



INTERNATIONAL JOURNAL OF ADVANCE RESEARCH, IDEAS AND INNOVATIONS IN TECHNOLOGY

ISSN: 2454-132X

Impact factor: 6.078

(Volume 6, Issue 2)

Available online at: www.ijariit.com

Research Paper about Counter Strike Global Offensive

Aayush Rathi

rathi.aayush30@gmail.com

NMIMS Anil Surendra Modi School of Commerce, Mumbai, Maharashtra

ABSTRACT

This research paper is about a PC competitive matchmaking game 'Counter Strike Global Offensive' and it shows the relation between Kills, Deaths and the network Ping. Taking into consideration all these factors, the research paper shows the impact of these factors quantified into the final score of the player, that is, MVP or Most Valued Player. Type of data: Secondary data, Independent variables: Kills, Deaths & Ping Dependent variables: MVP

Keywords— Kills, Deaths, Ping, MVP

1. INTRODUCTION

The data is about Counter Strike Global Offensive, a PC competitive matchmaking game. Counter-Strike: Global Offensive is a multiplayer first-person shooter video game developed by Valve and Hidden Path Entertainment. It is the fourth game in the Counter-Strike series and was released for Windows, OS X, Xbox 360, and PlayStation 3 in August 2012, while the Linux version was released in 2014. This FPS game is played online, 5 v 5 and it contains different data sets such as 'Kills', 'Deaths' etc. which can describe the kind of game an individual has played. Various factors such as Kills, Deaths & the network Ping and their impact on a players final score which is MVP or 'Most Valued Player'.

2. OBJECTIVES

- To understand the relation between Kills, Deaths & the network Ping.
- To understand the impact of Kills, Deaths & the network Ping on a players final score which is the MVP.

3. DATA

3.1 Ping

Table 1: Ping Data

Class Intervals	Bin Values	Frequency
0-100	99	949
100-200	199	142
200-300	299	25
300-400	399	12
400-500	499	2
500-600	599	1
600-700	699	1
700-800	799	1
	More	0

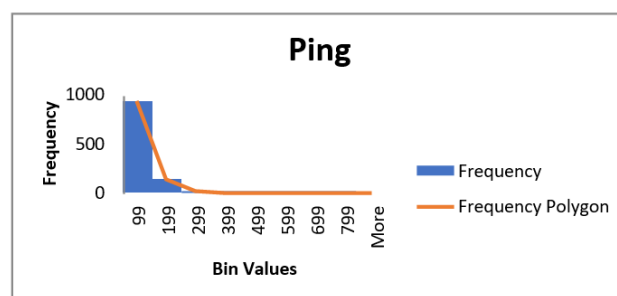


Fig. 1: Ping Data Graph

3.2 Kills

Table 2: Kills Data

Class Intervals	Bin Values	Frequency
0-5	4	36
5-10	9	165
10-15	14	371
15-20	19	334
20-25	24	159
25-30	29	56
30-35	34	10
35-50	39	2
	More	0



Fig. 2: Kills Data Graph

3.3 Deaths

Table 3: Deaths Data

Class Intervals	Bin Values	Frequency
0-3	2	7
3-6	5	21
6-9	8	46
9-12	11	84
12-15	14	132
15-18	17	243
18-21	20	307
21-24	23	249
24-27	26	43
27-30	29	1
	More	0

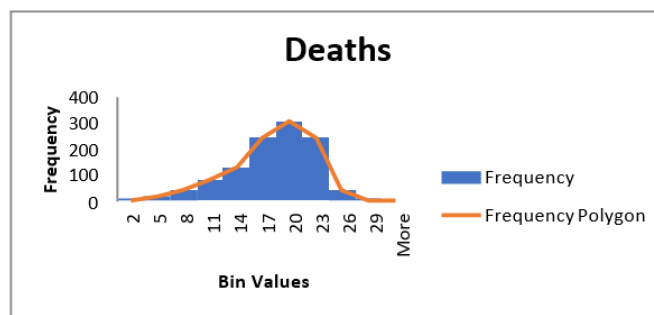


Fig. 3: Deaths Data Graph

3.4 MVP

Table 4: MVP's Data

Class Intervals	Bin Values	Frequency
0-2	1	532
2-4	3	451
4-6	5	124
6-8	7	25
8-10	9	1
	More	0

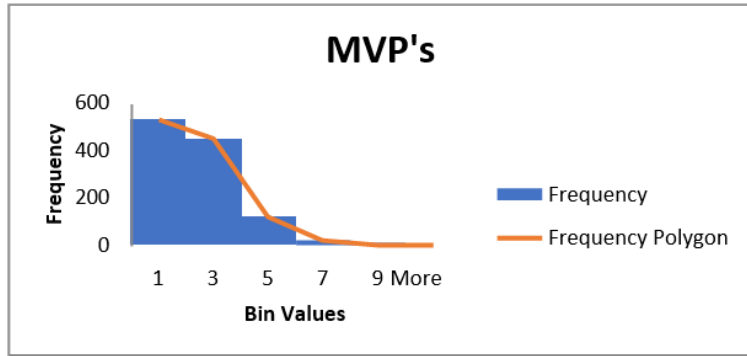
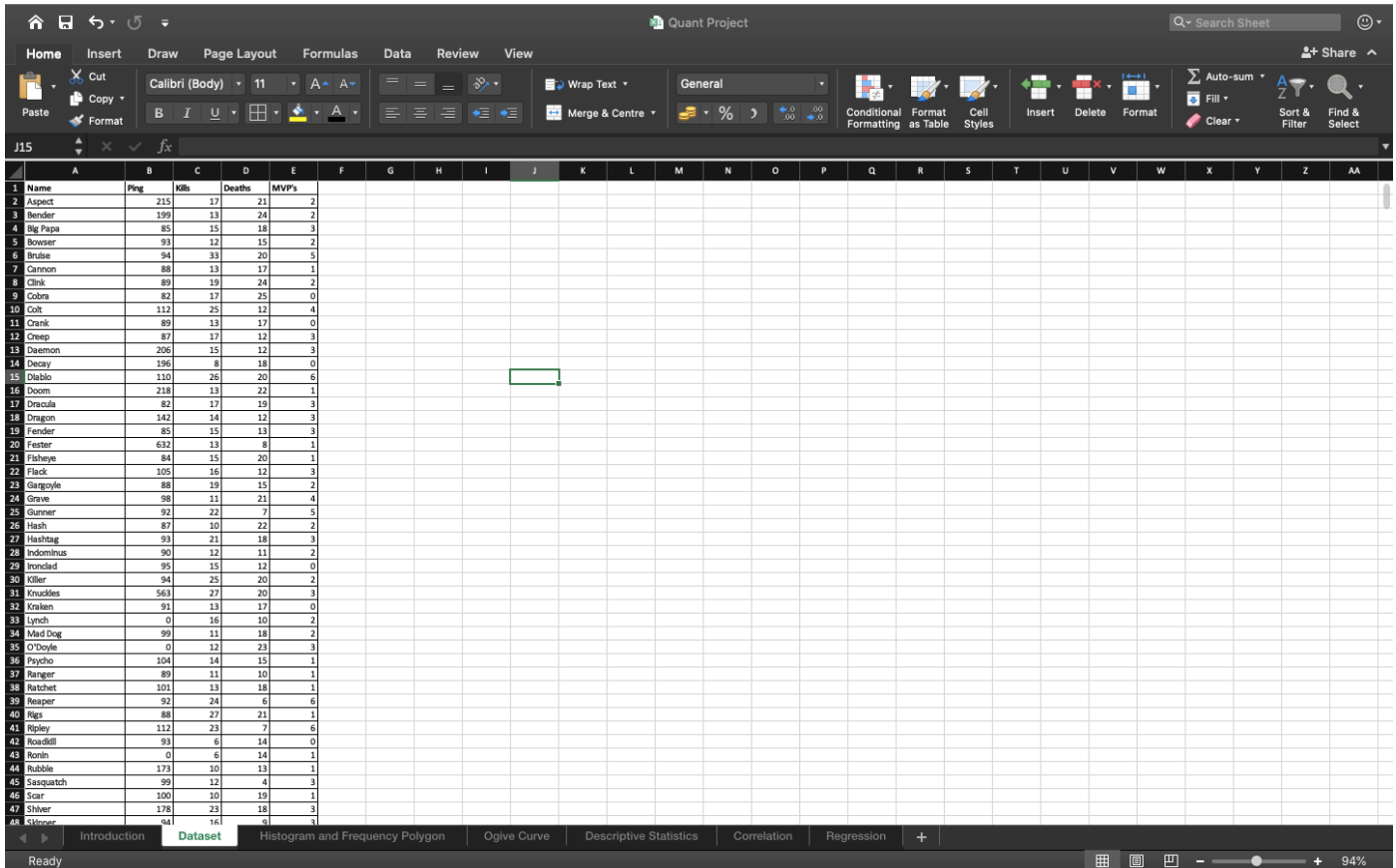


Fig. 4: MVP's Data Graph



4. CORRELATION

	MVP's	Kills	Deaths	Ping
MVP's	1			
Kills	0.63802	1		
Deaths	-0.00324	0.264325	1	
Ping	0.037572	0.099831	0.126688	1

Interpretation:
 There exists an Imperfect Positive correlation between MVP's and Kills
 There exists an Imperfect Negative correlation between MVP's and Deaths
 There exists an Imperfect Positive correlation between MVP's and Ping

Regression:

SUMMARY OUTPUT	
Regression Statistics	
Multiple R	0.662490575
R Square	0.438893762
Adjusted R Square	0.43740278
Standard Error	1.115870884
Observations	1133

ANOVA								
	df	SS	MS	F	Significance F			
Regression	3	1099.603579	366.5345263	294.3655608	3.8566E-141			
Residual	1129	1405.794479	1.245167829					
Total	1132	2505.398058						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	0.2825141	0.1345352	2.0999264	0.0359567	0.0185468	0.5464814	0.0185468	0.5464814
Kills	0.1719134	0.0057947	29.666904	1.7886E-1	0.1605437	0.1832832	0.1605437	0.1832832
Deaths	-0.057107	0.0072151	-7.914925	5.87559E-	-0.071263	-0.042950	-0.071263	-0.042950
Ping	-0.000174	0.0005078	-0.343883	0.7309977	-0.001171	0.0008217	-0.001171	0.0008217
Regression Equation: $Y = 0.2825 + (0.1719)X_1 - (0.0571)X_2 - (0.000174)X_3$								
Interpretation:								
If the independent variable Kills changes by 0.1719 units, there will be a change of 1 unit in MVP								
If the independent variable Deaths changes by -0.0571 units, there will be a change of 1 unit in MVP								
If the independent variable Ping changes by -0.000174 units, there will be a change of 1 unit in MVP								

5. CONCLUSION

To conclude, a relation between Kills, Deaths, network Ping and the player's final score, i.e, MVP was established in this research paper, which describes the kind of game an individual has played. Using simple tools of moving averages, graphical representations and interpretations were established.

6. REFERENCES

This data belongs to John Doe who is currently pursuing Molecular Biology. Data was taken from an open source/ public dataset from a platform called 'Kaggle'. This data is being used only for educational purposes and all content and copyright of the data remains with the original creator. (www.kaggle.com)