

Standardized questionnaires and construction of a new questionnaire

Muhammad Foysal Mubarak
M.Sc (on-going) in Edutech
12th Nov, 2019

Learning Objectives

At the end of this presentation, participants are expected to demonstrate an understanding of:

- Different types of tests.
- Different types of questionnaires.
- Effective ways to design questionnaires.

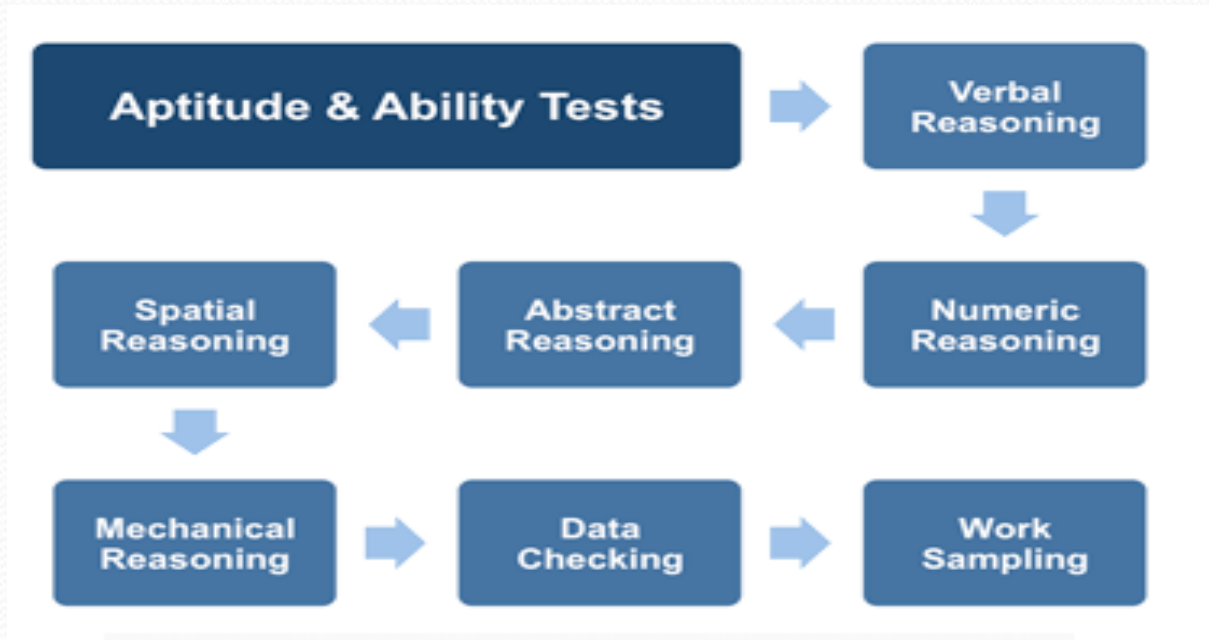


Different types of tests



Psychometric Tests: Practice Free Psychometric Tests. Retrieved Nov 5, 2019 from <https://psychometric-success.com/aptitude-tests/speed-versus-power-tests/>

Aptitude & Ability tests



Psychometric Tests: Practice Free Psychometric Tests. Retrieved Nov 5, 2019 from <https://psychometric-success.com/aptitude-tests/speed-versus-power-tests/>

Performance/ability test

Designed to determine achieved knowledge in certain subject.

Tests students have met specific learning goals or not at each grade level.

Efficient way to get an idea of how well students are performing

Too much emphasis on passing a test ignoring critical and creative thinking

Aptitude test

Designed to determine potential for success in a certain area

Tests determine which types of career one might be best suited for

Tests offer objective comparisons, improve the quality of hiring through training needs assessment.

Costly & tailored to the various positions
Focus of Test?

Speed test

How many questions you can answer correctly in the allotted time.

Scope of the questions is limited

Speed tests contain more items

The methods to answer is clear.

Tends to be used in selection at the administrative and clerical level.

Power test

Present a smaller number of more complex questions.

Scope of the questions is unlimited

Power tests contain less items

The methods to answer are not obvious

Tends to be used more at the graduate, professional or managerial level

Personality Tests

Measure human character or disposition

Assess clinical disorders & who needs counseling.

Identify individual differences & promote better communication.

DISC personality profile

(Dominance, Influence, Compliance, Steadiness)

Attitude tests

Assess an individual's feelings about an event, person, or object.

Attitude scales are used in marketing to determine individual (and group) preferences for brands, or items.

Likert type scale



What is a Questionnaire

A set of Questions designed to generate the statistical information from a specific demographic needed to accomplish the research objectives



A questionnaire is a research tool consisting of a series of questions and other **prompts** (Fact) asked to individuals to obtain **statistically useful** information about a given **topic**. The questionnaire is invented by the **Sir Francis Galton**. (S.Pandya, 2010)

Types of questions



1. Close Ended or Structured Questionnaires

1. Limited **Freedom** to express opinion
2. **Caping** of options (Avoid bias)
3. No thumb rule - **fix** numbers of options
4. Data form is **Quantitative**
5. Easy to **analyse/ coding** statistically
6. Scope of getting extra information is very less.

Examples of Closed ended question

Do you have a driving license?

- Yes
- No

Which subject did you enjoy the most at school?

- Math
- Science
- English
- Foreign Language
- History
- Government
- Art / Music
- Other

How many hours a day do you spend doing homework?

- 0 to 1 hour
- 2 to 3 hours
- 4 to 5 hours
- more than 5 hours

Examples of Closed ended question

- **Example of a Rating Question**

Please describe how you felt about the City tour at Saarbrücken?

(1=Unsatisfied, 2=Somewhat Satisfied, 3=Satisfied, 4=Very Satisfied, 5=Extremely Satisfied)

- **Example of a Ranking Question**

Please rank the following events at Saarland University in order of preference (starting with 1 for your favorite activity).

- ___ Excursion to Trier & Sarburg
- ___ City & Campus Tour
- ___ Buddy program * you & me *
- ___ International country evenings

Freedom to express opinion

No capping of options (Avoid bias)

Scope to obtain **more information**

Data form is **Qualitative**

Difficult to **analyse/ coding** statistically

2.

Open Ended or Unstructured Questionnaires

Example of open ended question

- What do you like best about the Edutech online courses?

3. Mixed/Semi-structured questions

Example:

Why did you enroll in ERM course?(please select all that apply)

- I am interested in interdisciplinary studies.
- I am interested in experiential learning.
- I thought it would help me develop my understanding in research
- I knew that the instructors of this course are very helpful.
- Other _____

Tips for designing questionnaires

- Clearly state your **intentions** with the research.
- Include **instructions** with your survey questionnaire.
- Don't ask for **personal information** unless you need it
- Keep the questions short and **concise**, grammatically simple, specific.
- **Order** questions according to subject/topic.
- **Pilot** test the survey questionnaire before you administer it!

Quiz:

Designing good questions

- How have teachers and students at your school responded to the new 45-minute lunch period?

 Satisfied
 Unsatisfied
- How have teachers at your school reacted to the new 45-minute lunch period?
 Satisfied
 Unsatisfied
- How have students at your school reacted to the new 45-minute lunch period?
 Satisfied
 Unsatisfied

Quiz:

Designing good questions

- Do you think that the new lunch menu at Mensa offers a better variety of healthy foods than the old one?

- Yes
- No
- No Opinion

- How do you feel about the new lunch menu at Mensa compared to the old one?

- The new menu offers a better variety of healthy foods
- The old menu offers a better variety of healthy foods
- The selections are similar
- No opinion

Quiz:

Designing good questions

- *What do you think about this report? __*
 - A. *It's the worst report I've read*
 - B. *It's somewhere between the worst and best*
 - C. *It's the best report I've read*
- Rank your impression of this report on a scale of 1 to 5 (where 1 indicates the worst report you have read, and 5 indicates the best). ____

Survey Question Pitfalls

- Poorly worded questions (ambiguous, broad, double-barreled)
- Order of questions
- Order of responses
- Too many/ too few choices
- Jargon
- Differences in scale

Activity: Checking understanding with Socrative tool

<https://b.socrative.com/login/student/>

Password: **PDCSESSION**

References:

- Cherry, K. (2019, Sept 17). What Are Achievement Tests and How Are They Used? Retrieved from <https://www.verywellmind.com/what-is-an-achievement-test-2794805>
- Psychometric Tests: Practice Free Psychometric Tests. Retrieved Nov 5, 2019 from <https://psychometric-success.com/aptitude-tests/speed-versus-power-tests/>
- Richmond, R. L. (2019). **Psychological Testing: Psychological Assessment.** Retrieved from <http://www.guidetopsychology.com/testing.htm>
- Questionnaire and Its Types. Retrieved Nov 6, 2019 from <https://www.slideshare.net/DrMadhuriSadgir/questinnaire-slide-share-pdf>