

Advanced Tests and Measurement

Introduction



PSY 721 Introduction

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What We Will Cover in the Course.

- Ethics of testing.
- Test construction.
- Test evaluation.
- Types of tests.



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What We Will Cover Tonight



- What is a test?
- History of testing.
- Assumptions we make about tests.
- Types of tests.
- Test use.
- Test user qualifications.

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Course Requirements

- Syllabus.
- Cohen & Swerdlik text.
- Study guide.
- Contacting me.
- Reserve materials.
- Attendance.
- Presentations.

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Course Web Site

- Syllabus.
- How to contact me.
- PowerPoint slides.
- Interesting sites.
- Pictures of me.



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Evaluation

- Quiz after each section.
 - Each quiz worth about 15-25 points.
 - Drop lowest quiz in computing grade.
- Paper.
 - Worth 30 points.
 - Due on July 30.
- Portfolio
 - Worth 40 points.
- No final examination.
- No extra credit.

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Sample multiple choice item.

1. This course is called
 - A. Elementary physics
 - B. Fun with sushi.
 - C. Advanced Tests and Measurement.
 - D. Existential phenomenology.

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Typical TRUE FALSE item.

1. **TRUE FALSE** California University of Pennsylvania is not located in the state of California.
2. **TRUE FALSE** Your professor is Wally Segap.

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Typical Definition

Define and give an example of the term CHEATING.

CHEATING occurs when a person copies another person's work and turns it in as his/her own. An example would be copying someone's quiz answers or turning in someone else's paper and taking credit for it.

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Examples of **BAD** definitions.

CHEATING is when you cheat and do bad things. Like taking your friend's pencil.

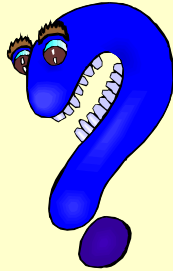
CHEATING is illegal stuff people do in class and they get caught.

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Course Survival Hints

- Work in teams.
- Know basic of statistics.
- Use the Study Guide.
- ASK QUESTIONS.



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THINK

Beginnings..

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Major Question

Why should you know anything about testing?



Which of the Following Is a TEST?

- Fran is evaluated on knowledge of physics in a multiple choice assessment.
- In a job interview Pat is asked about favorite college courses.
- When being screened for inclusion in a special training program, one criterion for admission is the number of course hours Kim took in psychology.
- Terry is rejected for a job as a counselor because she is a black female.

A TEST is...

An OBJECTIVE, STANDARDIZED measure of a SAMPLE of BEHAVIOR.


Testing vs. Assessment

<ul style="list-style-type: none"> • Testing - Objective. - Actuarial. - Numbers-oriented. - Test-focused. - What the numbers are. 	<ul style="list-style-type: none"> • Assessment - Interpretive. - Clinical. - Integrative. - Holistic. - What the numbers mean.
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Question?

Take a guess at
 the earliest
 documented use
 of tests.



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History of Testing, 1

1. Chinese civil service examinations ca 2200 BC.
2. Medieval guild examinations.
3. Sir Francis Galton.
 - 1869 *Classification of Men According to Their Natural Gifts.*
 - 1884 Anthropometric Laboratory
 - Sensory & motor data.

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History of Testing, 2

4. **1888 James McKeen Cattell**
 - 'Mental Test'
 - Attempted to use tests to assess college students.
5. **1900 College Entrance Examination Board established.**
6. **1906 Alfred Binet's test.**

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History of Testing, 3

7. **1908 Thorndike publishes first standardized tests.**
8. **1914 Otis publishes first group tests.**
9. **1918 Stanford Binet published.**

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Assumptions About Tests

- **Psychological traits exist.**
- **We can measure traits and states.**
- **Multiple sources of information are better than a single source.**
- **We can assess useful things.**
- **All measurement systems have some element of random error.**

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More Assumptions

- We can predict future behavior from assessed behavior.
- Testing and assessing can be done in a fair and unbiased manner.

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Types of Tests

1. Standardized vs. Non-standardized
2. Aptitude vs. Achievement
3. Individual vs. Group
4. Speed vs. Power
5. Objective scoring vs. Subjective Scoring.
6. Verbal vs. Non-verbal performance
7. Cognitive vs. Affective

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Test Purposes

- Screening.
- Classification and placement.
- Counseling.
- Diagnosis.
- Evaluation of intervention effectiveness.
- Research.



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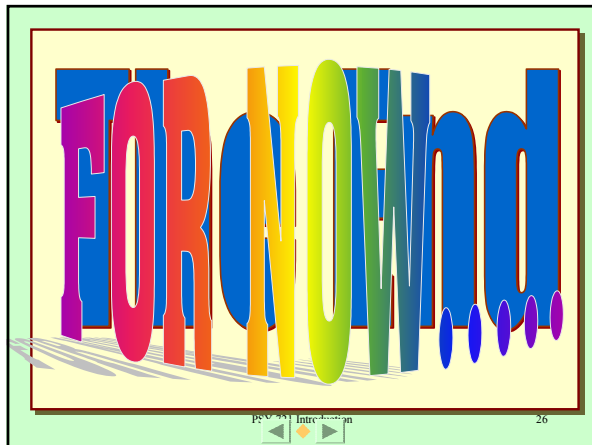
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Test User Qualifications

- **Level A** Purchased by schools and others licensed to use the tests.
- **Level B** Masters degree in psychology, education or equivalent or membership in a professional organization.
- **Level C** Ph.D. or equivalent or licensure or certification.

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