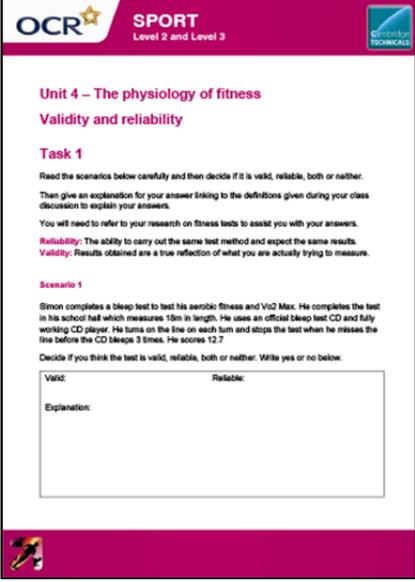


Unit 4 – The physiology of fitness

Validity and reliability

Instructions and answers for teachers

These instructions should accompany the learner task - OCR resource 'Validity and reliability', which supports Cambridge Technicals in Sport Level 3 Unit 4 – The physiology of fitness.



OCR  SPORT
Level 2 and Level 3 

Unit 4 – The physiology of fitness
Validity and reliability

Task 1

Read the scenarios below carefully and then decide if it is valid, reliable, both or neither.
Then give an explanation for your answer linking to the definitions given during your class discussion to explain your answers.
You will need to refer to your research on fitness tests to assist you with your answers.

Reliability: The ability to carry out the same test method and expect the same results.
Validity: Results obtained are a true reflection of what you are actually trying to measure.

Scenario 1

Simon completes a bleep test to test his aerobic fitness and V_{o2} Max. He completes the test in his school hall which measures 15m in length. He uses an official bleep test CD and fully working CD player. He turns on the line on each turn and stops the test when he misses the line before the CD bleeps 3 times. He scores 12.7

Decide if you think the test is valid, reliable, both or neither. Write yes or no below.

| | |
|--------------|-----------|
| Valid: | Reliable: |
| Explanation: | |

Associated Files:
Validity and reliability

Expected Duration:
Task 1 – 1 hour



This activity offers an opportunity for maths skills development.



Reliability: The ability to carry out the same test method and expect the same results.

Validity: Results obtained are a true reflection of what you are actually trying to measure.

Read the scenarios below carefully and then decide if it is valid, reliable, both or neither.

Then give an explanation for your answer linking to the definitions given during your class discussion to explain your answers.

You will need to refer to your research on fitness tests to assist you with your answers.

Scenario 1

Simon completes a bleep test to test his aerobic fitness and Vo2 Max. He completes the test in his school hall which measures 18m in length. He uses an official bleep test CD and fully working CD player. He turns on the line on each turn and stops the test when he misses the line before the CD bleeps 3 times. He scores 12.7

Decide if you think the test is valid, reliable, both or neither. Write yes or no next to Valid and Reliable below and then give an explanation for your answer.

Valid: No

Reliable: Yes

Explanation:

A standard bleep test is completed over a distance of 20m. Any results gained from the above scenario would not be valid when converting the score into a Vo2 max score. However the test is reliable as repeating the test again using an 18m distance, the standard equipment, and following the rules would result in the same or similar result.



Scenario 2

Claire completes a 35m sprint test to measure speed. She marks 35m out using 35 strides (1 stride = 1 meter) with cones placed at each end. She then gets a friend to stand at the finish line with a stopwatch. The timer starts the watch when Claire starts sprinting and stops it when Claire crosses the line. She repeats 3 times in a half hour period of testing. She records times of 9.67, 10.1, 9.13.

Decide if you think the test is valid, reliable, both or neither. Write yes or no next to Valid and Reliable below and then give an explanation for your answer.

Valid: Yes

Reliable: No

Explanation:

The test is valid as sprinting over a short distance and recording the times is a valid way of testing speed. The test is not reliable as if the test was repeated the distance may be different as it is not accurately measured using equipment and the timer may press start/stop at different points on each test.

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OCR Resources: *the small print*

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