## **Repeating Misinformation Doesn't Make It True, But Does** Make It More Likely To Be Believed

September 02, 2020

One of the most frustrating aspects of the coronavirus pandemic is seeing all of the false information circulating around social media. I was inspired to write this article after reading unfortunate (and inaccurate) comments <u>on a local Georgia school district's Facebook page</u> after they announced that three of its high schools were transitioning back to digital learning. It was breathtaking to see so many inaccurate claims about <u>efficacy of face masks</u>, fatality rates, or comparisons to the flu. My *Forbes* contributions are typically about weather and climate, but I am often inspired to make connections with other aspects of science too. There are striking similarities between repetitive false information about coronavirus and misinformation that I witness with weather and climate. I decided to explore something called the "illusory truth effect."

According to a 2015 study in the Journal of Experimental Psychology: General, the illusory truth effect is the notion that repeated statements are perceived to be more truthful than new statements. This effect is clearly something that marketing professionals, cult leaders, and politicians understand. In other words, you say something enough times, and people start to believe it. Temple University psychologist Dr. Lynn Hasher and colleagues published the first major study of the illusory truth effect. Some other interesting characteristics of the illusory truth effect detailed in *Psychology Today* by Dr. Joe Pierre include:

- If repeated enough times, the information may be perceived to be true even if sources are not credible.
- The illusory truth effect is very evident on subject matter people perceive themselves to know about.
- The effect can happen even if someone had previous knowledge that the information was false.

I am no psychologist, but this effect sure has elements of brainwashing and indoctrination. The aforementioned 2015 study also points out that, for many people, repeated statements are easier to process than new information even if people know better.

Ok, let's circle back and apply this effect in contemporary times. I am an atmospheric sciences professor at the University of Georgia, research meteorologist, and former president of the American Meteorological Society. Through these lenses, I have witnessed my share of illusory truth effect. In the realm of climate science, I have even called <u>myths about climate change "Zombie Theories"</u> because they get repeated over and over in social media, blogs, and editorials even though science experts have refuted them.

It happens in weather too. Many people are told that summertime flashes of lightning without thunder are caused by the hot air (so-called "heat lightning"). In reality, what people know as heat lightning is simply intra-cloud or cloud-to-cloud lightning that is too far away to hear the thunder. The <u>National</u>

Weather Service website points out, "While many people incorrectly think that heat lightning is a specific type of lightning, it is simply the light produced by a distant thunderstorm."

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