

## **Elucidating the algorithm for predicting student's suicide risk: a large-scale empirical study in primary and secondary schools across the country using the Suicide Risk Assessment Tool (RAMPS).**

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### **Summary:**

The increasing number of suicides among children is a serious social problem and there is an urgent need to strengthen suicide prevention. The study aims to identify pupils at high risk of suicide at an early stage and provide them with appropriate support. The study aims to achieve the following two objectives using RAMPS, a suicide risk assessment IT tool developed by the applicants:

1. build an algorithm to predict suicide attempts and suicide-related risk - utilizing diverse information collected from schools across the country and using machine learning techniques to uncover characteristics and patterns of students at risk.
2. developing practical tools to help school teachers identify students at high risk of suicide at an early stage and support care decision-making - the system uses cloud technology to collect and manage data and incorporates internationally assessed questions for suicide risk assessment, as well as daily events The system also incorporates information about the individual pupil's risk level and has the ability to visualize the risk level of individual pupils. Efforts are also being made to improve the usability of the system to make it easier for pupils to answer the questions.