Data mining techniques to study research aptitude of medical students in India

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This paper presents data mining techniques using Microsoft SQL Server 2008 to study research aptitude of undergraduate medical students of medical colleges from different parts of India. Under the Short Term Studentship (STS) programme of the Indian Council of Medical Research (ICMR), research proposals were invited online through the ICMR website http://www.icmr.nic.in and were also evaluated online. The data collected were analyzed using data mining techniques to study response of students, quality of proposals, selection of subject areas, methodology used, new insights proposed *etc.* Cross-Validation method was used to interpret the data mining results with reference to other extramural research programmes of ICMR. The outcomes can be used for initiating actions for bridging gaps.