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**Joseph Banks  
Secondary College**

**Research Methods, Relational Influences and Communication  
Worth 4% of the School Mark**

**Question/Answer Booklet**

**Year 12 ATAR PSYCHOLOGY Marking Key**

# Time allowed for this paper

## Reading time before commencing work**: thee minutes**

Working time for the paper: **sixty minutes**

# Materials required/recommended for this paper

***To be provided by the supervisor:***

This Question/Answer Booklet

Formulae and Data Booklet

***To be provided by the candidate:***

Standard items: pens (blue/black preferred), pencils (including coloured), sharpener,

correction tape/fluid, eraser, ruler, highlighters.

Special items: non-programmable calculators approved for use in the WACE examinations

# Important note to candidates

No other items may be taken into the examination room. It is **your** responsibility to ensure that you do not have any unauthorised notes or other items of a non-personal nature in the examination room. If you have any unauthorised material with you, hand it to the supervisor **before** reading any further.

**Structure of this paper**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Section | Number of questions available | Suggested working time  (minutes) | Your Mark | Marks available | Percentage of test |
| Section One:  Research Methods | 2 | 30 |  | 29 | 50 |
| Section Two:  Short Answer | 3 | 30 |  | 2 | 50 |
|  |  | **Total** |  | 55 | 100 |

**Instructions to candidates**

1. The rules for the conduct of Western Australian external examinations are detailed in the *Year 12 Information Handbook 2016*. Sitting this examination implies that you agree to abide by these rules.
2. Write your answers in this Question/Answer Booklet.
3. When calculating numerical answers, show your working or reasoning clearly. Your working should be in sufficient detail to allow your answers to be checked readily and for marks to be awarded for reasoning.

In calculations, give final answers to one significant figures and include appropriate units where applicable.

1. You must be careful to confine your responses to the specific questions asked and to follow any instructions that are specific to a particular question.
2. Supplementary pages for the use of planning/continuing your answer to a question may have been provided at the end of this Question/Answer booklet. If you use these pages to continue an answer, indicate at the original answer where the answer is continued, i.e. give the page number.

**Section 1: Research Methods (29 marks)**

**Question 1 (14 marks)**

1. Distinguish between scientific and non-scientific research in the table below. (6 marks)

|  |  |  |
| --- | --- | --- |
|  | **Scientific** | **Non-scientific** |
| **Collection of evidence** | **Based on verifiable evidence**  **Or**  **It is collected in a systematic way** | **Is based on tradition, experience or intuition**  **Or**  **Not collected in a systematic way** |
| **Methodology** | **Follows a descriptive set of instructions** | **Limited to no instructions** |
| **Reliability** | **Can be reproduced** | **Reproducibility is limited** |

Dr Koba conducted an experiment to test the effects of sugar on behaviour. He divided the participants randomly into two groups. One group was given a capsule containing 50 mg of sugar and the second group was given a capsule of water. The participants were then given a series of word problems to complete.



i. State the term used to identify the group that was given the capsule of water. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Control group | 1 |

Dr Koba, Dr Davey and Dr Aslan explained their understanding of statistical significance. Each described their understanding differently in the conversation below.

Dr Koba: It means that my data is probably reliable, I can draw conclusions from it

Dr Davey: I’m sorry, you’re wrong. It gives you an indication that your results are most likely due to something other than chance.

Dr Aslan: You’re both wrong. It’s when you calculate statistics, and they are correct.

ii. White person most correctly understands statistical significance? Circle their name below. (1 mark)

Dr Koba Dr Davey Dr Aslan

Dr Koba conducted a piece of research looking at the impact of matcha on mood. Dr Koba split a group of 100 participants into two groups those who received 1 cut of matcha per day over a 4-week period and those who received no matcha. Participant mood scores were measured daily and averaged below.

Larger values indicate higher reported mood scores.

|  |  |  |
| --- | --- | --- |
|  | **Average mood score at the start** | **Average mood score after 4 weeks** |
| **Matcha** | 4.3 | 6.7 |
| **No Matcha** | 1.2 | 7.8 |

iii. Describe the conclusions Dr Koba can make with P > .05 (3 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| It is the probability that the. Results obtained are due to random factors or chance  The p value that Dr Koba has shown that the amount likelihood that results are due to chance is over 5% and not due to the impact of the IV on the DV  This means that Dr Koba would have to refute his hypothesis that matcha impacts mood.  *Accept any other correct and relevant interpretation*  *1 mark mut be for relating the results to the hypothesis or variables* | 1  1  1 |

iv. Describe the data that Dr Koba collected above. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Subjective quantitative | 1 |

v. Dr Koba wanted to collected a different form of data. Give an example of a more reliable data collection method Dr. Koba could use. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Answers must include data collection methods that are objective rather than subjective. Answers can include:  - Blood sample to measure stress hormones (expected reduction in stress hormone cortisol)  - Measuring the levels of neurotransmitters | 1 |

**Question 2                                                                  (8 Marks)**

A psychologist conducted a study to investigate the relationship between the total number of hours of television watched and the total number of hours of sleep over seven days. Seven volunteer participants recorded for seven days the number of hours of television they watched and the number of hours they slept. The results of the study are shown in the table below.

|  |  |  |
| --- | --- | --- |
| **Participant Number** | **Total number of hours of television watched** | **Total number of hours sleep** |
| 1 | 35 | 45 |
| 2 | 14 | 50 |
| 3 | 9 | 58 |
| 4 | 8 | 60 |
| 5 | 5 | 64 |
| 6 | 2 | 67 |
| 7 | 8 | 62 |

The mean number of hours of television watched was 11.57 hours.

(a)             Identify the median of the number of hours of television watched.                    (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Median: 8 |  |

(b)             State **one (1)** advantage of using the median instead of the mean as a measure of central tendency.                                                                                                   (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| It is not impacted by outliers in the data |  |

(c)               State a conclusion that the researcher could draw from the results of this study.

(1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| As the amount of time watching TV increases the amount of time sleeping decreases |  |

(d)               Plot a graph of the results on the grid below.                                                 (4 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Title includes both variables  Scatterplot chosen  X and Y axis is labelled correctly  Plotting and scale are accurate | 1  1  1  1 |

(e)           Describe the relationship that can be seen from the graph. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Strong / moderate negative correlation |  |

**Question 3 (7 marks)**

1. Why should psychologists be concerned with ethical issues when they perform research with human participants? (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| As they are responsible to act professionally (1) and to ensure that their participants come to no psychological or physical harm (1) |  |

1. Define ‘privacy’ and ‘confidentiality’ as they relate to psychological research and outline the difference between the two terms. (3 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Privacy: Privacy refers to the protecting participants from unwanted intrusion into their private lives by collecting only information that is relevant to the study  Defines confidentiality: confidentiality refers to safeguarding the information of participants collected in an experiment through how it is collected stored and disseminated to others  Or  Ensuring that the information collected in an experiment is not made available to anyone outside of the experiment without the participants consent  Outlines the difference: Privacy relates to what information is collected, whereas confidentiality relates to how the information is dealt with. | 1  1  1 |

c) Outline two reasons why the mean score for a sample and its corresponding population may be different. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| If the sample size is too small  If the sample is unrepresentative of the larger population | 1  1 |

**Section 2 – Short Answer Question**

**Question 4 - Communication (6 marks)**

1. Define the term communication style and give one example. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Communication style refers to the social and cultural differences in language use e.g. accents, slang, grammar | 1  1 |

b) Briefly outline the key differences that Bernstein noted between the middle and working classes communication styles. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Elaborative code which is an explicit and descriptive style used by the middle class  Restrictive code which is a less descriptive style of speaking with shorter sentences used by both working and middle class  *If they mention that the middle class can only use elaborative only 1 mark awarded* | 1  1 |

c) Describe two key findings that Labov found when studying the language of African-American children in New York. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| African America children in New York spoke …  Any two of the following:   * There are different vernaculars spoken. * All equally complex. * Black English Vernacular not substandard, has own set of complex rules. | 1  1 |

**Question 5 – Relational Influences (14 marks)**

1. Define socialisation. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| The process by which an individual learns the socially accepted norms, values, behavior, and social skills appropriate to his or her social position. | 1 |

1. In hospitals in decades past, premature babies were placed in humidicribs and  parents were asked to ‘look but not touch’ and babies were handled only when  necessary. Now however, mothers are encouraged to hold their premature babies  on their breast with skin-to-skin contact for a few hours every day, where possible.
2. Identify the psychological research conducted on animals that may have contributed to this change in practice. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Harry Harlow – Rhesus monkies experiment | 1 |

1. Outline the findings from this study and explain why and how premature babies would benefit from skin-to-skin contact, both in the short term and the long term. (3 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Findings showed that the baby monkies would spend majority of their time in physical contact with the cloth mother over the wire mother.  Short term: contact with primary care giver is essential for secure attachments  Long term: secure attachments are beneficial for long-term cognitive, social and emotional development |  |

1. Bowlby conducted research called the 44 thieves’ study. Briefly outline the findings and conclusions from this research. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Found that out of the children who had committed a crime over half of them had experienced separation from primary care giver for least 6 months in the first 5 years  He concluded that maternal separation/deprivation in the child’s early life caused permanent emotional damage and/or affectionless psychopathy | 1  1 |

1. Outline one piece of criticism that Bowlby’s research has faced. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Bowlby draw a cause-and-effect conclusion which cannot be done from his research design (correlation)  Method involved participants recalling information on the child’s first few years in retrospect which is an unreliable data source | 1  Or  1 |

c) Alia has triplets. After reading about Mary Ainsworth’s attachment studies, Alia realises that each of her children displays a different attachment style: Anouk is a Type A, Eden is a Type B and Lee it a Type C.

1. Complete the table below by stating the name of the different attachment styles and describe how the Type B and C child may behave when Alia presents them with the Strange Situation. (4 marks)

|  |  |  |
| --- | --- | --- |
| **Child** | **Attachment style name** | **Behaviour** |
| **Anouk** | **Avoidant** | Ignores Alia, fails to look at her, does not seek her contact/comfort |
| **Eden** | Secure | **Uses Alia as a secure base to explore from, sad signalling or proximity behaviours when she leaves, seeks contact/comfort** |
| **Lee** | **Anxious** | **Remains close to Alia, Intense distress when Alia leaves, seeks comfort/contact but not easy to console** |

1. All infants have signalling behaviours explain the importance of these behaviours and give one example. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Signalling behaviours are behaviours such as crying, smiling and crawling towards the primary care giver  These are all intended to ensure that the babies needs are met for survival purposes | 1  1 |

**Question 6 (6 marks)**

1. Define conflict. (1 mark)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Conflict is where there are two or more parties who perceive that they have incongruent goals, values of behaviours |  |

a) Sam and Max are the only two employees working in Western Australia for a large multinational company. They are having a dispute with their employer with their employer with regards to their wages. Sam and Maw want a pay rise, but the company thinks they are asking for too much money.

Describe one type of solutions to resolve the conflict Include one consequence (positive of negative) to using this solution. (2 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| **Imposed solution**: This is a dictated solution where one party is stronger and will impose a solution on all parties involved. This generally means that one side is seen to win and the other to loose.  The company could impose their solution on Sam and Max. This could cause Sam and Max to resent the company as their wants have been neglected.  **Distributive solution:** This is a compromised solution where there is give and take between both parties to reach a solution. The company, Sam and Max could sit down and negotiate a solution where the pay rise received is somewhere between what the company wants and what Sam and Max would like.  The company has only given some ground in their solution with Sam and Max. This could cause Sam and Max to be not fully satisfied as their wants have not been fully met.  **Integrative solution:** This solution is more complicated than a compromise as it involves understanding both parties motives, values and goals. However this solution is seen as a win-win for both parties.  This solution would involve sitting down with both parties and figuring out what the motives, values and goals of each party are and then coming to an arrangement based on these factors. The company, Sam and Max all would all see it as making a gain. |  |

1. Blake has been out with his friends and stayed out past curfew. His parents are worried about where he is as his phone is also going straight to voicemail. Blake’s phone had run out of battery while had been out with his friends when one of them had a seizure and he had accompanied him to the hospital.

Compare how an authoritative and authoritarian would respond and what consequences would be put in place. (3 marks)

|  |  |
| --- | --- |
| **Descriptor** | **Mark** |
| Authoritarian:  Expects no rule breaking therefore would respond with disappointed / mad.  Punishment would be given.  Authoritative:  Disappointed but understanding, would respond by asking what happened  Exceptions to the rules are allowed and due to the emergency this may not warrant a punishment | 1  1  1 |