**Online likes can foster a herd mentality**

*Emily Sohn*

*Herd mentality can have ripple effects on everything from what people buy to how they vote, a new study suggests.*

Thumbs up, thumbs down. When someone "likes" a positive online comment, other people are much more likely to give the comment a thumbs up too, suggesting our opinions are swayed by what others think.

But negative sentiments don't have the same influence, a new study published today in [*Science*](http://dx.doi.org/10.1126/science.1240466) found.

In fact, when people saw a thumbs down, they became more likely to correct it with a thumbs up, particularly when the topic concerns politics or other weighty subjects.

Besides offering a window into the intermingling subtleties of human nature and online behaviour, the new findings show how herd mentality can have ripple effects (эффект домино) on everything from what people buy to how they vote.

By showing how our opinions are vulnerable to the arbitrary votes of others, the study may help people make better decisions.

"I think it cautions the online user or consumer to be sceptical of ratings and to consider that a rating might be the result of some social process and is potentially fraudulent or manipulated, rather than putting so much weight on the idea that, 'Well, if the crowd says it's a good product, it must be a good product,'" says study co-author Sinan Aral, a managerial economist at the [Massachusetts Institute of Technology](http://www.mit.edu/).

"A popular product may have been rated highly today because it is a good product -- or because it was rated highly yesterday."

In today's digital world, people frequently turn to online ratings when making decisions about hotels, movies, news reports, even political candidates. And according to recent research, Aral said, two-thirds of online shoppers say they trust reviews that are posted on the web.

To test whether online ratings deserve the weight that people put on them, Aral and colleagues designed an experiment using a news aggregation website, much like Digg or Reddit, where users post articles and add comments. They can also like or dislike comments left by others.

### Thumbs up, thumbs down

For the experiment, some comments were chosen at random to receive either a positive or negative rating. Over the course of five months, the study arbitrarily rated more than 101,000 comments, which were viewed more than 10 million times and given more than 300,000 subsequent ratings by users.

Finally, the researchers tallied numbers of "up" and "down" votes to see how their initial ratings influenced the way other users voted.

When a comment was randomly assigned a single positive vote, there was a 25 percent spike in subsequent "likes" compared to comments that were assigned no rating at all.

False negatives also generated a spike in thumbs-downs. But dislikes boosted the number of likes, as well, which overwhelmed any potential negative snowball effect.

When the scientists looked more closely at the rating history of people who voted on comments, they found that positive ratings actually changed people's opinions about the news item. It wasn't just that certain groups responded more frequently to likes or dislikes.

### Manipulating opinion

The ability of the herd mentality to increase people's chances of liking or believing something may help explain a wide variety of phenomena, Aral says, from housing bubbles to gold prices, and from political polls to restaurant reviews. The belief that other people like something has a powerful ability to make people like it themselves.

The new study illustrates how simple it would be for companies to manipulate reviews of their products by simply adding a few positive ratings of their own early in the process, Aral adds.

Effects were strongest when stories were about politics, business and culture than for fun or lifestyle pieces.

"In situations where there are more subjective or polarised views, you have to be a little more cautious about interpreting likes and dislikes on comments and whether you should take the rating as a serious number," says Matthew Jackson, an economist at Stanford University, who was not involved in the study.

"Think twice before you trust how many likes something has," he adds. "That's something you have to interpret with a grain of salt."

It's a situation many online users face on a daily basis.

Aral recently went on Yelp.com to review a restaurant with a plan to give it three out of five stars. But when he got to the site, he was shown how other people described the same place, and those reviews included some with five stars. Seeing those positive reviews made him think twice about his own previously mediocre opinion.

"A woman wrote how great it was, how great the prices were and how the lemon sauce was so great," he says. "Maybe it's not such a good idea to see other ratings right before you make your own."