

ITLT Notes

Lecture 1: Introduction to logical thinking

What is logical thinking?

- General aim: consciousness raising via aims of understanding and evaluating.
- The three "c"s: clarity, coherence, conciseness.
- Clarity primary aim: clear understanding
- Coherence: material
- Conciseness: separating what is central and essential from what is peripheral and less important
- Achieved by approaching material synthetically (looking at whole) and analytically (breaking down)

Content

- Arguments
- Language: Whenever you argue, you communicate in language of some kind. And can really influence thinking and action.
- value-ladenness: the property of the word, ie good or bad
- helps us to investigate the unconscious
- formal logic: deals with the patterns or forms, regardless of specific content
- informal logic: looks at aspects of reasoning which focus on arguments in real linguistic context.
- errors in reasoning: the ways in which reasoning can go wrong, weaknesses, biases, distortions, and so on.
- formal fallacies: where the error lies in the structure of the argument.
- informal fallacies: where the error is due to something in the content.
- Casting: involves drawing tree-structures to show the parts of the argument and how they're connected in extended arguments; step-by-step procedures for evaluating arguments; ways of identifying errors in arguments; techniques of focusing, selecting, organising material.

Difficulties facing psychology

- The richness and complexity of psychology results in many confusions and misconceptions.
- Deciding what it means to be scientific; the scientist-practitioner model in psychology; the essence of the scientific attitude as "critical inquiry" ("higher order" thinking).
- Need to develop clear and coherent position on the "big questions" è enduring debates.

The benefits of logical thinking

- Raising level of awareness of assumptions (motto of Socrates & Freud = "know thyself").
- Raising level of understanding - increased clarity.
- Developing ability to move between synthetic and analytic perspectives.
- Enabling more informed evaluations and choices; developing and supporting own view.
- Fostering the three "c"s in written and oral expression.
- Promoting autonomous thinking and freedom from authoritarian constraints.

Lecture 2: Logical Thinking and psychology

The place of rationality in human nature

- The two sides of human nature (rational vs irrational, reason vs the passions, thinking vs feeling, cognition vs emotion/feeling, intellect vs affect).
- the 18th century known as the "Enlightenment" or the "Age of Reason". Scientific Reason was upheld as the greatest achievement of human civilisation.
- those who wrote about psychology during the Enlightenment focused on the conscious, rational, adult mind.
- during the 19th century there was a powerful movement known as Romanticism, which was opposed to the Enlightenment, saying that Reason is not supreme - that humans have strong feelings, passions, intuitions, and these help us look beyond the material world - there are deeper levels of consciousness than ordinary rational consciousness
- Romantic movement was short-lived, in the sense that the scientific worldview eventually won out - but it meant that in the 20th century we see struggles to combine the two sides.
- we cannot ignore the motivational/emotional context

Non-rational forms of persuasion

- because there are two sides to our nature - we sometimes appeal to the other side; we exploit our knowledge of the other side, in order to persuade
- Force/coercion or physical threats
- Indirect threats - the weight of authority
- Brainwashing (actually believing).
- Using attractive, liked or respected characters (=“peripheral” route to persuasion). This emotional appeal uses the fact of identification - if we'd like to be that person. peripheral route to persuasion - that is, when the topic is not really important to us. However, if the topic is serious (say, our health) then the central route to persuasion
- Popular opinion - the bandwagon effect.
- Flattery: nonrational route to persuasion
- Appeal to strong emotions of pity, fear, hate, etc
- Sexual appeals: sexuality is one of the strongest motivating forces in human nature
- Exploiting language: positive connotations
- all appeal to the other side of human nature - the nonlogical side. They can all be considered in the category of emotional appeals

Unavoidable barriers - limitations of our cognitive apparatus

- Attentional capacity.
- Memory capacity.
- Age - Piaget's work on stages of cognitive development.

Avoidable barriers

- egocentrism, sociocentrism, relativistic thinking, unwarranted assumptions & stereotypes, & wishful thinking: Bassham et al. - discussed in tutorial Wk 2 – Socrates & Freud).
- Overconfidence (e.g. students, athletic teams).
- Premature commitment to a hypothesis (as in prejudice): are less likely to

perceive it accurately when it becomes a little clearer. Look for evidence that supports our beliefs and to overlook or disregard evidence (I was wrong, zombies do bleed)

- General socialisation lack of confidence and low self-esteem: socialisation is based on authoritarianism, (encapsulated by the pseudo-argument "because I said so"), not encouraged to think for ourselves and to argue logically - instead we experience submission to the power of authority. Our confidence in our ability is low. We become insecure about our ideas, and feel threatened if someone challenges us or if we think we've made a mistake. Thinking independently and critically then becomes a very difficult task later on, because we haven't had enough practice at it, and we lack self-confidence.
- Specific social influences of groups (e.g. conformity, "groupthink", etc): The social pressure to conform can make us believe something that is clearly contrary to the evidence of our senses (Asch's famous demonstrations)
- Overreliance on "representativeness" heuristic (e.g. ignoring base-rate info.):
- Overreliance on "availability" heuristic: ("Which is more frequent in English - words that start with the letter k, or words that have the letter k as their third letter?")

Conclusions

- The importance of both sides of human nature: we are a complex package è
- Need for awareness of how emotional side can distort, interfere with, or prevent logical thinking. But also need for sensitivity & "emotional intelligence"
- emotions can sometimes be "intelligent" and rational – they are appropriate reactions and can help us to function in the world. Sometimes, it seems as if our "body" will know something intuitively and immediately, and our "head" takes ages to catch up with our body. Sensitivity and "emotional intelligence" are also an important part of the complex package.
- Finally, since every Psychology's justified interest in cognition/emotion/motivation interaction: must remember importance of both sides