Exercise walk-through

1.2
The cognitive approach

International Baccalaureate · IB Diploma · Psychology · SL

The cognitive approach

- The **cognitive approach** studies mental processes such as memory, thinking and **attention**.
- Because we cannot see these processes, cognitive psychologists build **models** : simple pictures of how a process might work.
- A good model makes **predictions** that an experiment can test.
- The **multi-store model** (Atkinson and Shiffrin, 1968) says memory has three stores in a line: sensory memory, short-term memory and long-term memory.

The sociocultural approach

- The **sociocultural approach** explains behaviour by the groups and **culture** around us.
- It assumes we learn how to behave from other people.
- **Social identity theory** (Tajfel and Turner) says part of our self-esteem comes from the groups we belong to.
- In Tajfel's "minimal group" study (1971), Bristol schoolboys were split into groups by a trivial task (which of two painters they preferred).

How the approaches work together

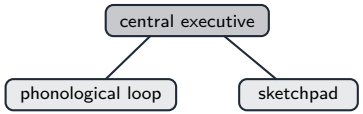
- Good answers often use more than one approach.
- Depression, for example, has a biological side (**genes** and serotonin), a cognitive side (negative thinking) and a sociocultural side (poverty, loneliness and how a **culture** talks about mental illness).
- Caspi's study shows two of these working together.
- Topic 2 uses this idea in each context, and the concept of **perspective** asks you to say which approach a claim comes from and which approaches it leaves out.

Exercises 2.1·2.2

2.1 Outline the **multi-store model** of memory. [3]



2.2 Using the **working memory model**, explain why it is hard to repeat a list of words while counting aloud, but easy to repeat it while picturing a map. [2]



Exercises 2.1·2.2

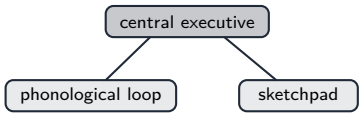
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2.1

three stores: sensory memory, short-term memory, long-term memory; attention moves information from sensory to short-term memory; rehearsal moves it from short-term to long-term memory / information not rehearsed is lost

2.2 Using the **working memory model**, explain why it is hard to repeat a list of words while counting aloud, but easy to repeat it while picturing a map. [2]

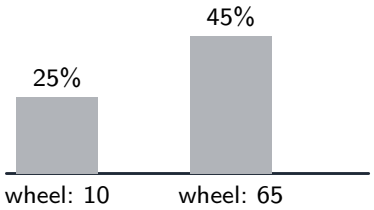


2.2

repeating words and counting aloud both use the phonological loop, so they compete for the same part; picturing a map uses the visuospatial sketchpad, a different part, so the tasks do not clash

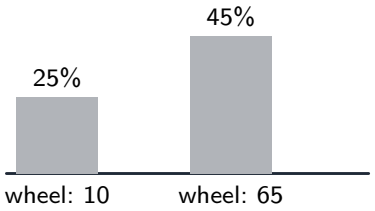
Exercise 2.3

2.3 *(Paper 1 Section A.)* Describe **one** study of anchoring bias. [4]



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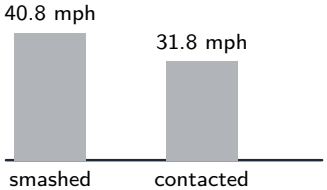


2.3

Tversky and Kahneman (1974); a wheel that stopped at 10 or 65 was spun, then people estimated the percentage of African countries in the UN; people who saw 10 gave a typical estimate of 25 %, those who saw 65 gave 45 %; a clearly random first number pulled the estimate towards it, which shows anchoring

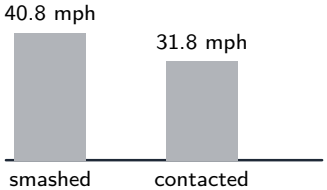
Exercise 2.4

2.4 *(Paper 1 Section B, learning and cognition.)* After a bicycle was stolen, a police officer asked a witness: "How fast was the thief running when he **smashed** into the girl?" Explain how this question could affect the witness's memory. [6]



Exercise 2.4

2.4 *(Paper 1 Section B, learning and cognition.)* After a bicycle was stolen, a police officer asked a witness: "How fast was the thief running when he **smashed** into the girl?" Explain how this question could affect the witness's memory. [6]



2.4

award up to [6]: a leading question suggests an answer; memory is reconstructive: the new information is added to the memory; Loftus and Palmer (1974): "smashed" gave higher speed estimates (40.8 against 31.8 mph for "contacted"); a week later more people in the "smashed" group falsely remembered broken glass (32 % against 14 %); so this witness may remember the thief as faster or the crash as more violent than it was; but the study used films, not a real, frightening event, so the effect may differ for a real witness / police should use neutral, open questions

Exercise 3.1

3.1 *(Paper 1 Section C.)* "Our memory of important events is accurate." Discuss this claim with reference to the concept of **measurement**. [15]



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3.1

Mark with the markbands: [13-15] focused on the claim, accurate knowledge, evidence used to build an argument, the concept used to evaluate throughout, a supported conclusion; [10-12] mostly focused, evidence used, some evaluation through the concept; [7-9] relevant knowledge but mostly description; [4-6] limited knowledge, little evaluation; [1-3] little that is relevant. Points that may be included: reconstructive memory: Bartlett (1932) found schemas changed the details of stories; measurement: Bartlett's method was informal, with no standard instructions, so changes are hard to score; Loftus and Palmer (1974): leading questions changed speed estimates and created false memories of broken glass; measurement: speed estimates and "yes/no" glass answers are clear and comparable, but the films lack real emotion; Brown and Kulik (1977): emotional events feel vivid and detailed; Neisser and Harsch (1992): accounts changed a lot after about two and a half years, yet confidence stayed high, measured by comparing two written accounts; confidence is not a measure of accuracy; conclusion: important events feel accurate, but the evidence shows they are often rebuilt; the claim is not supported, especially for details