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Impact of Parents Education and Profession on Student's Performance

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Abstract - *The aim of this study was to evaluate Student Higher Study Willingness and his Score Prediction using Machine Learning. This study shows that there are significant different ways to benefit from machine learning application in education area. Based on our survey, the paper describes that how machine learning can predict the student score or performance by student traits*

Key Words: Higher Studies, Machine Learning, Prediction, Willingness, Performance

1. INTRODUCTION

Now days, the major issue in the higher education institution is that management of bulk data and use that data to increase the performance of the students. These institutions have interest in the success of the students. In lifetime teaching, higher education institutions have a large data amount of student data which is already stored in their databases. Storage is not the problem but make it in a systematic manner and use it in an efficient results is the biggest problem. For higher education institutions, there are many tasks which has to in use in a effective manner.

1.1 Benefit

Through machine learning, it enhances the performance and willingness of the students.

There are some traits and qualities that are used to enhance the performance and willingness of the students. There are some data sets that represent a student, such as age, gender, family background or medical information.

We aim to analyze collective student information through a website (kaggle) and classify the collected data to predict and categorize student performance. We also seek to elucidate the different factors that affect student performance (success and failure rates).

This improves the performance of the individual as well as enhance the higher institution and that's make them standout from the crowd.

2. LITERATURE REVIEW

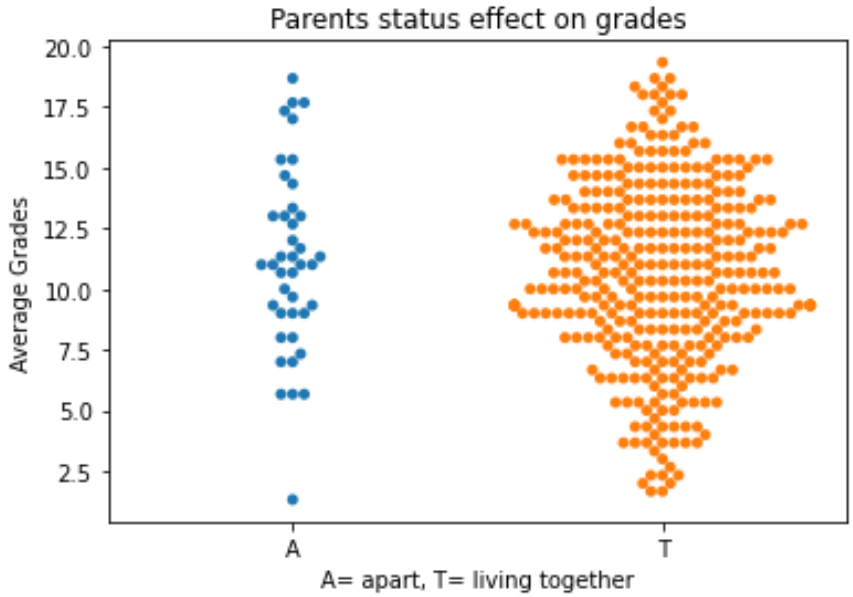
S. Celine, M. Maria Dominic, M. Savitha Devi (2020) conclude that many researchers use various techniques to make machine prediction, a reliable one. In the future, such systems are bound to substitute humans in the domain of prediction and also may excel humans in it. An attempt was made in this investigation to show the application of machine prediction to the employability of a candidate in a recruitment process. This research can be easily translated into other domains of predictions like health care, weather forecasting, natural calamities, crime prediction, etc., where the results will be a dichotomy in nature by changing the independent variables.

Gibbs Y. Kanyongo, Janine Certo & Brown I. Launcelot (2006) conclude that we see this as a possibility for future research. Also, it would be important to include the full range of possible parent-child literacy related activities if such an instrument was to provide a better picture of the influence of the home literacy environment on reading achievement. It is also argued that, even within the same country, the use of a home literacy instrument should be considered and used with caution. In most developing nations, the differences between urban based families and rural or farm-based families are so great that the use of the same home literacy instrument in those different environments may not produce accurate results. For example, most urban-based children are exposed to television, have electricity, and read newspapers among other things. For rural or farm-based children, all these amenities are not even imaginable for them.

Hazlina Darman, Sarah Musa, Rajasegeran Ramasamy, Raja Rajeswari (2019) conclude that the findings from this study has achieved the objective of developing a model that can predict the students' performance in final exam. The analysis has shown that the students who perform well in Test 1 and Test 2 have better chances of getting good scores in final exam, and vice versa. The value of R-square indicates at least one of the predictor variables contributes to the prediction of the students' performance in final exam. For future research, we will consider developing the similar model for the current/future students

who have different type of assessment and do the comparison to determine which assessment method gives better result in students' performances

Parents status effect on grades

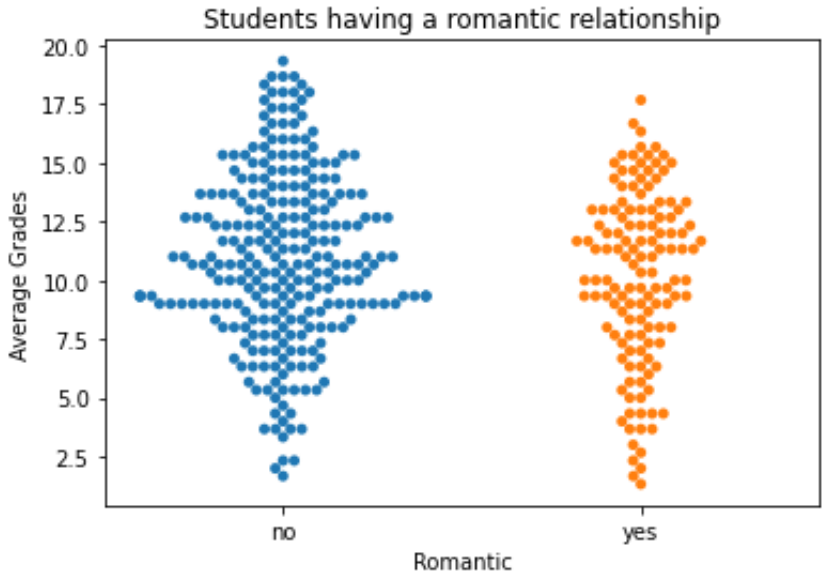


This graph describes that there is variation in average grades regarding parent's status.

Family relations effect on child grades

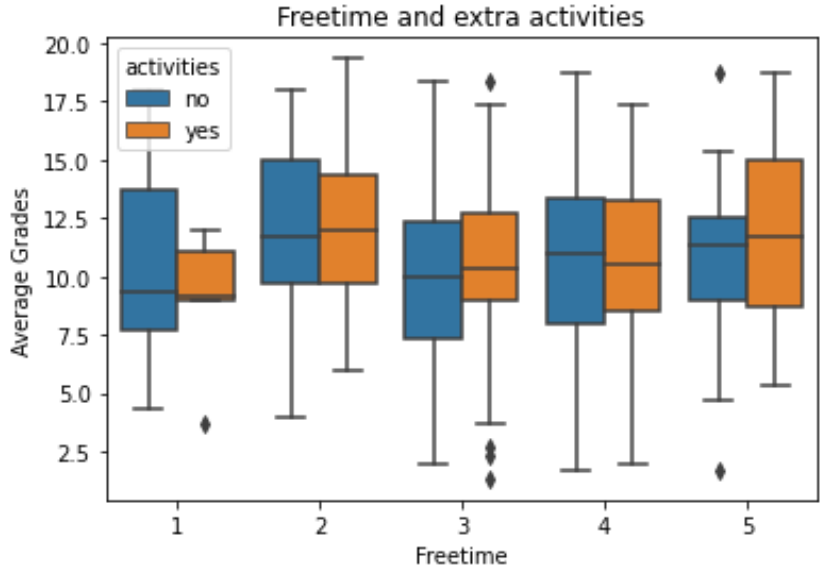
This graph describes that there is variation in average grades regarding family relation in society.

Students having a romantic relationship



This graph describes that there is variation in average grades regarding student love relationship.

Freetime and extra activities



This graph describes that there is variation in average grades regarding free time and extra activities.

3. CONCLUSIONS

The student whose mother is doctor is more average grades than others. The student having love relationship has less average grades than the student having love relationship. The student having extra paid course has more average grades than the student has not extra paid course.

Future scope:

In the future, we plan to implement own machine learning model for suggesting potential student to enroll or not to enroll on higher education based on different parameters. As we have rich database with lot of information of students on previous years, we believe that study would be of help to support our admission office as help in student enrolment process

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