

**COVENANT UNIVERSITY
NIGERIA**

*TUTORIAL KIT
OMEGA SEMESTER*

PROGRAMME: PSYCHOLOGY

COURSE: PSY 226

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PSY226: Experimental Design

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1. State the purpose of experimental Design

Answer: To provide answer to research question; To control variance.

2. State for methods of used to control variance

i. Elimination

ii. Randomization

iii. Matching

iv. Statistically equating groups

V. Building extraneous variable into the design

3. List the 16 common threats to internal validity of a study

4. What is population validity?

The extent to which the study result can be generalized from one population to another.

5. What are the two principles of maximizzing error variance?

6. Explain the Hawthorne effect.

Faking response due to the awareness that one is being studied.

7. Distinguish the One Shot case design from One-group pretest-posttest design

8. What is counterbalancing? Switching groups across conditions alternately.

9. Discuss the method of Solomon four Group randomized design

10. Experimental design originated with behavioural studies,

True or False

11. Discuss the concept of Blocks in Nested Designs

12. The basic principles of experimental design are attributed to _____.

R. Fisher.

13. What are the characteristics of true design?

Manipulation (treatment), Randomization, Control group

14. What are **FIXED** and Random effects

15. A simple true design consists of _____IV and _____DV?

One IV with 2 levels (T, C), One DV

16. What are the hallmark of complex true experiment?

Randomized matched control group design, Increased levels of IV, Factorial design, Multiple DVs

17. Which designs may be used to control order effect?

N!, latin square, and randomized block design

18. What do you understand by John Henryism.

Tendency to compete with the other group in the study.

19. Define a pilot study.

A preliminary study conducted before the main study aimed at testing the equipment and study design

20. Is it necessary to perform a further pilot study before starting the main study, if, due to the outcome of a pilot study, essential modifications are necessary?