SIGMA CHI-SQUARED
UCLA DATAFEST

By Rohit Manimaran, Aditi Behera, Surabhi Tadvalkar,
David Ryan, and Samarth Srinivasa
School 3561

Pie Chart:
- Power Priority: 21%
- Money: 9%
- Health: 16%
- Family: 11%
- Happiness: 27%
- Friends: 16%
- School: 16%

Box Plot:
- r = 0.04

Scatter Plot:
- Goal Achieved Amount vs. Goal Amount
- Event time (in hours)

Graphs showing data for two goals with different colors for achieved and total amounts.
The data we are looking at refers to students who played the PriorityMinigame, where they had to balance the consequences of different decisions that would affect how well they met their goals (priorities). The goal of the game is to balance different priorities without letting others fall to zero and meet both of their goals. Our Null Hypothesis is that the two attributes, being those who passed Goal 1 and passed Goal 2, are independent, as in those who passed Goal 1 did not affect the success those had in passing Goal 2. Our alternate hypothesis is that there was, in fact, a dependence between how many people passed Goal 1 and passed Goal 2. With our data, we got a chi-squared value of 11.485788, which with a degree of freedom of (2-1)(2-1) = 1 and an alpha value of 0.05, we can calculate that through the Chi-Squared table, we get a significance level of 3.84. Because 11.49 is more significant than 3.84, we can conclude that we reject our null hypothesis, and there is a strong correlation between how many people passed Goal 1 vs. how many people passed Goal 2.