IMPACT OF COVID-19 ON INDIAN EDUCATION SYSTEM.

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Introduction

Education is a disciplined system that focuses on ways and mode of learning and teaching in all the Educational Institutions contrasting to various means of socialization, both formal and Informal. As its rightly said, we are what we learn and adapt, Education guides us to transfer the values and knowledge of a society.

Over the passing years, as society has become ever more complex, and schools have become ever more institutionalized, educational experience has become less directly related to daily life. It has become a matter of expressing and learning in the context of these nine to five worlds, and more conceptual from practical, it is more about purifying, perusing, and learning things out of context. Covid 19 pandemic caused an unexpected turn in the Indian Education System. It did not only affect the lives of students but also the faculty, staff, and the government.

Online classrooms, radio programmes and online mobile applications and websites continue to be used by students despite the end of the school year. Over the last few years, India's GDP has fallen by an enormous amount. E-learning initiatives have many advantages, but they also have a few drawbacks for those who use them. The literacy rate has increased significantly since Covid was introduced.

Students from low-income families are more likely to perform poorly on standardised tests because they lack access to high-quality internet services and technology, such as computers, laptops, and smartphones. People in the upper and middle-income brackets tend to have better access to technology and thus score higher, but they participate in large numbers when it comes to health care. Consequently

This study focuses on finding out the factors for the impact of Covid-19 on the education system. This topic is of special interest as these day education has taken a back seat, starting from 2020, education sector is the most impacted industry all around the world.

Research Problem Background

With the advent of time, change in trend of Education has been observed due to the pandemic. Traditional Education methods like Real classrooms, Schools, Books and Notebooks, etc. have been replaced with, Google Classrooms or Zoom, Tablets, Mobiles or laptops, soft books Such as PDF's etc. Normal Schooling, which was once at the pinnacle of the most fruitful Education has been the biggest victim of this sudden shift.

Time & again, the one and only factor Covid-19 have been blamed for this thrift. However, very little research is available that can be considered as a bible to correctly identify the real impacts on the life of the students and as well as the impacts on the education system in India itself.

Research Objectives

The COVID-19 pandemic has caused the largest disruption to the education system in history. By mid-April 2020, 94 per cent of students worldwide were affected by the pandemic, representing 1.58 billion children and youth, in 200 countries.

In this research we are going to analyze and demonstrate the effects of Covid 19 on the education system and precisely about the negative effects caused by online learning on the students.

Objectives: -

- To analyze how online learning has affected on the Scores of the student or quality of education.
- To find out how online education is affecting the health of students as there is a decrease in the physical activities.
- To understand the time invested by the students on internet for education.
- To understand the time invested by the students on surfing the internet for example. YouTube, Instagram.
  From the target population which will answer the surveys and the data collected through the online surveys, we will collect information and then we are going to scrutinize the results to give a clear understanding about our analysis in the research.

Research Hypothesis

- H0- Null There is no relationship between Score (Dependent Variable) and other Independent Variables.

- H1 - There is a significant relationship between Score (Dependent Variable) and other Independent Variables. (Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING), Time Spent on Personal Development)

- All these Variables. (Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING), Time Spent on Personal Development) are independent and are not affected by each other

Hypothesis Explanation

- H0- Null There is no– relationship between Score (Dependent Variable) and other Independent Variables

This hypothesis was taken at the beginning of the research when there was no connection between the dependent and independent variables.

- H1 - There is a significant relationship between Score (Dependent Variable) and other Independent Variables. (Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING), Time Spent on Personal Development)

By taking this as alternate hypothesis we want to find out how the score of students (Dependent variable) is affected by the various activities they do (all the independent variables). After collecting all the data through questioner and survey we filtered it out and then we want to check how students (mainly their scores) have been affected by indulging into different activities (independent variables) like physical activity, internet surfing, personal development, and online classes. Also, to prove that there is a significant relation between score and other variables we are using different statical methods like mean median mode and regression model and other graphs.

- All these Variables. (Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING), Time Spent on Personal Development) are independent and are not affected by each other

We also want to prove that the there is no relation between the other variables, and they are completely independent.

Research design

Step 1:

We will be collecting Primary data and the variables are quantitative as well in nature. We will also collect secondary data from various websites and articles. **Step 2:**

We will use two type of data collection method primary and secondary

Primary:

We would be conducting surveys, interviews and focus group discussion and will be floating questionnaire and the response will be collected from people with different age groups ranging from 12-17 years of age.

Secondary:

We would be using the existing data available on the internet regarding the Impacts on education system due to Covid-19.

Step 3:

To analyze numerical data, quantitative data analysis was used, to determine how scores are affected during Covid-19.

We also analyzed how this pandemic affected the physical activities of the students which've increased various health problems among the students.

We came to our conclusion based on percentage or majority like how much people are suffering from the online education system or whether they've gained benefit from this new life changing education system.

Variables

1. Score (Dependent Variable)
2. Time Spent in Physical Activities (Independent Variable)
3. Time Spent on Online Studies (Independent Variable)
4. Time Spent on Internet (SURFING) (Independent Variable)
5. Time Spent on Personal Development (Independent Variable)

This is applied research to find conclusive evidence with the help of causal analysis. That the above variables directly Impact on the Education System.

Data / Observation

NAME AND AGE (MANDATORY)	AGE	TIME SPENT IN PHYSICAL ACTIVITIES (IN HOURS)	TIME SPENT ON ONLINE STUDIES (IN HOURS)	TIME SPENT ON INTERNET (IN HOURS)	TIME SPENT ON PERSONAL DEVELOPMENT	
Simran Shetty. 15	15	1	6	8	1	7
Hritik Mahajan 19	19	1.5	6	3.5	1	8.5
Ferns 19	19	0	3	5	0	6.5
Mary 20	20	1	3	6	1	6.9
Eth an. 16	16	3	2	1	0	8
Darshik age 16	16	2	8	8	1	8
Yogesh Pai 17	17	2	2	2	1	7.5
Jaini Shah. 16	16	3	7	1	3	8.9
Alok Mitra - 19	19	6	1	3	2	6.4

Degree of Question Crystallization – Formal study, as mentioned above, the study focuses on Impact of COVID-19 on Indian Education System, especially middle-income and lower-income group so here we know the variables and the research statement, hence it is the part of formal study.

Data Collection Method - Both Monitoring and data collection are used. Surveys, Personal Interviews, focus groups and method of quantitative data collection is used to get more insights on other variable, secondary data collection methods are used.

Purpose of Study - Causal explanatory, here we have tried to explain the fact that how the Scores and Quality of Education, Life, Mental Health has been affected due to online studies in this life-threatening pandemic.

Topic of Scope - Case study, the research was completed by floating questionnaires to individuals with different income background making it a sample study which is a part of case study.

Methodology:

Purpose of study - The main purpose is to find the relation between Dependent Variable and Independent variables and to know how the score of an Individual is affected by the different activities he is doing in the time of the Pandemic.

Research strategy – The variables which are used in research are all quantitative in nature as we are taking variables like Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING), Time Spent on Personal Development.

Study design - A Questioner was made on google forms which was sent to the various age groups with the help of the responses the data was collected, also a survey was conducted the data was gathered.

Study setting – The setting used in our research is individual Study setting which means whom or which specific group or individual are we focusing on Study.

Extent of research interference - The means in which data was assemble was through questioners. The questioner was directly sent to the individuals, hence there was minimal or no interference while collecting the data. It is Descriptive in nature.

Time horizon – We are not conducting the survey multiple times as we have a specified time frame for the research that is the reason, we have used Cross sectional time horizon.

Unit of analysis - The unit of Analysis is individual focus as our study is focused on individual score and the various factors affecting them.

Sampling designs –

- **Method -** We are using probability as each of the responded individual will have full chance to get selected. Each person who submits his response has the probability to be under the different variables we have chosen for our research. We are using random sampling method.
- **Size –** The sample size is large as the number of respondents what are used are from all over India. The origin from which we have collected our data is India.

Methods for data analysis – The various methods used in the research are mean, median, mode, regression model, Excel, and various graphical methods like scatter plotter etc.

Data Analysis:

Hypothesis

H1: H1 - There is a significant relationship between Score (Dependent Variable) and other Independent Variables. (Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING), Time Spent on Personal Development)

Given below are the observations of the the relation between the Dependent variable and the other independent variables.

1. **Age and Score:**
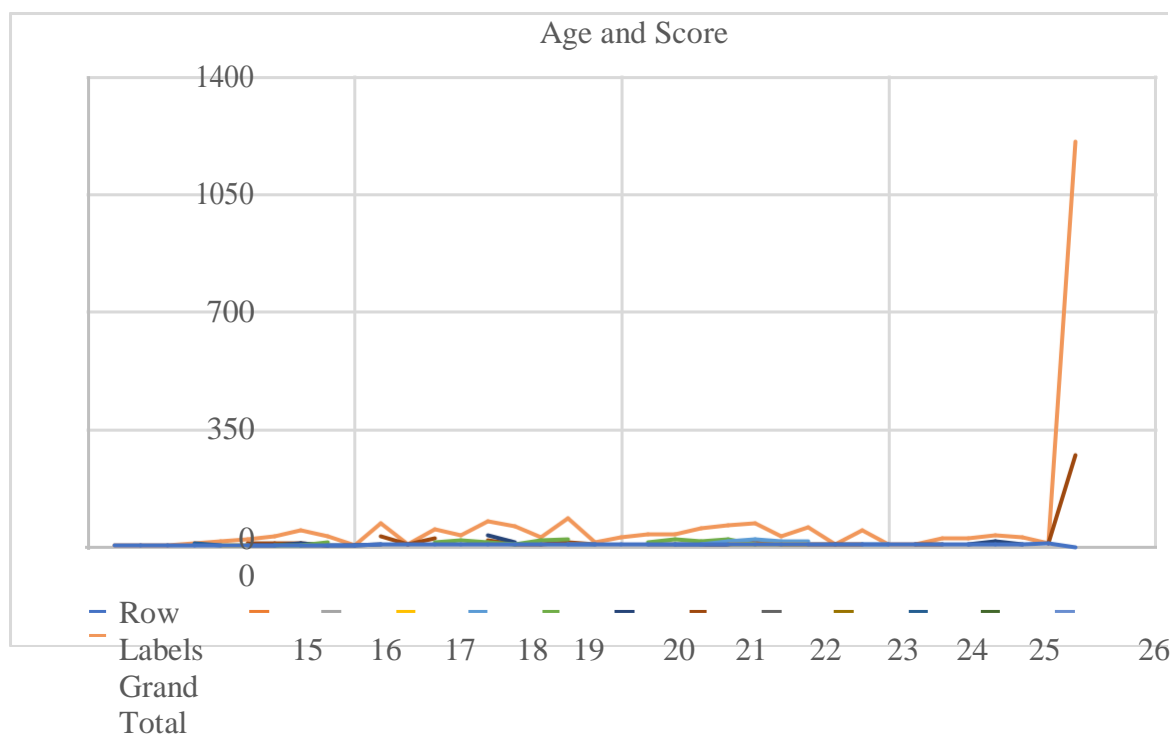
➢ The above plotter indicates that there is no significant relationship between Age and Score of students, so we reject this Hypothesis.

Intercept	24.6494 0458	1.15795 1226	21.2870 8361	4.63155 E-49	22.3629 8984	26.9358 1931	22.3629 8984	26.9358 1931
X Variable 1	-0.64662 6219	0.15789 6259	-4.09525 9899	6.60865 E-05	-0.95839 7843	-0.33485 4596	-0.95839 7843	-0.33485 4596

P-value
4.63155E-49

- ▪ The P value is greater than 0.05 so this proves there is no relation between Age and the score of students. the Age of the student is not a contributing factor to his/her score. score is not depending on the Age

2. **Score and Time invested in Physical activities:**

Physical acCviCes and Score
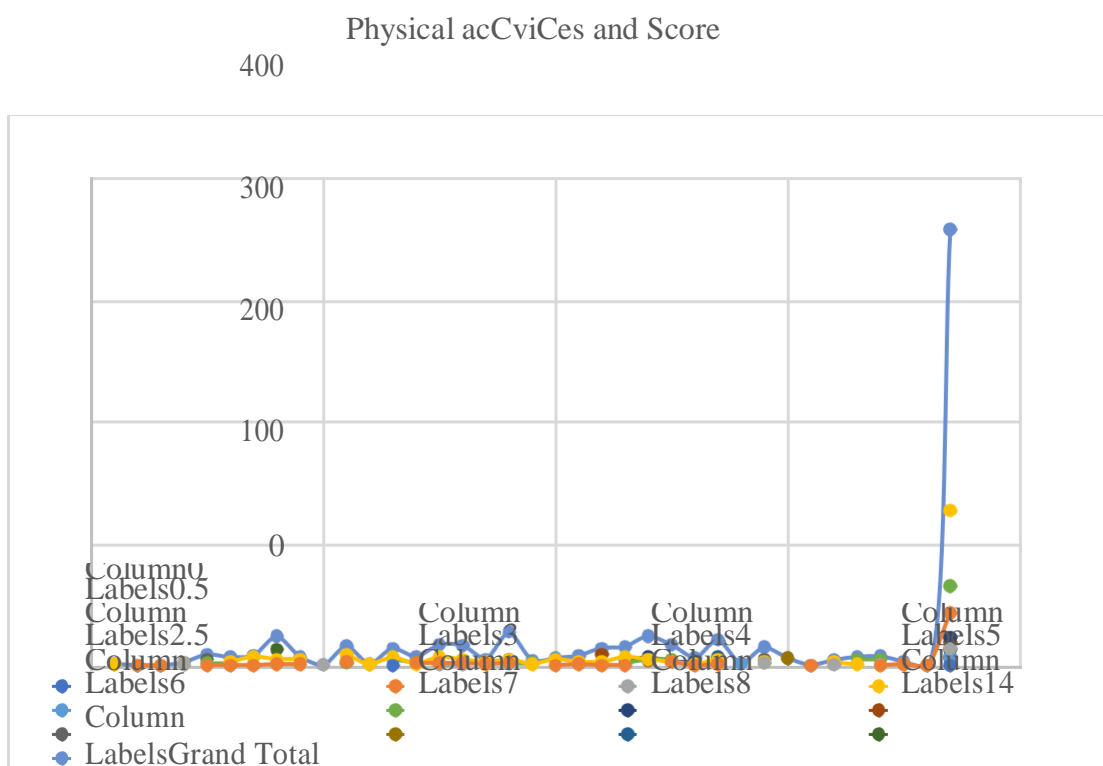
➢ The above plotter indicates that there is no significant relationship between Physical activities and Score of students, so we reject this Hypothesis.

Regression Table:

Regression Statistics	
Multiple R	0.094382894
R Square	0.008908131
Adjusted R Square	0.002864887
Standard Error	1.582732632
Observations	166

ANOVA

	df	SS	MS	F	Significance F
Regression	1	3.692594535	3.692594535	1.47406458	0.226450921
Residual	164	410.8269838	2.505042584		
Total	165	414.5195783			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.99617282	0.966128105	1.031098067	0.30401304	-0.911480526	2.90382617	-0.911480526	2.903826169
X Variable 1	0.15994643	0.131739585	1.214110611	0.22645092	-0.100177937	0.42007079	-0.100177937	0.420070793

P-value
0.30401304

▪ The P value is greater than 0.05 so this proves there is no relation between Time invested in Physical activities and the score of students. What ever time is used by the individual for physical activities has no connection with the score they secure.

3. Time invested in online classes and Score:
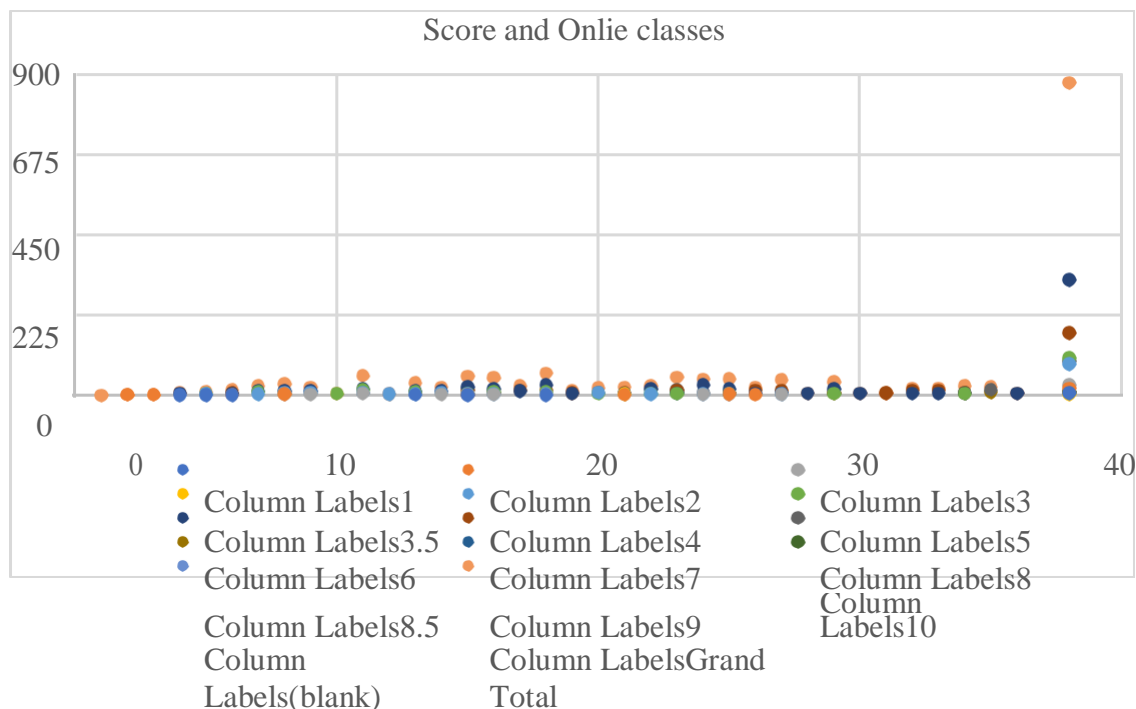
➤ The above plotter indicates that there is no significant relationship between Online classes and Score of students, so we reject this Hypothesis.

Regression Table:

Regression Statistics	
Multiple R	0.472220098
R Square	0.222991821
Adjusted R Square	0.218253966
Standard Error	1.677234489
Observations	166

ANOVA

	df	SS	MS	F	Significance F
Regression	1	132.4020652	132.4020652	47.06598923	1.33636E-10
Residual	164	461.3509468	2.81311553		
Total	165	593.753012			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	-1.689720791	1.023813716	-1.6504182	0.100771251	-3.71127637	0.331834791	-3.71127637	0.331834791
X Variable 1	0.957758717	0.139605497	6.860465671	1.33636E-10	0.682102837	1.233414598	0.682102837	1.233414598

P-value
0.100771251

- The P value is greater than 0.05 so this proves there is no relation between Time invested in Online classes and the score of students

4. Time invested in Internet Surfing and Score:

0

     0   10   20   30

Column Labels
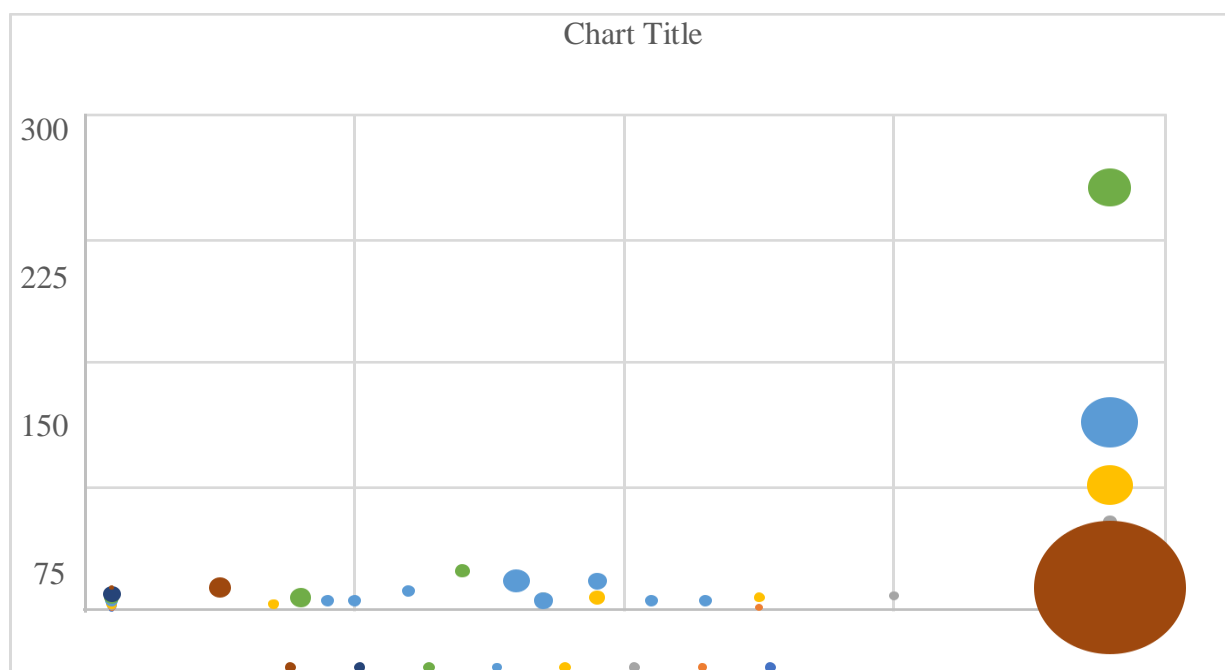
➤ The above plotter indicates that there is no significant relationship between Internet Surfing and Score of students, so we reject this Hypothesis.

Regression Table:

Regression Statistics	
Multiple R	0.580379627
R Square	0.336840512
Adjusted R Square	0.332796856
Standard Error	2.119850904
Observations	166

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	374.3353246	374.3353246	83.30099297	2.49926E-16
Residual	164	736.9779284	4.493767856		
Total	165	1111.313253			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	17.07579566	1.293994636	13.19618736	1.46849E-27	14.52075851	19.63083281	14.52075851	19.63083281
X Variable 1	-1.610419942	0.176446907	-9.126937765	2.49926E-16	-1.958820461	-1.262019423	-1.958820461	-1.262019423

P-value
1.46849E-27

- The P value is greater than 0.05 so this proves there is no relation between Time invested in Internet Surfing and the score of students

5. Time invested in Personal Development and Score:
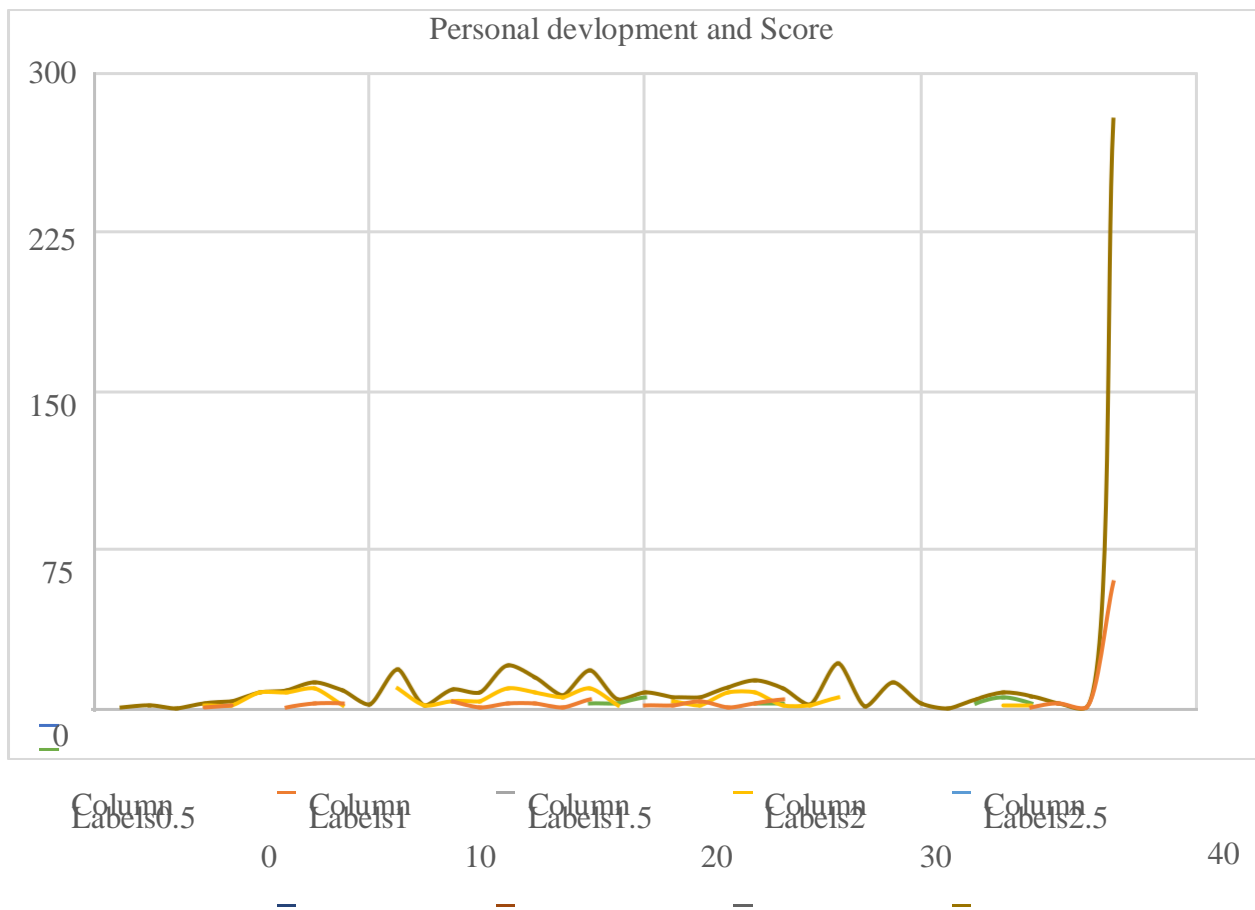
➢ The above plotter indicates that there is significant relationship between Personal Development and Score of students, so we accept this Hypothesis.

Regression Table:

Regression Statistics	
Multiple R	0.040612985
R Square	0.001649415
Adjusted R Square	-0.004438089
Standard Error	1.015592668
Observations	166

ANOVA

	Df	SS	MS	F	Significance F
Regression	1	0.279466467	0.279466467	0.270950896	0.603396643
Residual	164	169.1542685	1.031428466		
Total	165	169.4337349			

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	1.354623144	0.619935799	2.185102305	0.030299918	0.1305384 74	2.5787078 14	0.1305384 74	2.5787078 14
X Variable 1	0.044002119	0.084533391	0.520529438	0.603396643	-0.1229119 8	0.2109162 22	-0.1229119 85	0.2109162 22

P-value

0.030299918

- ▪ The P value is lesser than 0.05 so this proves there is relation between Time invested in Personal Development and the score of students

Results and recommendation from the research :

After analysing the data, we observe that there is no relationship between Score (Dependent Variable) and the Time Spent in Physical Activities, Time Spent on Online Studies, Time Spent on Internet (SURFING). But on the contrary according to our research Time which is Spent on Personal Development has a positive relation with score. When we used the regression table to understand whether there is any relation present in the above-mentioned variables. Firstly, we conducted a survey by sharing questioner to a group of people all over India, we got around 150-200 respondents. Then we sorted the data in excel according to the needs of the research. After using the regression model on the data, we observed that except for the time invested in personal development all the other independent variables have no relation with the score (dependent variable). We came to know this because according to the regression model if the p value is more than 0.05 the variables don't have any kind of relation. In the case of Time invested in Personal development the data we got determines that there is a significant relation between Score and Personal development because the P value is less than 0.05. In conclusion we observe that except for the time invested in Personal development all the other variables are not affecting the score and have no relation with the dependent variable

We also see that the score of everyone is affected in a different way according to activities he/she chooses to invest their time in. As we all know how the global pandemic (Covid 19) has impacted the overall learning experience for the student as well as the teachers. Even though it is an online, home learning process every individual takes this opportunity differently some make the best of it while the others get distracted resulting into lack of interest in studies a low overall performance leaving a negative impact on the education system.

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