How Spidey, Superman and Sherlock keep us sane
30 October 2017, by Hayley Jarvis

Superheroes like Spider-Man, Batman and Superman keep us sane while we struggle to feel safe in our overcrowded cities.

Such fantastic tales of superheroes summoning superhuman powers to save the world are often snobbishly labelled as childish distractions. But their moral battles to solve sticky situations and triumph over evil are a clever way to cope with real life, says Brunel University London's Dr James Carney.

The surge in the number of people living in cities, says Carney, leaves most people living at a constant low-grade anxiety.

"Comic books are a tool to deal with that anxiety, that problem of not knowing all the people you meet and not having that trusted network you might in a smaller place."

Naturally, people try to keep tabs on others around them. Most of us only have the brain space to keep track of about 150, which wasn't a problem until most of the world started to live in big cities. In a village, if someone steals your bike, you'll likely have a good idea who the thief might be. But if your bike is stolen on Oxford Street, there are literally thousands of unknown people who might be responsible.

This psychological overload or inability to do the amount of 'moral monitoring' we feel we need creates pressures only supernatural-style powers can tackle. "We know superheroes don't exist," says James, "but characters who are quasi-omniscient, that see everything and know everybody, fascinate us because they're a way to compensate. Fictional heroes like Sherlock Holmes, who can figure out everything about you from your appearance, or Spider-Man, whose sixth sense alerts him to distant danger, give us confidence that our uncertain social environment can be made safe."

In the biggest ever quantitative study of comic book heroes, Dr Carney and Dr Pádraig Mac Carron from the University of Oxford data-scraped wiki databases for legendary comic book publishers, Marvel and DC. They tested four predictions about comic-book superhero traits, such as 'prosocial agency' or guarding social good and punishing attempts to wreck it. The guess was their predictions would not stack up for ordinary human heroes without supernatural power or quasi-omniscience, which turned out to be the case. Crucially, they also discovered that the more popular a superhero is, the more they conform to the four predictions.

"It is good for anxiety to read comic books," said James. "If you like and enjoy them, it helps your overall happiness in relation to the world and
makes you think the world is a better place."

**More information:** Comic-Book Superheroes and Prosocial Agency: A Large-Scale Quantitative Analysis of the Effects of Cognitive Factors on Popular Representations is published in the *Journal of Cognition and Culture*.

Provided by Brunel University