

Exercise walk-through

24.1

Encoding depth and retrieval routes: evidence and transfer

GRE · GRE Subject Test · GRE Psychology

Concepts 1

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Levels of processing (Craik and Lockhart) hold that memory strength follows the depth of encoding, not the intention to learn. Shallow tasks (is the word in capitals?) give weak traces; phonemic tasks (does it rhyme?) are intermediate; semantic tasks (does it fit the sentence?) are deepest. Incidental learners doing deep tasks can out-remember intentional learners doing shallow ones.

Maintenance rehearsal repeats material without change and holds it briefly; elaborative rehearsal links it to meaning, images and prior knowledge, producing durable traces. The generation effect — better memory for answers you produce than words you read — is elaboration at work.

Concepts 2

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Transfer-appropriate processing adds the retrieval side: encoding helps most when it matches the test. Semantic encoding suits semantic tests; phonemic encoding can beat it on rhyme-recognition tests. Depth usually wins because most tests probe meaning, but the match, not depth alone, decides.

Encoding specificity applies the same match principle to context: recall improves when the retrieval environment or state matches encoding. These effects sit beside the interference mechanisms from the earlier memory unit: depth builds the trace, match retrieves it.

Check the transfer argument

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Cross meaning/rhyme encoding with meaning/rhyme testing. Randomize assignment appropriately, use comparable items and avoid order confounds. A general meaning advantage across tests supports one account; a reversal or stronger same-operation benefit supports matching. Inspect cell means and uncertainty. Do not invent results or claim a classroom study reproduces a named published finding.

Accept a different explanation when its evidence and limits are justified.

Exercises 2.1·2.2

2.1 Which study task produces the best later free recall of a word list? [1]

A. counting the letters in each word B. repeating each word aloud ten times C. judging whether each word fits a sentence frame D. rewriting each word in capitals E. reading the list twice quickly

2.2 A rhyme-encoding task outperforms semantic encoding when the test is: [1]

A. free recall B. semantic categorisation C. rhyme recognition D. sentence completion E. definition matching

Exercises 2.1·2.2

2.1 Which study task produces the best later free recall of a word list? [1]

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2.1 Answer: C. Semantic judgement is the deepest encoding; repetition without meaning is maintenance rehearsal. The other options do not satisfy the stated defining conditions.

2.2 A rhyme-encoding task outperforms semantic encoding when the test is: [1]

A. free recall B. semantic categorisation C. rhyme recognition D. sentence completion E. definition matching

2.2 Answer: C. Transfer-appropriate processing: the encoding that matches the test wins, even over deeper encoding. Compare the exact process, design or evidence, rather than an associated keyword.

Exercises 2.3-3.1

2.3 Revisit the worked case. State one conclusion its evidence supports and one stronger conclusion it does not support. Explain the difference. [2]

3.1 Design a two-by-two classroom study that distinguishes an encoding advantage from a matching advantage, then predict the informative pattern. Give the interpretation, supporting reasoning, a relevant alternative or limitation, and an appropriate check. [4]

Exercises 2.3-3.1

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2.3 Use the worked case evidence to support a bounded claim and explain why a causal, universal or stronger claim needs additional evidence. The claim must fit the specific design and observed process.

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