Twitter Tracks Mood Swings

Twitter may tell us a whole lot more than whether or not actors Demi Moore and Ashton Kutcher are really on the rocks or what reality TV star Kim Kardashian had over for lunch.

All of this tweeting may actually give researchers a glimpse into moods and mood patterns across the globe. The Twitterverse served as a virtual laboratory for graduate student Scott A. Golder and Michael Macy, PhD, professor of sociology at Cornell University in Ithaca, N.Y.

The duo analyzed 509 million tweets by 2.4 million people from 84 countries during a two-year period.

Some clear mood patterns and trends emerged. For starters, tweets tend to be more positive on the weekends than during the weekday. And whether you wake in the U.S, the United Arab Emirates, or anywhere else, moods tend to be better early in the morning, as evidenced by their optimistic tweets.

But our moods tend to grow more negative as the day goes on. Another good mood peak occurs around midnight. Taken together, this suggests that work-related stress may be putting a damper on our moods and attitudes.

The new findings appear in Science. Our early morning good mood surges occur two hours later on weekends or non-work days than during the work week because these are the days that people tend to sleep in.

How Tweet It Is

The researchers analyzed positive and negative words used in tweets via a standard language analysis program. They grouped the results by person and time of day. Positive words in tweets that indicate good times included "awesome," "definitely," "paradise," and "fantastic," says Golder.

On the flip side, negative words included "afraid," "fear," "rage," "abandonment," "panic," "remorse," and "vulnerable."

Many people use hashtags or emoticons to emphasize key words or hidden meanings in their tweets.

"We didn't look at hashtags because they are made up of words squashed together and it is hard to study that in a consistent way," Golder tells WebMD. They did look at emoticons, but even the uber-popular smiley and frowning face emoticons had no effect on the patterns.

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SOURCES: Golder, S. Science, 2011.
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