PSYCHOLOGY

PUZZLE

INTELLIGENCE

Case 1: The Child Who Understands but Cannot Explain

During a pediatric posting, a physiotherapy student treats an 8-year-old child with cerebral palsy. The child performs motor tasks accurately when shown but struggles to verbally understand instructions. Teachers report average school performance, but parents worry about "low intelligence." The student is asked to recommend whether psychological testing is needed and which type would best assess the child's abilities.

The challenge lies in distinguishing verbal intelligence from performance intelligence and avoiding mislabeling the child's cognitive capacity.

Possible Options

A. Assume low IQ due to poor verbal response

B. Recommend WISC focusing only on verbal subtests

C. Suggest a performance-based intelligence test

D. Avoid intelligence assessment altogether

Psychological Reasoning

Intelligence is multidimensional, not purely verbal

Mental age ≠ communication ability

Bhatia Performance Test or Raven's Matrices assess non-verbal reasoning

Option C best captures true cognitive potential

Case 2: Confusion Between Learning Difficulty and Intelligence

A physiotherapy student observes a 12-year-old boy with postural problems who struggles to follow multi-step instructions. His academic records show poor grades, and parents believe he has "low IQ." However, the child performs well in puzzles and pattern recognition tasks during therapy.

The student must decide whether the difficulty reflects low intelligence, learning disability, or attentional issues, and which test could clarify the situation.

Possible Options

A. Conclude low intelligence based on academics

B. Use Raven's Progressive Matrices for assessment

C. Calculate IQ using mental age assumptions
D. Ignore intelligence testing in physiotherapy

Psychological Reasoning

Academic performance ≠ intelligence
Raven's Matrices measure abstract reasoning independent of language
IQ involves chronological age vs. mental age comparison
Option B avoids educational bias

Case 3: Adult Patient with Inconsistent Test Results

A physiotherapy student assists in neuro-rehabilitation of a 35-year-old stroke patient. The patient performs well in reasoning tasks but poorly in memory-based instructions. A junior doctor suggests the patient has reduced intelligence. The student questions whether this conclusion is valid.

The challenge is understanding what intelligence tests measure and when results may be misleading.

Possible Options

A. Accept low intelligence diagnosis
B. Recommend WAIS for comprehensive assessment
C. Calculate IQ from current performance only
D. Attribute poor performance to lack of effort

Psychological Reasoning

Intelligence ≠ memory alone
WAIS assesses multiple domains (verbal, performance, working memory)
IQ reflects overall functioning, not isolated deficits
Option B ensures accurate psychological interpretation

Case 4: Mental Age vs. Chronological Age

A physiotherapy student works with a 10-year-old child whose motor learning resembles that of a younger child. Psychological notes mention a mental age of 7 years. Parents ask whether this means the child has "low intelligence."

The student must explain intelligence concepts clearly and ethically.

Possible Options

A. Say the child's IQ is permanently low
B. Avoid answering to prevent confusion
C. Explain mental age and IQ relationship
D. Suggest intelligence cannot be measured

Psychological Reasoning

Mental age indicates functional level, not worth or potential
IQ = (Mental Age / Chronological Age) × 100
Intelligence is dynamic, influenced by environment and training

Option C promotes accurate understanding and reduces stigma

Case 5: Choosing the Right Intelligence Test

During community posting, a physiotherapy student screens children from diverse linguistic backgrounds. One child struggles with language-based instructions but solves visual problems easily. The supervising therapist asks which intelligence test would be most appropriate.

The student must choose a test that minimizes cultural and language bias.

Possible Options

A. WAIS

B. WISC verbal scale

C. Raven's Progressive Matrices

D. School-based achievement tests

Psychological Reasoning

Language-dependent tests may underestimate intelligence

Raven's Matrices assess culture-fair, non-verbal intelligence

Intelligence testing must match context and population

Option C best ensures fairness and accuracy

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