

Exercise walk-through

7.1

Historical perspectives and psychometric interpretation: evidence and transfer

GRE · GRE Subject Test · GRE Psychology

Concepts 1

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Structuralism analysed conscious experience; functionalism asked how mental activity serves adaptation. Behaviourism emphasised observable learning; Gestalt psychology stressed organised perception. These are historical emphases, not interchangeable labels.

Psychoanalytic accounts emphasise unconscious conflict, humanistic accounts agency and growth, and cognitive accounts information processing. Compare the explanatory mechanism rather than matching every theory to a single familiar name.

Concepts 2

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Reliability concerns consistency across measurements. Validity concerns evidence for a proposed interpretation and use. A high reliability coefficient cannot prove that a test measures the intended construct fairly.

Standardisation supplies consistent administration and a relevant reference sample. Norm-referenced standing differs from criterion-referenced mastery. Predictive value depends on base rates as well as sensitivity and specificity.

Check the transfer argument

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True positives=18; false positives=198; all positives=216. Positive predictive value=true positives/all positives= $18/216=0.0833$, or 8.3%. Sensitivity= $18/20=90\%$, which answers a different conditional question. Low base rate explains the contrast. This arithmetic is not a diagnostic recommendation.

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

Exercises 2.1·2.3

2.1 A test gives consistent scores but measures a different construct. It may have: [1]

A. high reliability but poor validity B. perfect validity by definition C. no measurement error ever

2.2 Organised wholes in perception are especially associated with: [1]

A. Gestalt psychology B. classical conditioning alone C. trait scoring alone

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

Exercises 2.1·2.3

2.1 A test gives consistent scores but measures a different construct. It may have: [1]

A. high reliability but poor validity B. perfect validity by definition C. no measurement error ever

2.1 Answer: A. Consistency and construct evidence are different. The other options do not satisfy the stated defining conditions.

2.2 Organised wholes in perception are especially associated with: [1]

A. Gestalt psychology B. classical conditioning alone C. trait scoring alone

2.2 Answer: A. Gestalt accounts emphasise the structure of perception. Compare the exact process, design or evidence, rather than an associated keyword.

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

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.

Exercise 3.1

3.1 In 2,000 fictional cases, 20 meet a target definition. A screen flags 18 of these and 198 of the others. Compute the fraction of positive screens that meet the definition. Give the interpretation, supporting reasoning, a relevant alternative or limitation, and an appropriate check. [4]

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