

Logical Fallacies

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Logical Fallacies



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**007 Let's talk about logical fallacies.

Logical Fallacies

- A logical fallacy is an **error or mistake in terms reasoning or argument**
- **Appeal to Emotion** - You attempted to manipulate an emotional response in place of a valid or compelling argument.
- **Middle Ground** - A compromise, or middle point, between two extremes must be the truth.
- **Slippery Slope** - If we allow A to happen, then Z will eventually happen too, therefore A should not happen

<http://simplicable.com/new/fallacy-vs-cognitive-bias>
<https://yourlogicalfallacyis.com/appeal-to-emotion>
<http://www.fallacyfiles.org/introtofall.htm>



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**008 Now, generally speaking, a logical fallacy is a mistake or error in reasoning or argument. There is a slight difference between a fallacy and a cognitive bias. A logical fallacy is an untruth or faulty reasoning or an unsound judgment or argument. A cognitive bias, on the other hand, relates to those mental shortcuts.

So there are different types of fallacies. One of them is called the Appeal to Emotion, so where you use an emotional response to get your point across instead of a valid or compelling argument. So for example, you might say, "I stayed up all night and worked on the weekend on this, boss, so my analysis has to be correct."

There's also something called the Middle Ground Fallacy, and that is

the notion that a compromise or a middle point between two extremes must be the truth. Now, much of the time the truth does indeed lie in between two extreme points, but this can bias our thinking. Sometimes something is just simply untrue, and a compromise is also untrue, or settling for the least common denominator approach. So things can actually, in reality, be binary.

There's also something called the Slippery Slope Fallacy. So in other words, if we allow A to happen, then Z will happen too. Therefore we must not allow A to happen. The problem with this reasoning is that it shifts attentions to extreme hypotheticals. For example, a cyber intelligence analyst reports to leadership that social engineering is still a top threat for this particular industry. Leadership, as a result then, decides to reverse its policy on allowing all mobile devices because they are fearful of social engineering attacks, taking this possible extreme action as opposed to maybe considering employee training or other types of technical measures to prevent social engineering.

Good Thinking

- Relies on...
 - Is not always about memorization
 - Critical thinking and creativity
 - Having a purpose, not an agenda
 - Credibility, based on source validation
 - Interpreting, analyzing, evaluating, & inferring intelligence
 - But not in a vacuum
 - Treating opinions and judgments as living entities
 - Always evaluating them



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**009 Some good tips for thinking.

I put this slide up here because I think these are things that all analysts should think about. The first is that it's not always about memorization. Rather, it's more about critical thinking and being aware of cognitive biases and logical fallacies. It's about being creative and having a purpose and not necessarily an agenda. Good thinking also relies on the credibility of your sources and validating your information. It's not just about memorization, it's about interpreting, analyzing, evaluating, and inferring information, and not doing it by yourself, but doing it with others and getting different perspectives.

And always try to treat opinions and judgments as living entities. Always evaluate your opinions and thoughts

because things can change as new
information comes in.

Notices

Notices

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