Gaming Wins of LP and AP in the Year 2020

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Note: This is a fictional paper designed to show examples of the elements needed in your paper.

Your actual paper should have real-world data, calculations and references.

1. Thesis

This paper will analyze the weekly gaming wins of two members of the same household, LP and AP, during the year 2020, as well as discuss possible relationships between weekly winnings.

2. Data and Variables

The first variable, LP wins (or LPW), is a count of the weekly number of video game and board game wins achieved by the economics teacher LP. A "win" is defined by the individual game played, usually (but not always) as the greatest number of points of all players, or the first player to a certain objective. A tie, as again defined by the game, would not be included in this count.

The second variable, AP wins (or APW), is a count of the weekly number of video game and board game wins achieved by the economics teacher AP. A "win" is again defined by the individual game played, and a tie would not be included in this count.

All wins were self-reported using the Android Application "Count My Wins Plz" and downloaded from the international "1337 Gamer Rankings" database[1].

Both variables are stock variables and cover the first week of 2020 to the last week of 2020. Only number of wins were available, not number of games played.

3. Literature Review

In his 2016 paper, "Household Gaming – Analysis and Commentary," Tom Rahdo analyzed the monthly gaming habits of over 27 thousand households between 2013 and 2015. In it he notes that "higher gaming frequency of one member of a household tends to be positively correlated

[1] These application and database are fictitious, but they SHOULD exist.

with higher gaming frequency of other members of the household." He goes on to point out that this includes both games within the household and games with members outside the household.

In conclusion, Rahdo remarks that, "Gaming is one of the most relaxing, social, and intellectually stimulating activities that a human being can do. While not as much fun as writing an Econ 299 paper, it is definitely a close second. When one household member starts experiencing the positive impacts of gaming, it is hard for other members of the household not to notice and seek to emulate that activity."

While Rahdo's paper focussed on number of games and not number of wins, it still suggests some connectivity between individual gaming activities in the same household.

4. Individual Statistical Analysis

	LP Wins (LPW)	AP Wins (APW)
Mean	5.365385	6.384615
Standard Deviation	2.6199	1.794915
Minimum	0	3
Maximum	10	10
Range	10	7

From the above statistics, we see that LP won an average of about 5.4 games a week, whereas AP won an average of 6.4 games per week. AP therefore won an average of 1 more game per week than LP, a small, but not insignificant, difference.

In LP's worst gaming weeks, he did not win any games, and this occurred three times in the 52 data points available, or 5.8% of the time. This frequency argues that winning zero games is not an outlier for LP. AP did better in her worst weeks, winning 3 games. This also occurred three times.

In their best weeks, both LP and AP won ten games. This was a rare occurrence, presenting only once in the 52 weeks for both LP and AP.

As APW had a lower standard deviation than LPW, AP's outcomes every week were less spread out than LP. AP's wins were therefore closer to her average than LP, making AP's wins both slightly greater and more consistent than LP.

Overall, this data shows us that AP won more games than LP on average, but that LP's win rate was more spread out than AP. It is important to note that despite these differences, the two data sets were quite similar – never won more than 10 games in a week, and an average difference of only one game is quite small.

5. Related Statistical Analysis

Covariance	Correlation
0.917159763	0.19886098

Positive covariance and correlation between variables indicate that as one variable increases, the other also tends to. That is to say as one person wins more games in a week, the other also tends to win more games. Since correlation is bounded, a correlation of 0.199 is close to zero but not insignificantly small, indicating that the correlation, if it is valid, is weak but significant.

The positive correlation is surprising, as if these games were played against each other, one would expect a negative correlation – as when one player wins more games the other must mathematically lose more games. This suggests that some of the games are either co-operative games, were both players can win, or some of the games are played by only one of the two agents LP and AP.

One avenue that would explain a connection between these variables is that of competition and imitation. As one player wins more games, it encourages the other to win more games, either within the household or without. More data, such as number of games played or percentage of games played between AP and LP, would confirm this hypothesis.

In conclusion, due to competition and imitation this correlation is likely valid.

6. Conclusion

This paper aimed to analyze the weekly gaming wins of AP and LP, based on self-reported wins using the Android Application "Count My Wins Plz". We found that AP won an average of one more game a week than LP, partly as AP's weekly wins never fell below 3, whereas LP's lowest wins week was zero. However, given that the highest win rate was 10 wins a week, these two data sets were relatively similar.

Rahdo's 2016 paper suggested some correlation between number of games played by members of the same household, under the idea that gaming is communally addictive – one person's enjoyment of gaming easily spreads to another, encouraging more games to be played. Although we found a weak significant correlation between the weekly wins of AP and LP, this correlation is between wins, and not games played. The concept of competition between AP and LP suggests a valid correlation, but more information on the number of games played is required for a stronger conclusion.

Indeed, the greatest weakness of this study is the variable and data set. If we had data on the number of games played, or at least the number of games played between AP and LP, we could have stronger conclusions regarding possible correlation between AP and LP's gaming and

winning habits. In addition, although one year of data revealed a slight win advantage for AP, more years of data would be needed to definitively conclude which player achieved more wins.

In conclusion, future studies should collect more related variables on number of games played and the nature of those games (within the household or without), preferably collected over a longer period of time to yield more data points. In conclusion, AP and LP have to play more games for the furthering of economic research.

Appendix A: Works Cited

Rhado, Tom. "Household Gaming – Analysis and Commentary." *Journal of Awesome Economic Gaming and Awesomeness*, vol. 7, no. 42, 2016, pp 1001-1337.

1337 Gamer Rankings. No Date. *Table 299-A1A2A3 Gaming Wins Record, 2020 Basket Content, Weekly* (table). 1337 Gamer Rankings (database). Last updated January 19th, 2021. hnottp://GamerRankings/ThisIsNotReal/DontSearchThis/ButRememberToIncludeAURL/DoesAnyoneActuallyReadThis/data.html

Appendix B: Data

Week	LP Wins	AP Wins
1	6	5
2	4	5
3	9	7
4	7	8
5	8	7
6	7	7
7	7	5
8	4	7
9	6	7
10	3	5
11	6	6
12	6	7
13	1	6
14	0	6
15	7	4
16	8	7
17	7	6
18	10	4
19	5	9
20	4	3
21	8	6
22	8	9
23	6	9
24	6	6
25	6	8
26	0	8
27	7	6
28	4	4
29	4	7
30	1	5
31	5	6
32	3	4
33	0	7
34	9	8
35	9	3
36	5	5
37	8	9
38	5	8
39	3	7
40	8	8
41	1	8
42	2	6
43	8	9
44	6	3
45	7	7
46	4	5
47	3	5
48	4	4
49	9	10
50	3	4
51	4	8
52	8	9

Appendix C: Graphs and Charts