

Author Declaration Form

1. Funding

This research was supported by the Accelerating Higher Education Expansion and Development (AHEAD) Operation of the Ministry of Higher Education of Sri Lanka funded by the World Bank url: <https://ahead.lk/result-area-3/>.

2. Competing Interests

The authors have no relevant financial or non-financial interests to disclose.

3. Author Contributions

All authors of this journal gave the contribution towards designing the proposed model in the paper. The data collection and analysis were performed by Nushara Wedasingha, and Pradeepa Samarasinghe. The first draft of the manuscript was written by Nushara Wedasingha and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

4. Ethics approval

This research has strictly followed all the guidelines provided by the The Ethics Review Committee (ERC) of the University of Colombo Faculty of Medicine (<https://med.cmb.ac.lk/erc/#1549344246332-43b80a81-584c>) and obeyed all rules provided from the ethics review committee of the university of colombo faculty of medicine (<https://nmra.gov.lk/images/PDF/guideline/FERCSL-Guideline-2018.pdf>) during all data collection sessions and when using the collected data for comparing and training the developed models.

5. Consent to participate

A Written informed consent was obtained from the parents.

6. Consent to publish

The authors confirm that none of the data described in the paper disclose the identity of the participants in the datasets expect for the Fig. 1 where we have included image of a test subject in the over-all architecture diagrams. The authors took many approaches such as blurring the image of the subject in the diagram. However, the images were taken from a publically available dataset known as the Self-stimulatory Behaviours Dataset (SSBD) where it has all the necessary consent of the subjects to be published (<https://paperswithcode.com/dataset/self-stimulatory-behavior-dataset-1>).