

Exercise walk-through

Forgetting and Other Memory Challenges ■ 2.7

eXercise

You must be able to

- distinguish **encoding failure**, **storage decay** and **retrieval failure**
- contrast **proactive** 前摄 and **retroactive** 倒摄 interference
- describe the **misinformation effect** 错误信息效应
- explain why **eyewitness** 目击者 confidence is a weak guide to accuracy

Method — Three kinds of forgetting

Encoding failure: it never entered memory. **Storage decay:** it faded over time.

Retrieval failure: it is there but cannot be reached — the tip-of-the-tongue state proves this happens.

Method — Two interferences

Proactive interference: old learning disrupts new (an old password intrudes).

Retroactive interference: new learning disrupts old (this year's timetable replaces last year's).

Method — The misinformation effect

Information encountered **after** an event can be incorporated into the memory of it. A leading question — “how fast were the cars going when they smashed?” — changes what witnesses later report seeing.

Method — Confidence and accuracy

Repeated retelling and confirming feedback raise confidence without raising accuracy. A confident witness may be wrong, and confidence therefore cannot be used to verify a memory.

Practice 2.1 ■ 3 marks

State the three main causes of forgetting.

Solution 2.1

Method: Three kinds of forgetting

Worked steps

encoding failure — it never entered memory **B1**; storage decay — it faded over time **B1**; retrieval failure — it is stored but cannot be accessed **B1**.

Practice 2.2 ■ 2 marks

Explain the difference between proactive and retroactive interference.

Solution 2.2

Method: Two interferences

Worked steps

proactive: old learning disrupts new learning **B1**; retroactive: new learning disrupts old learning **B1**.

Practice 2.3 ■ 1 mark

Witnesses are asked how fast cars were going when they “smashed into” each other.

- (a) Name the effect this wording may produce.
- (b) State what it shows about memory.

Solution 2.3

Method: The misinformation effect

Worked steps

(a) the misinformation effect **B1**. (b) memory can be altered by information received after the event **B1**.

Exam-style 3.1 ■ 1 mark

The tip-of-the-tongue experience is best evidence for

- A** encoding failure
- B** storage decay
- C** retrieval failure
- D** the misinformation effect

Solution 3.1

- A encoding failure
- B storage decay
- C retrieval failure
- D the misinformation effect



Worked steps

- C. the information is clearly stored, since it arrives later unprompted.

Exam-style 3.2 ■ 1 mark

A student's old locker combination keeps intruding on the new one. This is

- A** proactive interference
- B** retroactive interference
- C** encoding failure
- D** consolidation

Solution 3.2

A proactive interference



B retroactive interference

C encoding failure

D consolidation

Worked steps

A. earlier learning is interfering with later learning.

Exam-style 3.3 ■ 2 marks

An eyewitness becomes more confident after being told another witness agrees.

- (a) State what has changed and what has not.
- (b) State one procedural safeguard against this.

Solution 3.3

Method: Confidence and accuracy

Worked steps

(a) confidence has risen **B1**; accuracy has not **B1**. (b) avoid giving witnesses feedback about other witnesses, and record confidence before any feedback **B1**.