

The Science Of Spin

This journal is an informal opinion piece. I will be expanding upon on the discussion questions that took place in tutorial, on Thursday, September 26th. The questions were:

- How do we distinguish between facts and opinions?
- How should science be disseminated to the public?
- Should opposing views on a topic always be presented?

First of all, I think we should have a very strict definition on what defines a fact; it needs to satisfy a multitude of properties. For instance, it needs to be reproducible by researchers with a very tiny margin of error and a 99+ percent confidence interval; many times. Then, these studies need to be peer reviewed and verified by other researchers. A major problem with today's scientific studies is the "Replication Crisis". As of 2019, many scientific studies are difficult and sometimes impossible to replicate. For example, the nootropic "Lion's Mane" has been studied by researchers for a long time. However, the verdict is still out on whether it is good for humans or not. Some studies claim that is good for the brain, and other studies claim that there is no benefit at all. It is very common for researchers to produce different results than their peers. Another good example is coffee. There are many studies that say coffee is harmful, and many more that say coffee is good for you. In order to avoid these inconsistencies, all research should follow a strict and standard protocol for their respective field. For example, studies that revolve around human health should be double blind, placebo controlled, randomized, and employ mixed methods; short term and longitudinal studies.

Science should be disseminated through a central authority that is highly trusted and not controlled by any third-party entity. This central authority should be funded by the public and controlled by the public. Furthermore, the studies that are disseminated to the public should only be funded by the public. Big corporations should not be allowed to fund public studies or flood academic sites with their research papers. This is because the vast majority of studies funded by "Big Industry" are inherently biased and flawed. An excellent example of this is Big Tobacco. For years, Big Tobacco misled the public into thinking that cigarettes are safe, beneficial, and pose no threat to human health. They accomplished this by funding their own private studies where they paid off researchers to produce favorable results. Then, they assembled a MOD squad (Merchants of Doubt) to spread their falsified studies and create doubt among the general public. Today, all "Big Industries" are employing these tactics. A current example is "Big Dairy".

Finally, opposing views should always be presented. This is because scientific research is a continuous process. The more we learn, the less we really know. For example, it took decades until humanity switched from the geocentric model of the solar system to the heliocentric model. Opposing views should be placed under the exact same scrutiny as every other research paper or idea. If the opposing view cannot hold under the strict guidelines, then it should not be presented.