CS 162

Loaded Dice Analysis

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I ran the following dice with 10, 100, and 100 rolls:

- Regular 6 sided dice.
- Regular 100 sided dice.
- Loaded 6 sided dice.
- Loaded 100 side dice.

The 10, and 100 roll runs were not very conclusive because of the small sample size.

Data was analyzed from the 1000 roll run.

Data from the regular dice run:

Dice6 mean	2.983209	Dice100 mean	38.20793
Dice6 median	3	Dice100 median	52
Dice6 mode	2	Dice100 mode	22
Dice6 stddev	1.704899	Dice100 stddev	29.63477

Sum mean	43.52518
Sum median	55
Sum mode	66
Sum stddev	29.69887

Data from the loaded dice run:

Dice6 mean	2.940327	Dice100 mean	39.39608
Dice6 median	3	Dice100 median	52
Dice6 mode	3	Dice100 mode	40
Dice6 stddev	1.705118	Dice100 stddev	27.97675

Sum mean	44.57401
Sum median	55
Sum mode	43
Sum stddev	28.04513

The results from the 6 sided dice did not follow the 100 sided dice because of the low number of sides, the chance of being loaded did not produce a noticeable effect in the output.

The loaded dice run had a lower standard deviation and a higher mean, indicating that the 5% chance of getting a loaded result had an impact on the overall outcome of the results.