University of Djilali Bounaama Khemis Miliana

Dep :Human & Social Sciences Stream :Councelling& Guidance

Level : 3 rd year Prof :D.Mezaini

LESSON THREE :Experimental Design

SECTION : TEST YOURSELF

SECTION A :

Answer **all** questions in the spaces provided

A researcher has conducted a matched pairs design experiment to investigate whether chewing gum influences concentration. Participants were matched on age and gender. She firstly recorded how many changes were detected in a 'spot-the-difference' puzzle by people not chewing gum when completing the task, then compared this to the matched group who did chew gum during the task. The results were then compared.

1.Write a research aim for this experiment

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2.Write a null hypothesis for this experiment.

……

……

3.Outline one strength and one weakness of using a matched pairs design in this experiment.

Strength :……..

Weakness :…….

4.What is the Independent variable and dependent variable in this investigation?
IV……..

DV……

SECTION B — Multiple-choice questions

Choose the response that is **correct** or that **best answers** the question.

1. Which is *not* a type of experimental design?
(a) Repeated measures.
(b) Independent groups.
(c) Matched pairs.
(d) Participant design.

2. Which is *not* a type of order effect?
(a) Fatigue.
(b) Concentration.
(c) Practice.
(d) Boredom.

3. Which of these is an attempt to control for order effects in a repeated measures design?
(a) Random allocation.
(b) Control condition.
(c) Demand characteristics.
(d) Counterbalancing.

4. Which of these is an attempt to control for participant variables in an independent groups design?
(a) Random allocation.
(b) Control condition.
(c) Demand characteristics.
(d) Counterbalancing.

questions	1	2	3	4
Answers				

SECTION C :Four-column match-up

Match up the statements below across the four columns (put the number of each statement in the corresponding column).

Independent groups			
Repeated measures			
Matched pairs			
Order effects			

(1) All participants carry out both conditions of the IV.

(2) A problem with repeated measures.

(3) Different groups of participants for each level of the IV.

(4) Researcher identifies relevant variables that could affect the DV.

(5) An example of this problem is a practice effect.

(6) Each participant is 'linked' to another across both conditions.

(7) This design uses the fewest participants.

(8) Participant variables are a problem.

(9) This design involves the most time and effort.

(10) Solved by counterbalancing.

(11) A solution to this problem is random allocation to conditions.

(12) Each participant acts as their own 'control'.