PSYCHOLOGY

Unit 1
Targeted Evaluation Task for School-assessed Coursework 1

2016 Test on Student-directed Research Investigation from 6 topics for Outcome 3

Recommended writing time*: 450 (should be 420) minutes
Total number of marks available: 30 marks

TASK BOOK

* The recommended writing time is a guide to the time students should take to complete this task. Teachers may wish to alter this time and can do so at their own discretion.
Conditions and restrictions

- Your teacher will inform you of the class time allocations for the completion of this task, but typically, students are permitted to spend between 6-8 hours of class time undertaking research for the investigation and communicating findings. This is per VCAA guidelines.
- While students are permitted to work in groups when conducting research, the writing of the report relevant to the investigation must be done individually.
- This task will be completed over the course of several weeks of classes. Classes will be allocated for the introduction of the area of research and introduction to the task of empirical research activity report writing.
- You will be required to collect data from chosen participants to form the data set for your report.
- It is important that you utilise your class time effectively and keep up to date in writing all sections of the report.
- The final report will be written during class time. It is important that you use the ERA report writing guidelines to complete this task.
- It is important that you keep all information such as data and rough drafts associated with this task. This will help to ensure authentication of your work.
- In the formal write up session, students are permitted to bring the following into the room for this task: raw data collection sheets, guidelines for writing psychological reports (found within this task), their textbook (if permitted by the teacher) and any other materials deemed appropriate by your teacher that will assist you in completing this formal report.

Materials supplied

- ERA information and criteria sheets.

Instructions

- All written responses must be in English.

Students are NOT permitted to bring mobile phones and/or any other unauthorised electronic communication devices into the room for this task.
Instructions for Targeted Evaluation Task

Task
Student-directed Research Investigation

Research topic
Students are to select from on the following topics available:

Topic 1: Biopsychology
- Are the sexes psychologically, as well as biologically, different?
- How do drugs such as caffeine and alcohol affect brain function?
- How do brain structures in animals compare with those in humans?
- What are the roles of the left and right hemisphere?
- Is the brain just a complex electric circuit?
- How are nerve cells such as grid cells specialised for different functions?
- How can brain trauma in sporting injuries affect cognitive function?
- Are animal studies of brain function directly translatable to human brain function?
- Do people use all of their brain capacity?
- How is psychological development affected by factors such as the prenatal environment?
- How ‘plastic’ is the human brain?
- Which areas of the brain are involved in specific psychological disorders?

Topic 2: Brain and the use of technology
- Are ‘brain training programs’ effective?
- How does the use of technology impact on brain functioning?
- Is our use of the internet changing the way we think and behave?
- How has neuroimaging changed our understanding of brain structure and function?
- How can technology be used to help people recover from brain trauma or injury?
- How are different neuroimaging techniques used to study brain structure and function?
- Does playing violent video games affect the structure and functioning of the adolescent brain?
- Is it possible to create artificial intelligence?
- What are the psychological justifications for it to be illegal to drive and use a mobile phone at the same time?
- How can transcranial magnetic stimulation be used as a mental health treatment?

Topic 3: Cognition
- What happens in the brain when we feel different emotions?
- How does brain development influence decision making in adolescents?
- How does play-based learning support children’s cognitive development?
- Why are humans able to create art and invent things?
- How does the brain enable decision making and problem solving?
- Does extra-sensory perception exist?
- What is ‘intelligence’?
- Is there a link between high IQ and high levels of symbolic thinking?
- Are some languages easier to learn than others?
- How does Freud explain the ‘preconscious’, ‘conscious’ and ‘unconscious’ mind?
2016 PSYCHOLOGY SCHOOL-ASSESSED COURSEWORK

Topic 4: Psychological development
- How does learning to play a musical instrument affect psychological development?
- Do different parenting styles affect the psychological development of children and adolescents?
- What are the developmental reasons for film/video game classification systems?
- What role does attachment play in the development of an individual’s personality?
- How does attachment theory inform parental decisions about child-care arrangements?
- How does Piaget’s theory influence the development/selection of age appropriate toys?
- Can personality be determined by the Rorschach test?
- Does the ‘two-hit’ hypothesis apply to all mental disorders?
- Are longitudinal studies useful when studying psychological development?
- What are the main criticisms of Piaget’s theory of cognitive development?
- How accepted are Freud’s theories related to the development of the id, ego and superego during infancy and childhood?

Topic 5: Mental health and disorder
- What are some of the strengths and limitations in using classification systems to diagnose atypical behaviours and mental disorders?
- How is the nature/nurture debate related to a consideration of mental health and mental disorder?
- How can temporary emotional states such as grief affect classification of behaviour and mental states?
- Why have some mental disorders been reclassified over time as not being disorders while other health conditions become newly classified as mental disorders?
- How has the treatment of mental disorders changed over time?
- When does a fear become a phobia?
- To what extent is mental disorder a cultural construct?
- Why is a fear of public speaking difficult to classify?
- Why isn’t caffeine addiction identified as a mental disorder?

Topic 6: Changing thoughts, feelings and behaviour
- What is the current research on and evidence for possible biological or psychological factors being involved in the development of syndromes such as Tourette syndrome?
- How can creativity and imagination be encouraged and fostered?
- How do inspiration and motivation affect thoughts, feelings and behaviour?
- What strategies can people use to change maladaptive behaviours?
- Do moods bias judgment?
- Are emotions contagious?
- How is the brain involved in ‘self-actualisation’?
- How does foetal alcohol syndrome affect nervous system functioning?
- What is the psychological basis for common types of intervention programs used to support young people?
- What are the potential risks of substance use (such as alcohol and illicit drugs) on adolescent psychological functioning?
- How did Freud explain the use of defense mechanisms when dealing with conflicts or problems in life?
Writing time
Development of investigation and data collection – 7 x 50 minute classes
Formal write up - 2 x 50 minute classes

Total number of marks available
30 marks

Number of words
1,000

Resources
You are allowed to use your textbook as a reference to complete this task; however, the ERA is to be written in your own words.

ERA report criteria
The following criteria are to be addressed in your report, the marks allocated for each criterion are provided below:

1. TITLE – Statement that describes nature of the study.
   ABSTRACT – A brief summary of the whole report, including aim, hypothesis, method, results and conclusion.
   3 marks

2. INTRODUCTION – Relevant background information, definition of key terms, description of relevant prior research and aim are all identified. Research hypothesis is clear, and concise, independent variable and dependent variable identified.
   6 marks

3. METHOD – Participants, materials, procedure, experimental design and participant selection and allocation are all identified. The research and data collection methods are appropriate to the investigation and described accurately with sufficient detail to enable replication. The relevant ethical principles are explained in detail and the steps taken to fulfill the requirements of ethical psychological research are comprehensive.
   4 marks

4. RESULTS – Appropriately labelled and titled tables and graphs are used. Statistical analysis is completed if relevant. Description but not interpretation of results is provided. Data display and analyses are appropriate, detailed, accurate and clear.
   4 marks
5. DISCUSSION – The conclusions and findings of the research are accurate, detailed, coherent and show evidence of an appreciation of the place of research in the development of understandings in Psychology. A statement indicating if the hypothesis is supported or not is provided. Relevance to previous studies, generalisations, confounding variables and suggestions for future research are all included.

6 marks

6. REFERENCES – Citing of all references using the APA system of citations and referencing.

2 marks

7. APPENDICES – Any relevant material such as data sheets and stimuli are attached.

2 marks

8. GRAMMAR - The report must have the appropriate structure and be written coherently; this includes correct grammar, spelling and paragraphing.

3 marks
EMPIRICAL RESEARCH ACTIVITY REPORT WRITING GUIDELINES

SECTION 1 – Title and Abstract (100 – 150 words)
The title of your ERA report should be a brief statement, which describes the nature of the study. Complete the abstract section of your ERA report last; however, it should appear on the first page under the title. The abstract is a brief summary of the whole report. Include: a summary of the method, the research hypotheses, the independent and dependent variables, and a summary of the aim, results and any conclusions from the results. It is not an evaluation of the success of the experiment and should be written in the third person.

3 marks

SECTION 2 – Introduction (150 – 200 words)
Outline some of the relevant background information in relation to the investigation. All sources of information used in the investigation require referencing. Provide a definition of key terms in your own words. Summarise any relevant research previously conducted on the topic. State the aim of the investigation. State the research hypothesis; ensure it is clear, and concise. State the independent and dependent variables.

6 marks

SECTION 3 – Method (150 – 200 words)
State the characteristics of the participants e.g. population, number, age and gender. Describe the sampling procedure used. List the materials and apparatus used in the experiment. Provide a step-by-step description of how the experiment was carried out. Describe the experimental design (if applicable) used and provide a justification for its use, i.e. the advantages of the chosen design over others. State how participants were allocated to each condition. State the steps taken to fulfil the requirements of ethical psychological research.

4 marks

SECTION 4 – Results (150 – 200 words)
Provide appropriately labelled and titled tables and graphs to summarise and organise the data. Provide a description but no interpretation of the results.

4 marks
SECTION 5 – Discussion (200 – 250 words)
State whether the hypotheses were supported or rejected. Provide a statement of the conclusions and findings of the investigation. State the relevance of the results to previous studies. State if it is possible to generalise any of the results to the wider population. Identify any confounding variables and make suggestions on how these could be controlled in future research. Make a recommendation for future research on the topic.

Alternatively, you may wish students to answer the following questions.
1. Was the hypothesis supported or refuted? Refer to exact evidence.
2. What conclusions can be made about the research topic?
3. What generalisations can be made?
4. List any extraneous variables that may have affected the results
5. What is the advantage or disadvantage of the experimental design chosen?
6. What ethical guidelines did your study adhere to?

SECTION 6 – References
All references used must be cited using the APA system of citations and referencing.

SECTION 7 – Appendices
Any relevant material such as data sheets and stimuli should be attached and cited in the body of the report.

SECTION 8 – Grammar
The report must include correct grammar, spelling, paragraphing and report structure, and be written coherently.

6 marks
2 marks
2 marks
3 marks
Unit 1 Psychology, Outcome 3 – Student-directed Research Investigation

**Methodology planning sheet**

Use the table below to develop a plan of the research methodology behind your self-directed investigation. Some of this has been done for you. It is important to keep track of this, so that you make the most of your class time and to ensure you have all data collected before the formal report write up sessions.

<table>
<thead>
<tr>
<th>Task</th>
<th>Details of the task</th>
<th>When this will be completed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identify research question</td>
<td>Choose a study from the list provided or negotiate a topic to study with my teacher</td>
<td></td>
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<tr>
<td>2. Conduct background reading on the topic and develop a hypothesis</td>
<td></td>
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</tbody>
</table>
| 3. Plan the method                             | * Identify variables under investigation  
* Choose research design  
* Choose sampling and allocation procedures |                              |
<p>| 4. Assess ethical considerations               | * Gain informed consent (using clear language statement provided as a guide)          |                              |</p>
<table>
<thead>
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<tbody>
<tr>
<td><strong>5. Collect data</strong></td>
<td></td>
</tr>
<tr>
<td><strong>6. Analyse data</strong></td>
<td></td>
</tr>
</tbody>
</table>
| **7. Interpret data** | * Draw conclusions about whether the data supports the hypothesis and the degree to which the results are valid and due to the effect of the IV on the DV  
* Make generalisation to the wider population (if possible) |
| **8. Report the findings** | Develop a report that adheres to APA guidelines for report writing. |
Unit 1 Psychology, Outcome 3 – Student-directed Research Investigation

Research outline

Research question / aim: __________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Hypothesis: __________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Operationalised IV: __________________________________________________________
______________________________________________________________________________

Operationalised DV: __________________________________________________________
______________________________________________________________________________

Extraneous variables: _________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Outline of how these variables will be controlled: _________________________________
______________________________________________________________________________
______________________________________________________________________________

Sampling method and justification for selection: _________________________________
______________________________________________________________________________
______________________________________________________________________________

Research design: ____________________________________________________________
Allocation method: _______________________________________________________________

Procedure for data collection: ______________________________________________________
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Selection of graphs / tables to summarise descriptive statistics: ______________________
______________________________________________________________________________
______________________________________________________________________________
______________________________________________________________________________

Sample graphs, tables can be constructed in the space below:

END OF TASK BOOK
Plain Language Statement

Consent Form to Participate in Research

Project title:

I, ………………………………………………. have been invited to participate in the above study, which is being conducted under the direction of …………………… I understand that although the study is being conducted by them, other relevant persons may assist or act on their behalf during the study.

My agreement is based on the understanding that the research study is investigating (insert aim of study here).

During this study, I understand that I will be required to (insert procedure here). This process will take approximately (insert time commitment here).

- I have received sufficient information about the aims and nature of the study. All of my questions have been answered to my satisfaction.
- I understand that I can refuse to consent or withdraw from the study at any time without explanation.
- I consent to the use of my results in developing a report on this study provided my identity is not revealed.
- I hereby voluntarily consent and offer to take part in this study.

Signature (participant or guardian if under 18) Date: Time:

Signature (experimenter) Date: Time:
## UNIT 1, OUTCOME 3 – STUDENT-DIRECTED RESEARCH INVESTIGATION

<table>
<thead>
<tr>
<th>Criteria Description</th>
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Student name: ___________________________________________ 
Result (S/N): _______________ Total marks ________/30

Teacher comments: ________________________________________

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