



جامعة مصر للمعلوماتية
EGYPT UNIVERSITY
OF INFORMATICS

Egypt University of Informatics
Computer and Information Systems
Data Analysis Course

Impact of Gaming on Life Performance

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Introduction:

This report examines the impact of gaming on life performance based on data collected from a survey. The survey aimed to understand the relationship between gaming and various aspects of life, including academic/work performance, problem-solving skills, cognitive abilities, social interactions, and overall well-being. By analysing the survey responses, we can gain insights into how gaming influences individuals' lives.

Research Question:

The primary research question addressed in this report is: What is the impact of gaming on life performance, including academic/work performance, problem-solving skills, cognitive abilities, social interactions, and overall well-being?

Hypothesis:

Based on previous studies, we hypothesize that excessive gaming will lead to a decline in academic/work performance and negatively affect social interactions. However, we also expect to find that gaming can have positive effects on problem-solving skills, cognitive abilities, and overall well-being.

Population of Interest:

The population of interest for this study is individuals who engage in gaming activities, regardless of age or gender. The focus is on understanding the impact of gaming on various aspects of their lives.

Sampling Method:

The survey participants were selected using convenience sampling, where individuals who were willing and available to participate were included. This method may introduce bias, as it may not represent the entire population of gamers accurately.

Bias Identification:

1. Self-Selection Bias: Participants who chose to respond to the survey may have different gaming habits and attitudes compared to those who did not participate, leading to potential bias in the results.
2. Recall Bias: Participants may have difficulty accurately recalling the frequency and impact of gaming on their life performance, leading to inaccuracies in the data collected.
3. Social Desirability Bias: Participants may provide responses they believe are socially acceptable rather than reflecting their true experiences and opinions.

Survey Questions:

The survey included the following questions:

1. GPA: Participants were asked to provide their current GPA.
2. Influence on Problem-Solving Skills and Cognitive Abilities: Participants rated the extent to which gaming positively influenced their problem-solving skills and cognitive abilities on a scale of 1 to 5.
3. Decline in Academic/Work Performance: Participants indicated whether they had experienced a decline in academic/work performance due to excessive gaming.
4. Negative Effects on Social Interactions and Relationships: Participants rated the frequency of negative effects of gaming on their social interactions and relationships.
5. Positive Impacts on Overall Well-being: Participants reported any positive impacts of gaming on their overall well-being, such as stress relief, relaxation, or improved mood.
6. Overall Impact on Life Performance: Participants rated the statement "Gaming has had an impact on my overall life performance" on a scale of 1 to 5.

Analysis:

The data from the survey was analysed by calculating descriptive statistics, including averages, frequencies, and percentages. These measures were used to assess the impact of gaming on various aspects of life performance.

Descriptive Statistics:

Question 1 - GPA:

Mean: 2.879032258064516

Median: 2.69

Standard Deviation: 0.6586367478294829

Question 2 - Influence on Problem-Solving Skills and Cognitive Abilities:

Mean: 2.967741935483871

Standard Deviation: 1.3034280690482294

Question 3 - Decline in Academic/Work Performance:

Yes 16

No 15

Name: decline in academic/work performance, dtype: int64

Question 4 - Negative Effects on Social Interactions and Relationships:

Frequently 12

Rarely or never 12

Occasionally 6

Very frequently 1

Name: negative effects on social interactions and relationships?, dtype: int64

Question 5 - Positive Impacts on Overall Well-being:

Yes 23

No 8

Name: positive impacts of gaming, dtype: int64

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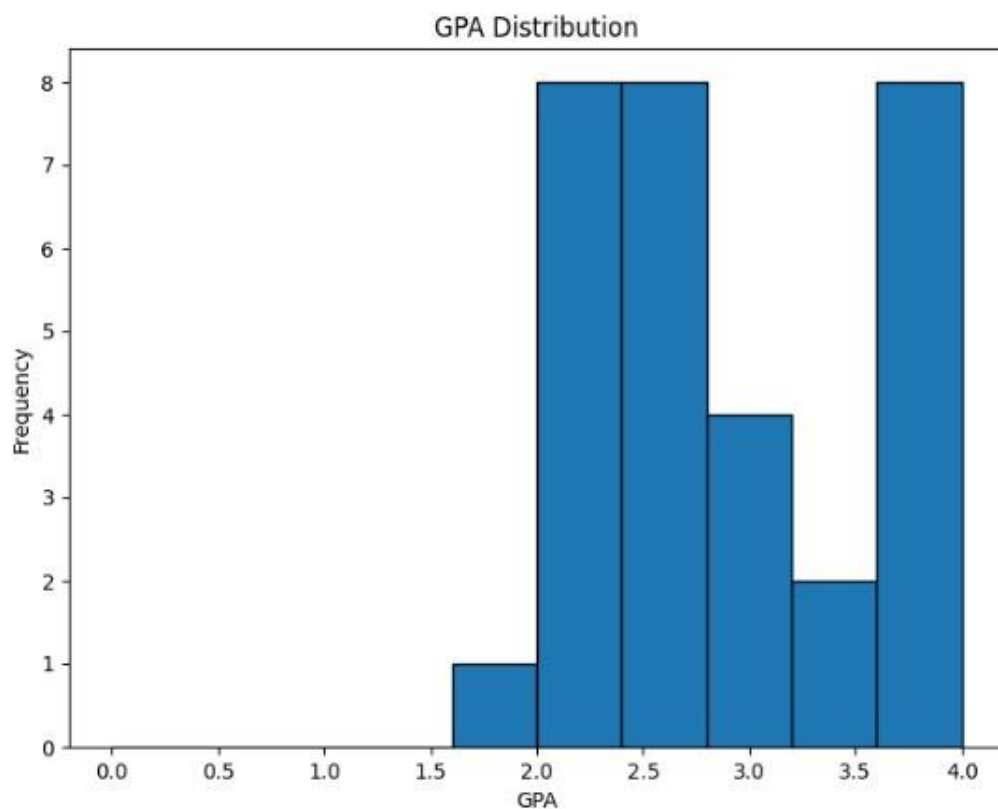
Question 6 - Overall Impact on Life Performance:

Mean: 3.032258064516129

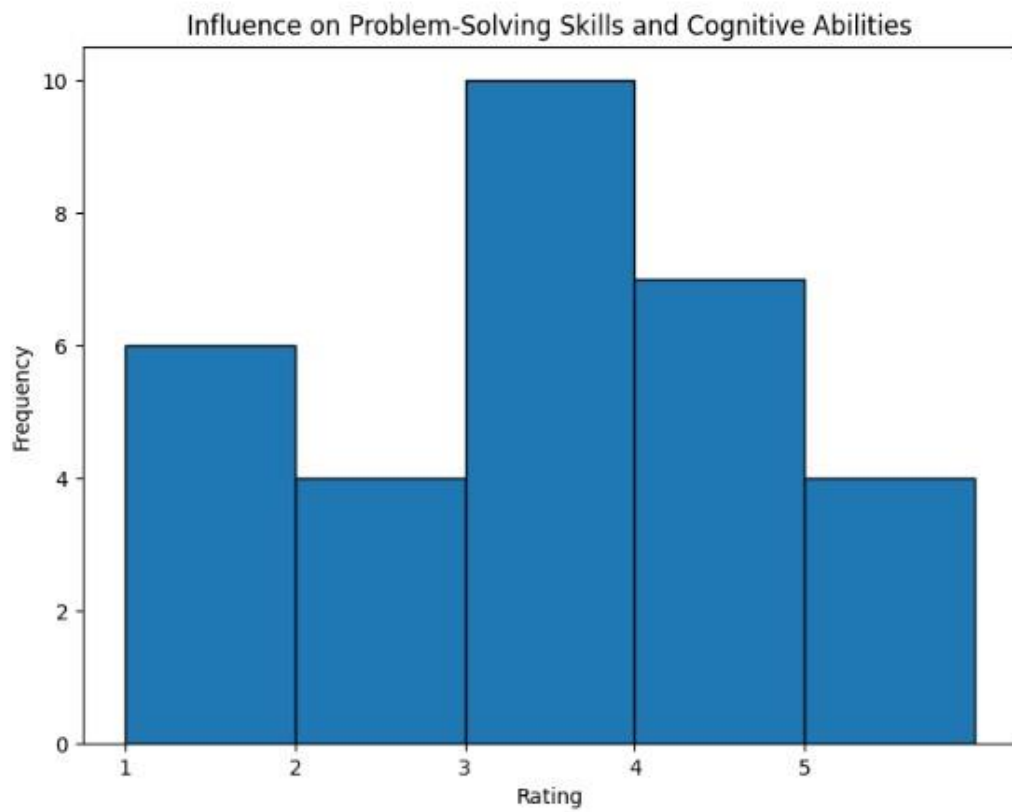
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As the target audience was just gamers, we found that they have different Gpa's and the mean was 2.87, median is 2.69, and found that most of the gamer's GPA between 2:3 GPA which is not high and not low,

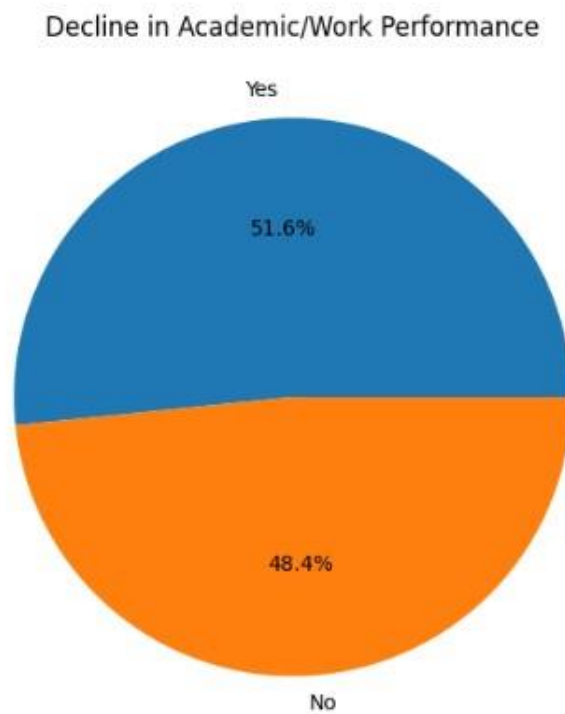
Conclusion: Gaming does no significant impact on GPA



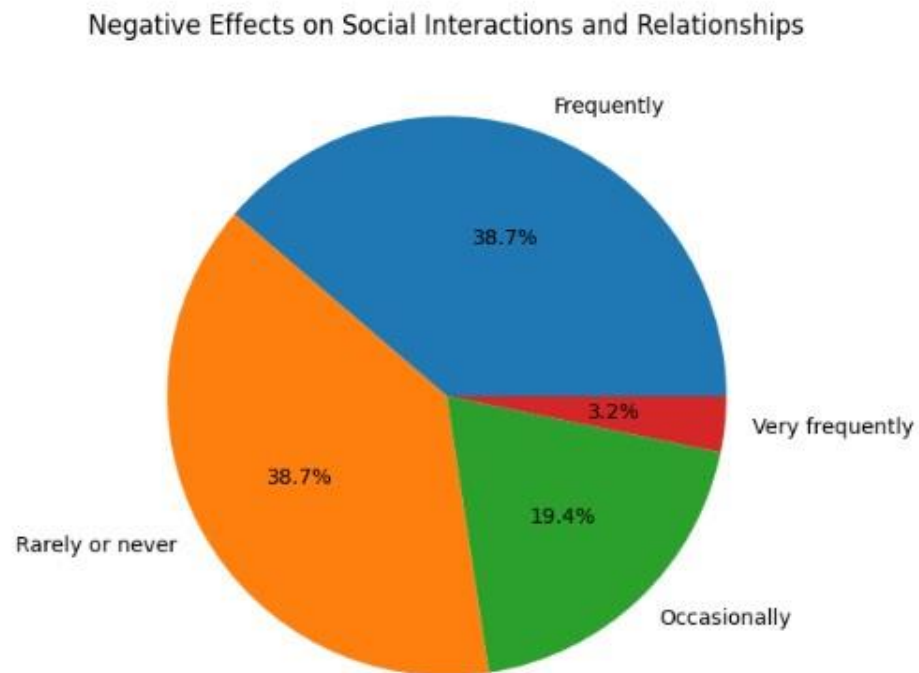
In the second question why found that the average benefited from gaming in problem solving and cognitive skills



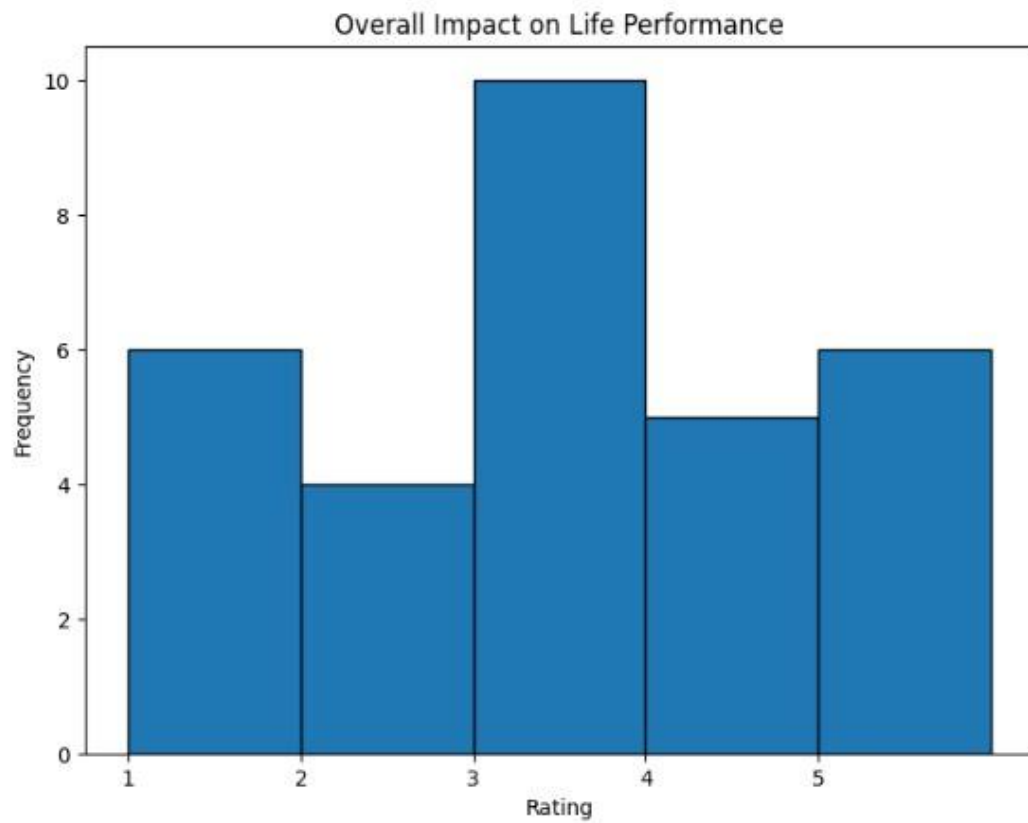
In the 3rd question we found that the majority in gamers have a problem postponing work and academic things to play



In The 4th question found that gaming can have a harmful effect on social interactions and relationships but also in an equal percentage with no effect at all so it not clear to say that it has a negative impact on sociality (based on the sample)



In the last question found that gaming has a moderate impact on life performance



Conclusion:

The data analysis reveals that gaming has both positive and negative impacts on life performance. While gaming can enhance problem-solving skills, cognitive abilities, and overall well-being for many individuals, it can also lead to a decline in academic/work performance and negatively affect social interactions. These findings suggest the importance of maintaining a balanced approach to gaming to ensure a healthy and well-rounded life performance. However, it is essential to acknowledge the potential biases in the data due to self-selection, recall, and social desirability, which may limit the generalizability of the findings. Further research utilizing more diverse and representative samples would provide a more comprehensive understanding of the impact of gaming on life performance.