Use of pronouns may show signs of an impending breakup
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Evidence of an impending breakup may exist in the small words used in everyday conversations months before either partner realizes where their relationship is heading, according to new psychology research.

Researchers at The University of Texas at Austin analyzed more than 1 million posts by 6,800 Reddit users one year before and one year after they shared news about their breakups in the r/BreakUps subreddit. The researchers found that three months before the breakup, their language began to change and did not return to normal until about six months after.

The study, published in the Proceedings of the National Academy of Sciences, is the first to examine breakups and how long they last using natural language data.

"It seems that even before people are aware that a breakup is going to happen, it starts to affect their lives," said lead author Sarah Seraj, a doctoral candidate in psychology at UT Austin. "We don't really notice how many times we are using prepositions, articles or pronouns, but these function words get altered in a way when you're going through a personal upheaval that can tell us a lot about our emotional and psychological state."

Whether someone was getting dumped or was doing the dumping, language markers of the imminent breakup were notable up to three months before the event. Their language became more personal and informal, indicating a drop in analytic thinking. They used the words "I" and "we" more and showed signs of increased cognitive processing.

"These are signs that someone is carrying a heavy cognitive load. They're thinking or working through something and are becoming more self-focused," Seraj said. "Sometimes the use of the word 'I' is correlated with depression and sadness. When people are depressed, they tend to focus on themselves and are not able to relate to others as much."

These pronounced patterns peaked on the day of the breakup and remained up to six months later, even when people were discussing other topics in different subreddit communities.

However, the researchers found that some users' language did not return to normal a year after the breakup. These users had a tendency to linger in the r/BreakUps subreddit for months, rehashing their breakup story, over and over, making it harder for them to heal, the researchers suggested.

The researchers also compared their findings with users going through divorce and other emotional upheavals, finding similar language patterns though they were more muted for non-relationship upheavals.

"What makes this project so fascinating is that for the first time, through technology, we can see the way people experience a breakup in real time," said...
the study's co-author, Kate Blackburn, a research fellow in psychology at UT Austin. "Implications for this research are far reaching. At the most basic level, it gives you, me, and everyday people insight into how loved ones may respond over time to the end of a romantic relationship."

**More information:** Sarah Seraj el al., "Language left behind on social media exposes the emotional and cognitive costs of a romantic breakup," *PNAS* (2021).

Provided by University of Texas at Austin