



PSYCHOLOGY

ATAR course examination 2023

Marking key

Marking keys are an explicit statement about what the examining panel expect of candidates when they respond to particular examination items. They help ensure a consistent interpretation of the criteria that guide the awarding of marks.

Section One: Research methods**20% (38 Marks)****Question 1** (11 marks)

- (a) State the dependent and independent variables within this study. (2 marks)

Description	Marks
Dependent variable – hours of sleep	1
Independent variable – whether they ate blueberries or not	1
Total	2

- (b) Identify which group is the experimental group within the study. (1 mark)

Description	Marks
blueberry group/first group/group 1	1
Total	1

- (c) Clarify what is meant by a control group within an experimental study. (2 marks)

Description	Marks
group not exposed to independent variable	1
used as a comparison	1
Total	2

- (d) Define the term ‘uncontrolled variable’. (2 marks)

Description	Marks
variable that is not monitored within a study	1
because it was not considered/not thought of as likely to impact result	1
Total	2

- (e) Summarise how Fletch would have followed appropriate informed consent procedures.
(4 marks)

Description	Marks
Any four of <ul style="list-style-type: none">• Fletch needed to provide participants with a statement informing them that participation was voluntary• there would be no consequences if they did not participate• the statement needs to state the purpose of the research• outline any possible risks to participation• what the participants are expected to do within the study• outline participant rights (withdrawal rights, confidentiality, etc)• provide details of who to contact with questions about the study• participants must sign their consent and be provided a copy of the information.	1–4
	Total 4
Note: needs to be an active concept for 'procedures', any discussion of minors and/or deception is irrelevant to Fletch's study.	

Question 2

(13 marks)

- (a) Define 'non-experimental research'. (1 mark)

Description	Marks
research where variables are not manipulated	1
Total	1

- (b) Calculate the mean score for openness for the Team sports participant group and record it in the table below. (1 mark)

Description				Marks
Year 12 participants	Openness	Conscientiousness	Extraversion	1
Team sports	2.3	3.7	3.0	
Non-team sports	4.0	2.2	3.0	
Total				1

- (c) (i) State the range for conscientiousness for the non-team sports participant group. (1 mark)

Description	Marks
1	1
Total	1

- (ii) Comparing the range values above, interpret what these scores indicate about conscientiousness in both groups. (2 marks)

Description	Marks
the team sports had a greater range of conscientiousness levels in the group/had more diversity between students regarding conscientiousness	1
the non-team sports group had a narrower range of conscientiousness/were more similar in levels of conscientiousness	1
Total	2

- (d) Calculate the median score for extraversion for both groups. (2 marks)

Description	Marks
team sports group: 3	1
non-team sports group: 3	1
Total	2

- (e) Propose **two** reasons why the median could be a more useful measure of central tendency than the mean to analyse a data set. (2 marks)

Description	Marks
when the data set is skewed (bias) in either direction	1
when outliers exist that impact the mean	1
Total	2

- (f) State the type of data Eshal's survey collected. (2 marks)

Description	Marks
subjective	1
quantitative	1
Total	2

- (g) Describe **one** disadvantage with using the type of data Eshal's survey collected. (2 marks)

Description	Marks
biased	1
scores student selected could have been influenced by external factors/positive response bias/social desirability bias/open to dishonesty	1
Total	2

Question 3

(14 marks)

- (a) List **three** steps associated with planning psychological research. (3 marks)

Description	Marks
identify a research issue or problem to investigate	1
formulate a hypothesis	1
choose research design/design the method	1
Total	3
Accept other relevant answers.	

- (b) Deduce **one** practical consideration Bert would have to address in his study design for each of the elements below.

- (i) Subject sampling (2 marks)

Description	Marks
Bert should ensure the magpies (1) are the same ones that visit his yard each day (1).	1–2
Total	2
Accept other relevant answers.	

- (ii) Data collection method (2 marks)

Description	Marks
Bert is looking for a change in friendship level (1) which is a subjective experience and will be difficult to measure in birds (1).	1–2
Total	2
Accept other relevant answers.	

- (iii) Procedure (2 marks)

Description	Marks
Bert will have to decide how he will conduct his study (1) with regard to timeframes, feeding protocols and how he will manage extraneous and confounding variables (1).	1–2
Total	2
Accept other relevant answers.	

- (c) Define 'reliability' in research by applying the concept to Bert's study. (2 marks)

Description	Marks
Bert will need to ensure that his procedure and data collection tool (1) are likely to generate the same results under the same conditions (1).	1–2
Total	2
Accept other relevant answers.	

- (d) Argue whether Bert's study is likely to have high or low levels of validity, giving **two** reasons for your response. (3 marks)

Description	Marks
Low levels of validity	1
Any two reasons	
<ul style="list-style-type: none"> • significant differences between studies (low concurrent validity) • Bert wanted to compare magpie behaviour towards himself and a young female (low concurrent validity) • Bert has not developed a sufficient theoretical basis for his research design (low construct validity) • he will have difficulty drawing a conclusion • in a naturalistic setting there is likely to be a high number of extraneous variables (confounding variables). 	1–2
Total	3
Accept other relevant answers.	

Section Two: Short answer

55% (89 Marks)

Question 4

(11 marks)

- (a) Name the missing divisions in the diagram below.

(2 marks)

Description	Marks
<pre> graph TD CNS[Central nervous system] --> Brain[Brain] CNS --> Spinalcord[Spinal cord] PNS[Peripheral nervous system] --> Somatic[Somatic nervous system] PNS --> Automatic[Automatic nervous system] </pre>	1–2
Total	2

- (b) Compare the sympathetic and parasympathetic divisions of the nervous system.

(3 marks)

Description	Marks
they both act without conscious control/automatically	1
sympathetic fight and flight/prepares the body for stress	1
parasympathetic rest and digest/when the body is at rest	1
Total	3
Accept other relevant answers.	

- (c) State whether the sympathetic or parasympathetic nervous system is most active during the following activities.

- (i) Listening to quiet music before bed. (1 mark)

Description	Marks
parasympathetic	1
Total	1

- (ii) After eating a large lunch with friends. (1 mark)

Description	Marks
parasympathetic	1
Total	1

- (iii) Being trapped in a locked room with a wasp. (1 mark)

Description	Marks
sympathetic	1
Total	1

- (d) Compare the processes of the sympathetic nervous system with the processes of adrenaline. (3 marks)

Description	Marks
they both prepare the body for stressful situations	1
sympathetic nerves use neural signalling/faster (while)	1
adrenaline is a hormone/chemical messenger/slower	1
Total	3
Accept other relevant answers.	

Question 5

(10 marks)

- (a) Name the researchers who devised the multi store model of memory. (2 marks)

Description	Marks
(Richard) Atkinson	1
(Richard) Shiffrin	1
Total	2

- (b) Label the **two** sections, marked X and Y, of the multi store model on the diagram below. (2 marks)

Description	Marks
X: sensory register/memory	1
Y: long-term memory	1
Total	2

- (c) State both the duration and capacity of your response to X in part (b). (2 marks)

Description	Marks
Duration: less than one second to three seconds	1
Capacity: unlimited	1
Total	2

- (d) Contrast **two** different aspects of short-term memory and working memory. (4 marks)

Description	Marks
Any two of	
<ul style="list-style-type: none"> • short-term memory (STM) is a single-component system (1), whereas working memory has a multi-component system (1) • STM is measured using simple span tasks (1), whereas working memory is measured using complex span tasks (1) • working memory is an active process (1), whereas STM uses passive maintenance (1) 	1–2
Total	4

Question 6

(14 marks)

- (a) Define what is meant by the term 'attachment' in psychology. (2 marks)

Description	Marks
formation of a strong emotional bond	1
between primary carer and child	1
Total	2

- (b) State the name of this theorist. (1 mark)

Description	Marks
(Harry) Harlow	1
Total	1

- (c) Complete the flow chart below relating to the study with rhesus monkeys. (5 marks)

Description	Marks
Aim Find out whether food or contact comfort is more important in attachment formation	1
Participants Eight baby rhesus monkeys separated from their mothers at birth	-
Procedure	
Group one Four monkeys with a cloth surrogate that provided food and a wire surrogate that did not provide food	1-2
Group two Four monkeys with a wire surrogate that provided food and a cloth surrogate that did not provide food	
Independent variable Food provision	
Dependent variable Time spent with each surrogate	-
Results All monkeys from both groups spent most time with the cloth surrogate, regardless of which surrogate provided food	1
Conclusion Contact comfort is more important than food in attachment formation	1
Total	5
Accept other relevant answers.	

Question 6 (continued)

- (d) Apply your understanding of this study to state **one** generalisation about human attachment. (1 mark)

Description	Marks
contact comfort is likely to be crucial to attachment in humans	1
Total	1
Accept other relevant answers.	

- (e) Complete the table that follows identifying the **two** indicated parenting styles from the quadrant below. (2 marks)

Description	Marks
B – authoritative	1
D – authoritarian	1
Total	2

- (f) Compare the parenting styles of quadrant A with those of a parent in quadrant C. (3 marks)

Description	Marks
both styles set few limits	1
Any two of	
<ul style="list-style-type: none"> • (permissive parenting) quadrant A respond to their kids with warmth and show interest in their children • (uninvolved) quadrant C parents do not show interest or warmth • (permissive parents) quadrant A allow their kids unbridled expression (through lack of rules) • (uninvolved) quadrant C parents have a lack of rules from disinterest or self-focus • reward identification of quadrant A as permissive parenting 	1–2
Total	3
Accept other relevant answers.	
Note: does not need to name uninvolved parenting for full marks.	

Question 7

(10 marks)

- (a) Complete the table below by defining the following terms. (2 marks)

Description		Marks
Style component	Definition	
Accent	sounds of language associated with place (or class)	1
Grammar	rules that govern language	1
		Total
		2
Accept other relevant answers.		

- (b) State the **two** styles of communication identified by Tannen. (2 marks)

Description		Marks
report		1
rapport		1
		Total
		2

- (c) Identify **one** other example of a more masculine style of communication and justify why it is more likely to be used by men. (2 marks)

Description		Marks
Identifies communication mode where speaker is taking centre stage/conveying knowledge/conveying skill		1
Provides a justification, e.g., a man explaining to his friends his knowledge of bitcoin currency		1
		Total
Accept other relevant answers.		

- (d) Using your understanding of the gender differences in communication style, present an argument for why an indirect request may be seen as a more feminine style of communication. (4 marks)

Description		Marks
Any four of		
<ul style="list-style-type: none"> • an indirect request allows the other person to share the outcome, building relations rather than taking centre stage (so it is likely to increase compliance in the future) • indirect requests still lead to compliance • a direct request is more likely to lead to conflict or perceptions by the listener of rudeness, indirect seen as offering friendship and choice to the listener • indirect requests are interpreted as politeness in many cultures • indirect communication is better able to convey nuance and context. 	1–4	
		Total
Accept other relevant answers.		4

Question 8

(18 marks)

- (a) Summarise Erikson's stage theory of identity.

(5 marks)

Description	Marks
Any five of	
<ul style="list-style-type: none"> individuals move through eight stages across the lifespan through which individuals develop their sense of self each stage is named correctly and in order (if listed as an order) at each stage, there is a psychosocial crisis that has to be overcome where individual needs are in conflict with the demands of society a positive resolution of crises leads to development of virtues a positive resolution of crises leads to healthy personality development failure to resolve crises results in becoming stuck, leading to abnormal personality development failures to effectively resolve a crisis results in a reduced capacity to resolve crises at later stages 	1–5
Total	5
Accept other relevant answers.	

- (b) Complete the following tables on pages 20 and 21 identifying which crisis of Erikson's stages best applies to these two males. In your response outline the crisis and
- two**
- possible outcomes of the crisis. (8 marks)

Description			Marks	
Person	Identification of crisis	Outline and two possible outcomes of crisis:		
Jun	Industry vs Inferiority	Outline of crisis: competence and learning, increased social relationships	1–4	
		Outcome 1: child succeeds in school, and socially, and are rewarded for industry/competence		
		Outcome 2: failure leads to feelings of inferiority		
Lut	Generativity vs Stagnation	Outline of crisis: focus on work and maintaining family relations	1–4	
		Outcome 1: success leads to feelings of accomplishment/productive/leaving a legacy		
		Outcome 2: failure leads to self-centredness and stagnation		
Total			8	
Note: outcome 1 and 2 are interchangeable.				

- (c) Using Erikson's stage theory of identity, propose what Lut has to do, as a father, to help Sha resolve her crisis positively. (3 marks)

Description	Marks
allow her to explore her abilities	1
encourage her to grow her independence	1
tolerate any failures	1
Total	3
Accept other relevant answers.	

- (d) Describe **one** specific example of how Lut can support Sha in overcoming her crisis.
(2 marks)

Description	Marks
Rather than dressing her, Lut could allow Sha to try herself (1) until she succeeds or asks for help (1).	1–2
Total	2
Accept other relevant answers. Note: response should refer to Lut allowing Sha to try to succeed in a task rather than do it for her straight away or refuse to let her try.	

Question 9

(13 marks)

- (a) Outline each of these elements as they contribute to a sense of community. (4 marks)

Description	Marks
membership: sense of belonging/common symbols/being part of a group	1
integration and fulfilment of needs: people feel rewarded for participation in community/people understand and feel a part of the community	1
influence: people feel they can influence/be influenced by the community (bidirectional)	1
shared emotional connection: shared history of connection and experiences	1
Total	4

- (b) Identify the **five** attributes of membership. (5 marks)

Description	Marks
boundaries	1
emotional safety	1
a sense of belonging (and identification)	1
personal investment	1
a common symbols system	1
Total	5

Note: answers may be provided in any order.

- (c) Describe how 'integration and fulfilment of needs' and 'influence' contributed to Oisin feeling a sense of community while living in Higus. (4 marks)

Description	Marks
Integration and fulfilment of needs	
being at school with close friends	1
social needs were met (understanding, acceptance)	1
Influence	
being in the student council	1
being able to be influenced/influencing others	1
Total	4

Accept other relevant answers.

Question 10

(13 marks)

- (a) Define 'stress'. (2 marks)

Description	Marks
the physiological or psychological response to internal or external stressors	1
that are perceived as challenging/exceeding their ability to cope	1
Total	2

- (b) Contrast stress and trauma. (2 marks)

Description	Marks
stress is a response while trauma is an experience	1
stress can come from an everyday experience while a traumatic event is generally more significant and negatively life changing	1
Total	2
Accept other relevant answers.	

- (c) Identify the **three** event characteristics that contribute to stress. (3 marks)

Description	Marks
predictability	1
controllability	1
experience of threat or loss	1
Total	3

- (d) Using the **three** event characteristics identified in part (c) that contribute to stress, account for why changing to a different line of work could be considered stressful. (6 marks)

Description	Marks
Predictability is low (1) New workplaces and jobs often present unexpected challenges (1)	1–2
Controllability is low (1) New employees are often required to complete a training program and only do work as instructed (1)	1–2
Experience of threat or loss is high (1) Individual may have left a workplace where they were competent/loss of valued colleagues/there is the threat of embarrassment as they learn a new skill (1)	1–2
Total	6
Accept other relevant answers.	

Section Three: Extended answer**25% (58 Marks)****Question 11****(29 marks)**

Siblings Clarissa, 16, and Sabiya, 17, are arguing over who needs to stay home on Friday night to look after their younger sister Una.

Clarissa has her best friend Henny's birthday dinner on Friday night, while Sabiya has her second shift at her new job. In an effort to improve the sisters' conflict resolutions skills, their father explained if the sisters discussed each other's needs and motivation they may reach a win-win solution and then he left them alone to resolve the conflict.

The sisters began discussing the issue, presenting their own points of view and seeking a middle ground solution. It became clear, however, that Sabiya had volunteered to pick up the extra shift, even though she knew Una needed babysitting on Friday.

The discussion finished abruptly with Clarissa getting angry and recounting how Sabiya had been rude to Henny the last two times she came to a family dinner when the rest of the family had been friendly. Sabiya also ignores Henny at school. Clarissa attributed Sabiya picking up the extra shift to her dislike of Henny and left the room.

Write an extended answer with reference to the scenario by explaining the relevant psychological concepts.

In your answer you must:

- identify and explain the conflict resolution technique the girls used, and identify and explain **one** suitable alternative (6 marks)
- name, describe and evaluate the **three** types of solutions to resolve conflict the girls could have reached (12 marks)
- explain, using Kelley's covariation model, why Clarissa made an internal attribution for Sabiya's extra shift at work (7 marks)
- communicate psychological understandings clearly with correct use of psychological language. (4 marks)

Description	Marks
Identify and explain the conflict resolution technique the girls used, and identify and explain one suitable alternative	
Method of conflict resolution: negotiation (reciprocal communication process in which) two or more parties in a dispute examine issues, explain positions, and exchange offers and counteroffers (1) in an attempt to identify a solution or outcome that is acceptable to all parties (1)	1 1–2
Alternative method of conflict resolution: mediation	1
A neutral third party (1) (parent) could have helped the girls to reach a solution by facilitating productive discussion (1)	1–2
Subtotal	6
Name, describe and evaluate the three types of solutions to resolve conflict the girls could have reached	
Imposed solution	1
Stronger or third party decides on solution to the issue	1
Reasonable evaluation of solution type examples include: <ul style="list-style-type: none"> • likely to result in one or both parties being dissatisfied • the solution has not been agreed to by all parties • solution can be achieved relatively quickly • there is no requirement for parties to state and/or justify their position • solution can be effective where one party does not act in good faith/unwilling to compromise 	1–2
Integrative solution	1
Solution to conflict that meets the objectives of all parties	1
Reasonable evaluation of the solution type examples include: <ul style="list-style-type: none"> • it is not always practical/possible to meet the objectives of parties to a conflict • it may be more time consuming to work through the issues to reach complimentary positions • integrative solutions may require a higher level of skill in conflict resolution than is available to parties • a desirable solution as it should leave all parties satisfied in a win-win outcome 	1–2
Distributive solution	1
Solution is a middle ground where both parties agree to a compromise	1
Reasonable evaluation of the solution type examples include: <ul style="list-style-type: none"> • parties can be satisfied with the outcome as they are able to save face when equal compromise has been made • distributive solutions can be a practical solution where parties' objectives are incompatible • not an ideal solution as neither party necessarily gets what they want 	1–2
Subtotal	12

Question 11 (continued)

Explain, using Kelley's covariation model, why Clarissa made an internal attribution for Sabiya's extra shift at work	
Clarissa's internal attribution to Sabiya's behaviour was based upon her perceiving a negative attitude from Sabiya towards Henny	1
Low consensus	1
Everyone else in the family is kind to Henny, only Sabiya is not	1
High consistency	1
Sabiya has been rude or unhelpful towards Henny each time she has had the opportunity	1
Low distinctiveness	1
Sabiya has acted negatively towards Henny in different situations (at family dinner and ignoring her at school)	1
Subtotal	7
Communicate psychological understandings clearly with correct use of psychological language	
Candidate writes coherent and logically ordered paragraphs. Appropriate psychological terminology used consistently, extensively, and correctly. Punctuation and grammar do not impede meaning. <i>(Does not need essay style broad introduction or conclusion for full marks.)</i>	4
Candidate writes coherent and logically ordered paragraphs. Uses a range of psychological terminology that is mostly correct. There may be some errors in punctuation/grammar evident but these do not impede meaning.	3
Candidate uses paragraphs. Uses simple psychological terminology. May have some errors in punctuation/grammar evident but these do not impede meaning.	2
Candidate uses some psychological terminology correctly and may have limited correct spelling, punctuation and grammar.	1
Subtotal	4
Total	29

Question 12**(29 marks)**

Diiz has moved to a new town and is trying to find groups to belong to. He feels he is reasonably environmental and has found an arm of Greenpeace in town. This is the first time Diiz has joined an environmental group. He volunteers to organise regular sea clean ups, and notices he gets angrier at the level of pollution than he did before, yelling at an old man who did not take his picnic rubbish off the beach. Diiz notices the different ways he conforms within the group and how he tends to obey the president of the group.

Using your understanding of social psychology and the influence of groups on behaviour, explain how joining the Greenpeace group impacts Diiz's behaviour.

In your answer you must:

- define 'group' (2 marks)
- explain group polarisation and how Diiz joining Greenpeace would have influenced him (4 marks)
- outline the **two** different ways Diiz may be influenced by conformity, describing **one** key study of conformity (identify theorist, outline method and results) (9 marks)
- explain why Diiz obeys the president by defining obedience and describe **one** key study of obedience (identify theorist, outline method and results) (10 marks)
- communicate psychological understandings clearly with correct use of psychological language. (4 marks)

Question 12 (continued)

Description	Marks
Define 'group'	
a group is two or more people	1
who interact for more than a short amount of time	1
Subtotal	2
Explain group polarisation and how Diiz joining Greenpeace would have influenced him	
strengthening of opinion (1) when in a group of like-minded people (1)	1–2
while Diiz was reasonably environmental before, his opinions were strengthened (1) when around the people at Greenpeace. This changed his attitude and now becomes more upset (1) about rubbish on the beach (yelling at old man)	1–2
Subtotal	4
Outline the two different ways Diiz may be influenced by conformity, describing one key study of conformity (identify theorist, outline method and results)	
at first, he conformed as he was in a group of new people he didn't know and in a strange situation (1), this is informational social influence (1) after this, he conformed to group pressure in order to be accepted (1) normative social influence (1)	1–4
Study – Asch (1) – simple line judgement task (1), participants were in a room of confederates and asked which line matched the reference line (1). Found that people conformed to the confederates' answer even when it was wrong (1), only 25% of people did not conform at any point (1)	1–5
Subtotal	9
Explain why Diiz obeys the president by defining obedience and describe one key study of obedience (identify theorist, outline method and results)	
when we change behaviour at instruction (1) or request of authority figure (1)	1–2
Diiz views president as an authority figure (1) and feels he needs to follow his instructions or risk a consequence (1)	1–2
Study – Milgram (1) – participant was given role of teacher with confederate as learner (1), put into separate rooms and told to ask learner questions and shock them when they answered incorrectly (1), each time they answered incorrectly they were instructed to increase the shock (1). Only 5/40 (12.5%/very few) participants stopped when learner went silent (1). All other participants continued to obey even believing they were hurting someone else (1)	1–6
Subtotal	10
Communicate psychological understandings clearly with correct use of psychological language	
Candidate writes coherent and logically ordered paragraphs. Appropriate psychological terminology used consistently, extensively, and correctly. Punctuation and grammar do not impede meaning. (Does not need essay style broad introduction or conclusion for full marks.)	4
Candidate writes coherent and logically ordered paragraphs. Uses a range of psychological terminology that is mostly correct. There may be some errors in punctuation/grammar evident but these do not impede meaning.	3
Candidate uses paragraphs. Uses simple psychological terminology. May have some errors in punctuation/grammar evident but these do not impede meaning.	2
Candidate uses some psychological terminology correctly and may have limited correct spelling, punctuation and grammar.	1
Subtotal	4
Total	29
Accept other relevant answers.	

ACKNOWLEDGEMENTS

- Question 6** Flow chart adapted from: Grivas, J., & Carter, L. (2005). *Psychology For the VCE Student. (Units 1 and 2)* (4th ed.). John Wiley & Sons Australia Ltd, p. 42, fig. 2.8.
- Question 9(a)(c)** Information from: Smith, J. K. (2010). *Sense of Community and Neighborhood Design: A Comparative Case Study of Four Arroyo Grande Neighborhoods*. [Master's thesis, California Polytechnic University] p. 5. Retrieved May, 2023, from <https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1323&context=theses>
- Question 10(a)** American Psychological Association. (n.d.). *Stress* [Definition]. Retrieved August, 2023 from <https://dictionary.apa.org/stress>

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