Confirmation Bias (CB)

We already used the test of guessing at my number rule, based on the sequence 2, 4, 8. Everyone was asked to guess at my rule and then propose a sequence that would test whether their guessed rule matched mine or not.

Here's another:
4 cards are laid on a table. All cards have a number on one side and a letter on the other. We want to test the model: if a card has A on one side, it has 1 on the other.

The cards laid out show A, B, 1 and 2.

The question is: which cards would you turn over to test your model? (the cards showing A and 2).

Supposedly the commonly chosen cards are A and 1, the latter being an example of confirmation bias (tending to support rather than refute)

Confirmation bias is our tendency to selectively reinforce what we already believe. It can take many forms:
  i) actively choosing views/information that support what we already believe and ignoring others

  ii) avoiding the attempt to rejecting/disproving models that we accept (as per our demo)

  iii) setting higher standards for accepting evidence that is contrary to what we believe than we wet for accepting evidence that fits with what we believe

Case-building versus unbiased analysis:
  case-building refers to attempting to marshal evidence in favor of a point of view while ignoring contrary evidence. It is used in court and debate. It is legally mandated in trials – a defense attorney cannot present anything not in favor of her/his client.

An experiment (see excerpts file). Two groups of students with different a priori attitudes on the deterrent benefit of death penalty were given the same fictitious studies, one supporting a deterrent effect, the other not. After considering the supposed studies, both groups had increased the strength of their beliefs – they diverged.

This illustrates how CB is antithetical to the SM. In science, consensus should emerge as more evidence accumulates. With CB, divergences grow larger with more evidence.

Exploiting confirmation bias as a manipulation weapon. (pure speculation – not exam material)

If I know your attitudes about many things (as does Facebook and maybe Amazon), it is possible for me to deliver an article to you that is mostly agreeing with your existing biases but now embeds a new idea. If the mere constellation of text that coincides with your existing biases makes acceptance of the new idea more likely, then I can influence you – on a new subject – merely by knowing your existing biases.

Then a group can write many different articles for people with vastly different biases, and have all those articles make the same pitch for the new idea. Merely by selectively targeting those

different articles, I can have a profound effect on people's ideas – even if there is no foundation to the new idea.

Overcoming CB.

CB is unconscious. Overcoming it must be a conscious effort by individuals. The big problem is that most people don't care to challenge their views.

1) deliberately challenge your beliefs,

a) try defending an alternative view, as by preparing for a debate in which you might
have to defend either side of a proposition

b) interact with people who have opposing views; read opposing views

c) test yourself for bias (not sure how).

2) try to be aware of possible biases

gender discrimination is rampant, by both men and women. If you are aware, it
becomes easier to check that you are not committing it.