



PENELITIAN QUASI-EXPERIMENT

(Nonequivalent Four Control Group Design)

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WHAT IS EXPERIMENTAL RESEARCH







It is the only type of research that directly attempts to influence a particular variable, and when properly applied, it is the best type for testing hypotheses about cause-and-effect relationships. (Fraenkel, Wallen & Hyun, 2012) 111111111







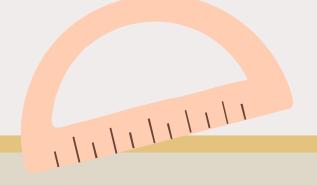
WHAT IS EXPERIMENTAL RESEARCH





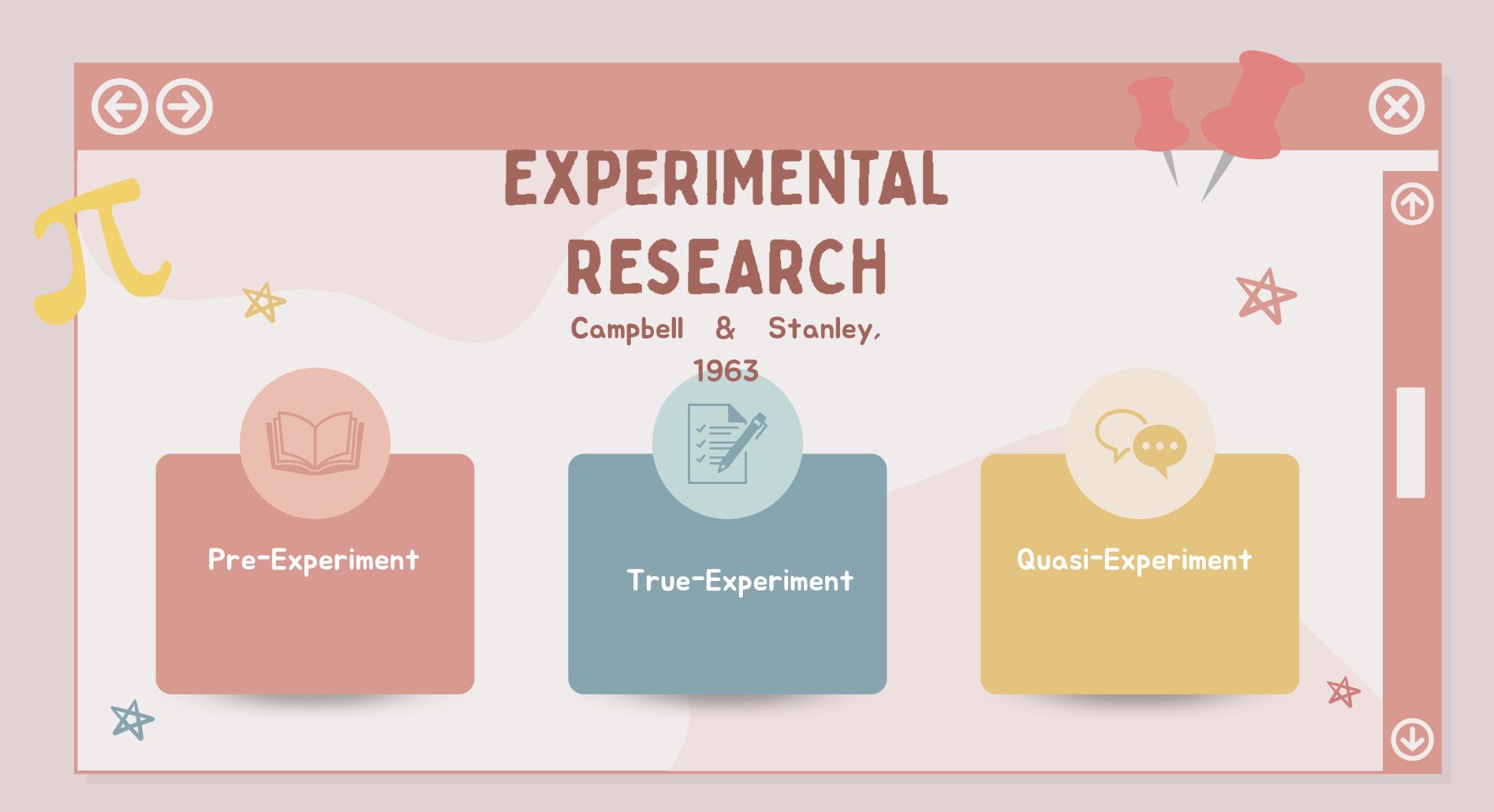
"To experiment is to try, to look for, to confirm" (Fraenkel, Wallen & Hyun, 2012)

















PRE EXPERIMENT



One-shot case study design



One group pre-test post-test design



Static group comparison











TRUE EXPERIMENT



Pre-test post-test contro; group design



Post-test only control group design



Solomon Four Group Design















QUASI EXPERIMENT



Non-equivalent control group design



Counterbalance Design



Time Series Design









QUASIEXPERIMENTS



Quasi-experiments are most likely to be conducted in field settings in which random assignment is difficult or impossible. They are often conducted to evaluate the effectiveness of a treatment.



Read Next



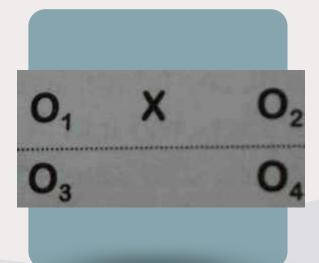




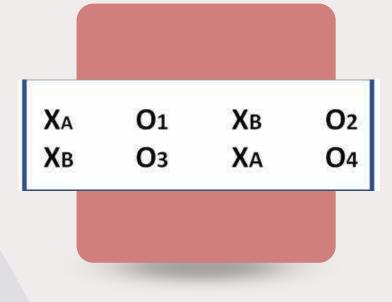




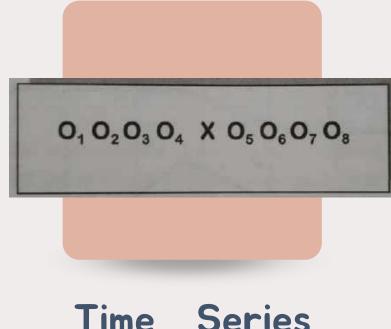
QUASI EXPERIMENT



Non-equivalent control group design



Counterbalance
Design



Time Series

Design









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NON-EQUIVALENT CONTROL GROUP DESIGN

When participants are not randomly assigned to conditions, however, the resulting groups are likely to be dissimilar in some ways. For this reason, researchers consider them to be nonequivalent. A nonequivalent groups design, then, is a between-subjects design in which participants have not been randomly assigned to conditions.





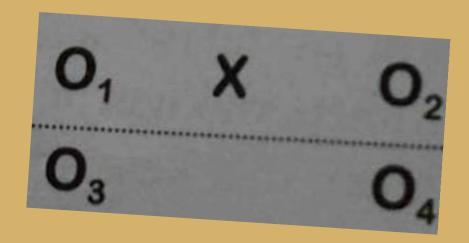








NON-EQUIVALENT PRETEST-POSTTEST CONTROL GROUP DESIGN



01: Pretest of the treatment group

02: Pretest of the control group

X: Treatment

02: Posttest of the treatment group

04: Posttest of the control group







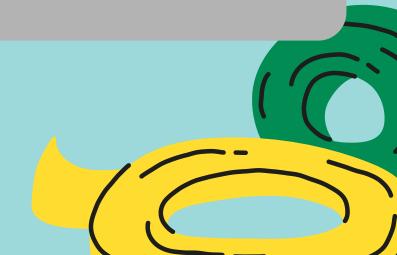
RESEARCH PROCEDURES OF NON EQUIVALENT PRETEST POSTTEST CONTROL GROUP DESIGN OF QUASI EXPERIMENTAL RESEARCH

A.
PREPARATION
STAGE

B.
IMPLEMENTATION
STAGE

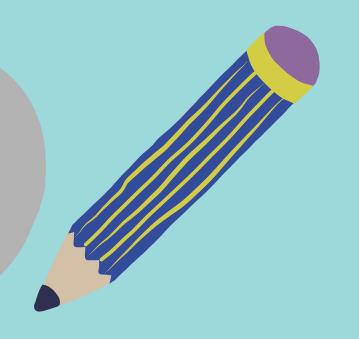
DATA PROCESSING
& ANALYSIS







A. PREPARATION



A. Observi ng B.
Searching &
Studying The
Relevant
Literature

C.
Studying the syllabus of the relevant course (that are related to the dependent variable)

D.
Determining
/ Identifying
the
population
& Sample

E.
Identifying
The Research
Variable &
Formulating
The
Hypotheses

F.
Compiling The
Research
Instruments, The
Blueprints, The
Lesson Plan, The
Students'
Worksheet &
Tasks

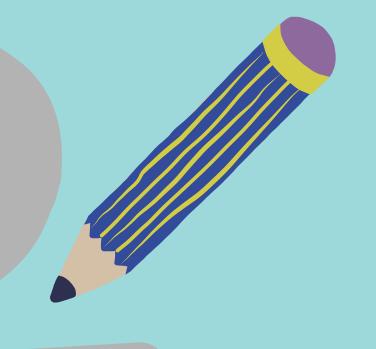
G.
Preparing the
The Data
Collection
Techniques







A. PREPARATION



Н.

Testing The
Construct
Validity of
The
Instruments

H.
Conducting The Try-Out
Test

1.

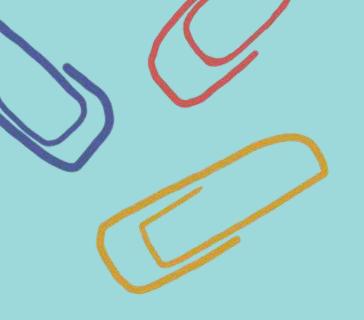
Analysing The Results of The Tryout Test

- Validity
- Reliablity

Jetting Up
The
Research
Timeline







B. IMPLEMENTATION



A.
Conducting
Pre-Test



B. Giving
Treatments

A.
Conducting
Post-Test





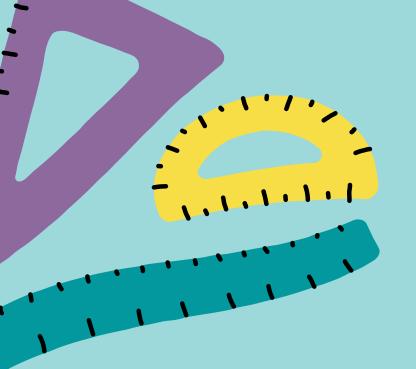
C. DATA PROCESSING & ANALYSIS

A. Testing The Hypotheses
B. Giving Conclusion on The
Results of The Hypotheses
Testing









STUDYING THE RELEVANT LITERATURE



Type of Sources

Fraenkel, Wallen & Hyun, 2012

A. General Reference Tools

The sources researchers often refer to first (Education Research Database), eg. ERIC (EBSCO); ProQuest Education Journal; Google Scholar, etc.

B. Primary Sources

Publication in which the researchers reports the results of their studies directly, eg. Linguist Journal, JOAL, etc.

B. Secondary Sources

Publication in which authors describe the work of others, eg. textbook.

POPULATI ON & SAMPLE

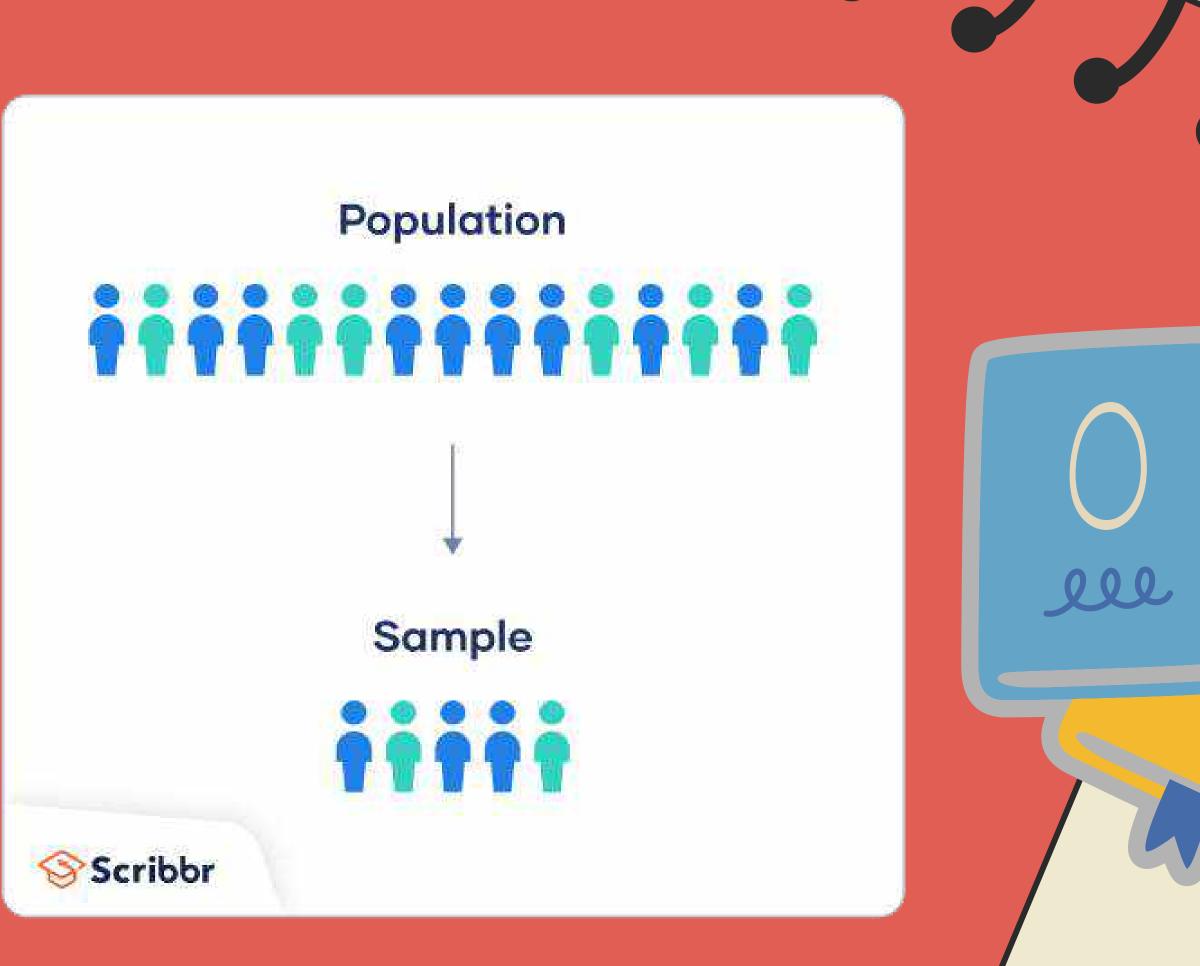
POPULATION

a **population** is a representative sample of a larger group of people (or even things) with one or more characteristics in common.

SAMPLE

A sample is the specific group that you will collect data from. The size of the sample is always less than the total size of the population.







RESEARCH VARIABLES



INDEPENDENT VARIABLE

Cause

(Peer Tutoring, Editing Technique, Literature Circle, etc)

DEPENDENT VARIABLE

Effect

(Reading Ability, Writing Skills, Vocabulary Mastery, Speaking Skills, Listening Comprehension, etc) The Effect of Literature Circle on Students' Reading Comprehension

- The Influence of Editing
 Technique on Students' Writing
 Mastery
- The Effectiveness of Peer
 Tutoring on Students' Anxiety in
 Speaking Class



A hypothesis is simply put a prediction of the possible outcomes of a study.



Write a null hypotheses





you need to write hypotheses before you start your experiment or data collection.



Null hypotheses and alternative hypotheses are mutually exclusive. This means that if one of your hypotheses is true, the other must be false.



Starts with a question, eg. Is there a significant effect of literature circle on students' reading comprehension?



- HO: There is no significant effect of literature circle on students' reading comprehension.
- H1: There is a significant effect of literature circle on students' reading comprehension.

TESTING THE CONSTRUCT VALIDITY OF THE INSTRUMENTS

CONDUCTED
BY TWO
RELEVANT
EXPERTS OF
THE STUDY

GREGORY TEST

The experts rate
 each item of the
 instruments using
 4 scales

1-2-3-4

GREGORY TEST

2. Grouping The Scales

1-2 (Less

Relevant)

3-4 (Very

Relevant)

GREGORY TEST

3. The Results Are
Tabulated in a
matrix and then
calculated to find
the content validity

Content Validity = D A+B+C+D

ANALYSING THE RESULTS OF TRYOUT TEST (FOR MULTIPLE CHOICE ITEMS)



TESTING THE DISTRACTOR EFFICIENCY







A t-test is a statistical calculation that measures the difference in means between two sample groups.

 $(x1 - x2) / sp(\sqrt{1/n1} + 1/n2)$

INTERPRETING
THE TEST
RESULTS