

Logical Fallacies



A **logical fallacy** is an error of reasoning. These can weaken the credibility of your paper and alienate your reader. The following examples illustrate some of the logical fallacies you should avoid. If you are concerned you may be unintentionally using a logical fallacy, talk to a professor or consult other resources for more information about logical fallacies.

Irrelevant Appeals

Irrelevant appeals use information or arguments that are unrelated to the given material and include the following:

Popular Appeal to Authority

This appeal relies on widespread acceptance, not logic.

Example: You shouldn't get uptight about copyright infringement. Everyone owns illegally copied music.

Irrelevant Appeal

This appeal relies on outside authorities or sources that have no expertise about the subject.

Example: If a famous football player endorses a brand of sports medicine, then it must be an effective product.

Appeal to Ignorance

This appeal relies on the absence of contradictory knowledge or evidence.

Example: Of course unicorns exist. No one has ever proven that they don't.

Ad Hominem

This appeal relies on irrelevant characteristics of persons associated with an opposing argument. In politics, this is often called "mud slinging."

Example: We can't take this candidate seriously because he used to be an actor.

Straw Man

This appeal misrepresents an opponent's position by turning it into an indefensible claim through misquoting or oversimplifying the issue.

Example: The school principal wants to stop serving cake in the cafeteria. He clearly wants us to go hungry.

Emotional Appeal or Ad Misericordiam

This appeal relies on an irrelevant emotional appeal at the expense of logic.

Example: Look at the cute little puppy! How could such a sweet little thing be capable of eating your shoe?

Red Herring

This appeal sidetracks an issue by bringing up unrelated information to distract the audience from the issue at hand.

Example: The car wouldn't have broken down if you would have taken out the trash when I asked.

Improper Generalization

Improper generalizations summarize a point using inadequate evidence or faulty arguments and include the following:

Hasty Generalization

This appeal makes a broad generalization based on scanty or inconclusive evidence.

Example: I'm never eating dinner again. I've tried cooking several dishes and all of them are disgusting.

Composition

This appeal assumes that if all parts of a whole have a given property, then the whole must have that same property.

Example: If all the basketball players are good, then the whole team must be good.

Division

This appeal is the converse of composition, the argument generalizes that if something has a certain property, then its parts have that property also.

Example: Dancers have strong muscles. Jenny dances. Therefore, Jenny must have strong muscles.

Slippery Slope

This appeal takes several related ideas and inappropriately makes a generalized statement about them all.

Example: Don't let the employees dress casually on Fridays, or they will start dressing casually every day.

Questionable Analogy

This appeal takes an analogy and generalizes the relationship between the two items in a way that is not appropriate.

Example: Universities shouldn't raise the cost of tuition because students could go broke and lose their housing.

False Assertion of a Cause

False assertion of a cause assumes that two different causes or events are somehow related and includes the following:

Oversimplified Cause or Post Hoc

This appeal attributes a causal relationship as being the only possible cause of a certain outcome, when other causes may have contributed to that outcome.

Example: When I wear these shorts and take a test, I get a good grade. I should wear these shorts to every test, so I will get good test scores.

Questionable Cause

This appeal correlates two irrelevant items, concepts, or factors, resulting in questionable or confused causes.

Example: Studies show that married American adults, on average, are happier than non-married ones. Clearly, marriage leads to a greater happiness.

Questionable Assumptions

Questionable assumptions reach a conclusion that does not follow according to the context and include the following:

Begging the Question

This appeal is a circular argument and assumes the point being proven is true based on the initial premises alone.

Example: He must be telling the truth. He said so himself.

False Dilemma or Dichotomy

This appeal assumes that only one of two choices is possible, when in reality other alternatives exist.

Example: If I don't get into the best medical school, my future career will be ruined.

Equivocation

This appeal assumes that two or more inconsistent terms are the same.

Example: Our new supervisor majored in English, so he probably overthinks everything.