

CRITICAL THINKING: FALLACIES

Use this sheet to help you:

- identify weakness in other people's arguments
- avoid constructing arguments that involve poor reasoning

5 minute self test

Read the list of statements below. Under each one, make a note of what problems might exist concerning the reasoning behind them.

1. This sort of behaviour can't be tolerated; it is un-Australian.

2. Communism must have been wrong; there hasn't been a shred of evidence to the contrary.

3. It is wrong to criticise the PM on this point. After all, he has more information and responsibility than we have and should be better than us in deciding these matters.

4. Paul Keating was Prime Minister when Australia had the greatest recession in 60 years. Clearly, he is a cause of this misery.

Read on for answers

Introduction: what is bad reasoning?

Academic study is all about recognising and presenting convincing arguments. To be a good student, it is essential for you to be able to identify and avoid bad reasoning.

Bad reasoning is reasoning which has invalid form (the conclusion does not follow from the premises); or reasoning in which the premises or conclusion of an argument are false. Bad reasoning can occur when statements are made which are fallacious, that is, when arguments are put forward in which the premises do not provide sufficient support for the conclusions.

Knowing more about standard fallacies in reasoning can help you to read articles critically and to argue for and against the points of view of others.

Standard Fallacies

1. Overgeneralisation

Asserting something of a whole class of things when it is not true
e.g. Japanese people are shy.

2. False cause

Attributing to something a cause which is incorrectly based
e.g. Paul Keating was Prime Minister when Australia had the greatest recession in 60 years. Clearly, he is a cause of this misery.

3. False analogy

Making a false or misleading analogy
e.g. The democratic system is a poor way of governing, because electing members of Parliament is like having children elect their teachers.

4. Begging the question

Assuming to be true what is in dispute
e.g. This sort of behaviour can't be tolerated; it is un-Australian.

5. Circular reasoning

The use of a premise to prove a conclusion and the conclusion to prove the premise (an extended case of begging the question)
e.g. One should not drink alcohol because it is against the will of Allah and one must do the will of Allah because it says so in the Koran

6. Non-sequitur

A confusion of cause and effect, something is claimed to follow or to cause something else when it is not obvious at all
e.g. The Rolls Royce is the world's finest car; therefore, you get your money's worth when you buy a Rolls Royce.

7. False dilemma

The incorrect suggestion that only one of two alternatives apply
e.g. There are only two political choices left in the world: Communism and Capitalism.

8. Complex question

The invitation of only a simple answer, when there are really many issues involved and no simple response

e.g. You have stopped beating your wife haven't you?

9. Argument from ignorance

The suggestion that lack of evidence/argument is sufficient proof for asserting something

e.g. Communism must have been wrong—there hasn't been a shed of evidence to the contrary.

10. Relevance

There are several varieties of this:

(a) *Ad hominem argument*: using irrelevant (and/or false) points to attack the opposing side
e.g. Feminism is a lot of rubbish; only women who are too unattractive to get men become feminists.

(b) *Appeal to the gallery*: using irrelevant appeals to a lot of people to argue a point.
e.g. Buy 'Winfield', Australia's largest selling cigarette.

(c) *Appeal to authority*: using irrelevant appeals to famous people to argue a point.
e.g. It is wrong to criticise the PM on this point. After all, he has more information and responsibility than we have, and should be better than us in deciding these matters.

(d) *Appeal to pity*: using irrelevant appeals to mercy on emotional grounds to argue a point.
e.g. I deserve to be forgiven of the crime. I have a wife and three children to support plus an invalid parent.

11. Ambiguity

Shifting the meaning of terms of the argument while in the process of arguing a point

e.g. An elephant is an animal; thus a small elephant is a small animal

12. Composition

Arguing improperly that what is true of parts of something must be true of the whole

e.g. The new laws will benefit single parents substantially, so therefore they will also benefit the community as a whole.

13. Division

Arguing improperly that what is true of the whole of something must be true of its parts.

e.g. The army is very inefficient so we cannot expect Major Smith to do a good job.

Want to learn more?

There are several more categories of fallacies. Two good sources of further information about fallacies are:

The Internet Encyclopaedia of Philosophy, (2014) *Fallacies*, Accessed 29/08/14 from <http://www.iep.utm.edu/fallacy/>

The Nizkor Project. (2014). *Fallacies*, Accessed 29/8/14 from <http://www.nizkor.org/features/fallacies/>