

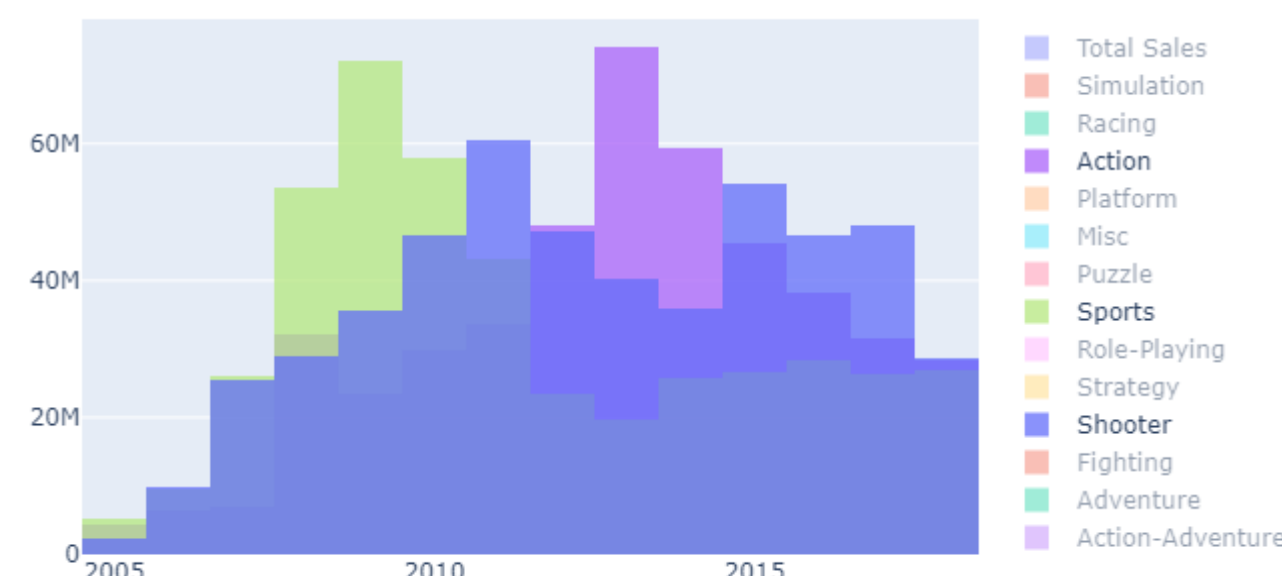
Do video games cause aggression and what is their impact at all?

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Introduction

1

This research aims to observe a correlation between school shootings and video games, and the impact of video games on those who play them. I don't know whether every point of my plan will be done since I'll use free access data, which provides not all info that is needed.



Methodology

2

The methodology implies the use of statistical tools for hypothesis testing and data processing approaches:

- 1st : Collect and rebuild data for further analysis
- 2nd: Analyze data about games sales, school shootings, impact of game industry on economy using chi-squared test and linear fit

Experiment Setup

3

The experiment setup involves:

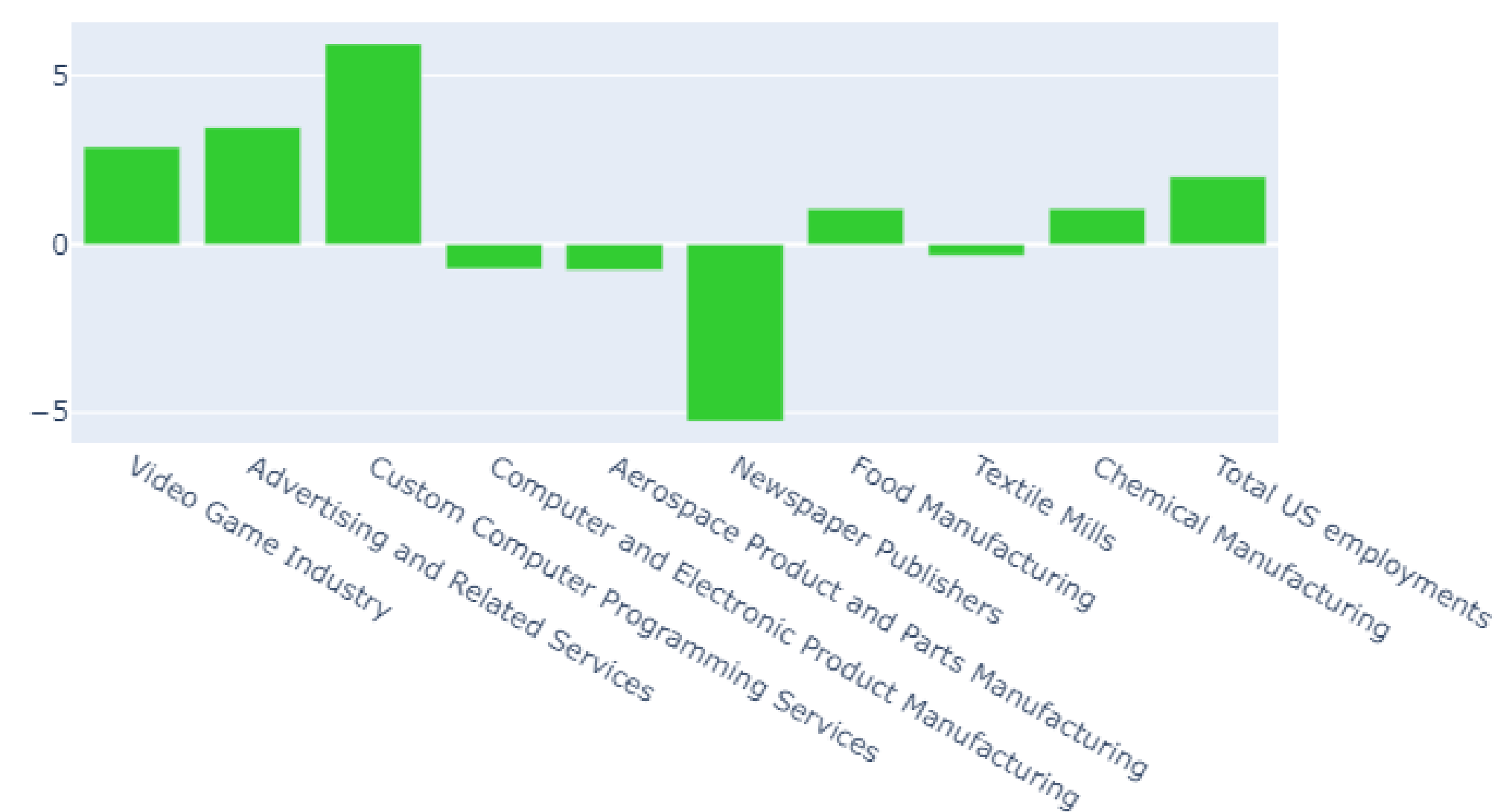
- Data from the real world
- Analyzing correlations

The purpose of the experiment is to determine what computer games affects on.

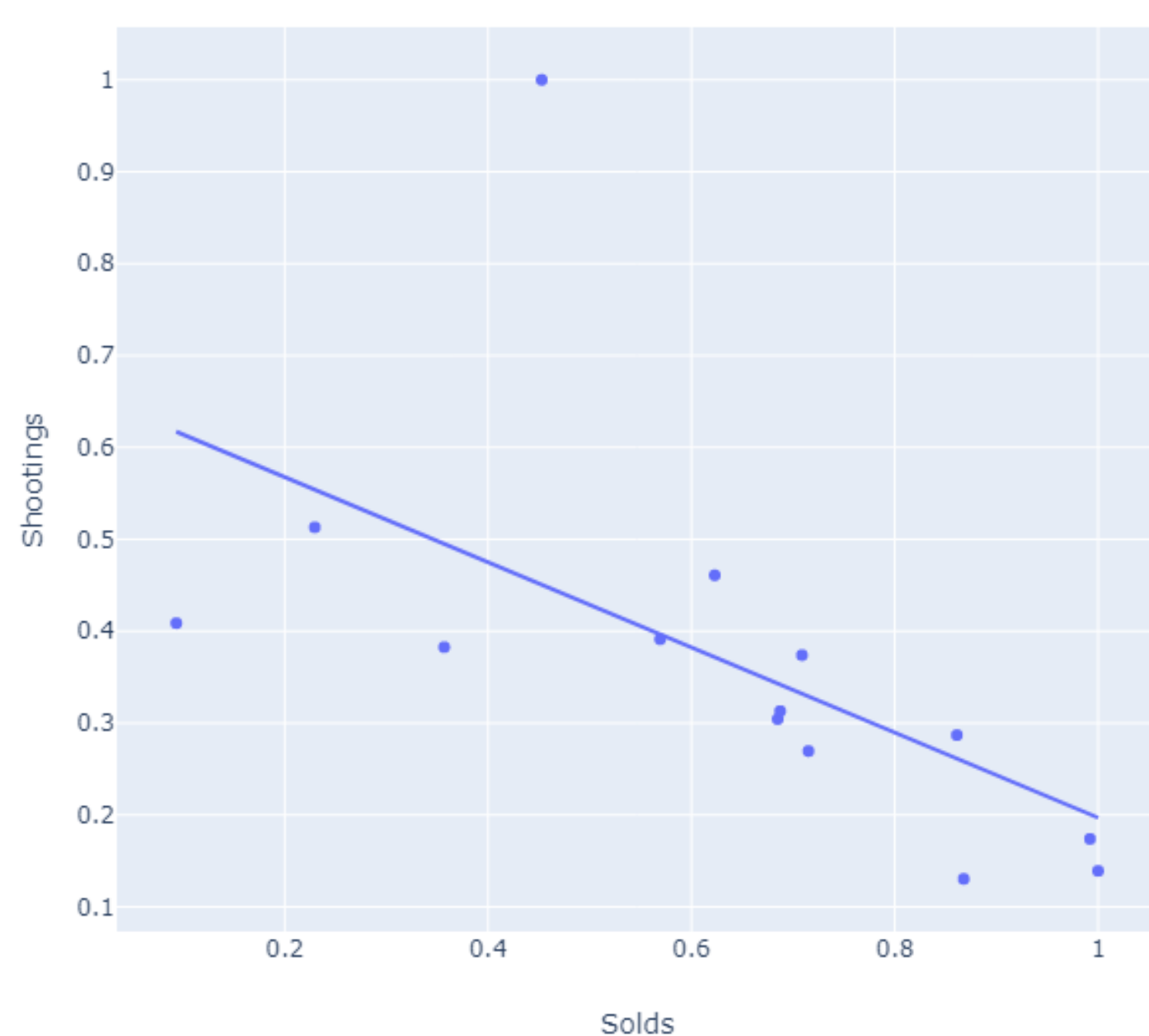
Following hypothesis was tested:

$H_0 : \mu_1 = \mu_2$, $H_1 : \mu_2 > \mu_1$ for specific aspect of student's life (for example, grades) for gamers and non-gamers.

Annual growth rate in %



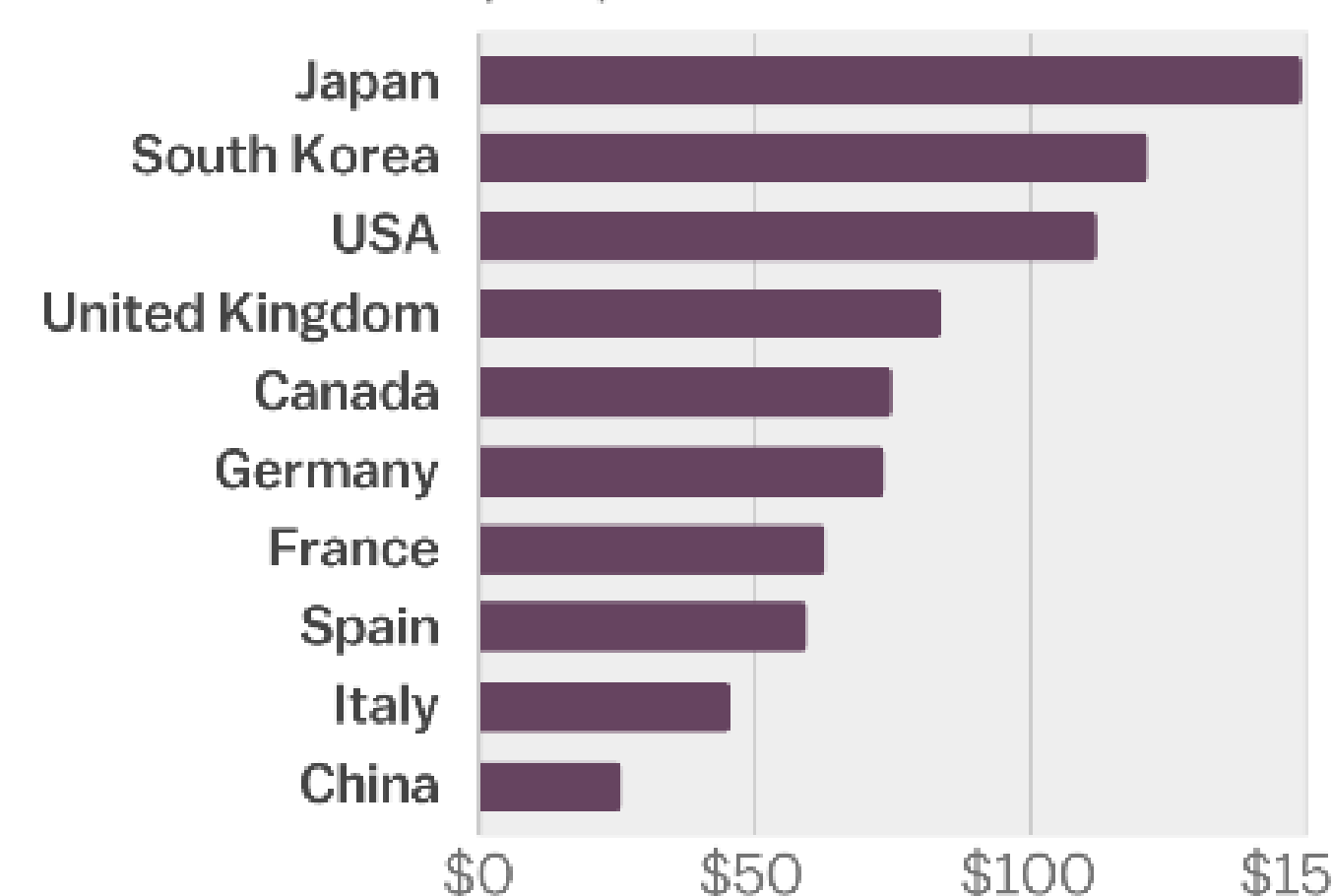
Game industry pays a huge tax to the US national budget, and gives a lot of working places for Americans. Comparing to most popular industries in the USA, the game industry is one of the fastest-growing.



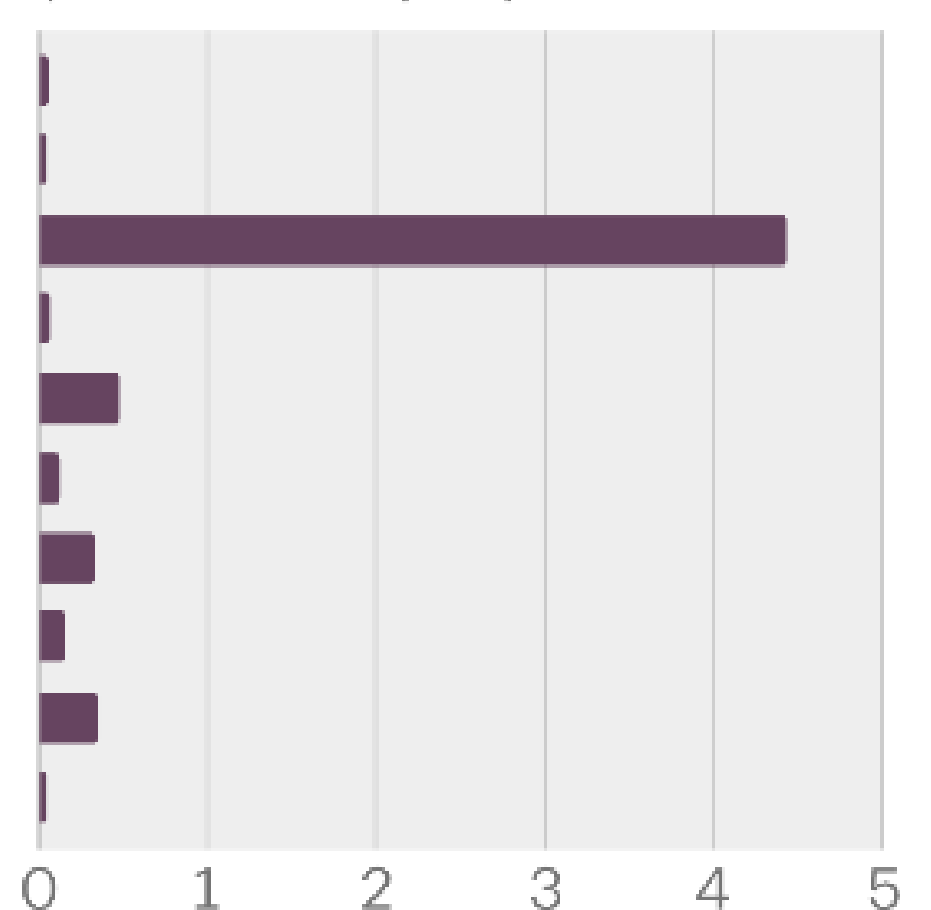
The correlation between the number of games sold and shooting in schools. Data is scaled. Each point means each year from 2005 to 2018

From countries which give the biggest profit to the game industry, the only USA has such a problem with gun deaths (including school shootings). Very likely, the reason is that the USA is one of the two countries where permits or licenses are not required to obtain and possess firearms. The second one is Yemen.

Video game revenue
per-person estimate for 2019



Violent gun deaths
per 100,000 people in 2017



Violent gun death data from the Institute for Health Metrics and Evaluation; video game revenue data (which does not include hardware sales) from Newzoo, a gaming analytics company

Vox

Results

4

Things that are definitely associated with video games.

- higher grades among boys
- lower alcohol consumption, no history of de-pression, getting into serious fights and carrying a weapon among girls
- lower smoking and marijuana usage
- higher caffeine consumption
- lower school shootings rate (keeping in mind that it's not totally clear result, because we didn't have enough data for this)
- growth of employment rate
- high contribution in GDP

Conclusions

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We cannot unambiguously say how computer games influence on our minds, but there are some things that we can say (on the left).

Despite video games can be related to girls' aggression, but in general, they are blamed not for their crimes. Moreover, they are even benefit.