Video Gamer Aggression
“Games don’t make me angry”

https://www.youtube.com/watch?v=frhm0BQy0m4
The Concept: Research Proposal

- Was I getting angrier?
- Am I an angry person?
- Long sessions of gaming seemed to make me more irritable
- Was I the only one?
“Differential Neural Recruitment during Violent Video Game Play in Violent- and Nonviolent-Game Players” By Gentile, Swing and Anderson

Seven of the participants preferred violent games and six non-violent games.

During their sessions they would be placed into an MRI machine to measure how their brain reacted.

They would play one version for 45 seconds, rest for 30 seconds, play the next version, rest, and switch versions again. They did this for 7 minutes and 30 seconds.

Found positive and negative affects of playing violent video games.
Brainstorming ideas

- How do we run our own unique test
- Can we put something together
- What game/console would be used
- How will we gather data
- What tools do we use to gather data
Why Halo?

- Very popular game
- Not as violent as most
- People have been playing for years
- Easy to get used to
How to implement our idea?

- How to put it together
- So many people in one place, how to accommodate
- Equipment
- How to get people involved
- Tournaments have prizes

Our Solution

- Reach out to UVU Game Center
- More than enough equipment
- More than enough space
- UVU Intermural program
- We prove a grand prize
Player Input: Our testing method

Before Tournament:
Contestant Questionnaire:
Contestant Number: ______

What is your gender?
- Male
- Female

What is your age?

What is your highest form of education?
- High school
- Associate's degree
- Bachelor's degree
- Higher

How many hours a week do you spend on video games?
- 0-1
- 1-4
- 4-5
- 5-8
- 8 or more

How many years have you been playing video games?

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel tense</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am annoyed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am angry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to hit something</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel short of breath</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once more we want to make certain you are aware that the tournament will be video recorded and photographed. This will be for research purposes only.

Observer: ___________________________ Round: ____
Station: _______ Team Observed: _______ Time: _______
Victor and score: ______
Observations during round:

Observation of Individuals:
Some common signs of anger are: teeth grinding, fist clenching, flushing, paling, sweating, and muscle tension.

Player number _______

Common sign of anger: _______ frequency: 1 2 3 4 5

Common sign of anger: _______ frequency: 1 2 3 4 5
The Tournament
Observation

- What signs of aggression
- Physical/Verbal
- Quantify the aggression
- Most aggressive
- Teamwork/Cooperation

<table>
<thead>
<tr>
<th>Observer:</th>
<th>Station:</th>
<th>Team Observed:</th>
<th>Round:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time:</td>
<td>Victor and score:</td>
<td>Observations during round:</td>
<td></td>
</tr>
</tbody>
</table>

Observation of Individuals:
Some common signs of anger are: teeth grinding, fist clenching, flushing, palming, sweating, and muscle tension.

- Player number: 
- Common sign of anger: 
- Frequency: 1 2 3 4 5
- Common sign of anger: 
- Frequency: 1 2 3 4 5
Observation

- Signs of aggression
- Player given a number
- Frequency
- Notes
- Teamwork

<table>
<thead>
<tr>
<th>Observer</th>
<th>Walton</th>
<th>Ferron</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Team</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Victor</td>
<td>Victor</td>
<td>Loser</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Player</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>5</td>
<td>Very verbal, frequent utterances directed to other team.</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>One utterance, most kills. Most composed of group.</td>
</tr>
<tr>
<td>12</td>
<td>5</td>
<td>Frequent verbal utterances mostly of confusion. Tongue hung out of mouth.</td>
</tr>
<tr>
<td>15</td>
<td>5</td>
<td>Random giggling and grinning. Kept shaking head.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Aggressive</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>13</td>
<td>Most aggressive</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Verbal Threats</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Team Work</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
<td>Three worked as a team, the fourth was new.</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Frequent communication amongst each other.</td>
</tr>
</tbody>
</table>

5
Questionnaire Form

- Before the tournament
- After each match
- What we wanted to capture

Before Tournament:
Contestant Questionnaire:
Contestant Number: _______

What is your gender?
- Male
- Female

What is your age?

What is your highest form of education?
- High school
- Associate's degree
- Bachelor's degree
- Higher

How many hours a week do you spend on video games?
- 0-1
- 1-4
- 4-5
- 5-8
- 8 or more

How many years have you been playing video games?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel tense</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am annoyed</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I am angry</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I want to hit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>something</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel short of</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>breath</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Once more we want to make certain you are aware that the tournament will be video recorded and photographed. This will be for research purposes only.
Set-up

- Halo: Master Chief Edition
- 4x4 Team Deathmatch
- 50 kills
- 10 min matches
- Randomized maps
- Double elimination
### Participants

- Under the age 25
- High school graduates
- Split between 1-4 & 4-5
- Have been actively playing most their life

<table>
<thead>
<tr>
<th>Age</th>
<th>Education</th>
<th>Weekly</th>
<th>Years</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>HS</td>
<td>1-4</td>
<td>12</td>
</tr>
<tr>
<td>18</td>
<td>HS</td>
<td>4-5</td>
<td>10</td>
</tr>
<tr>
<td>18</td>
<td>HS</td>
<td>4-5</td>
<td>3</td>
</tr>
<tr>
<td>18</td>
<td>HS</td>
<td>1-4</td>
<td>2</td>
</tr>
<tr>
<td>22</td>
<td>AS</td>
<td>4-5</td>
<td>18</td>
</tr>
<tr>
<td>23</td>
<td>HS</td>
<td>8+</td>
<td>18</td>
</tr>
<tr>
<td>23</td>
<td>AS</td>
<td>1-4</td>
<td>17</td>
</tr>
<tr>
<td>24</td>
<td>AS</td>
<td>1-4</td>
<td>16</td>
</tr>
<tr>
<td>25</td>
<td>BS</td>
<td>8+</td>
<td>24</td>
</tr>
<tr>
<td>26</td>
<td>HS</td>
<td>4-5</td>
<td>13</td>
</tr>
<tr>
<td>27</td>
<td>BS</td>
<td>4-5</td>
<td>15</td>
</tr>
<tr>
<td>28</td>
<td>HS</td>
<td>4-5</td>
<td>24</td>
</tr>
<tr>
<td>28</td>
<td>BS</td>
<td>1-4</td>
<td>16</td>
</tr>
<tr>
<td>29</td>
<td>BS</td>
<td>5-8</td>
<td>26</td>
</tr>
<tr>
<td>35</td>
<td>BS</td>
<td>0-1</td>
<td>25</td>
</tr>
<tr>
<td>42</td>
<td>HS</td>
<td>0-1</td>
<td>35</td>
</tr>
</tbody>
</table>
How to record

- Each player was able to play at least twice
- Some players had to leave early
- Ranked 1-4
- 1 being strongly disagree, 4 strongly agree
Emotions

![Bar chart showing emotions over rounds]

- **Lose Breath**
- **Rounds**

- Rounds: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16
- Lose Breath: 5, 5, 6, 7, 6, 6, 6, 12, 10, 6, 6, 6, 2, 2, 2, 2, 1
- Rounds: 1, 2, 3, 4, 5, 6, 6, 2, 2, 3, 3, 3, 2, 2, 1
Our findings

Data Collected

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tense</td>
<td>9</td>
<td>27</td>
<td>15</td>
<td>11</td>
<td>6</td>
<td>12</td>
<td>13</td>
<td>21</td>
<td>11</td>
<td>5</td>
<td>2</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Annoyed</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>12</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>12</td>
<td>8</td>
<td>9</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Angry</td>
<td>7</td>
<td>11</td>
<td>5</td>
<td>10</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>14</td>
<td>6</td>
<td>6</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Hit</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>8</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Lose Breath</td>
<td>5</td>
<td>14</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>5</td>
<td>6</td>
<td>12</td>
<td>10</td>
<td>6</td>
<td>1</td>
<td>6</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>
Data breakdown: Observation vs. Questionnaire

- 10 out of 16 (62.5%) thought they were less angry than what the observer recorded
- 5 out of 16 (31.3%) had very low aggressive signatures
- Teamwork always won
- People were not as consistent as thought (get angry one match, a little more calm in others)
- No threats (real) threats were made
- Did not become violent
Video Gamer aggression

THE PROCESS TO THE CONCLUSION OF OUR FINDINGS
Preparing for the tournament:

- Trevor created the Participant Questionnaire and the Observer Template.
- Danny and Preston, with the assistance of Professor Duffin, worked on contacting and coordinating with the Wellness Center and Intramurals for the tournament.
- Preston also worked on the final IRB application and the flyer.
- Catherine worked on the Informed Consent form.
Change of venue:

- Initially the tournament had been planned to take place at the Wellness Center in their gaming center.
  - Difficulties contacting and working with the Wellness Center’s gaming center.
  - Difficulties setting an acceptable date for the majority researchers to be present and coordinate with the Wellness Center.
  - Restriction on who could participate (only UVU students could participate)
  - Lack of advertising and interest from students to participate.
  - Limited remaining time to conduct the project.
Change of venue:

- Moved tournament to a private location
  - No longer needed to work with the Wellness Center
  - Could set the date for when it would work best for the researchers.
- Opened participation to friends, family, and anyone else who would want to participate.
Day of the tournament:

What was unanticipated?

- Didn’t have the second gaming system in the expected outlined timeline.
- Lack of participants.
- Participants came and went making it difficult to maintain the tournament and people on the same teams.
- The Participant Questionnaire and Observer Template had unexpected flaws:
  - Participant Questionnaire:
    - After each round, participants found it difficult to use the one table provided to note how they felt.
  - Observer Template:
    - Difficulty ranging the varying emotions and reactions of each player.
    - Difficulty identifying the varying signs and frequencies of each emotion and reaction.
- Each round, the observer noted observations differently and we weren’t as conformed as wanted.
Day of the tournament:

- What went right?
  - Participants provided fair feedback that helped create sufficient information to present.
  - Observers were able to find a range of information that can be broken down and studied differently.
  - Participants and Observers worked well with what they had.
  - Researcher were able to correct or work with unanticipated difficulties to still gain the desired knowledge.
What we learned and what can be done differently or improved:

- In the future, for such a study, researchers need to have the paperwork turned in within the first month of the semester and approval before the end of the second month.
- When working with the University to set up an event, it is necessary to contact them within the first month to start contacting the proper authoritative persons and coordinate possible future dates.
- Once you have IRB approval, set a date far enough out that you can sufficiently advertise for the event/tournament.
- If delegating the roster to an outside party, communicate with them and leave them sufficient instructions to dispel confusion and provide them a contact number to call when questions arise.
- When bringing in outside equipment for an event, have it the day before to prevent delays on the day of.
- Simplify the Participant Survey even more so that it is more participant friendly, i.e. adjust the tables to include borders, and create boxes for each anticipated round.
- Adjust the Observer Template to be more compatible with the Participant Survey and create tables for the observer that can better unify and conform what observers are noting and the varying frequencies found.
Overall:

- Of the sixteen participants, we as researchers were able to make small findings that provided a small proof of increased agitation and aggressiveness. In further conclusion, if the studied is continued in a bigger setting, with more participants, it could be found that gaming does in fact agitate and make gamers more aggressive, especially in a tournament setting.

- Proof that gamers progressively become more agitated and may be unaware of such state of mind while gaming is one particular gamer. This gamer, after the first round, happened to catch the observers notes about the participants and saw that the notes concerning. The participant hadn’t noticed what they did while gaming. So in future rounds this gamer attempted to correct how they acted, unsuccessfully.