A network of connected circles and lines

AI-generated content may be incorrect.

[Link to R Code](https://github.com/phoebewang59/Social_Network_Analysis_in_Psychology/blob/main/marvel.R)

This dataset is an undirected and unweighted edgelist from Kaggle, representing heroes who appear together in Marvel comics. Since there were too many characters, I focused on the main heroes featured in the Avengers movies and colored the nodes based on their degrees, with Captain America having the highest degree and Hawkeye the lowest. The orange vertex frame represents the betweenness of the heroes. Only Dr. Strange and Hawkeye have a betweenness greater than 0. Given that they are on the **periphery** of this network, they may serve as weak ties connecting these main characters to other, less frequently appearing heroes in the Marvel Universe.

Data source: <https://www.kaggle.com/datasets/csanhueza/the-marvel-universe-social-network?select=hero-network.csv>

A diagram of a network

AI-generated content may be incorrect.

[Link to R Code](https://github.com/phoebewang59/Social_Network_Analysis_in_Psychology/blob/main/gossip_positive.R)

I used gossip\_crew.Rdata and focused on positive gossip. To make the edges more meaningful, I thresholded the matrix so that each edge represents a person gossiping positively about another person more than twice (i.e., gossip$positive > 2 was assigned a value of 1). M20 has the highest betweenness, and this network examines the geodesic distances from M20 to the rest of the nodes, with a distance of 0 referring to M20. The vertex frame color represents gender, and it appears that most males tend to be directly connected to M20, while females are mostly at distances of 2 or 3 from M20.