

Humans will actually react pretty well to news of alien life

February 16 2018



Credit: CC0 Public Domain

As humans reach out technologically to see if there are other life forms in the universe, one important question needs to be answered: When we make contact, how are we going to handle it? Will we feel threatened and react in horror? Will we embrace it? Will we even understand it? Or, will we shrug it off as another thing we have to deal with in our increasingly fast-paced world?

"If we came face to face with [life](#) outside of Earth, we would actually be pretty upbeat about it," said Arizona State University Assistant Professor of Psychology Michael Varnum. "So far, there's been a lot of speculation about how we might respond to this kind of news, but until now, almost no systematic empirical research."

Varnum presented his findings during a press briefing Feb. 16 at the annual meeting of the American Association for the Advancement of Science in Austin, Texas.

In a [pilot study](#), Varnum and his colleagues analyzed language in newspaper articles about past potential [extraterrestrial life](#) discoveries. Through the work, Varnum aimed to address the nature of reactions to extraterrestrial life by analyzing reactions using a software program that quantifies emotions, feelings, drives and other psychological states in written texts.

The articles in the pilot study focused on the 1996 [discovery](#) of possibly fossilized extraterrestrial Martian microbes; the 2015 discovery of periodic dimming around Tabby's Star, thought to indicate the presence of an artificially constructed "Dyson sphere;" and the 2017 discovery of Earth-like exoplanets in the habitable zone of a star. The pilot study

found that language in the coverage of these events showed significantly more positive than negative emotions.

In a separate study, the team asked more than 500 different participants to write about their own hypothetical reactions and humanity's hypothetical reaction to an announcement that extraterrestrial microbial life had been discovered. Participants' responses also showed significantly more positive than negative emotions, both when contemplating their own reactions and those of humanity as a whole.

"I would have some excitement about the news," one participant said. "It would be exciting even if it was a primitive form."

In another study, Varnum's group presented an additional sample of more than 500 people with past news coverage of scientific discoveries and asked them to write about their reactions. The participants were divided into two groups. In one group, participants read a past article from The New York Times describing possible evidence of [ancient microbial life](#) on a Mars meteorite. The second group of participants read an article from the Times describing the claimed creation of synthetic human made life created in the lab. Here too, the team found evidence of significantly more positive than negative emotions in responses to the claimed discovery of extraterrestrial life, and this effect was stronger in response to reading about extraterrestrial life than human made synthetic life.

"This discovery shows that other planets have the ability to have life on them," a participant said. "It's a very interesting and exciting finding that could be only the beginning."

In unpublished results presented at the conference, Varnum analyzed recent media coverage of the possibility that the interstellar Oumuamua asteroid might actually be a spaceship. Here too, he found evidence of

more positive than [negative emotions](#), suggesting that we may also react positively to the news of the discovery of evidence of intelligent life from elsewhere in the universe.

Varnum said the studies show that "taken together, this suggests if we find out we're not alone, we'll take the news rather well."

The results of the first three studies were published Jan. 10 in *Frontiers in Psychology* and analysis of reactions to Oumuamua were presented at AAAS for the first time. ASU doctoral students Hannah Bercovici and Jung Yul Kwon, and ASU alumna Katja Cunningham, assisted Varnum in the research.

Varnum will formally present this research in his presentation, "What Happens When Everyone Finds Out?" The presentation will be given at the "Is There a Future for Humanity in Space?" session on Feb. 17.

More information: Jung Yul Kwon et al, How Will We React to the Discovery of Extraterrestrial Life?, *Frontiers in Psychology* (2018). [DOI: 10.3389/fpsyg.2017.02308](#)

Provided by Arizona State University

Citation: Humans will actually react pretty well to news of alien life (2018, February 16) retrieved 20 March 2024 from <https://phys.org/news/2018-02-humans-react-pretty-news-alien.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.
