

2022 – 12 ATAR Psychology

Task Two – Investigation

7.5%

Serial Position Effect Investigation

Name:

Due Date:

Score: /52

**Assessment type:** Investigation

**Conditions**

Time for the task:

* One week to conduct the investigation, collect the data and research the evidence for the role of serial position effect in short-term memory.
* During this week you will write up your method, table, graph and briefly summarise your results as per the report requirements.
* One period to write the abstract, introdution, discussion and conclusion under test conditions.

Materials required when writing the Abstract, Introduction, Discussion and Conclusion:

* Data (tables and graphs)
* List of references
* Questionnaire and responses
* ½ an A4 page of dot point notes

You must also consider how you will address the ethics involved in any investigation.

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**Examining short-term memory through the serial position effect (52 marks)**

You will be examining **your** short-term memory through the serial position effect. Specifically, you will investigate whether **your** ability to recall items from a list reflects the pattern suggested by the serial position effect, i.e. more items from the start and end of a list are recalled correctly than items in the middle of the list.

Participants in this investigation will be required to remember and recall as accurately as possible sets of 10-digits in the order they are presented. Participants will be presented with five sets of digits and will be given the chance to recall the digits at the end of each set on a provided data sheet. The data collection for this investigation will take place during regular class time.

Using your class notes and library research, make succinct notes on the theories and evidence related to this topic. You are permitted ½ an A4 page of notes when you write your abstract, introduction, discussion and conclusion.



Dear student,

As part of this psychology unit, you will be collecting data to examine short-term memory through the serial position effect.

Participants will be involved in a brief experiment to determine whether Serial Position Effect follows pre-determined patterns. Data will be collected during regular class time.

To safeguard anonymity, students’ written responses will be identified by a code number and all individual student data will be shredded at the completion of the unit.

To give your consent to being involved in this investigation, please read, complete and sign the attached consent form.

Your parent or guardian must also provide consent for your participation in this investigation. If they agree, please ask them to also sign the provided consent form.

Even if you have signed the consent form, you may withdraw from this investigation at any time. There will be no consequences if you do not want to participate, or if you initially agree to participate and later decide to withdraw. Your rights and responsibilities are detailed in the consent form.

Please ask me if you do not fully understand the information provided or if you would like further information or have any concerns about what is required of you in this investigation.

Yours sincerely

N. Edwards



**Examining short-term memory through the serial position effect**

**Consent form**

Participant’s name:

Investigation title: **Examining short-term memory through the serial position effect**

Teacher’s name: N. Edwards

I consent to participate in the research investigation named above. The nature of the research, including the procedures, has been explained to me, and is summarised in the information letter I have been given.

I give permission for the responsible teacher, named above, to use the outlined investigation procedures with me.

I understand that:

(a) I am free to withdraw from the investigation at any time. There will be no consequences if I decline to participate or if I initially agree to participate, but later decide to withdraw.

(b) The investigation is for the purpose of teaching and learning.

(c) The confidentiality of the information I provide will be safeguarded. Written responses will be identified only by a code number in order to ensure that responses are anonymous.

(d) There are no known adverse effects of participation in this investigation.

(e) I will maintain the confidentiality of other participants in this investigation.

**Please return this signed consent form to your teacher.**

**Signed:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Student)

**Students under the age of 18 may participate in this investigation only if a parent or guardian completes the following section.**

I consent to the participation of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the above research investigation.

**Signed:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Date:** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

(Parent/Guardian)

**Marking key for Serial Position Effect Investigation (7.5%)**

* Abstract – provide an overview of the investigation, including the aim, hypothesis, main features of the method, summary of results and conclusion/s

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * States an aim/hypothesis * Hypothesis is operational | 1–2 |
| * Briefly describes the method, including   + the participants   + materials used   + how the task was administered | 1–3 |
| * States the results of the research * Draws a relevant conclusion | 1–2 |
| **Total** | **7** |

* Introduction – provide information and research related to the topic for the investigation

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Makes a relevant statement about short-term memory (STM), describing its main features | 2 |
| * Makes some comments about STM | 1 |
| **Subtotal** | **2** |
| * Explains the serial position effect | 3 |
| * Describes the serial position effect | 2 |
| * Briefly comments on the serial position effect | 1 |
| **Subtotal** | **3** |
| * Supports above information with reference to relevant research | 2 |
| * Refers to some research without making links to the topic | 1 |
| **Subtotal** | **2** |
| **Total** | **7** |

* Method – describe the participants, materials and procedures so that the investigation can be replicated

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Describes participants in sufficient detail to be replicated, e.g. number, age, gender * Describes the selection process | 1–2 |
| * Describes materials * Provides sufficient detail to be replicated | 1–2 |
| * Describes the procedure, including:   + addresses anonymity   + describes task in sufficient detail to be replicated   + describes the collection, collation and presentation of results | 1–3 |
| **Total** | **7** |

* Results – represent data in a written summary, tables and graph

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Organises all relevant data logically in correctly labelled tables   + correctly organises table   + correctly labels table, including units, where appropriate   + includes relevant data | 1–3 |
| * Presents data in a graph   + correctly graphs data   + uses appropriate labelling   + uses appropriate titles | 1–3 |
| * States results of the investigation * Provides an accurate summary of the data | 1–2 |
| **Total** | **8** |

* Discussion and Evaluation
  + discuss the results of the investigation and how they relate to relevant psychological theories
  + evaluate the design of the investigation and explain how the investigation could be improved
  + discuss how ethical issues were addressed
  + explain the relevance of the results to the population from which the sample was drawn and to theory or other research

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Discusses the results of the investigation, relates the results to the hypothesis and explains how they relate to relevant psychological theories | 4 |
| * Discusses the results of the research supports, comments on the hypothesis and describes relevant psychological theories | 3 |
| * Describes what happened in the investigation and cites relevant psychological theories | 2 |
| * Describes what happened in the investigation | 1 |
| **Subtotal** | **4** |
| * Evaluates the investigation design:   + discusses any methodological flaws   + explains steps taken to ensure reliability and how it could be improved | 3 |
| * Explains how variables are controlled and suggests ways to improve reliability | 2 |
| * States that variables need to be controlled and suggests how to improve reliability | 1 |
| **Subtotal** | **3** |
| * Discusses ethical issues and describes how these were addressed | 2 |
| * Refers to ethical issues that were considered in the investigation | 1 |
| **Subtotal** | **2** |
| * Discusses relevance of results to the population from which the sample was drawn as well as to theory or other research referred to in the introduction | 2 |
| * Suggests how the investigation might be of relevance to science or society | 1 |
| **Subtotal** | **4** |
| **Total** | **13** |

* Conclusion – relate the results to the hypothesis or research question

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Makes accurate conclusions that relate to the hypothesis or research question | 2 |
| * Forms an accurate conclusion but does not relate it to the hypothesis or research question | 1 |
| **Total** | **2** |

* References – provide an alphabetical list of any references used in the report

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Includes a range of relevant references (at least 5, from appropriate sources) | 1 |
| * Correct end-text referencing (Inc. listed alphabetically) * Correct in-text referencing (Inc. quantity) | 1  1 |
| **Total** | **3** |

* Appendix – attach your data sheet

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Appends data sheet | 1 |
| **Total** | **1** |

* Clarity of Expression

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Quality of spelling and grammar | 1–2 |
| * Correct use of headings, organised, presented in APA format | 1 |
| * Written in passive voice | 1 |
| **Total** | **4** |