Mental Health and Video Games

By Lauralee, Cade, & Nick
1/16/25

Agenda

- **Introduction**
  - Overall well being of gamers
  - Gaming has a overall good effect on your life
- **Problem**
  - **Do Video games have a overall negative impact on**
- **Methods**
  - We found the data
  - We cleaned data
  - We used code to search the data
  - We used the code to make visuals
- Tools, techniques, or frameworks applied
- **Results**
  - Gamers are generally happy
- **Conclusion**
  - We found that on average gamers are happy for the most part

The Pitch

Our project set out to explore the effects of video games on mental health and overall life satisfaction. The results were clear: video games have a positive impact. They enhance cognitive abilities, reduce stress, and promote social interaction, contributing to both mental well-being and life satisfaction. Gaming isn’t just about entertainment—it’s about improving quality of life.

What's the problem

Why Is the Correlation Between Video Games and Mental Health Important?

Mental Health Awareness

- Helps understand how gaming influences psychological well-being.

Promoting Positive Use

- Encourages healthy gaming habits to maximize benefits like stress relief and cognitive growth.

Supporting Vulnerable Groups

- Provides therapeutic value for individuals facing mental health challenges.

Public Health Implications

- Highlights gaming's role in societal issues like productivity and social behavior.

Informing Game Design

- Guides developers in creating games that promote emotional resilience and wellness.

Objective

The goals of this project were to:

Understand the impact of video games on mental health

- Explore how gaming influences emotional well-being.

Evaluate the effects on overall life wellness

- Determine whether video games support or hinder life satisfaction.

Assess whether video games improve life or cause harm

- Balance positive contributions against potential drawbacks.

Datasets

Data set 1

Source:https://www.kaggle.com/datasets/alanpal/gaming-and-mental-health

Size: 95 lines

Key features: we were able to use this one to get more data on the social aspect of gaming

Data set 2

Source:https://www.kaggle.com/datasets/divyansh22/online-gaming-anxiety-data

Size:5000 lines

Key features: large, multiple results to compare

Preprocessing: we had to remove some of the info due to reptation and being unnecessary

Methods

Data Collection

- Gathered relevant data from credible sources.

Data Cleaning

- Removed inconsistencies and prepared the data for analysis.

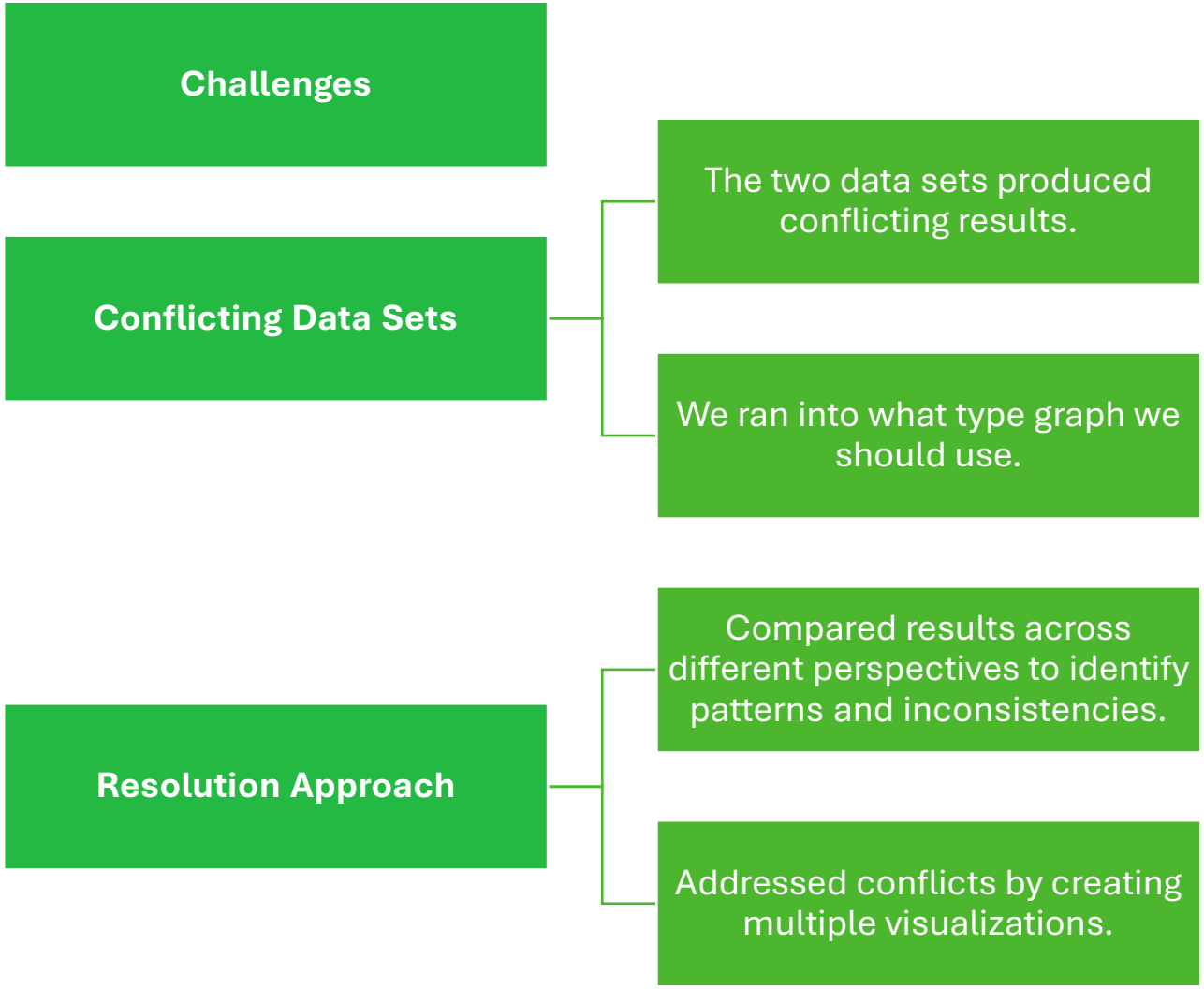
Data Analysis

- Used code to explore and search the data for meaningful patterns.

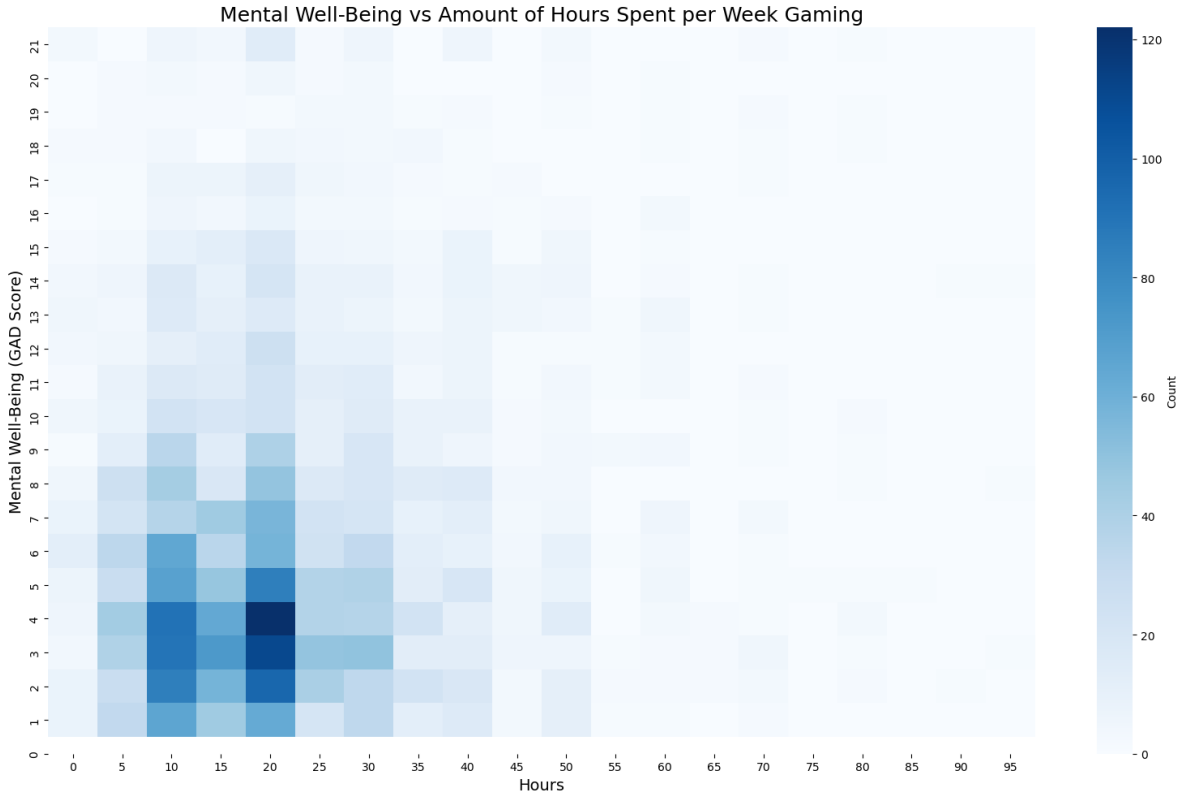
Visualization

- Leveraged coding tools to create clear, impactful visualizations.

Challenges


Challenges
Conflicting Data Sets
The two data sets produced conflicting results.
We ran into what type graph we should use.
Resolution Approach
Compared results across different perspectives to identify patterns and inconsistencies.
Addressed conflicts by creating multiple visualizations.

Results



Dataset 2

Size: rows

Features: GAD Score

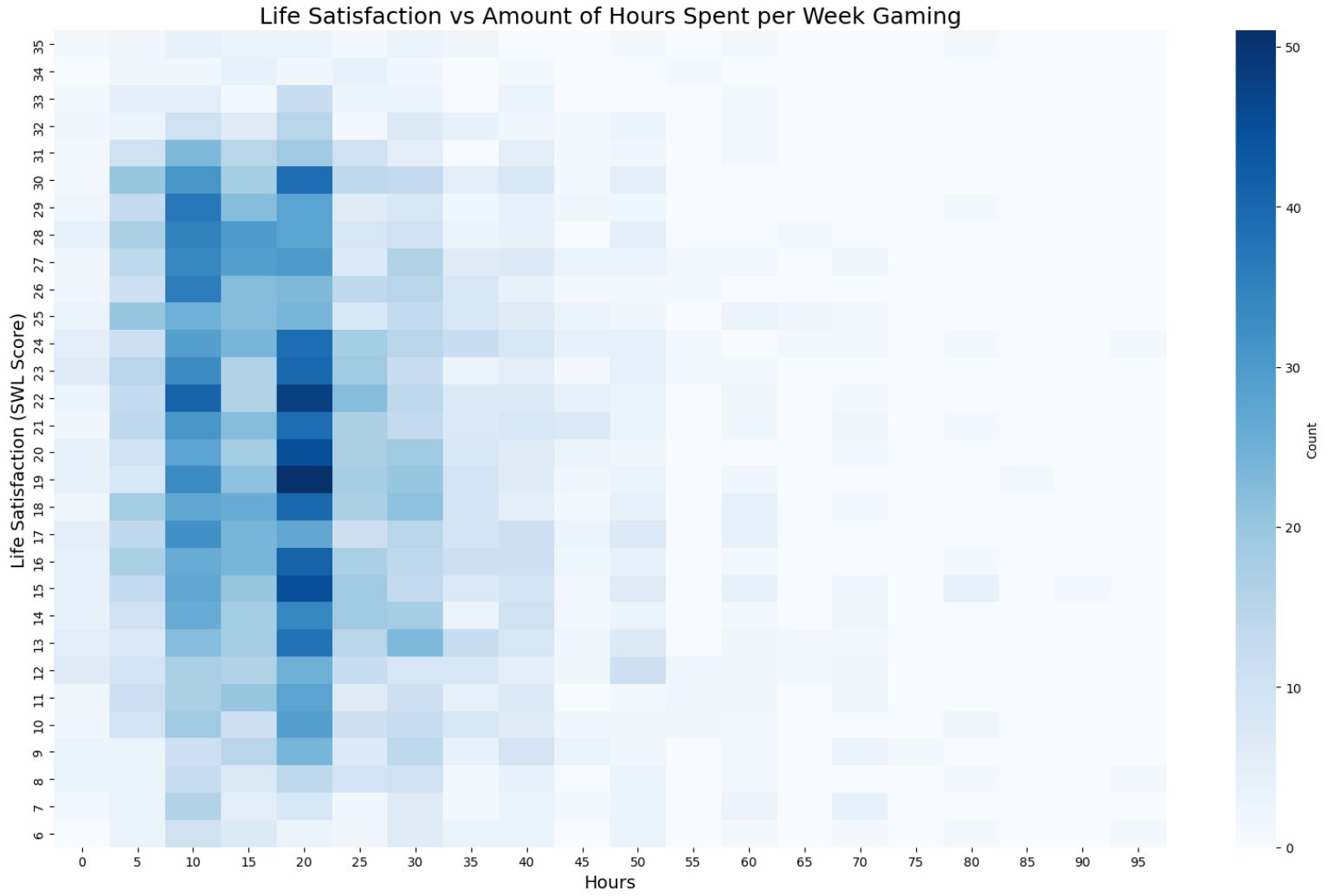
0-5 = Very good well-being

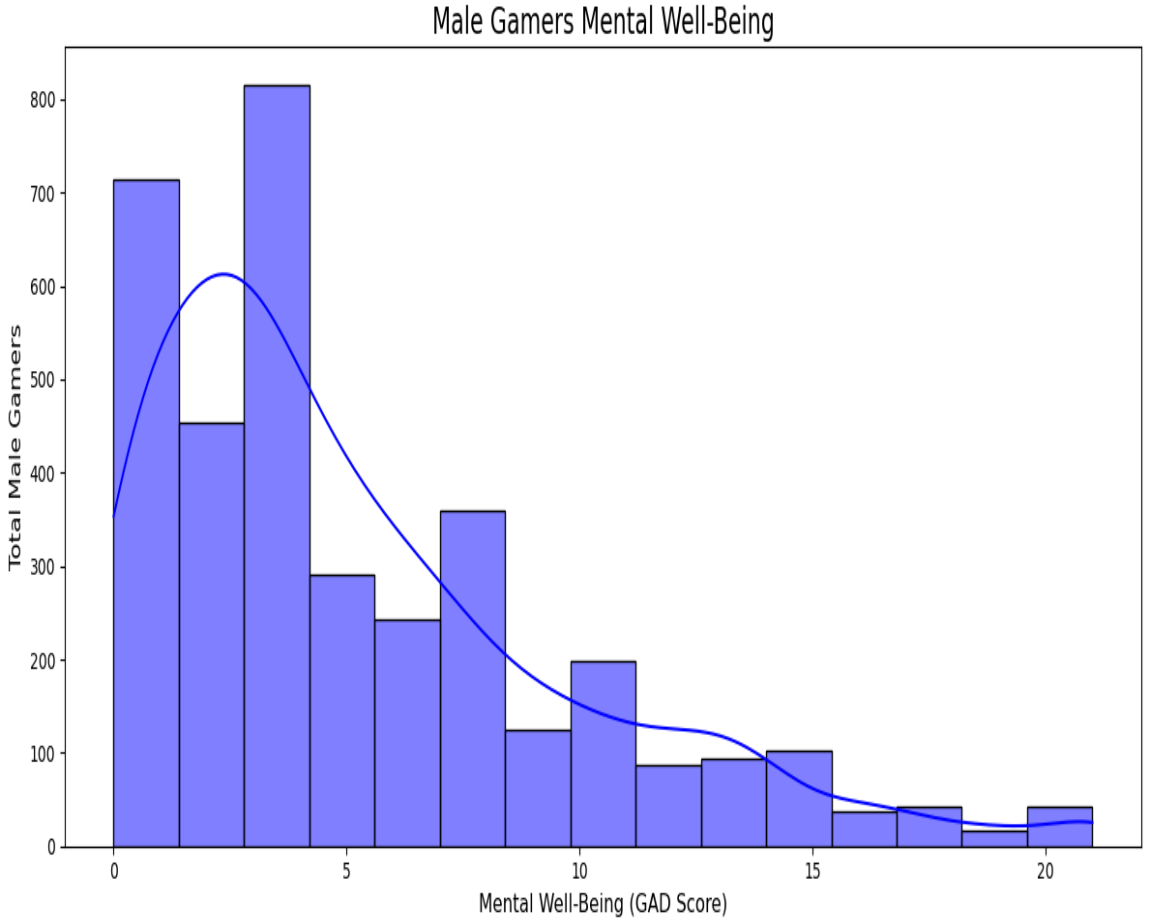
6-10 = Moderately good well-being

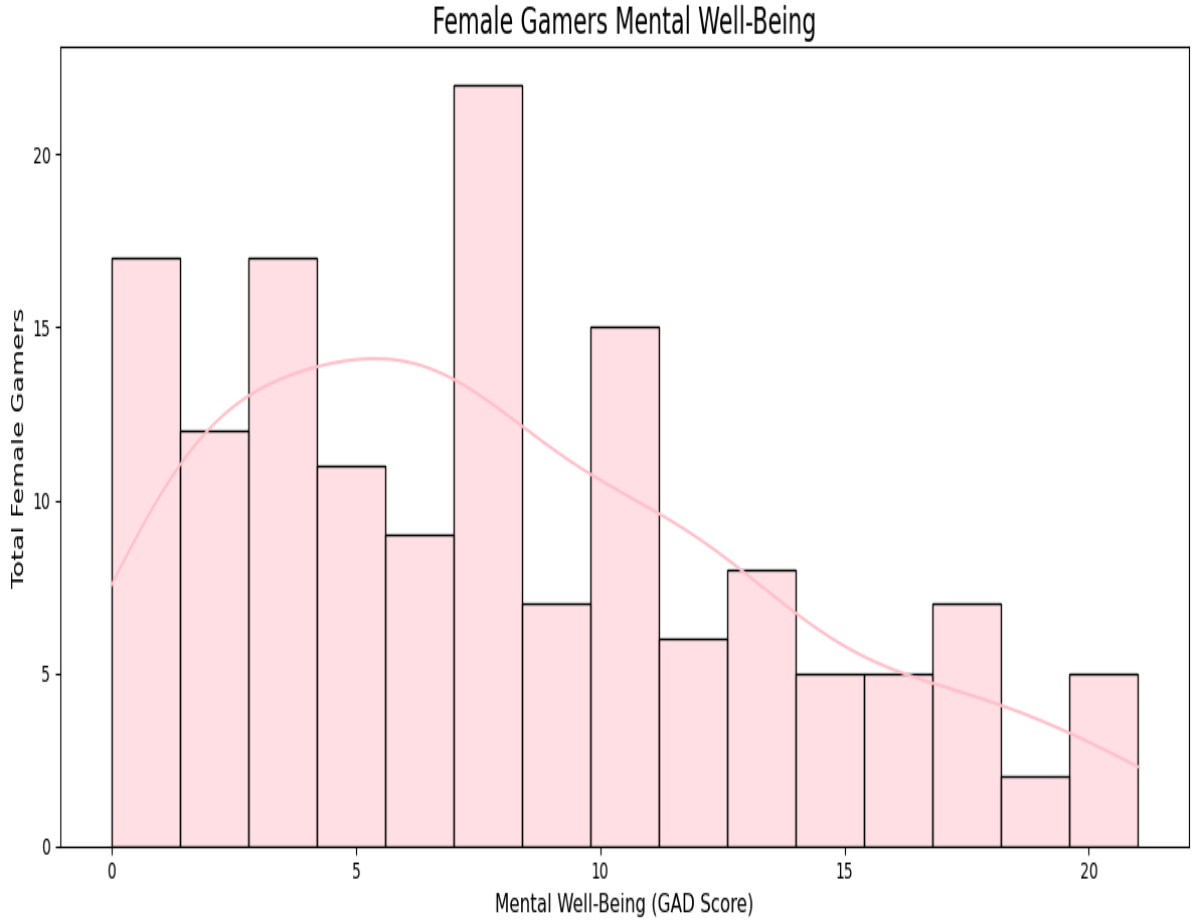
11-15 = Moderately bad well-being

16-21 = Very bad well-being

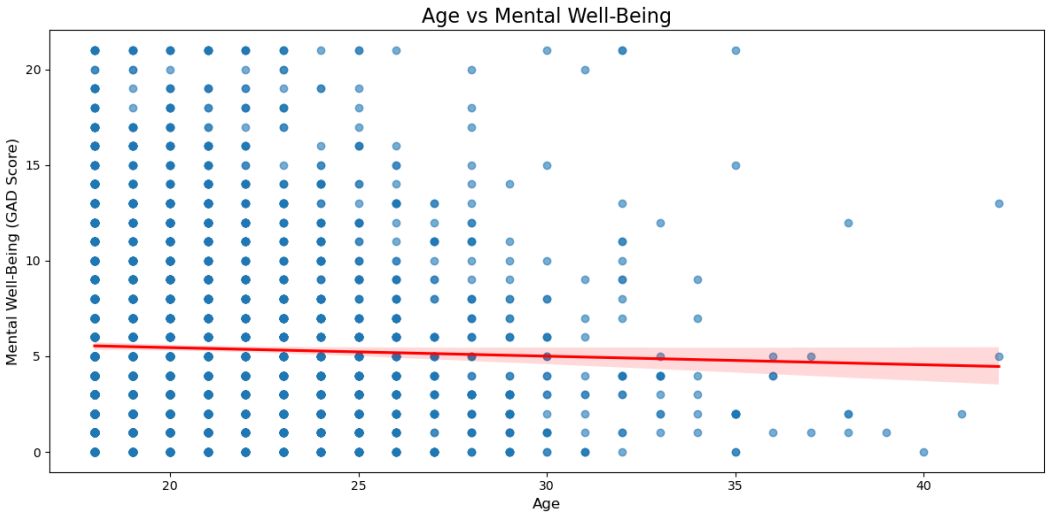
Results

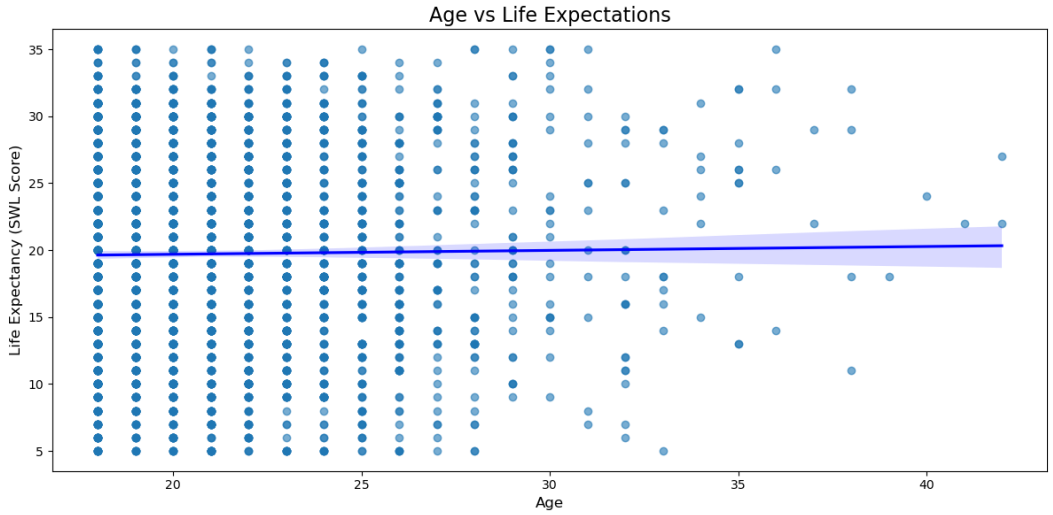

Life Satisfaction vs Amount of Hours Spent per Week Gaming
Life Satisfaction (SWL Score)
Hours
Count
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
0
10
20
30
40
50


Male Gamers Mental Well-Being
Total Male Gamers
Mental Well-Being (GAD Score)
0
100
200
300
400
500
600
700
800
0
5
10
15
20


Female Gamers Mental Well-Being
Total Female Gamers
Mental Well-Being (GAD Score)
0
5
10
15
20
0
5
10
15
20

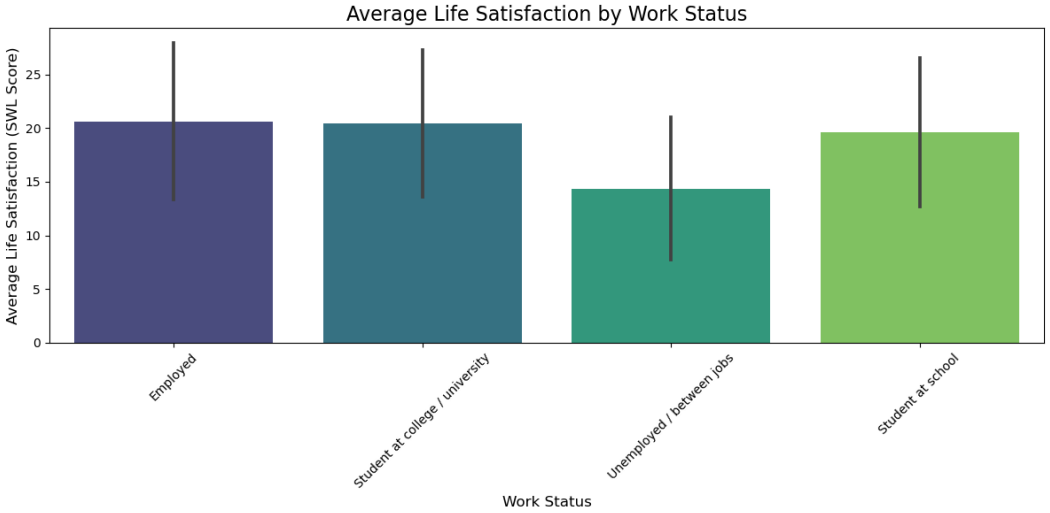
Results


Age vs Mental Well-Being
Mental Well-Being (GAD Score)
Age
0
5
10
15
20
20
25
30
35
40

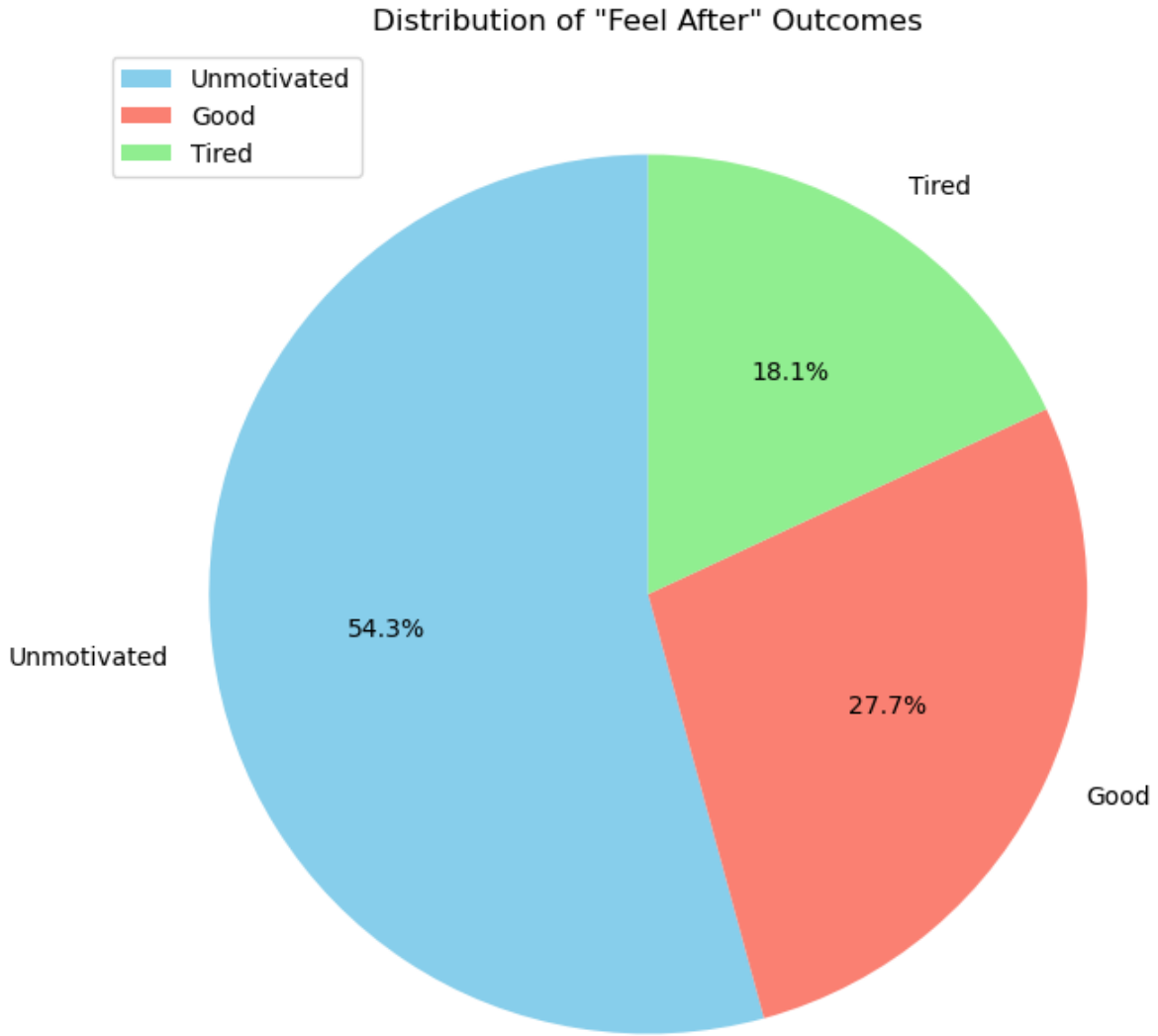

Age vs Life Expectations
Life Expectancy (SWL Score)
Age
5
10
15
20
25
30
35
20
25
30
35
40

Results

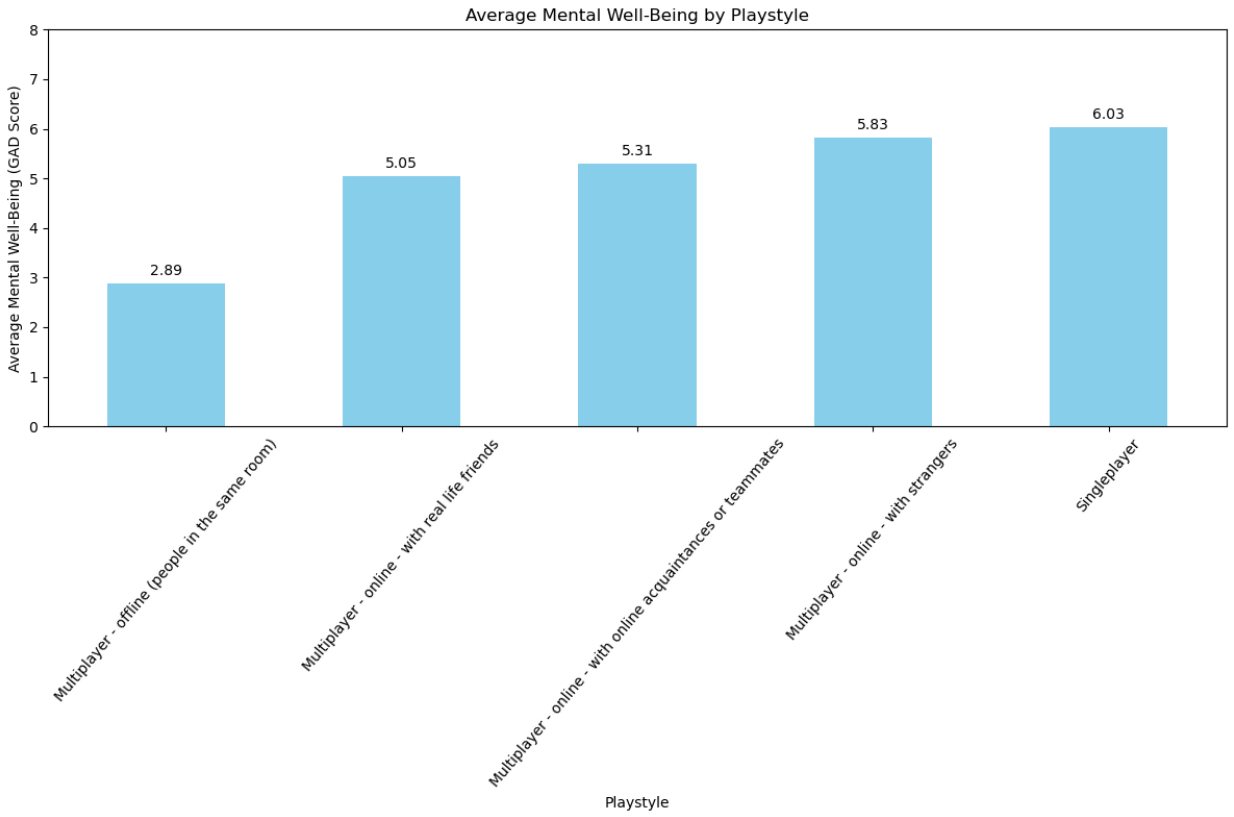

Average Mental Well-Being by Work Status
Average Mental Well-Being (GAD Score)
0
2
4
6
8
10
12
Employed
Student at college / university
Unemployed / between jobs
Student at school
Work Status


Average Life Satisfaction by Work Status
Average Life Satisfaction (SWL Score)
0
5
10
15
20
25
Employed
Student at college / university
Unemployed / between jobs
Student at school
Work Status

Results


Distribution of "Feel After" Outcomes
Unmotivated
Good
Tired
18.1%
54.3%
27.7%
Unmotivated
Tired
Good

Results



Dataset 1

Size: rows

Features: **SWL Score**

5-11 = Very bad life satisfaction

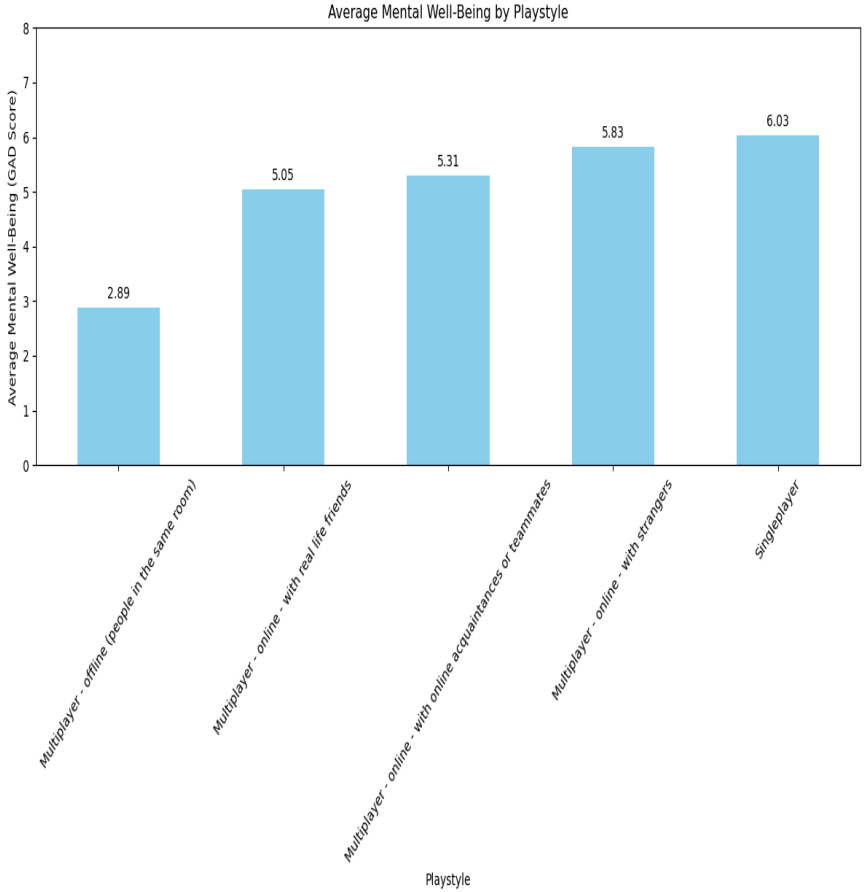
12-17 = Moderately bad life satisfaction

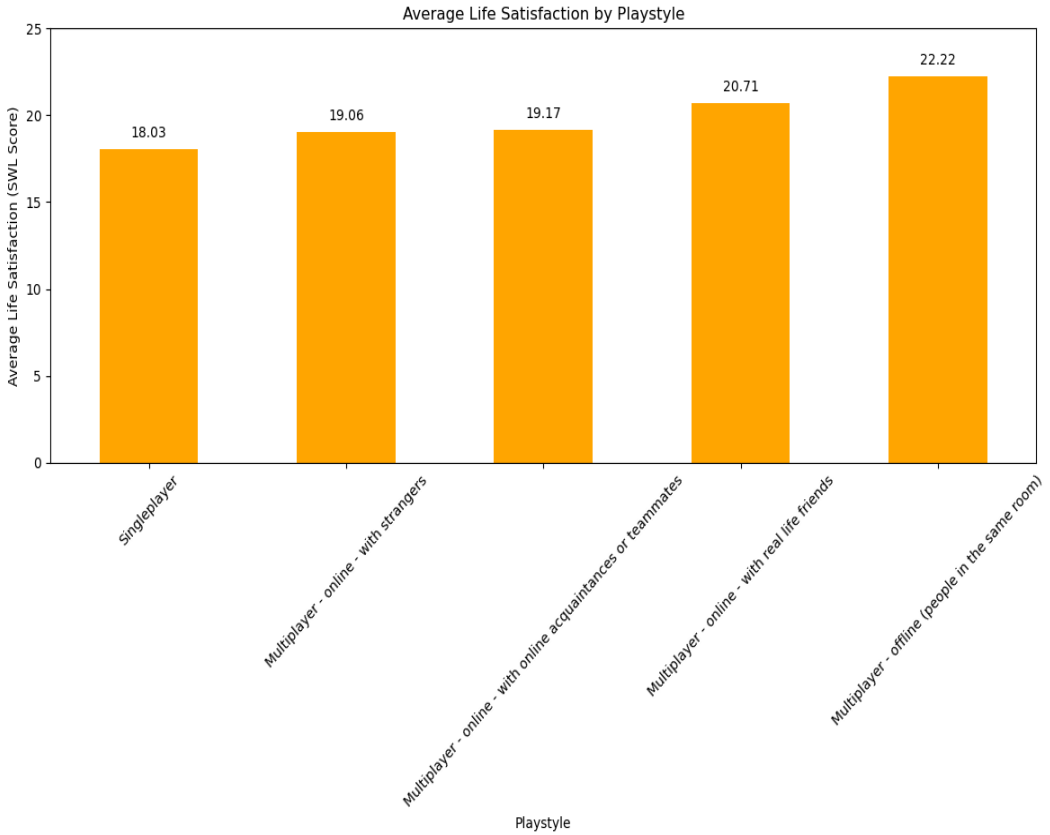
18-23 = Neutral life satisfaction

24-29 = Moderately life satisfaction

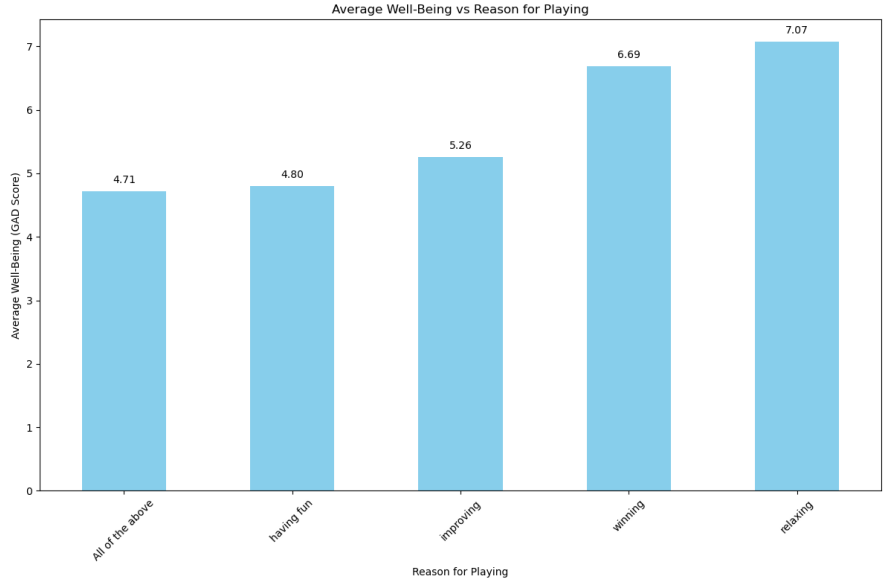
30-35 = Very good life satisfaction

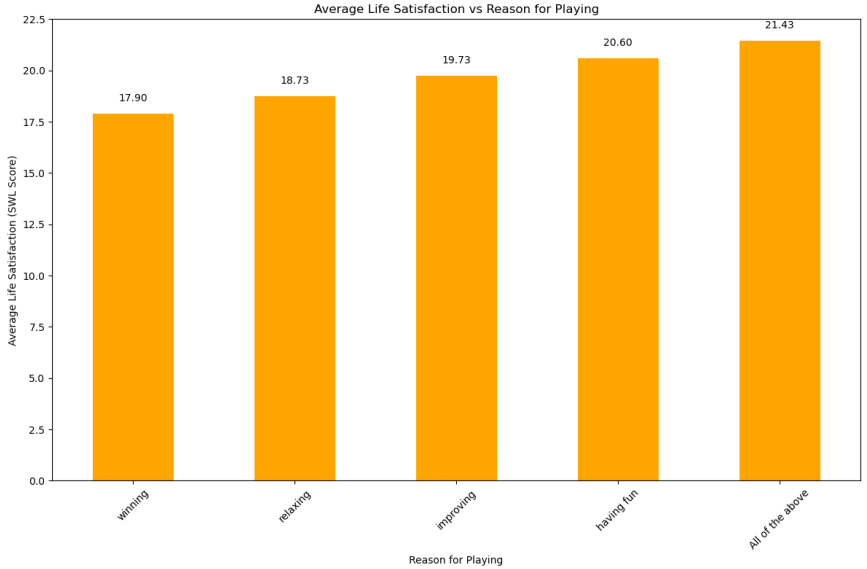
Results


Average Mental Well-Being by Playstyle
Average Mental Well-Being (GAD Score)
0
1
2
3
4
5
6
7
8
2.89
5.05
5.31
5.83
6.03
Multiplayer - offline (people in the same room)
Multiplayer - online - with real life friends
Multiplayer - online - with online acquaintances or teammates
Multiplayer - online - with strangers
Singleplayer
Playstyle


Average Life Satisfaction by Playstyle
Average Life Satisfaction (SWL Score)
0
5
10
15
20
25
18.03
19.06
19.17
20.71
22.22
Singleplayer
Multiplayer - online - with strangers
Multiplayer - online - with online acquaintances or teammates
Multiplayer - online - with real life friends
Multiplayer - offline (people in the same room)
Playstyle

Results


Average Well-Being vs Reason for Playing
Average Well-Being (GAD Score)
Reason for Playing
4.71
4.80
5.26
6.69
7.07
All of the above
having fun
improving
winning
relaxing


Average Life Satisfaction vs Reason for Playing
Average Life Satisfaction (SWL Score)
Reason for Playing
17.90
18.73
19.73
20.60
21.43
winning
relaxing
improving
having fun
All of the above

Future work

For future work

- We would like to find and add in datasets about how video games affect physicals
- We would have liked to find a way to incorporate this data set.
  - https://agdatacommons.nal.usda.gov/articles/dataset/Data_from_The_influence_of_active_video_game_play_upon_physical_activity_and_screen-based_activities_in_sedentary_children/24666177

Conclusion

Our findings reveal that video games influence overall well-being in meaningful ways. They have the potential to positively impact mental health, enhance life satisfaction, and provide benefits that go beyond mere entertainment. While the effects can vary by individual, the evidence suggests that gaming can play a valuable role in promoting overall wellness.

References

Dataset 1: Gaming and Mental Health

https://www.kaggle.com/datasets/alanpal/gaming-and-mental-health

Dataset 2: Online Gaming Anxiety Data

https://www.kaggle.com/datasets/divyansh22/online-gaming-anxiety-data

Q&A

The End