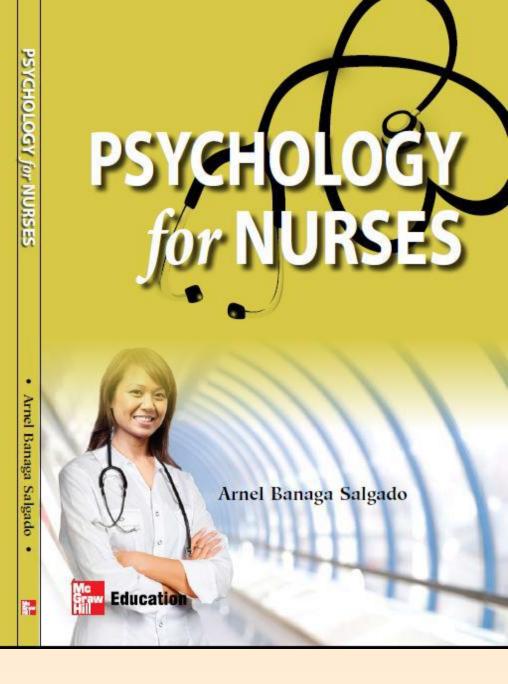


Psychology for Nurses is a comprehensive book written for those taking diploma and degree programmes in nursing, it is also for the registered nurses (RN) who would like to enrich their nursing practice. Psychology as a subject must provide adequate insight for those who are embarking into the nursing profession, a healthcare profession which requires adjustment to the behaviour of the patients and those around them; understanding the patients' anxiety, fear or pain; and self-acceptance by the nursing care givers in order to function independently within the areas of their responsibility.

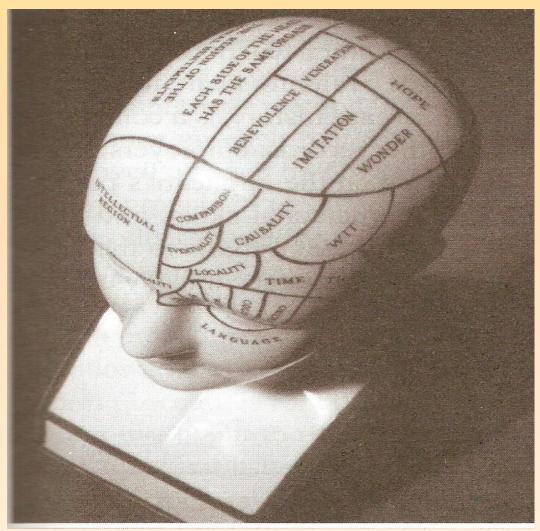
This book is unique in that the author who is a psychologist and a mental health nurse practitioner has introduced new concepts that are relevant to the nursing practice. Among these concepts are psychology of nursing care; psychological interventions, like the therapeutic smile; and the therapeutic use of self or presence. The basic concepts of psychology are also presented in this book since, as the author views it, it is very important that all nurses know and understand the origin and the development of psychology as a science.

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# Chapter 13



PSYCHOLOGY FOR NURSES by Arnel Banaga Salgado

### Chapter 13

# Psychological Assessment and Testing (Psychometrics)

### **EXPECTED LEARNING OUTCOMES**

### After studying this chapter, you are expected to:

- have adequate knowledge of the different tools used by psychologists in the assessment of behavior;
- 2. identify the requirements of a good psychological test;
- demonstrate how to establish the validity and reliability of a psychological test and its standardization;
- 4. determine how intelligence of individuals are assessed; and
- discuss how personality of individuals are assessed using psychological assessment.

### Introduction

- Psychological assessment is necessary for the practice of psychiatric nurses, since this will help them understand more their clients.
- Nursing history taking may be sufficient to understand wholly the psychiatric patient, objective and standardized tests can be given to assess their psychopathology and mental health.

 Psychological assessment goes beyond testing for assessment has a broad range of information to be collected and new methods other than testing may be required to obtain the necessary information. • "These methods could include routine visits to the house and the community or naturalistic observations" urged Maloney and Ward (1976, p. 145).

### Tools of Psychological Assessment

Cohen et al. (1996) listed a number of tools used in psychological assessment. They are

- tests,
- 2. interviews,
- 3. portfolio,
- 4. case study,
- behavioral observation,
- 6. multi- media-equipped computers

- A test may be defined simply as a measuring device or procedure.
- Psychological tests differ on a number of variables such as content, format, administration procedures, scoring and interpretation procedures and psychometric or technical quality.
- Interview is another tool which is widely used in the process of psychological assessment.

"To the extent that it is practically feasible, direct observation frequently proves to be the most clinically useful of all assessment procedures"

# **Psychological Tests**

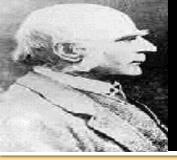
 A psychological test is an objective and standardized measure of a sample of behavior (Anastasi, 1982) which provides a systematic basis for making inferences about people (London and Bray, 1980).

- Bower, Bootzin and Zajonc (1987) claimed that "unless a test is reliable and valid, it cannot measure behavior accurately, and unless it has been standardized, there is no way to determine the meaning of an individual's score.
- Therefore, validity and reliability are important criteria for judging a test's value, and standardization is essential in judging its utility."

- A test is valid when it measures what it purports to measure and the way its validity is established depends upon the purpose of the test.
- A test is reliable if it measures something consistently.

- Standardization refers to uniformity in administration, scoring and interpretation of tests.
- Uniform procedures require that the testing environment, test directions, test items, and amount of time allowed be similar as possible for all individuals who take the test.
- Standardization involves uniform procedures for administering and scoring a test, developing norms for the test.
- Norms are established standard of performance for a test.
   Norms inform us about which scores are considered high, average or low.

- Norms are established by giving the test to a large and well-defined group of people called the standardization group, representative of the population for whom the test is intended.
- Future test takers' scores are determined by comparing their scores with those from the standardization sample or group that determined the norms.



# Intelligence Tests

- Early interest in intelligence testing dates back to the eugenics movement of Sir Francis Galton.
- He believed that it is possible to improve genetic characteristics such as intelligence through breeding.

 Mental ability was assessed by simple tests of sensory discrimination and reaction time which could be measured with precision.



# Alfred Binet (1857-1911)

- Alfred Binet developed the first intelligence test.
- n 1904, he developed a test that could identify the mentally retarded children in Paris schools.
- In collaboration with Theodore Simon, a psychiatrist, Binet devised thirty simple tests that rated children's ability to do such tasks as understand commands, recognize familiar objects and grasp the meaning of words. The items on the test were designed to measure children's judgment, reasoning and comprehension.

- The first test was published in 1905 and then revised in 1908 and 1911. In 1911, he devised items for adults and to infants as young as three months in 1912 (Anastasi, 1981).
- The 1908 revision introduced the notion of mental age.
   Mental age is a measure of a child's intellectual level that is independent of a child's chronological age (actual age).
- Shortly after Binet's original work, Lewis M. Terman of Stanford University and his colleagues helped refine and standardize the test for American children.

## Group Intelligence Tests

- Group intelligence tests are found in school and in the military settings.
- In schools, we have the California Test of Mental Maturity, the Kuhlmann-Anderson Intelligence Tests, the Henmon-Nelson Tests of Mental Ability and the Cognitive Abilities Test (Cohen et al., 1996).
- One popular test that reached the Philippines is the OLSAT or the Otis-Lennon School Ability Test formerly The Otis Mental Ability Test.

# The Army Alpha

FOLLOWING	ORAL DIRECT	IONS		
Mark a cross in	the first and also	the third circle:		
0	0	0	0	0
ARITHMETIC.	AL REASONIN	G		
Solve each prob	lem:			
How many men	are 5 men and 1	0 men?		Answer ( )
If 3 1/2 tons of	coal cost \$21, w	hat will 5 1/2 tons cost?		Answer ( )
PRACTICAL J	UDGMENT			
Why are high n	nountains covere	d with snow? Because		
☐ they are	e near the clouds			
☐ the sun	shines seldom o	n them		
the air i	s cold there			
SYNONYM-A	NTONYM PAIF	RS		
Are these words	the same or op	posite?		
largess-donati	on .	-	same	e? or opposite?
accumulate—di	ssipate		same	e? or opposite?

## The Army Alpha

#### DISARRANGED SENTENCES

Can these words be rearranged to form a sentence?

envy bad malice traits are and

true? or false?

#### NUMBER SERIES COMPLETION

Complete the series: 3 6 8 16 18 36 ... ...

#### ANALOGIES

Which choice completes the analogy?

tears-sorrow :: laughter-

smile girls grin

granary-wheat :: library-

books paper librarian desk

#### INFORMATION

Choose the best alternative:

The pancreas is in the

shoulder neck abdomen head

The Battle of Gettysburg was fought in

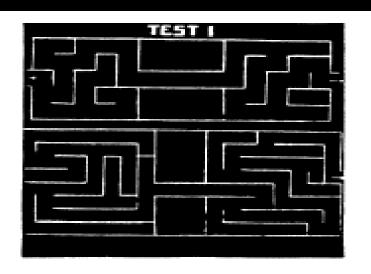
1863 1813 1778 1812

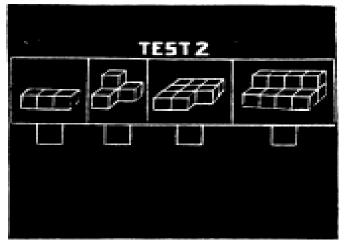
Note: Examinees received verbal instructions for each subtest.

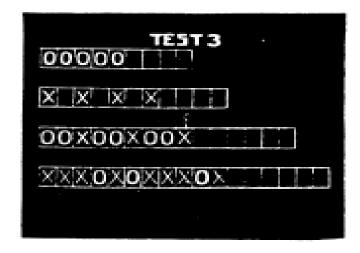
#### FIGURE 1.1 Sample Items from the Army Alpha Examination

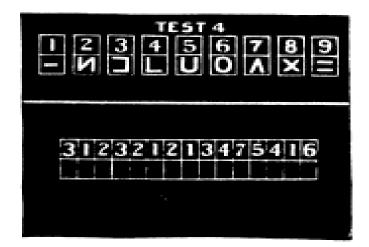
Source: Reprinted from Yerkes, R. M. (Ed.), (1921). Psychological examining in the United States Army. Memoirs of the National Academy of Sciences, Volume 15. With permission from the National Academy of Sciences, Washington, DC.

## The Army Beta

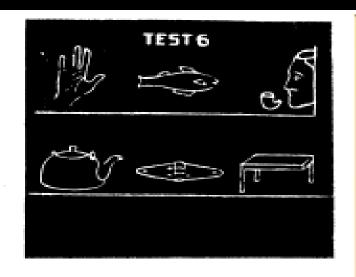


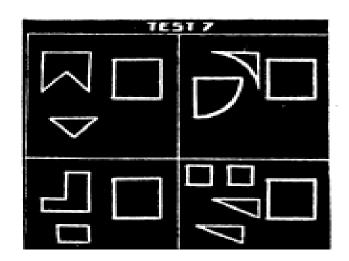


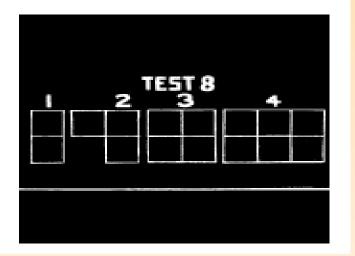




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6 2	6 2
59	56
327	327
249	249
1536	1536
3745	3745
45010	45001
62019	62019







### **Aptitude and Achievement Tests**

- Aptitude Tests attempt to measure a person's capability for mastering an area of knowledge.
- Achievement Tests assess the amount of knowledge someone has acquired in a specific area.

 A number of tests exist to measure specific intellectual abilities ranging from critical thinking such as the Watson-Glaser Critical Thinking Appraisal to musical listening skills such as the Seashore Measures of Musical Talents (Cohen et al., 1996). On most achievement tests, the skill that is required is called convergent—thinking; after a consideration of the facts and after a logical series of logical judgments is made, a solution to a problem is arrived at.

### **Personality Tests**

- Psychologists use personality tests to aid in the diagnosis of psychological disorders, to counsel people, to select employees and to conduct research.
- There are three major categories of personality tests: self-report inventories, projective tests and behavioral assessment.

## Self-Report Inventories

Self report inventories instruct people to answer questions about themselves, about their characteristic behaviors, beliefs and feelings (Leal, 1996). Popular among these are the 1) Myers-Briggs Type Indicator, a test inspired by the theoretical typology of Carl Jung authored by Isabel Briggs Myers and Katharine C. Briggs (1943-1962); 2) the Mooney Problem Checklist devised by Mooney and Gordon (1950) which relates to emotional functioning in areas such as home and family; boy/girl relations; courtship and marriage; morals and religion; school/occupation; economic security; social skills and recreation; health and physical development.

## **Projective Techniques**

projective tests are indirect methods of personality assessment; the examinee's task is to talk about something or someone other than himself or herself, and inferences about the examinee's personality will be made from the response. Projective hypothesis holds that an individual supplies structure to unstructured stimuli in a manner consistent with the individual's own unique pattern of conscious and unconscious needs, fears, desires, impulses, conflicts and ways of perceiving and responding. Projective tests are personality tests that present an ambiguous stimulus that examinees are asked to describe or explain. They are designed to elicit unconscious conflicts and feelings and are sometimes called psychoanalytic tests.

### Behavioral and Other Personality Measures.

- Behavioral assessment attempts to obtain more objective information about personality by observing an individual's behavior directly.
- Personality cannot be evaluated apart from the environment.
- This technique is favored by the behaviorists.

- One method then is naturalistic observation which is the systematic recording of behavior in the natural environment.
- It can also occur outside of a natural setting.
   Behavior can be assessed in a clinical setting.
- The strategy may include: interview of the client with respect to her problem, administer an appropriate test to the client, ask the client to keep detailed diaries

- of her thoughts and behaviors with respect to her efforts to meet men and or accompany the client to a singles bar and observe her behavior.
- This technique is called behavioral observation.

### **Psychometric Tests For Psychiatric Nursing**

- Beck Depression Inventory (BDI)
- Zung Self-Rating Depresseion scale
- 3. Self-Worth Scale Inventory (SWOSI)

# The SELF-WORTH SCALE INVENTORY developed by AB SALGADO

### SELF-WORTH SCALE INVENTORY (S WOSE) ANSWER SHEET

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### **KEY POINTS**

- The different tools used by psychologists in the assessment of behavior include tests, interviews, portfolios, case studies, behavioral observations, and multimedia-equipped computers.
- A psychological test is an objective and standardized measure of a sample of behavior. Validity and reliability are important requirements of a good test.
- A valid test measures what it purports to measure. The types
  of validity include content validity, face validity, predictive
  validity, construct validity, concurrent validity, and criterion
  validity.

- Standardization refers to uniformity in the administration, scoring, and interpretation of tests.
- Intelligence test is a kind of evaluation that measures the mental ability of a person.
- Aptitude tests attempt to measure a person's ability to master an area of knowledge, while achievement tests assess the amount of knowledge that someone has acquired in a specific area or subject.

- Personality tests are used by psychologists to aid the diagnosis of psychological disorders, counseling of clients, recruitment of employees, and research into personality.
- Three major categories of personality tests are selfreport inventories, projective tests, and behavioral assessment.
- Behavioral assessment attempts to obtain more objective information about personality by observing an individual's behavior directly.