

TEST THREE

Name: _____

Teacher: _____

Mark:

/47

Percentage:

%

MARKING KEY**Section One: Research methods**

(11 marks)

Question 1

(7 marks)

Following work conducted on the Mozart effect, a researcher wanted to investigate the relationship between children's exposure to music at a young age and their coping mechanisms later in life. The researcher advertised for participants in the local paper. Sixty-five parents of children aged 3-5 years answered the advertisement. The children were screened and 40 children were chosen for the experiment. The researcher randomly allocated 20 children to one group and 20 children to another group. The children in group 1 were exposed to music every day for a period of one year. Exposure to music included playing music, dancing to music and creating music. The children in group 3 were not exposed to any music for one year. Years later, the researcher located the participants from both groups after they had entered high school. He gave them all a coping mechanisms test. This involved a test with scenarios and a series of activities which involved them making decisions in emergencies, suggesting strategies for coping and survival, and reporting on how they felt when role-playing these emergencies. He found that the children in group 1 averaged 85% on these tasks, while the children in group 2 averaged 82% on these tasks. He found that the difference in coping abilities between groups 1 and 2 was $p > 0.05$.

- (a) Write a suggested operational hypothesis for this experiment.

(3 marks)

It is hypothesised that children (1) who are exposed to music for one year at a young age will achieve a higher percentage on a coping mechanisms test in their teenage years than children who are not exposed to music for a one-year period.

- Operationalised independent variable (1).
- Operationalised dependent variable (1).

- (b) Discuss one uncontrolled variable that may have influenced the results of this experiment. (2 marks)

Examples of responses:

- Participants may have had significant life events occur which may have either increased or decreased their ability to cope.
- Participants may have learned other coping strategies, unrelated to music, which may have increased their ability to cope.

- (c) Are the results of this experiment statistically significant? Explain your answer.

(2 marks)

No (1), as $p > 0.05$ means that it is likely that the results have occurred due to chance (1).

Question 2**(4 marks)**

A government school in Perth had fantastic results in psychology last year and published each student's end of year examination result in the January newsletter. The data set is below.

A+	A	B	A+	B+	C	B+	A
B+	B	A	A	A+	A	A	B+
D+	B	C+	A+	C+	B+	A	B+

Construct a frequency distribution table that highlights these results. (2 marks)

Examination grade	Frequency
A+	4
A	7
B+	6
B	3
C+	2
C	1
D+	1

What would be the best way to represent this data graphically and why?

This data would be best represented in a bar graph (1) because grades are not continuous data, they are discrete (1).

Section Two: Short answer**(11 marks)****Question 3****(3 marks)**

Name one researcher who criticised Piaget's theory of cognitive development and explain his or her criticism.

Name of researcher: Donaldson and Hughes (1)

They criticised Piaget's tasks as being unfamiliar to children (1)

When they are given more familiar tasks, they are able to demonstrate higher abilities at a younger age (1)

OR

Name of researcher: Siegal (1)

His criticism related to the language used in the tasks (1)

The experimenter asks questions that are too obvious or repetitive so children assume their first

response was incorrect and change their response to please the experimenter (1)

Question 4**(6 marks)**

(a) What sort of learning was Albert Bandura known for investigating? (1 mark)

Observational learning.

(b) Define this type of learning. (1 mark)

Observational learning involves actively watching a model and their actions and consequences to guide future behaviour.

(c) Briefly outline what occurred during Ainsworth's 'Strange Situation' study (the method). (3 marks)

A mother would leave her young child, between 12 and 18 months, in a room (1). During this time a stranger would enter to interact with the child (1). The child was then reunited with its mother and the child's response was recorded (1).

- (i) What was the 'Strange Situation' study assessing? (1 mark)
Attachment styles in children.

Question 5 (2 marks)

Mike wanted to test whether recall or recognition is a more successful way to retain information. He decides to use nonsense syllables to test the relative successfulness of each measure.

Explain a task he could devise to assess a group of participant's memories using recall, and a task he could devise to assess a group of participants' memories using recognition.

- (a) Recall task: (1 mark)

He could show the students a list of ten nonsense syllables and then get his participants to recall as many words as possible.

- (b) Recognition task: (1 mark)

He could show the students a list of ten nonsense syllables and then give them a list of 20 possible syllables and get them to circle the ones that appeared on the original list.

Section Three: Extended answer (25 marks)

This section contains **one (1)** question.

- Planning: If you use a page for planning, indicate this clearly at the top of the page.
- You should refer to relevant psychological concepts, theories and research in your answer.

Suggested working time: 30 minutes.

Question 6

Jasmine is a tourist in London and becomes lost while trying to find her way to a café to meet a friend. She has left her mobile phone in the hotel and does not have a tourist map, so she asks someone on the street for directions. The stranger talks her through a series of directions involving a number of street names, landmarks and turns.

Name two components of Baddeley and Hitch's model of working memory and describe the role of each in Jasmine remembering and following the instructions to find her way to the café.

Any two:

Phonological loop (1): used to maintain, rehearse or encode the spoken directions/repeating the directions over in her mind (1).

Visuospatial sketchpad (1): used to create a mental map of the directions/to generate a visual image of the route and/or landmarks (1).

Central executive (1): involved in orientating attention, selecting information to be attended, in directing resources to the slave systems (phonological loop and visuospatial sketchpad)/for directing information from the phonological loop, visuospatial sketchpad and long-term memory to the episodic buffer (1).

Episodic buffer (1): multidimensional workspace that enables the temporary representation of an integrated episodic memory of the current situation, including information from both the phonological loop and the visuospatial sketchpad as selected by the central executive, and any relevant information retrieved by the central executive from long-term memory (1).

In your answer you should:

- Define working memory. An active subsystem of short-term memory that temporarily stores and manipulates a limited amount of information needed to perform cognitive tasks (1).
- Describe a criticism and contribution of Baddeley and Hitch's model of working memory.

Criticism: model only involves short-term memory so it is not a comprehensive model of memory (as it does not include sensory memory or long-term memory) (1)

Contribution: model applies to real life tasks such as reading (phonological loop), problem solving (central executive) and navigation (visual and spatial awareness) (1).

- Select another model of memory you have studied, define your chosen model and give details of each component of this model.

Multi-store model of memory (1).

Atkinson & Shiffrin (1).
Definition: memory as a system consisting of multiple memory stores, through which a stream of data flows for processing (1).

Sensory memory (1): first stage of memory that receives unlimited amount (1) of sensory information (1) for up to a few seconds (1).

Short-term memory (1): second stage of memory that stores a limited (around seven pieces) of information (1) for approximately 12-30 seconds (1).

Long-term memory (1): third memory system that receives an unlimited amount of information (1) and stores it relatively permanently (1).

- Describe a difference between your chosen model and the working memory model.

Multi-store model of memory involves a whole memory system that includes sensory memory, short-term memory and long-term memory (1) whereas the working memory model is based on the section of short-term memory only (1).

Quality of extended response	
Well-constructed response with an introduction, conclusion, and well-developed sentences and paragraphs. Consistent use of appropriate psychological language.	3
Coherent response with adequate sentence and paragraph structure. Use of clear everyday language.	2
Incoherent response, lack of paragraph structure and/or poor sentence structure. Colloquial language or poor English expression.	1
Response is too brief or irrelevant to be awarded marks	0
	Total
	3

* No need to have introduction and conclusion.