HISTORY OF TESTING AND ASSESSMENT

• Although you are not expected to remember the years and the chronological order of how testing and assessment developed over time - history is important as it provides context and appreciation of the strides that have been made thus far

• Specific events in history or in the context influenced assessment
  – French minister of public instruction appointed commission to find ways to identify mentally disabled individuals to provide them with appropriate education [Alfred Binet – first test of intelligence]
  – Had to appoint a huge number of people in a short space of time in World War I, sparked the development of group intelligence tests

• Consequences of assessment influenced the context
  – EEA originated to address the challenges in the use of tests and assessment [fairness and bias]
HISTORY OF TESTING AND ASSESSMENT

• Issues to note:
  – Language
  – Misuse of intelligence tests
  – Multiculturalism [culture-free; culture-reduced; culture-common; cross-cultural]

• South African journey
  – Link of testing to political, social and economic issues
  – Racial issues; illiteracy; discrimination
  – Redressing past imbalances; fairness; reduce bias; continuous research

• Role of testing in modern society
  – Continued use of tests
  – Need for tests???
  – Pro-test vs. anti-test
LEGAL AND ETHICAL PRACTICE OF PSYCHOLOGICAL ASSESSMENT

• Statutory control of the use of psychological assessment in South Africa.
• HPCSA (Health Professions Council of South Africa) – ACT 56 of 1974 stipulates what can be seen as a psychological act.
• Psychometrics committee of the HPCSA oversees all matters related to psychological assessment in South Africa.
• Different categories of professionals and classification of all measures.
• PSYSSA (Psychological Association of South Africa)
• Responsibility for the proper use of tests rests with the individual user
• Fair and ethical assessment practices
• Important principles of privacy, confidentiality and best interest of the client
• Multiple constituents and competing values in the practice of assessment
Topic 3 Study unit 3

• 3 chapters covered from prescribed book:
  
• Chapter 3 - basic measurement & scaling concepts

• Chapter 4 - reliability

• Chapter 5 - validity
TECHNICAL AND METHODOLOGICAL PRINCIPLES

• BASIC CONCEPTS

• Levels of measurement (scales)
  – Properties: Magnitude; equal interval and absolute zero
  – Categories: Nominal; Ordinal; Interval and Ratio

• Basic statistical concepts (frequency, measures of central tendency, measures of variability, correlation and regression)
  – Refer to study material for IOP2601 if you want more detailed explanations of these statistical concepts

• Application: determination of correlation for reliability and validity
NORMS AND THE STANDARD NORMAL DISTRIBUTION

• Question:
If you were told that an individual had obtained a score of 80 on a test – what would your interpretation be?
  – (1) good score
  – (2) low score
  – (3) Not enough information
• If 80 out of 300 = low score
• If 80 out of 100 = good score
  • Though 80/300 is a low score, if others (similar to the individual) taking the same test obtained 25/300 and below, then the score can be interpreted as good in comparison to the group. Similarly, a score of 80/100 is good but in comparison to a group (similar to the individual) that got 95/100 and above, the score can be seen as low.
Therefore, scores have meaning when they are put into a context

Use of raw scores vs. norm scores

Various standard scores:
  - Percentile score
  - z-score
  - T-score
  - Stanines
  - Stens
  - Deviation-IQ

Norm-referenced measures vs. Criterion-referenced measures
RELIABILITY

- Reliability (consistency)
  - test-retest reliability
  - alternate form reliability
  - split-half reliability
  - Kuder-Richardson & Coefficient Alpha
  - inter-scorer reliability
  - Intra-scorer reliability

- Standard error of measurement (SEM)

- Factors influencing reliability and what can be seen as acceptable levels…
VALIDITY

• Validity (accuracy)
  – content-description (face & content validity)
  – criterion-related validity (concurrent & predictive)
  – construct-identification (factorial; convergent & discriminant; incremental; differential)

• Validity generalisation; cross-validation

• Standard error of estimate (SEE)

• Factors influencing validity and what can be seen as acceptable levels…
Lessons

• Know the past to appreciate the present and to appropriately plan for the future

• Testing happens within a context [influenced by past & present events; political, legal, economic & social]

• Scores need to be interpreted within that context

• Industrial psychology students have to become knowledgeable about the contextual and technical (psychometric) requirements important for testing and assessment