PSY3041: PSYCHOLOGICAL TESTING, THEORIES OF ABILITY AND ETHICS

READING NOTES

Content:

- 1. Ethics: key principles, dilemmas and decision- making procedures
- 2. Introduction to psychological testing
- 3. Reliability and validity
- 4. Test development
- 5. Theories and measurement of intelligence
- 6. Group and individual differences in intelligence
- 7. Educational testing
- 8. Neuropsychological testing
- 9. Personality testing
- 10. Clinical testing
- 11. Careers and organisational testing
- 12. Forensic testing and conclusion

W1 Ethics (pgs. 36-40)

The ethical decision-making manual

Commonsense trap - must know your own 'reality', real objectivity is difficult to achieve Values trap -Circumstantiality trap -Who will benefit trap

The ethical hierarchy

Professional - refrain from behaviour that jeopardizes practicing (and protect of self) Society - debate around replacing law for ethical principles is wrong; as it will 1) surely cause harm to therapeutic relationship 2) violates principle of putting client first 3) help turn professionals into law enforcers which is not their function.

Individual client - sometimes putting clients interest third is needed

The ethical decision-making process

- 1. Identify ethical standard involved consider principles; legal responsibility; opinion of supervisors
- 2. Determine trap possibilities commonsense / who will benefit / circumstantiality / values
- 3. Frame preliminary response
- 4. Consider consequences
- 5. Prepare ethical resolution
- 6. Get feedback
- 7. Take action

APS code of ethics

Principle A - respect for rights and dignity of people and peoples Principle B - propriety (decency) Principle C - integrity

Deep sleep therapy (DST) example

W2 Psychological tests; (pgs. 3-20, 21-27, 33-36, 41-46)

History of psychological testing

Binet - individual tests of ability

WWI – army alpha/beta

Weschler – for inpatient psychiatric settings; better than Stanford-Binet; age appropriate; deviation IQ method (compare to age group) instead of mental age

Woodworth – during WWI he developed first self-report personality test; then **Hathaway and McKinley** developed the MMPI

Projective vs objective tests; Rorschach vs MMPI

Psychological tests

A psychological test is a sample of behaviour that is used to make inferences about the individual in a significant social context

Distinction between a test and assessment is important because a) tester must know whether test is being used as a sample or behaviour, or a sign of an underlying disposition, and b) these two differences are interpreted differently; if used as a sample, usually interpreted as 'criterion referencing'; if used as a sign, 'norm referencing' is adopted.

Tests are:

An objective procedure;

Summarised quantitatively in terms of score(s);

Provide an objective reference point for behaviour it ensures

- In a <u>criterion referenced test</u> uses a pre-determined empirical standard as a reference point for evaluating performance of a test taker
- In a <u>norm referenced test</u> uses performance of representative people (i.e. the norm) on test for evaluating performance of a test taker

Limitations of tests

They are only tools

They are often used in an attempt to capture the effects of hypothetical constructs, and thus there is sometimes a gap between what the psychologist intends to measure and what is actually measured

Because of the continual refinement of theories, psychological tests can lose their utility i.e. <u>test obsolescence</u> Cultural/linguistic limitations

W3 Reliability and validity (pgs. 71-74; 85-150

<u>Reliability</u> – the consistency with which a test measures what it purports to measure dependability

Systematic vs unsystematic biases;

"Social desirability bias" – when people respond to questions that place them in a favourable or unfavourable light; form of method variance

Domain sampling model – a way of thinking about the composition of a psychological test that sees the test as a representative sample of the larger domain of possible items that could be included in the test

 Test reliability becomes a problem of sampling, not from a population but rather sampling items from a domain of all possible items

To say that a test is not reliable is open to misinterpretation; <u>quantitative indexes</u> provide for a more precise form of communication.

- Standard error measurement (SEM)
 The precision of an individual test score as an estimate of the trait it is measuring
- Reliability coefficient (r)
 An index often a Pearson product moment correlation coefficient of the ratio of true score to error score variance in a test

 $\mathsf{SEM} = \sqrt{(1-r)}$

Validity - the extent to which evidence supports the meaning/use of a test

<u>Construct validity</u> – the meaning of a test score made possible by knowledge of the pattern of relationships it has with other variables and the theoretical interpretations of these relationships

Chronbach and Meehl proposed the multitrait-multimethod (MTMM) to evaluate construct validity:

Idea that variance arises from 3 sources

1) due to the underlying disposition the tester is assessing,

- 2) arising from the method of measurement used (e.g. self-report or problem solving)
- 3) random error

Method variance??

Convergent/discrimination validity - multitrait multimethod matrix

<u>Content validity</u> – the meaning that can be attached to a score on a test on the basis of inspection of the material that constitutes the test