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Final Findings Report

For this project I wanted to investigate the relation video gambling had to the unemployment numbers. I chose this project because I never understood gambling. I’m not a gambler nor is any of my family members. So, I hoped I could get an insight on what drives gambling and to see if gambling was hurting people and I choose video gambling for this because I’m an IS major and this is right up my ally. I believe that Video gambling is directly related to the unemployment numbers. This means if the total number of dollars spent goes up so will the unemployment numbers. And if they do end up being a direct relationship then I believe that video gambling machines and establishments should be regulated. I propose that there should be a set number of machines an establishment can have. And that there shouldn’t be entire business built of video gambling. I believe that this will help reduce the use of video gambling and help people to get on the right track. To start what is video gambling? Video gambling is a form of digital gambling. There are dedicated machines to video gambling. These machines hold slot machine like games. Each machine has up to five games and each game has an on-screen game board. Each board has up to 5 quadrants. And each game has symbols that are based on their numeric value. There are up to 50 symbols on each board. The higher the number the rarer the symbol is and the less frequently it will show up on the board. And at the heart of the machines is a random number generator, that assigns numbers to all the symbols and then placed on the boarded. These games are all primarily luck-based games. The next step of the project was to find where I was going to get my data from. I got the video gambling data from the Illinois Gambling Board at this website: <https://www.igb.illinois.gov/videoreports.aspx> . I used data from the end of 2017 to what I could use of 2020. And for the unemployment I used Illinois Department of Employment Security, at this website: <https://www2.illinois.gov/ides/LMI/Pages/Historical_Monthly_Annual_Data.aspx>. And I used data from 2017 through 2019. For this project to really understand the data I cleansed all the data, I uploaded it to R and used R to create Visualizations. For My visualizations I used 4 bar graphs and two violin charts. I primarily used bar graphs because I believe the show the most accurate version of the data. I used the violin charts just to show something I found interesting. My results are below

Chart, bar chart

Description automatically generated

This is my first bar graph; this shows the amount played by year. As you can see 2019 was the most played. Year What we should see in the unemployment data do the same if they are directly related.

Chart

Description automatically generated

This is my second bar graph; this shows the amount played by month. As we can see august is the month where the most is played.

Chart, treemap chart

Description automatically generated

This is my third bar graph; this shows the unemployment rate by year. Surprising to see that 2017 is the year with the highest unemployment rate. In the first graph we see that 2019 was the year with the most played.

Chart, histogram

Description automatically generated

This is my fourth bar graph; this shows the unemployment rate by month. Another surprising result that January is the month with the highest unemployment rate.

Chart

Description automatically generated

This is my first violin chart; this show the amount won vs the establishment count. I chose to create this chart because I wanted to see if the more establishments. That a municipality had do they pay out more. And here you can see they do not.

Chart

Description automatically generated

My last visualization is a violin chart, this shows the net wager against the establishment count. I created this because I wanted to see if the wager would go up if there were machines around. And it seems that it does a little.

So, in the end it seems my hypothesis was wrong. Comparing the bar graphs, we can see that they aren’t related. We can see that yeas don’t match up, the unemployment peaks at 2017 and the video gambling peaks at 2019. This shows that they aren’t directly related. So, one doesn’t affect the other. Looking at the graph the almost seem to be inversely related. As the unemployment falls the total amount spent goes up. This could be from more people having a disposable income. Even though I was incorrect about their relationship my proposal stays the same. I believe that video gambling machines should be regulated. Gambling addictions are still a problem in the us and having machines that feed that addiction is a problem. And by limiting the number of machines we limit the amount of exposure people receive.

Link to my GitHub: https://github.com/Jleonard1656/Video-Gambling