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A DATA VISUALIZATION ON THE BAD EFFECTS OF CHILD'S SOCIAL MEDIA AND VIDEO GAME ATTRACTION DUE TO COVID-19 PANDEMIC

Sushanta Sen, Shomitro Kumar Ghosh, Arindra Dey Arni & Md. Ismail Jabiullah

Research Scholar, Department of Computer Science and Engineering, Daffodil International University

Dhaka, Bangladesh

ABSTRACT

Children will be the founders of the next generation. They will lead the world tomorrow. But if they are in a wrong track, the world will fall in danger tomorrow. Most of the children in this generation are involved on social media and video games. Particularly, during the covid-19 pandemic situation, it grew the most. As a result, children have a bad effect on their body, mind and their character also. Using social media by children can lead them in a bad track. Because there are numerous things on social media which are not appropriate for children and these can built a very bad effect on their mind. Besides, playing excessive video games by children can create different health problem and mind problem. Those social media and video games hamper their study and misguide them. In this research, we find out the statistics of children that are affected in their body, mind and study by those things during and before covid-19.

KEYWORDS: *Child Attraction, Data Analysis, Data Visualization, Social Media, Video games, Weka Explorer*

INTRODUCTION

Children are the substance of any country. Their actions in the future will guarantee that a country will flourish, or not. If they work well then the country will flourish. If they don't work well then the country will not flourish. But it entirely relies on the actions during the children's lifetime since it is the period to shape their character and fitness. If their character and fitness are decent in child lifetime then they will be a good being. If their character and fitness are not decent in child lifetime then they will be a bad being. Nowadays children are habituated in social media and video games. This creels their development of building character and fitness much. We have to overhaul on this lateral.

Data Mining is the system of spotting gorgeous knowledge, like patterns, changes, associations, significant structures and anomalies, from large quantities of data collected in databases, data warehouses, or some other information fountains. Due to the widespread attendance of very large quantities of data in electric forms, and the approaching necessity for revolving such data into practical information and knowledge for large applications including Market analysis, Business management and decision support, data mining has drawn a great deal of eye in information industry in current years.

Data mining is useful for organizing changes. Child's history, personal data give a large amount of information regarding a chosen change. The datasets are applied for removing necessary information. From those we are skilled to take alternatives and create laws.

REVIEW WORKS

To prepare this research, firstly we have to accomplish the Google Form. Because there we have to gather the data utilizing the Google Form and need to continue update the Data sheet and the results. Because as much as the data amplified, the outcomes of the projects convert more effectual. Then we applied the sheet in Weka Explorer creating the sheet .csv file.

Secondly, we find some results for different attributes with the help of Data Visualization. Those results will be "Data Visualization of Health Problem and Mental Problem and Data Visualization of How in Study" according to the data of during the Covid-19 pandemic and before the pandemic.

METHODOLOGY

Software: Weka

Weka is software which is used for diverse machine learning algorithms for the Data Mining mechanisms. In this software, there are many data mining utensils for data preparation, classification, regression, clustering, association and visualization. Weka is prevailing enough to deliver us the facility for implementing more than one classification algorithm only for alone model. In that situation we have to use Weka for getting the predictable results for the data sets. At first we pre-processed the .csv data sheets for getting the testing results. Also .ARRF file can be cast-off for this but here we use .csv file. Then we eradicate the attributes which are not obligatory for testing the algorithms. Finally we use diverse algorithms for getting different results for the datasheets [01].

DATA VISUALIZATION

We use the Data Visualization method to find some results in Weka Explorer. Those results help us to get some valuable information of our research.

Data Collection Process

First of all, we make a Google Form to collect some data providing the form. We collect a decent amount of data to fulfil our thesis.

Then we take the data in a MS excel sheet. After that, we train the sheet in Weka Explorer making the sheet .csv file. Making .csv file is important because Weka Explorer can't train MS excel sheet.

Data Visualization and Input-Output Analysis

1st Visualization

In the first visualization of our research we mainly find the result of how many child have health problem who are attract on social media and video games both or any one during the covid-19 by the help of data visualization. Here in Figure 1 shows the health problem during covid-19. Here in Figure 1, "Yes" gives the result of child have health problem and "No" gives the result of child have not health problem.
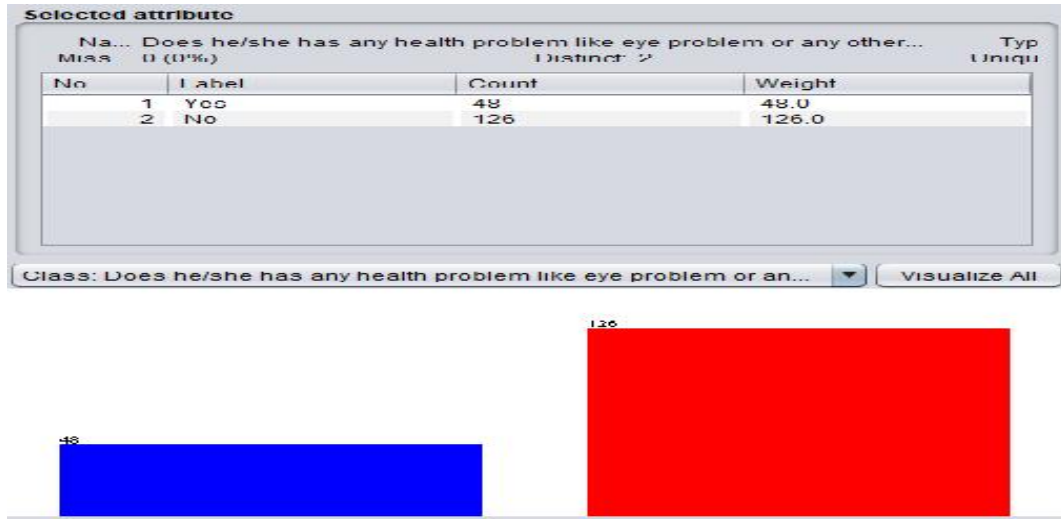
Figure 1: Data Visualization of Health Problem during the Covid-19 Pandemic.

2nd Visualization

In the second visualization of our research we mainly find the result of how many child have health problem who are attract on social media and video games both or any one before the covid-19 by the help of data visualization. Here in Figure 2 shows the health problem before covid-19. Here in Figure 2, "Yes" gives the result of child have health problem and "No" gives the result of child have not health problem

In Table 1 mainly the input output of the 1st and 2nd visualization have been analyzed. Here we find that 48 child have health problem attract on social media and video games both or any one out of 174 during covid-19 and 36 child have health problem attract on social media and video games both or any one out of 174 before covid-19. This table 1 mainly gives the full description of 1st and 2nd visualization.
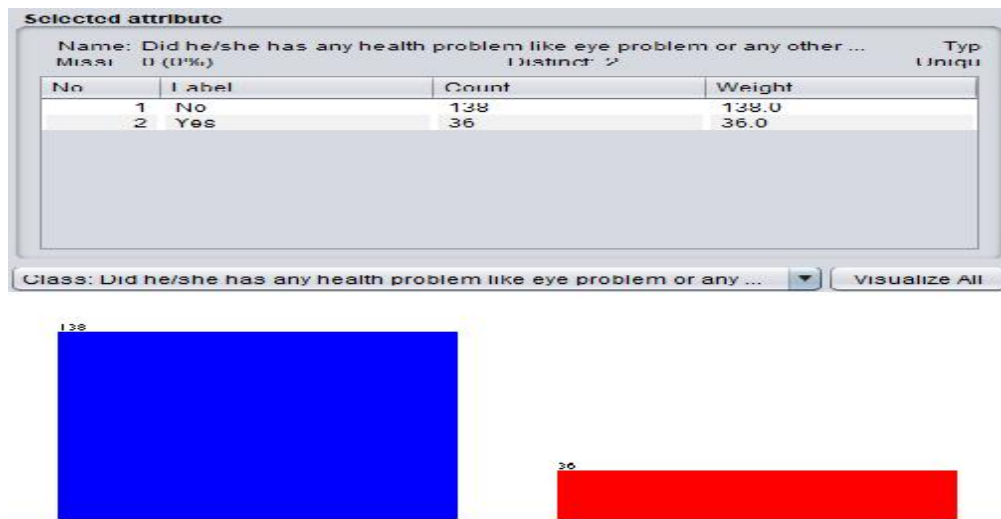

Figure 2: Data Visualization of Health Problem before the Covid-19 Pandemic.

Table 1: Testing Set for Any Health Problem during and before the Covid-19 Pandemic

Stage	Total Number of Problem
During Covid-19	48
Before Covid-19	36

3rdVisualization

In the third visualization of our research we mainly find the result of how many child have mental problem who are attract on social media and video games both or any one during the covid-19 by the help of data visualization. Here in Figure 3 shows the mental problem during covid-19. Here in Figure 3, "Yes" gives the result of child have mental problem and "No" gives the result of child have not mental problem.
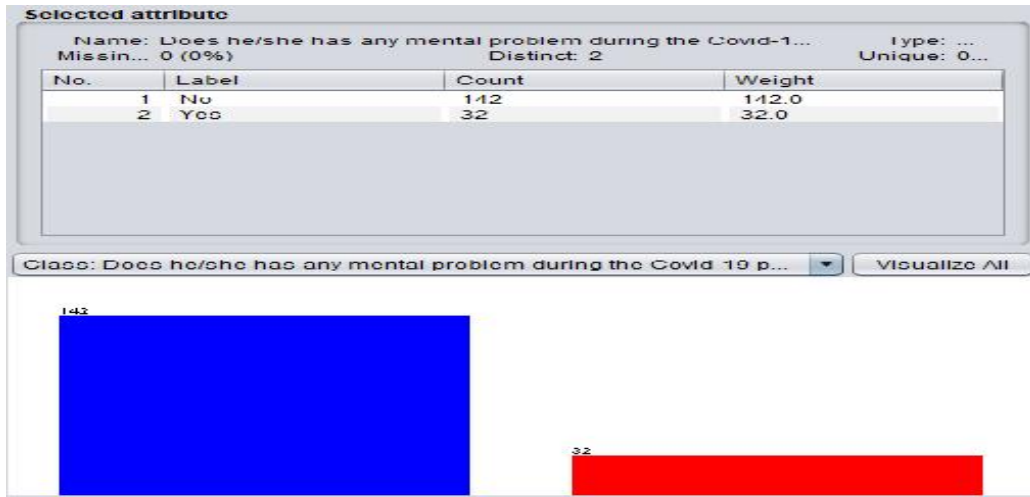

Figure 3: Data Visualization of Mental Problem during the Covid-19 Pandemic.

4thVisualization

in the fourth visualization of our research we mainly find the result of how many child have mental problem who are attract on social media and video games both or any one before the covid-19 by the help of data visualization. Here in Figure 4 shows the mental problem before covid-19. Here in Figure 4, "Yes" gives the result of child have mental problem and "No" gives the result of child have not mental problem.

In Table 2 mainly the input output of the 3rd and 4th visualization have been analyzed. Here we find that 32 child have mental problem attract on social media and video games both or any one out of 174 during covid-19 and 21 child have mental problem attract on social media and video games both or any one out of 174 before Covid-19. This Table 2 mainly gives the full description of 3rd and 4th visualization.

Figure 4: Data Visualization of Mental Problem before the Covid-19 Pandemic.

Table 2: Testing Set for Any Mental Problem during and before the Covid-19 Pandemic

Stage	Total Number of Problem
During Covid-19	32
Before Covid-19	21

5th Visualization

In the fifth visualization of our implementation we mainly find the result of the child how in study that is attracts on social media and video games both or any one during the covid-19 by the help of data visualization. Here in Figure 5 shows this. The result gives three category of student, which are Good, Medium and Bad.

In Table 3 mainly the input output of the 5th visualization have been analyzed. Here we find that 69 child good in study attract on social media and video games both or any one out of 174, 73 child medium in study attract on social media and video games both or any one out of 174 and 32 child bad in study attract on social media and video games both or any one out of 174. This table 3 mainly gives the full description of 5th visualization.
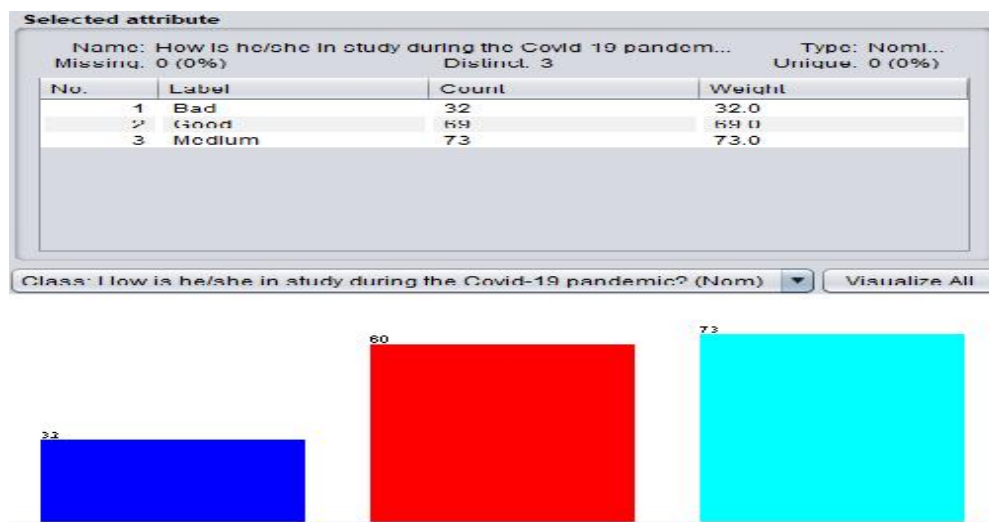

Figure 5: Data Visualization of How in Study during the Covid-19 Pandemic.

Table 3: Testing Set for How in Study during the Covid-19 Pandemic

How in Study	Total Number of How in Study
Good	69
Medium	73
Bad	32

6th Visualization

In the sixth visualization of our implementation we mainly find the result of the child how in study that is attracts on social media and video games both or any one before the covid-19 by the help of data visualization. Here in Figure 6 shows this. The result gives three category of student, which are Good, Medium and Bad.

In Table 4 mainly the input output of the 6th visualization have been analyzed. Here we find that 92 child good in study attract on social media and video games both or any one out of 174, 55 child medium in study attract on social media and video games both or any one out of 174 and 27 child bad in study attract on social media and video games both or any one out of174.This table 4 mainly gives the full description of 6th visualization.

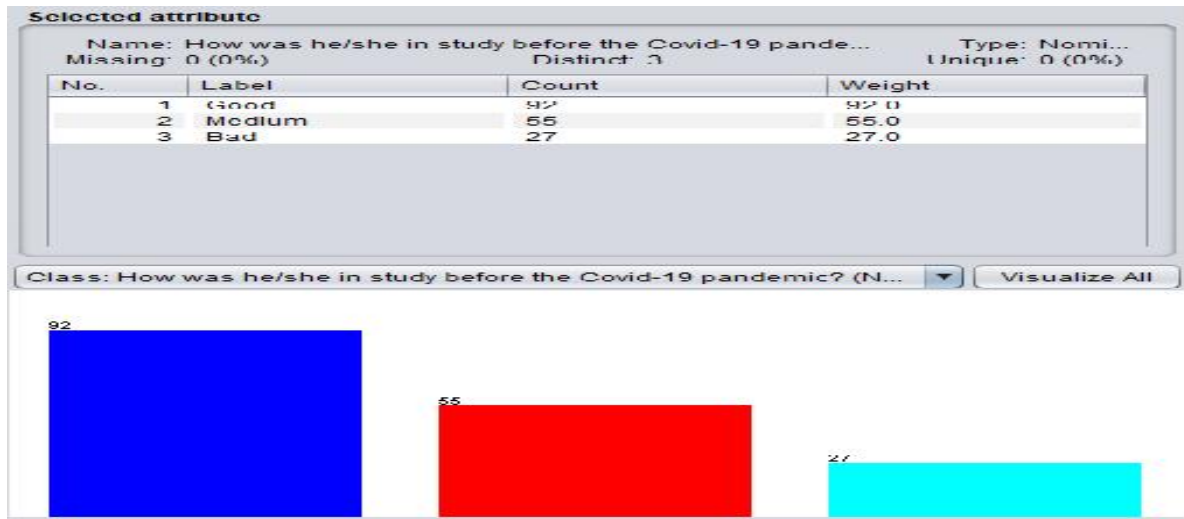**Figure 6: Data Visualization of How in Study before the Covid-19 Pandemic.**

Table 4: Testing Set for How in Study before the Covid-19 Pandemic

How in Study	Total Number of How in study
Good	92
Medium	55
Bad	27

CONCLUSIONS

We have presented here the approach of finding the results of the bad effects of child social media and video games attraction during and before COVID-19. We did not find any researches of the similar nature done focusing especially on this matter. Here we find the results of child health problem and mental problem, during and before COVID-19 for those activities using data visualization. Finally we find here the result of the value of how many child are good, medium and bad in study who are attract on social media and video games during and before COVID-19. The statistics shows that the bad effects of the children are high during the covid-19 pandemic.

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