



| | | |
|--|---|--|
| Is this WORTHY of my attention? | Who is presenting this? <i>Consider: qualifications, who they represent, any bias?</i> | Is the author qualified to discuss this information? If they are a scientist, do they have an educational and/or professional background directly connected to the topic? Who is funding the research or publication? Does that introduce any conflicts of interest? |
| | What claim are they making or implying? | Is there a direct claim being made that is using data as evidence? If not, is there a claim being implied by the presentation of the data? |
| | Why are they making this claim? <i>Purpose, motive, profit.</i> | What is the purpose of the information? Is the intention clearly stated or implied? Is the point of view objective and impartial? Is there evidence that this is opinion, propaganda, marketing, or otherwise politically motivated? |
| INSPECT the data. | What is being measured? <i>What data and units are on the axes? Are they clearly labeled and not misleading?</i> | What are the variables represented in the data presentation (charts, graphs, etc.)? Are the variables and axes labeled appropriately? Are the data presented in a straightforward way, or are they misleading? |
| | Is the scale and choice of units appropriate? <i>Consider: cherry-picking, choice of categories, oversimplification, truncation. etc.</i> | Is the scale of the graph appropriate? Is the graph only showing data that the author wants you to see and excluding other relevant data (cherry-picking)? Is the graph showing too much data so that it is difficult to see relevant trends? Did the author truncate the data to make differences seem exaggerated (bar graphs should start at zero)? Did the author group data in a way so that categories or “bins” agree with their claim instead of grouping data in a different way? |
| | Is causation implied when correlation is more likely? | If there is a relationship between the variables presented or implied, can you be sure that one of those variables influenced the other directly? |
| Does this make SENSE? | Is the comparison of these variables logical? <i>Are there other variables that could be considered?</i> | Is the author correlating variables that are unrelated? Can another variable account for some or all of the change seen? How could you design an investigation to test whether these variables could be interacting, controlling as many other variables as possible. |
| | Are there signs that the data are biased? | How or why was this sample chosen? Was it chosen for convenience? Did the author only use data that would support their argument to the exclusion of other relevant data? What was the sample size? |
| | Are there other ways to interpret the data? | Without looking at the author’s conclusion, how do you interpret the data? Does this match with the conclusion presented? Could other conclusions be arrived at through another interpretation? |
| | How does this compare with other reliable sources? <i>What do other experts say?</i> | Look at other sources. Can you find other studies on the same topic? Has this claim already been debunked by a fact-checker like Snopes or Politifact? If most studies disagree with this one, which claim is supported by the best evidence and logical interpretation? |
| What EMOTION do you feel? | How does this conclusion make me feel? <i>Is it overhyped or clickbait?</i> | Does this claim or headline make you feel a strong positive or negative emotion? Is the headline or title consistent with the data and conclusions stated later? If an extraordinary or sensational claim is being made, is there sufficient data to support that claim? |
| | Is this what I already believed before I read it? | Maintain awareness of your emotions and try not to fall into the trap of confirmation bias. If the claim makes you feel a strong emotion, take a step back and then take a deeper look trying to be unbiased. |
| | What might make me change my mind? | If you agree or disagree strongly with the author’s conclusion, consider what it would take to change your mind. What kind of evidence? How much evidence? How many other corroborations? |