Research Report

My theoretical hypothesis was that Marvel and DC target with their superhero films the same kind of audience in the 21st century thus movies from Marvel and DC are equally good or bad.

I compared the IMDB ratings of 26 movies by the Marvel Studies, with the IMDB ratings of 18 movies from DC Comics. Movies by Marvel received a different rating (*M* = 7.56, *SD* = 0.56) as movies by DC Comics (*M* = 6.80, *SD* = 1.41), *Mdif* = 0.764, 95% CI [0.16;1.37], *t*(41) = 2.459, *p* = 0.018.

Contrary to my expectations, the 90% CI around the mean overlaps only same parts of the equivalent boundary and is not including 0 (See Figure 1). Since we have NHST <= 0.05 and the Equivalence > 0.05, we see that the ratings of DC and Marvel comics are not equivalent and statistically different by at least a large effect (*d* = 0.8). We can conclude that the data we have does not support our hypothesis. We see that the DC movies are significantly worse than Marvel movies.

A screenshot of a cell phone

Description automatically generated

*Figure 1*. Plot of the 90% confidence interval around the mean difference (left), compared to the equivalence boundary (-0.8,0.8, right).