Bivariate Analysis

Gender Comparisons (Figure B1 and B2)

I compared the means of the “Time spend playing video games” variable between the two genders, male and female. The difference in means is statistically significant (t score= .05) with males playing an average of 16.22 hours/week and females playing an average of 6.78. It is also worth noting that there is an outlier. One male respondent plays for an average of 100 hours/week. I removed the outlier and to my surprise, I actually got a more statically significant score (t score= .004). This is because despite the difference between the two sample means being smaller, removing the outlier decreased the standard deviation of the male sample by a greater margin making the difference more significant overall.

The comparison of the mean “Money spent on video games in in the past year” between the two genders, male and female, was also statistically significant (t score= .001). The male sample has a mean of $315.46 and the mean for females is $67.81. Only one female spent $200 in the past year while 16 males spent =>$200.

Age comparison (Figure B3)

The Correlation between age and “money spent on video games in the past year” is statistically significant (Pearson Correlation= .518). This correlation was significant mid-way through my data entry. I later added a few more subjects, one of which was the oldest (27 years old) and spent the most money ($1300). Two new consoles, Playstaion 4 and XBOX One, launched last November. Those consoles cost $400-$500. I talked to the subjects who claimed to have spent =>$400 and most of them said they bought one of new consoles in the fall.

Online gaming (Figure B4, B5, an B6)

I recoded the “online multiplayer” and “local multiplayer” variables into dichotomous (Yes/No) variables as opposed to measuring them by number of days a week spent playing for my analysis because of the small sample size. The correlation between the two dichotomous was no surprisingly not significant (Pearson Chi-Square= .936). There was almost a perfect 50% split between online and not online play for both the “local multiplayer” column and the no “local multiplayer” column. I expected people to prefer one form of multiplayer over the other or to replace local multiplayer with online multiplayer, but it turns out that there is no relationship between the two.

Online gaming is known to have a lot of people who discriminate against people of other races, genders, or sexual orientation. Everyone hides behind the veil of a screen name, so one can say hurtful things without any consequence.

I first checked the correlation between a dichotomous race variable of “white” and “not white” and compared it to the dichotomous online multiplayer variable. The relationship is statistically significant (Pearson Chi-Square= .054). The value is actually barely misses the critical value of .05, but the sample size is only 44 so I decided to be lenient about it and call it significant. I followed this up by checking the correlation of the race with the original non-dichotomous online multiplayer variable, but I removed all subjects who did not play games online at all. This way I am able to see which racial group of online players spends more time playing. The mean comparison was not significant (t score= .877). Nonwhite gamers are more likely to play online, but of the people playing online, race has no relationship between time spent playing.

The next comparison I did was between gender and the dichotomous online multiplayer variable. The Correlation between the two is significant (Pearson Chi-Square= .024). 66% of males play online while 45% of females play online. I repeated the process of checking which group of online players spends more time playing, but comparing the 18 male online players to the very small 5 female online players would not produce results with enough statistical power worth analyzing.