SWINBURNE
SENIOR SECONDARY COLLEGE

Psychology
Holiday Homework
Year 12, 2023

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Work required:	**Complete the A4 booklet:** ● Activities & questions based on Key Science Skills (Edrolo CH 1)
Textbooks and other resources:	**Essential** ● Edrolo Psychology 3&4 digital textbook & online access Optional: ● Edrolo printed textbook ● Psych Notes Units 3 and 4 (A+ publishing)
Key Links:	**VCAA Psychology resources** http://www.vcaa.vic.edu.au/Pages/vce/studies/psychology/exams.aspx **Additional websites for revision:** http://www.atarnotes.com/ http://wiki.engageeducation.org.au/practice-exams/psychology/ https://www.studyclix.com.au/subjects/vce/common/psychology
Due Date:	Week 1, Term 1 2023

Holiday Homework

Essential

This is work that MUST be completed by ALL Psychology students over the holidays. All SACs will include elements of this content and your KSS notes will be referred to and added to throughout classes in AOS 1.

Students can refer to Chapter 1: Key Science Skills in the Edrolo Units 3&4 Psychology textbook to assist them in responding to these questions.

TASK: Students are to complete the Holiday Homework booklet, to be handed in in Week 1, Term 1.

Topics include:
- Experimental research
- Research Questions
- Independent and Dependent Variables
- Sample and Population

Getting Ahead

For those who want to feel more prepared for the start of Term 1.

TASK: Complete the work listed above, and then **read the Edrolo textbook Chapter 1**. Take notes on any key concepts relating to the topics.

Specifically, read & take notes on the following topics:
- **1B** - Types of psychological studies
- **1B** - Other processes & techniques
- **1C** - Sampling techniques & allocation
- **1D** - Extraneous & confounding variables
- **1D** - Prevention of extraneous variables
- **1E** - Ways to categorise data
- **1F** - Data accuracy & precision, repeatability & validity
- **1F** - Drawing conclusions
- **1G** - Ethical concepts (eg. beneficence) & guidelines (eg. debriefing)

Population & Sample

Activity 1

Highlight the* population *and* sample *in the following examples, using different colours

- a group of pre-school children selected for research into cognitive development; Australian children aged two to four years
- people aged seventy-five years and over; a group of 100 randomly selected people aged seventy-five years and over responding to a questionnaire on ageing
- Victorian voters registered on the electoral roll; voters responding to a telephone survey on their preferred political leader
- twenty adolescents who are interviewed in a study investigating psychosocial development; adolescents in a particular youth training centre

Activity 2

1. In research the term 'population' refers to:
   a) every resident in a particular geographical location.
   b) the whole group that is of interest to the researcher, including every individual.
   c) every person and/or animal involved in the research project.
   d) the group of participants directly involved in a research study.

2. In research the term 'sample' refers to the:
   a) collection of evidence that has been gathered.
   b) smaller subgroup of the population that acts as researchers in a study.
   c) large group of people or animals that is of interest to the researcher.
   d) smaller subset of the population that are the research participants.

3. Random sampling refers to :
   a) ensuring that every member of the target population has an equal chance of being selected as a participant.
   b) recruiting research participants according to their availability.
   c) ensuring that every member of the sample has an equal chance of being selected in the population.
   d) selecting participants systematically according to their age, gender or religious background.

4. A random sample is needed in order to:
   a) select subjects to take part in research so that there are equal numbers of males and females
   b) ensure that there is no experimenter bias
   c) ensure that experimental and control groups are similar in terms of participant variables
   d) ensure that different characteristics within the population are also found within the participants in the research.

Independent & Dependent Variables

TASK: Use 2 different coloured highlighters to highlight the IV (independent variable) and DV (dependent variable) in the following scenarios:

1. Primary school children who watch violent cartoons on television have more nightmares than those who watch humorous cartoons.

2. By the age of six, children who were in day care before the age of six months are socially better adjusted than those who stayed with a sole caregiver.

3. Children who sleep more than nine hours each night have better concentration in school than those who sleep less than nine hours.

4. It is predicted that taking a tablet that will enhance concentration will allow the students to perform better on their exams, as shown by their end of year results.

5. The experimenter studied the results of the student's maths exams and found that the results correlated with the amount of hours each student spent studying.

6. James practiced his basketball three pointers for 3 hours before the game. During the game James scored 12 three pointers, more three pointers than anyone else on his team.

7. Jodie had three Panadols and after two hours felt a lot of pain relief.

8. Joe spent all night on Facebook, the next day he got a poor score on his maths test.

9. Tegan runs every morning for 2 hours, she got the top score in her P.E beep test.

10. Jason brushes his teeth twice every morning and once at night in the shower, his dentist said he has the cleanest teeth he has ever seen.

11. Adults who drink more than five alcoholic drinks each night suffer memory loss at an earlier age than non-drinkers.

12. The words at the beginning and end of a list will be recalled more accurately than those in the middle of the list.

13. VCE students who eat breakfast get better results than those who do not eat breakfast.

Research Questions

TASK: Link the following pairs of variables to <mark>create research questions</mark>.
For each formulated research question, <u>underline or highlight the two variables (IV & DV)</u> in different colours.

Example: stress and laughter
Research question: Does laughter reduce stress?

- parental praise and self-esteem

- hearing impairment and MP3 player use

- sense of wellbeing and friendships

- sibling birth order and personality

- mood and helpful behaviour

- type of TV advertisement (annoying or enjoyable) and product sales

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- unemployment and mental illness

- free access to gym and workplace productivity

- intelligence and sensory stimulation in infancy

- bullying behaviour and unstable home life

Research Activity

TASK: Read the summary of research below and answer the following questions:

The effects of exercise training on psychological stress in an adolescent population
R Norris, D Carroll, R Cochrane   https://pubmed.ncbi.nlm.nih.gov/1538350/

To determine whether participating in physical activity affects psychological well-being in an adolescent population, 147 adolescents were randomly assigned to either high intensity aerobic training or a control group. The training group met twice per week for 25-30 min. Aerobic fitness levels, heart rate, blood pressure and self-report of stress and well-being were measured prior to and following 10 weeks of training. Subjects undergoing high intensity exercise reported significantly less stress than subjects in the control group. This experiment provides evidence to suggest that in an adolescent population, high intensity aerobic exercise has positive effects on stress reduction.

Variables: Identify the independent and dependent variables

IV:
_____

DV:
_____

Hypothesis: Suggest a hypothesis for the study

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_____

Methodology: What is a "control group"? Why would the researchers use a control group?

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Methodology: The researchers used a "self report" method to determine stress levels. What is a self report? What potential issues are there for using a self report in the above study? What are the strengths of using a self report?

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