

How Not to be Persuaded with Numbers

How do you tell if you are being persuaded?

Thinking of the number like a picture makes it easier to see if you are being persuaded.

If you use your phone's camera, you already have the intuitive tools to question if someone is using bad data to persuade. Use the 5 tests below to figure it out.

The Bottom Line

Protect yourself from being persuaded by numbers. Treat the data like it's a photo and ask yourself these 5 questions to tell if you are being persuaded.

Selfie Test



Ask, "Is it a selfie?" Just like when someone takes a dozen photos and only posts the best-looking one, people do the same with self-reported data. Ask yourself, "Did the group reporting the data also collect it, or is it from an objective 3rd party?"

Zoom Test



Ask, "How different is the number if I zoom in or out?" Would the number look different if you could zoom in closer or zoom out further and see more context?

Crop Test



Ask, "What has been cut or left out?" Just like with a photo when someone has been cut out, ask what data is missing or not being reported.

Video Test



"Would the interpretation differ if you looked at the trend rather than a single point?" Often, looking at the trend gives more context, just like a video gives more context than a photo.

Like Test



Ask, "What is my emotional reaction to the data?" When we don't like the data, we are immediately skeptical. But we are less skeptical when we want to smash that 'like' button. When we have a strong positive reaction, we want the data to be true, and that's when we are most susceptible to being persuaded by bad data.

Example

Say you hear that 7.7% of teachers are quitting and not returning to work next year. How do you judge if this is true and something you should be concerned about?

Selfie Test - You look and see it is data collected from a 3rd party.

Zoom Test - You zoom out and see it's the "highest ever recorded." You also see only a decade of data, and 7.7% is about the same as when the data was first tracked. Zoom in, and you see a lot of variability in the rate. Some areas only have about 2% of teachers leaving, and others have over 16%. There's also high variance based on the school type and teacher demographics.

Crop Test - How does 7.7% compare to other industries? A look at other industries shows teachers leave at a much lower rate than many professions.

Video Test - The teacher data two years ago was 5.4%, the lowest rate recorded, and now it's 7.7%. Could this be natural variability?

Like Test - Do you want this data to be true or are you skeptical? Be the most cautious when you want the data to be true.