GSND-5130 Quantitative Survey

Competitive games tend to bring out aggressive behaviour in gamers

Ajith Krishnan and Rishi Kudtarkar

Hypothesis

Based on our Literature Reviews, we further investigated the connection between heightened aggression and competitive video games, especially those that dominate the ESports scene

Therefore our Hypothesis is that Competitive games tend to bring out aggressive behaviour in gamers.

We will be providing sufficient data that we collected from our survey and see if our hypothesis matches up!

Literature Reviews

1. Violent video games exposure and aggression: The role of moral disengagement, anger, hostility and disinhibition.
2. The effect of violence and competition within video games on aggression - Andre Dowsett
3. The longitudinal association between competitive video game play and aggression among adolescents and young adults - *Paul J.C. Adachi and Teena Willoughby*
4. The effect on online violent video games on levels of aggression - *Jack Hollingdale and Tobias Greitemeyer*

Survey Data Analysis

- Majority of our participants were male.
- In the future we would like to test more female participants and see how they correlate with our data.
- As female gamers might react differently to outcomes in competitive games.

Gender: How do you identify?

30 responses

● Male
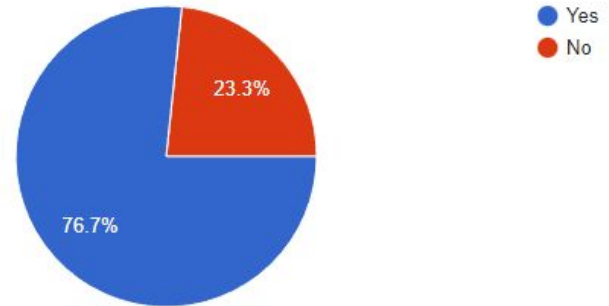● Female
● Prefer not to say

96.7%
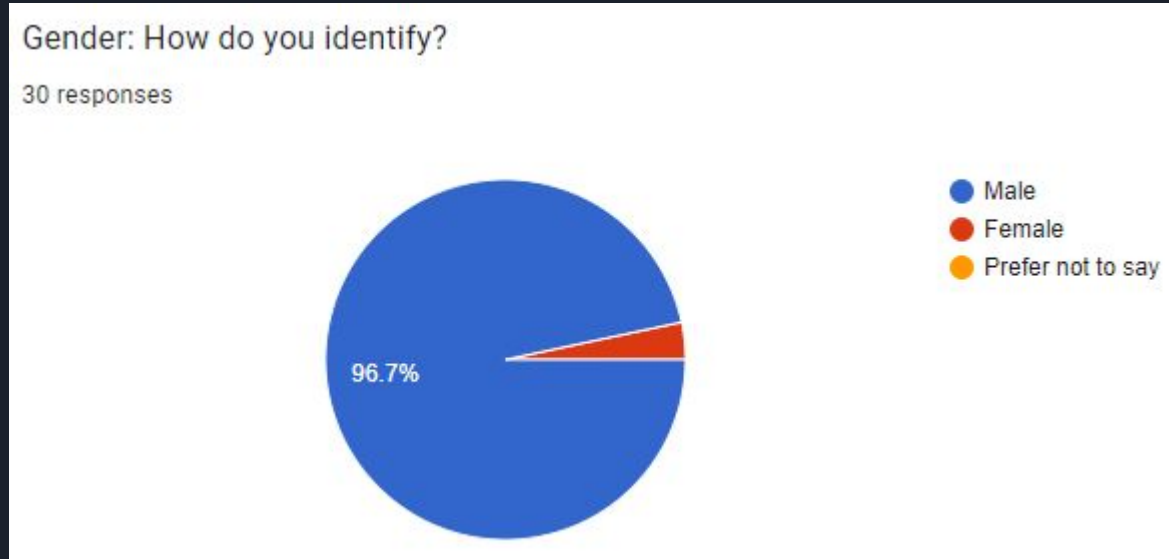
Importance of ranking system to players in a competitive game.

We asked players if they were self-conscious of their ranks in the games they played, which is a catalyst to all emotional reactions to the overall competitive gaming experience.

Are you self-conscious about your rank?

30 responses

- Yes
- No

23.3%

76.7%

Most Played Games

Data Correlation

Based on the data correlation analysis we found some interesting facts and they can be divided into 2 categories:

1. Positive Correlation
2. Negative Correlation

Positive Correlations:

- Gamers who solo-queue tend to be more patient than gamers that queue with friends. This contradicts the common notion that gamers are much more patient and relaxed when queuing with friends.
- Gamers who were found to have higher win-rates were not conscious about their rank, this points out that gamers who do not mind their ranks are more relaxed and tend to be less aggressive when they lose a match.
- Gamers who spent more time playing competitive games indicate they are more patient than the ones who spent less time.
- Gamers who have higher KDA and advanced skills are more likely to be patient and this ties in with the previous point as less skilled gamers get frustrated way too often after a loss and quit playing the game leading to decreased time spent playing.
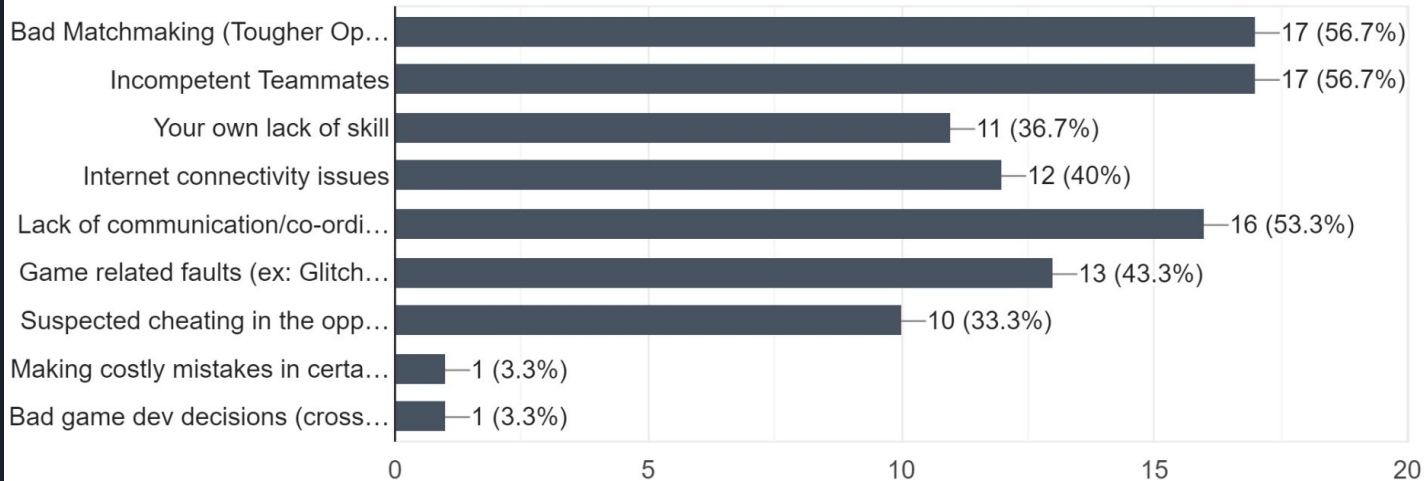
Negative Correlations:

- Gamers that spent less time playing everyday were not conscious about their ranks. These type of gamers mostly play in a casual spirit and just play to have fun. When compared to the survey data these gamers ranked themselves lower on skill levels and didn't really have much to complain.
- Gamers with a low win-rate were found to very self-conscious about their ranks. This could be due to the psychological toll they have about their ranks and tend to under perform in games.
- Gamers who played ranked games with friends were found to be more frustrated than when playing in a solo-queue mode.
- Gamers with bad/terrible KDA ratio were found to lash out and get more frustrated evidently due to their bad performances, we also found out that these players tend to blame the game more rather than their own lack of skill. Although there were some people who accepted this.
- Young gamers were found to more self-conscious about their ranks than older people.

Reasons gamers pointed out after a loss

What reason are you most likely to relate with when you lose a match?
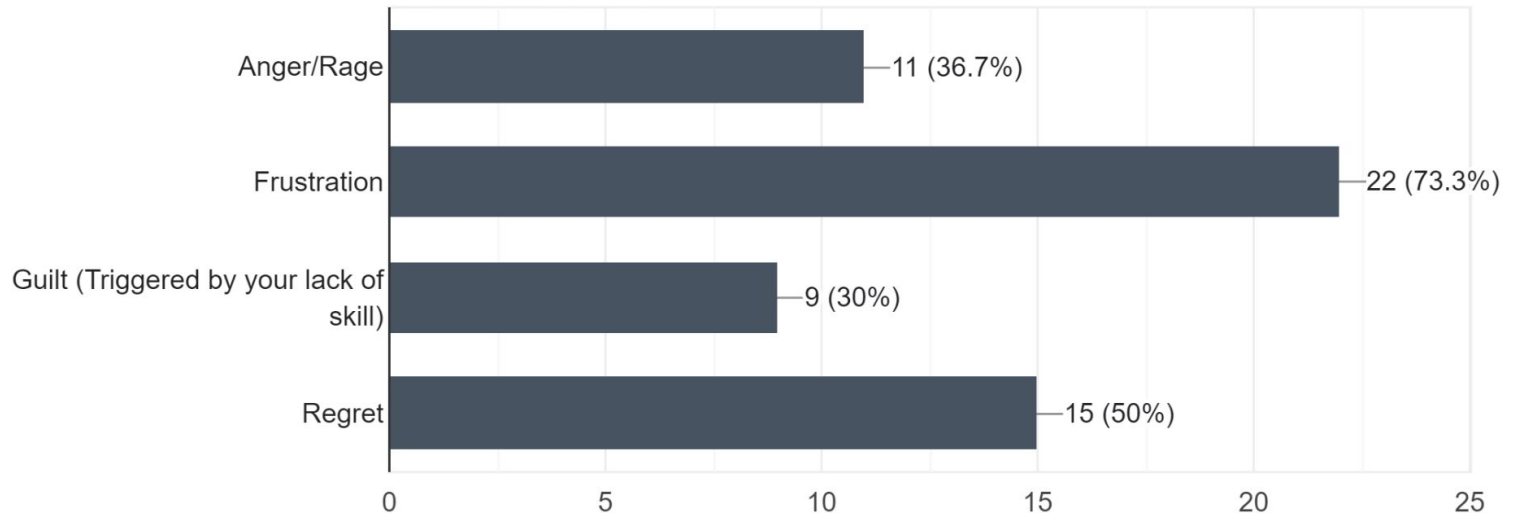
30 responses

Reason	Count
Bad Matchmaking (Tougher Op…	17 (56.7%)
Incompetent Teammates	17 (56.7%)
Your own lack of skill	11 (36.7%)
Internet connectivity issues	12 (40%)
Lack of communication/co-ordi…	16 (53.3%)
Game related faults (ex: Glitch…	13 (43.3%)
Suspected cheating in the opp…	10 (33.3%)
Making costly mistakes in certa…	1 (3.3%)
Bad game dev decisions (cross…	1 (3.3%)

How they felt after a loss

What emotions overcome you when you lose a ranked match?

30 responses

Emotion	Count (%)
Anger/Rage	11 (36.7%)
Frustration	22 (73.3%)
Guilt (Triggered by your lack of skill)	9 (30%)
Regret	15 (50%)

Descriptive answers on why competitive games cause frustration/aggression among gamers

- *"It's a matter of ego for me, I just can't accept the fact that he/she is better than me at this game."*
- *"It's hard to digest that someone beat me at a game that I've been playing for years."*
- *"Because I'm being denied a sense of accomplishment!"*
- *"Because of the passion towards the game"*
- *"My efforts are wasted by teammates."*

Descriptive answers on why losing in a competitive scene causes aggression and why they keep coming back to play these games despite frustrating losses.

- *"Fun Game and it's addicting."*
- *"Winning causes more satisfaction."*
- *"The Rank is so close, yet so far."*
- *"Want to redeem myself because I know I can have a better game."*
- *"The need to win".*
- *"I am a very competitive person and losing is a hard pill to swallow for me."*
- *"The competitive factor brings out the most emotions."*
- *"Feel the need to be high in rank so I can brag about it, losing said rank or being in a lower rank causes anger and insecurity."*

Frustration as a result of toxicity

Frustration and aggression also arises from moral disengagement and hostility in game from toxic players. Frustrated gamers often lash out to their team-mates with hate speech and blame them for their losses. This is also another major cause for gamers to react aggressively after they have had a bad game and had to deal with toxicity on top of it.

When asked how our participants deal with toxicity we got the following responses:

- *"I just don't answer to be honest, it's one of the main reasons I play fighting games rather than team based competitive games, because in fighting games losing is only MY FAULT whereas in team based games it could be anyone and in turn leading to aggressive behaviour."*
- *"I start being toxic myself and start spamming toxic emotes and send toxic DM's."*
- *"Throw the game and tick everyone off."*

Future Work and Conclusion

From the data we have gathered, the potential for further investigation is possible, especially given the ever evolving nature of video games and the communities behind them. This extends to investigating the difference in behaviors when gender is exclusively taken into consideration. More comprehensive results can be brought out if these results are compared to a similarly engineered study that investigates emotional effects of non competitive games/narrative driven games.

From our research and analysis, we have come to the conclusion, based on the data collected from the survey participants, that our findings correlate with our hypothesis that competitive games do tend to bring out aggressive behaviors.