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**PSYCHOLOGY ATAR – YEAR 11 2024  
Unit 1**

**Task 2: Science Inquiry (Research)**

*Science Inquiry and Lifespan Psychology*

*Part B*

**Syllabus Points:**

* Science Inquiry: Ethical guidelines and practices for psychological research, formulating research, methodology, drawing conclusions, evaluation of research and communicating
* Lifespan Psychology

**Conditions**

Time for the task:

* Part A: 2 hours in class plus homework time to conduct planning, research and note-taking
* Part B: 5 minutes of reading time. 50 minutes to complete an in-class inquiry under supervised conditions with one page of notes allowed

**Task weighting**

* 15% in total
  + Part A due Wednesday, 5 April 2023, submitted by 11:59pm via SEQTA, worth 5 marks
  + Part B to be completed in class on Thursday, 6 April 2023 worth 50 marks

**Structure of this paper**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Section | Number of questions available | Number of questions to be attempted | Suggested working time  (minutes) | Marks | Score |
| Section One:  Science Inquiry | 2 | 2 | 50 | 50 |  |
|  |  |  | **Total** | 50 |  |

|  |  |  |
| --- | --- | --- |
|  | **Score** |  |
| **Part A** | **/ 5** |  |
| **Part B** | **/ 50** |  |
| **Total** | **/ 55** | **%** |

**Section One: Science Inquiry 100% (50 Marks)**

This section has **one** question. Write your answers in the spaces provided.

Suggested working time: 50 minutes.

**Question One (37 marks)**

Throughout life, people acquire beliefs, values and behaviours that are through to be important and appropriate to function effectively as members of society. This is known as socialisation. Psychologists are interested in studying important influences on people at different stages of their lives, so that they have a greater understanding of how people adjust to changing roles throughout their lives. Mary Ainsworth was a key researcher in developmental psychology. Based on your research into the experiments of Mary Ainsworth, answer the questions that follow:

1. Define attachment. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The formation of a strong emotional tie between an infant and their caregiver. | 1 |
| **Total** | **1** |

1. State the type of research method used by Ainsworth and justify your response. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Experimental research | 1 |
| Correct reasoning – independent variable is manipulated, cause and effect can be found, random allocation can occur | 1 |
| **Total** | **2** |

1. Identify the aim of Ainsworth’s research. (1 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Aim – To measure the attachment of an infant to the caretaker as demonstrated by observations of a child's behaviour during the separation and return from mother | 1 |
| **Total** | **1** |

1. Identify the sample Ainsworth used in the experiment. (2 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 100 American mothers (1) and their infants aged 1-2 years old (1) | 1 - 2 |
| **Total** | **2** |

Ainsworth’s research was heavily influenced by a notable theorist.

1. State the theorist that Ainsworth based the ‘Strange Situation’ experiment on. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Bowlby | 1 |
| **Total** | **1** |

1. Based on your knowledge of this theorist, explain why Ainsworth chose a particular sample for the Strange Situation experiment. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| According to Bowlby, the critical period in forming attachments is 2 years old | 1 |
| **Total** | **1** |

1. Develop a directional hypothesis for Ainsworth’s 1978 experiment. (5 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Population – Infants | 1 |
| Independent variable – person present in the room | 1 |
| Dependent variable – security of attachment | 1 |
| Measurement tool – observation | 1 |
| Direction – secure / insecure reaction | 1 |
| *For example: It is hypothesised that infants who are separated from their mothers will show* | |
| **Total** | **5** |

1. Identify the independent variable, dependent variable and three controlled variables in Ainsworth’s experiment. (5 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Independent variable – person present in the room | 1 |
| Dependent variable – security of attachment | 1 |
| 3 x Controlled variables | 1 - 3 |
| **Total** | **5** |

1. Outline the method used by Ainsworth in her 1978 experiment. (8 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Method:   * Observer introduces mother and baby to experimental room, then leaves. * Mother is nonparticipant while baby explores room. * Stanger enters and mother leaves. * First separation episode. Stranger’s behaviour is geared to that of the baby. * First reunion episode. Mother greets and comfortable baby, then tries to settle baby into play. Mother leaves. * Second separation episode. Baby left on its own. * Stranger enters and gears behaviour to that of the baby. * Second reunion episode. Mother enters, greets baby. Stranger leaves. | 1 - 8 |
| **Total** | **8** |

1. Identify the most appropriate sampling method for an experiment similar to Ainsworth’s. Explain your reasoning. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Random sampling | 1 |
| A method of sampling that ensures every member of the study population has an equal chance of being selected to participate in the study | 1 |
| Using random sampling ensures results can be generalised to the wider population | 1 |
| **Total** | **3** |

1. State two findings from Ainsworth’s experiment. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any two of the following:   * A child’s attachment style is dependent on the behaviour their mother shows towards them * Sensitive’ mothers are responsive to the child's needs and respond to their moods and feelings correctly. Sensitive mothers are more likely to have securely attached children. * Mothers who are less sensitive towards their child, for example, those who respond to the child’s needs incorrectly or who are impatient or ignore the child, are likely to have insecurely attached children. * Securely attached infants are associated with sensitive and responsive primary care. * Insecure resistant attached infants are associated with inconsistent primary care. Sometimes the child’s needs and met, and sometimes they are ignored by the caregiver. * Insecure-avoidant infants are associated with unresponsive primary care. The child comes to believe that communication of needs has no influence on the mother/father. * Avoidant children think themselves unworthy and unacceptable, caused by a rejecting primary caregiver. * Resistant children have a negative self-image and exaggerate their emotional responses as a way to gain attention. * Accordingly, insecure attachment styles are associated with an increased risk of social and emotional behavioural problems via the internal working model. | 1 - 2 |
| **Total** | **2** |

1. Describe two ethical considerations relevant to Ainsworth’s research. (6 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any two of the following:   * Informed consent (1) - All participants must be informed of the nature of the research, its benefits and risks, and what they will be expected to do. This must be done in writing in language they can understand. * Protection from harm (1) – Researchers must ensure that those taking part in research will suffer physical or mental harm * Withdrawal rights (1) – Participants can leave the study at any time without being pressured to stay or penalised if they leave. * Confidentiality (1) – Participant’s data is stored securely, disposed of when no longer needed, and not revealed without their consent. * Privacy (1) – The participant has the right to have the collection, storage, and sharing of their personal information protected. * Voluntary participation (1) - Participants cannot be forced to participate, cannot be bribed or be threatened with failure of a course or the exclusion from a treatment program. | 1 – 4 |
| Applies to research | 1 - 2 |
| **Total** | **6** |

**Question Two (13 marks)**

Psychology students wanted to revisit Ainsworth’s research into attachment. They observed the behaviour of three one-year-old boys who were taken to day care by their mothers.

Each boy behaved differently when the mothers left:

**Li:** ignored his mother.

**Zac:** appeared a little upset.

**Rob:** did not want his mother to leave and was extremely upset.

When the children were approached by a childcare worker, they all behaved differently. Li was calm, Zac was moderately anxious while Rob was very anxious.

1. Referring to the different attachment types identified in Ainsworth’s Strange Situation experiment, identify the mostly likely type for each child. (3 marks)

|  |  |
| --- | --- |
| **Li:** | Type A – Insecure avoidant attachment |
| **Zac:** | Type B - Secure attachment |
| **Rob:** | Type C – Insecure resistant attachment |

1. Outline the behaviour each of the children is likely to display when his mother collects him from childcare. (3 marks)

|  |  |
| --- | --- |
| **Li:** | Li is not likely to approach mother/is likely to ignore/avoid his mother. |
| **Zac:** | Zac is likely to greet his mother enthusiastically |
| **Rob:** | Rob is likely to seek and reject her mother/is likely to hold out arms but may resist contact. |

The psychology students noted that Ainsworth’s original study had good reliability.

1. Define reliability and explain what this means in the context of Ainsworth’s original study. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The extent to which a given method or test provides consistent findings when repeated | 1 |
| When Ainsworth’s study has been repeated, researchers have achieved consistently results with the original experiment | 1 |
| **Total** | **2** |

Ainsworth’s research has played an important role in the current understanding of child development. However, when the psychology students conducted their experiment, their results had low validity.

1. Define validity. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The extent to which an assessment tool measures what it’s meant to measure | 1 |
| **Total** | **1** |

1. Identify and explain two limitations of Ainsworth’s study that impact the validity of results.

(4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Methodology doesn’t accurately assess attachment (1) due to the highly artificial environment (1) | 1 - 2 |
| There are different reasons why children develop attachment types (1) such as child temperament and/or caregiver responses (1) | 1 - 2 |
| **Total** | **4** |