiple cases of measurement. Game based identification is selected for it can record the most recent exhibit of dyslexia signs and it is hard to refute the result. To make the result harder to refute, the game is equipped with a modified Procedural Content Generator to generate multiple cases of measurement. This is to avoid memorization, a phenomenon where one can train using the game to gain good score in the game. The score obtained based on memorization however does not reflect the capability of the person. This research puts a strong effort to make the game hard to refute due to expert experiences in identifying dyslexia for adults. On the other hand, the Executive Function is a persistent signs and traits in both adult and children, therefore it is apt to design a game based identification around them .

Keywords: Dyslexia in adult, Dyslexia identification, Game based identification, Procedural Content Generation