**AsPredicted registration:**

* **Have any data been collected for this study already? (optional)**  
  No, no data have been collected for this study yet
* **What's the main question being asked or hypothesis being tested in this study? (optional)**  
  My theoretical hypothesis is 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.
* **Describe the key dependent variable(s) specifying how they will be measured. (optional)**  
  I will use Wikipedia for a list of Marvel and DC Movies:   
  - <https://de.wikipedia.org/wiki/Marvel_Studios>   
  - <https://en.wikipedia.org/wiki/List_of_films_based_on_DC_Comics_publications>  
  For DC only the movies in the 21st century are taken into account for the fact that superhero movies in general became a real new genre only after the year 2000.  
  I will then search for the movies using IMDB and note the IMDB movie rating for movies from the year 2000 up until today, i.e. 2020-03-07
* **How many and which conditions will participants be assigned to? (optional)**2, Marvel vs. DC Comics movies
* **Specify exactly which analyses you will conduct to examine the main question/hypothesis. (optional)**  
  I am going to calculate the 90% CI around the effect size. When the 90% CI falls below, and excludes a Cohen’s d of 0.8 with alpha = 0.05, I will consider the movie ratings of DC and Marvel to be equally good or bad.
* **Any secondary analyses? (optional)**None
* **How many observations will be collected or what will determine the sample size? No need to justify decision, but be precise about exactly how the number will be determined. (optional)**  
  I predict that there is no difference and consequently I'll do a power analysis for an equivalence test. I choose a study design with 80% effect due to the limited time of collecting a lot of data, still 80% gives me enough confidence in rejecting the smallest effect size I care about. Power analysis (two-sided t-test: Mean difference between two independent means) shows that we need 26 movies for each condition assuming a true effect size of 0, choosing an alpha of 0.05 and aiming for 80% power in order to show that the difference between Marvel and DC ratings is smaller than Cohen's d of 0.8.   
  Due to the limited available data I will collect all movies available, i.e. 18 movies after the year 2000, for DC and randomly choose 26 Marvel movies from the year 2000 up until today, i.e. 2020-03-07 for Marvel. This is obviously smaller than the 26 samples for each condition based on the power analysis. Thus, the power of our studies will be effectively rather around 72% which I consider still enough.
* **Anything else you would like to pre-register? (e.g., data exclusions, variables collected for exploratory purposes, unusual analyses planned?) (optional)**  
  As stated before I am only considering movies from the year 2000 up until 2019-03-07. This is aligned with my hypothesis that superhero movie really only became a thing in the 21st century.