

Text messages reveal the emotional timeline of September 11, 2001

September 1 2010

The terrorist attacks of September 11, 2001 have been called the defining moment of our time. Thousands of people died and the attacks had huge individual and collective consequences, including two wars. But less is known about the immediate emotional reactions to the attacks. For a new study published in *Psychological Science*, a journal of the Association for Psychological Science, researchers analyzed text messages sent on September 11, 2001 for emotional words. They found spiking anxiety and steadily increasing anger through that fateful day.

The researchers took advantage of transcripts of more than 500,000 text messages sent to pagers on the day of the attacks. The transcripts were published anonymously last year on WikiLeaks. Psychological scientists Mitja D. Back, Albrecht C.P. Küfner, and Boris Egloff of the University of Mainz in Germany used software for automatic text analysis to look for words that relate to sadness (words such as crying and grief), anxiety (worried, fearful), and anger (hate, annoyed). They also noted when various events happened that day, such as the plane crashes, President George W. Bush's two speeches, and the time when American Airlines reported the loss of two airplanes.

Anger accumulated through the day. By the end of the day, there were 10 times as many angry text messages as in the morning, before the plane crashes. Anxiety, on the other hand, rose and fell through the day; 30 minutes after a stressful event, significantly more anxiety-related words appeared in text messages than 30 minutes before. But anxiety always returned to baseline levels. The data show that people did not

mainly react with [sadness](#); that may have come later, the researchers say.

The fact that anger dominated in people's immediate reactions may help explain some of the consequences of the attacks. Anger is known to make people want vengeance; this could explain the reports of acts of discrimination against Muslims in the days after the attacks, as well as the broader societal response, the researchers speculate.

Provided by Association for Psychological Science

Citation: Text messages reveal the emotional timeline of September 11, 2001 (2010, September 1) retrieved 3 May 2024 from

<https://medicalxpress.com/news/2010-09-text-messages-reveal-emotional-timeline.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.