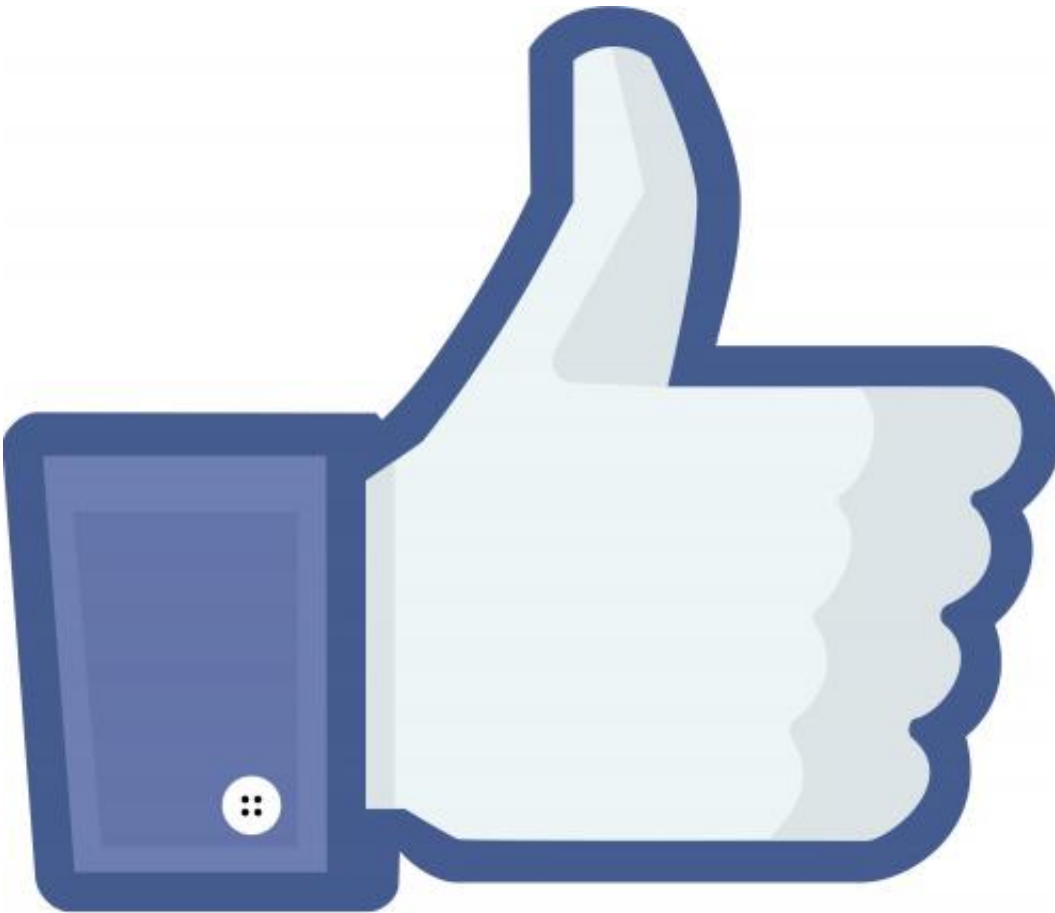# Facebook posts reveal personality traits, but changes complicate interpretation

September 11 2014

A study from the University of Kansas finds that people can accurately detect the personality traits of strangers through Facebook activity;

however, changes to the social media site in the past three years could be making it harder to do so.

Researchers sampled 100 Facebook users, paralleling the demographics of the social networking site, and asked them to fill out a personality survey. A group of coders looked at each person's Facebook activity, 53 cues in all, to see whether certain personality types were more likely to do specific activities. The researchers then had 35 strangers spend 10 to 15 minutes on each of the Facebook users' profile pages to see if they could correctly gauge a person's personality.

The crux of the study looked at which cues correlated to personality types and whether the 35 strangers were able to correctly detect personality traits based on those cues. The research found that extroversion was the easiest personality trait for strangers to interpret followed by agreeableness and openness. There was just one cue that pointed to conscientiousness and none that helped detect neuroticism.

The study, "Impression Management and Formation on Facebook: A Lens Model Approach," will be published this month in the journal *New Media & Society*. The research was conducted by Jeffrey Hall, an associate professor of communication studies, doctoral candidate Natalie Pennington and Allyn Lueders, who received her doctorate at KU and is now an assistant professor of communication studies at East Texas Baptist University.

While strangers were able to correctly match certain Facebook activities with personality traits, the researchers believe new algorithms enacted by Facebook could make it harder to detect personality traits.

"Studies have given us really good evidence that we do know what people are like when we get a complete view of their actions on Facebook," Hall said. "However, since much of that research studied

earlier versions of Facebook, it's conceivable that people's ability to accurately judge others will go down as a consequence of these changes."

Since the data was collected in 2011, Facebook has changed how and when users see other people's activity. At the time data was collected, users saw every action – from likes to changes in personal history – their friends took. Now, those actions can be viewed in a small box in the upper right-hand corner of the page, making the actions less apparent.

Today, the posts on Facebook's most prominent feature, the newsfeed, are based on an algorithm that takes into account how recent the post is, how many people like it or have commented on it and if the user has frequently interacted with the person making the post.

That's an important shift for judging personalities because, according to the KU study, an agreeable person tends to post less often, an open person is less likely to respond to other people's posts but make more political status updates, and a conscientious person agrees more often with what other people post. So, if Facebook changes how often users see their friends' posts, users could be forming the wrong impressions of their friends.

"If Facebook suddenly starts highlighting people you may not have regularly interacted with and promotes a lot of posts from them, you may no longer think that person is agreeable," Pennington said. "It may not be that they post that much, but that your feed has gotten smaller and shows a smaller subset of friends."

Another change is the kind of information that was shown on the info page, now referred to as the About page. At one point, Facebook users were able to list their favorite bands, books and movies. Those who did so tended to have open personalities. Now Facebook asks users to choose

from a list of options, which to Hall is a passive step versus an active one.

"An open person is able to construct their personality through the process of making choices. Facebook is essentially taking away agency and replacing it with algorithms," Hall said.

Some cues are still easy to spot, despite the changes made to Facebook. That is especially true for cues connected to extroverts, such as the total number of friends a Facebook user has, the number of friends in photos, status updates that are positive and the tendency to use extended letters in words, for example "nooooo" or "heeeeey."

One Facebook activity that didn't carry much weight in accurately detecting personality was the number of likes a post generates from other users.

"It is unfortunate because that it is one of the main factors in how often other people are seeing posts, and it is probably worthless for knowing what their real personality is," Hall said.

Provided by University of Kansas