**PSYCHOLOGY**

**ATAR UNIT 3 2017**

**MARKING GUIDE**

**Section One: Research methods 20% (42 Marks)**

**Question 1 23 marks**

A study was conducted to determine the effect of meditation on memory in high school students. Researchers randomly divided 100 Year 11 students into two groups, with 50 participants in each group. Group One participated in 20 minutes of meditation before the test while Group Two did not participate in meditation. All participants sat a memory recall test at the same venue at the same time. The test required participants to recall as many words as possible from a list of 20 words they had been shown earlier.

1. Identify the independent and dependent variables. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Independent Variable – participation in meditation  Dependent Variable – number of words recalled | 0-1  0-1 |
| **Total** | **2** |

1. List **two (2)** variables the researchers controlled in this study. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Participant age – year 11 * Number of participants in each group * Length of time they meditated (20mins) * Venue where recall test was sat * Time of memory recall test * Memory recall test | 0-2 |
| **Total** | **2** |

1. Identify the sample for this study. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 100 Year 11 Students | 0-1 |
| **Total** | **1** |

1. Write an operational hypothesis for this study. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| It is hypothesised that high school students (1) who meditate for 20 mins prior to a memory recall test (1) will score higher than high school students who do not meditate prior to the test.(1) | 0-3 |
| **Total** | **3** |

1. Is this study scientific or non-scientific? Give two reasons for your answer. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Experimental   * Variables were manipulated * Cause and effect relationship * Includes independent and dependent variables | 0-1  0-2 |
| **Total** | **3** |

1. Identify **two (2)** ethical considerations relevant to this study. For each consideration, identify how the researchers should deal with it. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for name and 1 mark for how to address issue:   * Confidentiality – ensure that anything disclosed during the study is not released outside of the study. * Voluntary participation – ensure that participants are aware that they do not have to participate and can choose to do so without bribery or coercion * Withdrawal rights – ensure that participants understand they are free to withdraw from the study at any time without consequence * Anonymity – ensure all results can not be identified to a particular participant, that they are nameless * Privacy – ensure all personal details about the participant are kept from third parties * Informed consent – ensure all participants are informed of the true nature and purpose of the experiment before the experiment begins * Debriefing – ensure participants fully understand what happened during the experiment | 0-2 each |
| **Total** | **4** |

Below is a selection of the scores attained in the study. Calculate the mean, mode, median and range of the scores. (4 marks)

1. Mean: 13.3
2. Mode: 16
3. Median: 13.5
4. Range: 10

|  |  |
| --- | --- |
| Group 1 Participants | No. of words recalled |
| Participant 1 | 17 |
| Participant 2 | 14 |
| Participant 3 | 16 |
| Participant 4 | 10 |
| Participant 5 | 16 |
| Participant 6 | 13 |
| Participant 7 | 7 |
| Participant 8 | 13 |
| Participant 9 | 16 |
| Participant 10 | 11 |

The researcher found that, on average, Group 2 participants remembered 12.6 words. A statistical test between the means for both groups found that p>0.05.

1. State whether difference between the means for the two groups were statistically significant. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| No (the difference between the means is not statistically significant) | 0-1 |
| **Total** | **1** |

1. Describe the meaning of ‘statistically significant’. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any correct answer acceptable for up to 2 marks.  Example of a 2 mark response:   * Whether the difference between two scores is likely to be a true difference or due to chance factors / error   Examples of 1 mark responses:   * Whether the result is due to chance / error * Whether the difference is real | 0-2 |
| **Total** | **2** |

1. Outline the conclusion that the researcher should draw from the results. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any response that indicates that there was **no significant difference between the scores** of the two groups accepted for one mark. Examples of correct responses include:   * The year 11 students in the two groups **were not significantly different** in their word recall test scores. * The word memory scores of the year 11 students who meditated and did not meditate **were the same**. * P>0.05 means the hypothesis can not be supported due to the results being due to chance and therefore not statistically significant. | 0-1 |
| **Total** | **1** |

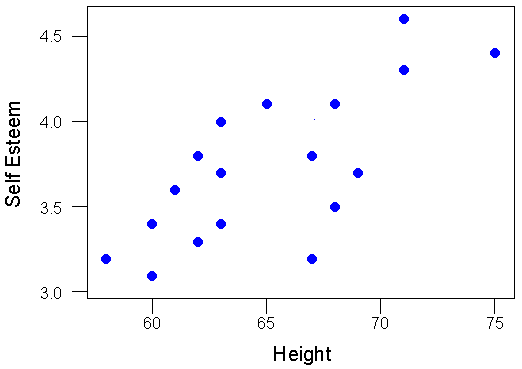
**Question 2 12 marks**

Complete the table below to help classify the type of data collected by three different research methods. (12 marks)

|  |  |  |  |
| --- | --- | --- | --- |
| **Research Method** | **Interview** | **Likert Scale** | **Heart Rate** |
| **Qualitative or Quantitative** | Qualitative | Quantitative | Quantitative |
| **Subjective or Objective** | Subjective | Subjective | Objective |
| **Describe one strength** | Rich data collected/ opportunity to discover detail or reasons for responses/ any other logical and correct answer | Can analyse data statistically/ cost efficient to study large group/ time efficient to study large group/ any other logical and correct answer | Can analyse data statistically/ cost and time efficient to study large group/ does not rely on participant honesty/ any other logical and correct answer |
| **Describe one limitation** | Responses may not be honest/huge time required to study large group/more difficult to find volunteers/any other logical and correct answer | Responses limited to options provided/no opportunity for rich data or reasons for responses/ any other logical and correct answer | Unable to tell what is causing change in heart rate/ limited detail in data collected/ any other logical and correct answer |

**Question 3 7 marks**

Josephine gathered data about people’s self esteem levels and correlated it to their height to produce the following scatterplot. Use the information provided to answer the questions below.



1. What term is given to the variables studied in the above research? (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Behavioural (variables) | 0-1 |
| **Total** | **1** |

1. Describe the strength and direction of the correlation between self esteem scores and physical height. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Strong/moderate  Positive | 0-1  0-1 |
| **Total** | **2** |

1. The above scatterplot is missing a number of necessary elements. Name two things that are missing in this scatterplot. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any of the following accepted:  Title  Measurements of variables (units)  Lines showing broken axes | 0-1  0-1  0-1 |
| **Total** | **2** |

1. Josephine used this data to report that ‘being taller gives people higher self-esteem’. Is this an accurate claim to make? Explain your answer. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| No (it is not an accurate claim to make)  Correlation does not show cause and effect. | 0-1  0-1 |
| **Total** | **2** |

**END OF SECTION ONESection Two: Short answer 55% (94 Marks)**  
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**Question 4 12 marks**



**1**

**2**

**4**

**3**

1. Complete the table below in relation to the diagram of the brain above. (8 marks)

|  |  |  |
| --- | --- | --- |
| Label | Lobe Name | Role of Lobe |
| 1 | Frontal Lobe | Any one of: cognition, attention, memory, decision making, higher mental ability, motor planning, control of movement |
| 2 | Temporal Lobe | Any one of: hearing, speech, memory, object recognition, semantic knowledge |
| 3 | Occipital Lobe | Vision |
| 4 | Parietal Lobe | Any one of: memory, spatial-motor mapping, attention, bodily sensations such as temperature and touch, awareness of the body’s position in space |

1. For the following scenarios, name the area or cortex of the brain that has been damaged and what that area is responsible for.  
   1. Pepper was playing hockey when the ball was chipped and hit her left temple. Immediately following the accident, she could speak in long sentences but could not be understood by others. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Wernicke’s Area  Understanding and comprehension of language | 0-1  0-1 |
| **Total** | **2** |

* 1. Jason is a motorcross fanatic. Recently, he was demonstrating his skills in front of a group of friends and forgot his helmet. He came off over the handlebars and was unable to move his body for a number of minutes following the accident, even though there was no spinal damage. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Motor cortex (primary motor area)  Initiating voluntary movement | 0-1  0-1 |
| **Total** | **2** |

**Question 5 18 marks**

1. Give a psychological definition for a neuron. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| A cell that carries messages between the brain and other parts of the body and that is the basic unit of the nervous system. | 0-1 |
| **Total** | **1** |

1. Provide one example of a neurotransmitter and list two of its’ functions. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for correct neurotransmitter, up to 2 marks for correct functions. Answers include, but are not limited to:  Dopamine (1) – learning, attention, pleasurable sensations  Serotonin (1) – sleep, appetite, memory, mood-boosting | 0-3 |
| **Total** | **3** |

1. Give an appropriate definition for a hormone. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Chemical messengers that are produced by the endocrine glands of the body. | 0-1 |
| **Total** | **1** |

1. The ‘flight or fight’ response happens when we are confronted with something that could potentially be dangerous.
   1. Give one real-life example of a situation where the flight or fight response would occur. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any logical answer referred to an ‘emergency’ situation; examples such as, “hearing footsteps behind you on a dark street alley,” or, “being asked to present a speech to a large crowd.” | 0-1 |
| **Total** | **1** |

* 1. Name one hormone responsible for this response. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Adrenaline/ noradrenaline/ epinephrine/ norepinephine | 0-1 |
| **Total** | **1** |

* 1. Provide two examples of changes to the way the human body functions as a response. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Any correct answers acceptable for up to 2 marks. Examples include but are not limited to:   * Increased heartrate * Dilates pupils * Bronchial dilation * Inhibited salivation * Inhibited digestion * Relaxes bladder | 0-2 |
| **Total** | **2** |

1. Complete this table on psychoactive drugs: (9 marks)

1 mark for a correct response in each box. Answers may include, but are not limited to the following:

|  |  |  |  |
| --- | --- | --- | --- |
| **Class of drug** | **One (1) physiological effect** | **One (1) psychological effect** | **Example of a drug in this class** |
| Hallucinogen | * increased heart rate * increased blood pressure * increased body temperature * blurred vision * dilated pupils * convulsions/seizures. | * disrupted cognition * altered perceptions * distorted sense of time * hallucinations * mood swings * dissociation. | LSD  PCP  Cannabis  ecstasy |
| Depressant | * reduced activity in the CNS * decreased heart rate * slower breathing * reduced coordination, etc. | * feel less stressed/calmer * relieves anxiety, etc. | Alcohol  Valium  Barbituates  cannabis |
| Stimulant | * speed up activity in the CNS * increase heart rate * rapid breathing, etc. | * increased feelings of excitement * higher energy levels * increased confidence, etc. | Caffeine  Nicotine  Amphetamines  Cocaine  Crystal meth |

**Question 6 16 marks**

1. Nicholas notices a strong smell coming from the oven and realises the smell is gas. He goes over and turns off the oven which had been knocked on and was leaking gas. As a child, Nicholas remembers smelling leaking gas and his mother telling him about a house fire caused by a leaking oven. Referring to the multistore model of memory, name and explain how the 3 different registers of memory have been used by Nicholas in processing this situation. 9 marks

Registers do NOT have to be in a particular order

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Register 1: Sensory Memory (1) – Nicholas noticed the smell and decided it needed attention (1), encoding the sensory information into electrochemical messages to be sent to the short term memory (1)  Register 2: Long-term memory (1) – declarative memory remembers the smell of gas and the story his mother had told him in his episodic memory (1), this has been retrieved to be used by short term memory (1)  Register 3: Short-term/working memory (1) – this is Nicholas being aware of the gas leak (1) and taking an action about it (1) | 0-3  0-3  0-3 |
| **Total** | **9** |

1. Working memory is a name given to the part of short-term memory which is concerned with immediate conscious perceptual and linguistic processing.  
   1. In the space provided, draw the Baddeley and Hitch 1974 working memory model. (4 marks)  
        
        
      *1 mark for each component plus a mark for cyclic arrows between.*

Central Executive

Phonological loop

Visio-spatial Sketchpad

* 1. Explain this model and how it works. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Working memory consists of a central executive which controls and coordinates the operation of two subsystems(1). The phonological loop is assumed to be responsible for the manipulation of speech based information (1), whereas the visuo-spatial sketch pad is assumed to be responsible for manipulating visual images (1). | 0-3 |
| **Total** | **3** |

**Question 7 12 marks**

1. Distinguish between the three psychological terms: recall, recognition and re-learning. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Recall – retrieve information from memory without any prompts or cues  Recognition – identifying the information from a number of alternatives  Re-learning – if information is learned more quickly the second time, it is assumed some information must have been retained | 0-1  0-1  0-1 |
| **Total** | **3** |

1. Katrina has a Maths test coming up next week but will be on camp until then. She decides to spend a night before she leaves for camp cramming her Maths revision and learning the concepts. On camp, she had to learn how to measure and orientate herself on a map, which requires mathematical understandings. When it came to her Maths test, she was unable to recall some of the answers as she kept thinking about mapping skills.
   1. Name and outline the theory of forgetting Katrina is experiencing. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Interference – forgetting as a result of competing, similar information being stored  Retroactive – new information (map reading) interferes with old (study for the teset) | 0-3 |
| **Total** | **3** |

* 1. Name the other form of this type of forgetting and give an example of it. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| proactive interference – gives a relevant example showing old information interfering with new information | 0-2 |
| **Total** | **2** |

1. Name and outline two other theories of forgetting. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for name, 1 mark for outline. Possible answers include:  Retrieval failure – inability to retrieve a certain piece of material because of the lack of appropriate cues (may not be permanently forgotten, but is unable to be retrieved at the time needed)  Motivated forgetting – inability to retrieve information because there is some advantage to not remembering it (Repressed memories)  Decay – fading away of memories over time generally due to disuse  Organic theories – memory loss due to disease or injury | 0-4 |
| **Total** | **4** |

**Question 8 12 marks**

1. Angus and Felicity are arguing over which game to play in the yard. Felicity wanted to play catch with the tennis ball but Angus was hoping to play cricket. Their mother came out and told them to play cricket and that there was to be no more discussion or arguing about it.  
   1. Name the type of solution that was used to solve this conflict. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Imposed solution | 0-1 |
| **Total** | **1** |

* 1. Outline two disadvantages to this type of solution. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for each correct response. Maximum two marks. Answers may include, but are not limited to the following:   * neither party may get what they want * one party ‘wins’ while the other party ‘loses’ * underlying conflict remains unresolved * parties do not have control over the decision-making * the parties do not develop skills for resolving conflict * unfair/bias outcome | 0-2 |
| **Total** | **2** |

* 1. Name and outline one alternative solution that could be reached in this scenario and how this could be achieved to resolve this conflict. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for naming solution type, 1 mark for outlining that type of solution and 1 mark for how this could be achieved.  Distributive (1) – half-half solution, compromise, where they get some things they want but also don’t get some things. (1) They could divide their play time between the two sports, playing cricket for the first 20mins and catch for the second 20mins (1)  Integrative (1) – win-win solution, both sides benefit from the decision, must understand both parties’ motives/goals (1) Angus can hit the ball so that Felicity can catch it, thus allowing both kids to play the game they want (1) | 0-3 |
| **Total** | **3** |

1. Name and outline two different techniques for resolving conflict and name the types of solutions that could be reached for each. (6 marks)   
     
   Marks can be awarded as outlined below.

|  |  |  |
| --- | --- | --- |
| Name technique | Outline technique | Types of solutions |
| Mediation (1) | bringing in a third party to help settle conflict (1) | usually results in integrative or distributive solutions (1) |
| Negotiation (1) | offers and counteroffers are made until parties come to an agreed solution (1) | usually distributive (1) |
| Counselling (1) | helps one or both parties develop skills (listening and assertiveness) to deal with conflict (1) | usually integrative solution (1) |

**Question 9 14 marks**

1. Define the psychological term ‘socialisation’. (1 mark)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The acquisition of beliefs, values and behavior that are thought to be important and appropriate to function effectively as a member of society. | 0-1 |
| **Total** | **1** |

1. Jeremy wanted to attend a party on Friday night and asked his parents. They told him he was not allowed to go because he had not completed his assignments for school and also had football early the next morning. Name the style of parenting Jeremy’s parents have demonstrated and describe three key features of this parenting style. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for name, up to 3 marks for key features.  Authoritative   * Sets limits * Responsive to child’s viewpoint * Demands are reasonable and children understand reason for decisions/rules * Try to involve children in decision making as they get older * Warm and responsive | 0-1  0-3 |
| **Total** | **4** |

1. Describe another way in which Jeremy’s parents may have responded to his request and the parenting style that response is associated with. (2 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 1 mark for alternate response, 1 mark for associated parenting style. Examples of correct responses are:   * Told Jeremy, “No, because we say so.” – Authoritarian * Said, “Sure honey, do whatever you want.” – Permissive * Ignored him or told him, “do whatever, we’re too busy/don’t care.” - Uninvolved | 0-2 |
| **Total** | **2** |

1. Name the theorist, and describe the study including finding, that looked at attachment in monkeys. (4 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Harlow (1959)  Wanted to look at whether ‘contact-comfort’ or food provision was more important in forming attachment (1). Separated eight rhesus monkeys from mother at birth. Each monkey given two surrogate mothers in their cage; one wire, one cloth, half monkeys had feeding bottle on wire mother, half had feeding bottle on cloth monkey. All monkeys spent more time clinging to cloth monkey, regardless of feeding bottle (both drank similar amounts and gained similar weight). When frightening stimuli were added to the cage, all monkeys sought comfort from cloth monkey first (1). Concluded ‘contact comfort’ was more important than food in forming attachment. (1) | 0-1  0-3 |
| **Total** | **4** |

1. List three outcomes that Bowlby suggests would come from maternal deprivation during the critical period. (3 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Delinquency * Reduced intelligence * Increased aggression * Depression * Affectionless psychopathy | 0-3 |
| **Total** | **3** |

**Question 10 (10 marks)**

a) Communication styles differ depending on one’s age, gender and social background. Name the theorist that believed one’s social class directly relates to their communication abilities.

(1 mark)

|  |  |
| --- | --- |
| Description | Marks |
| Basil Bernstein | 0-1 |
| Total | 1 |

b) Deborah Tannen (1990) considered women communicate differently to men. Describe three gender differences Tannen highlighted in her research.

(3 marks)

|  |  |
| --- | --- |
| Description | Marks |
| Responses include but are not limited to:  Women use rapport talk, whereas men use report talk (1).  Women tend to communicate to establish relationships, develop understandings and negotiate differences (1).  Men tend to use talk as it is used in public speak, for example holding centre stage when telling stories or imparting information (1).  Women use more confirmatory tones like ‘mmm’ and ‘yeah’ to indicate listening (1).  Women use ‘hedges’ to soften a request (1). | 0-3 |
| Total | 1 |

c) Name the theorist that proposed that language was innate and outline his argument.

(3 marks)

|  |  |
| --- | --- |
| Description | Marks |
| Chomsky (1). Chomsky proposed that children are born with a Language Acquisition Device (LAD), a process that is activated when children use language (1). His theory assumed that there were universal rules that could distinguish grammatical from ungrammatical sentences (1). | 0-3 |
| Total | 3 |

d) In 2004, the company ‘Dove’ launched the campaign for Real Beauty, after findings suggested that only 2% of women worldwide described themselves as beautiful. The campaign included promoting six real women with curves as beautiful as well as producing a short film called Evolution that demonstrated that an average looking women could be photo shopped to look like a model. In regards to persuasive communication suggest why these advertisements were successful.

(3 marks)

|  |  |
| --- | --- |
| Description | Marks |
| Responses include but are not limited to:  The source of the message included normal, everyday looking women that the public could identify with (1).  The nature of the communication appealed to women’s emotions and body satisfaction (1).  The characteristics of the source included women worldwide who were dissatisfied with their appearance (1). | 0-3 |
| Total | 3 |

**END OF SECTION TWO**

**Section Three: Extended answer 25% (34 Marks)**

Suggested working time: 60 minutes.

**Question 11 34 marks**

Georgia has an issue with snakes. She wasn’t born afraid of them, but has at some point acquired the fear. Living on a farm, Georgia has found that this fear can be bothersome, as snakes are part of farm life. She seeks different ways to try to overcome her fear.

Discuss three different theories of how Georgia may have acquired this fear as well as two different ways in which this fear could be overcome.

In your answer, you should:

* define and discuss three learning theories
* define and discuss two different behavior modification models
* support your discussion with empirical research.

|  |  |
| --- | --- |
| **Learning theories (observational learning, classical conditioning, operant conditioning)  (5 marks each)** | **15** |
| An extended answer with detailed references to relevant psychological concepts, theories and research that describes and explicitly explains what the theory or research contributes to the topic being discussed. | 4-5 |
| An extended answer with minimal (one or two), brief and/or inaccurate descriptions of relevant psychological concepts, theories and research. | 2-3 |
| Contains some generalisations and statements consistent with current psychological understandings **or** produces a short answer without reference to empirical evidence. | 1 |
| No answer. | 0 |
| **Behaviour Modification Techniques**  **(5 marks each)** | **10** |
| An extended answer with detailed references to relevant psychological concepts, theories and research that describes and explicitly explains what the theory or research contributes to the topic being discussed. | 4-5 |
| An extended answer with minimal (one or two), brief and/or inaccurate descriptions of relevant psychological concepts, theories and research. | 2-3 |
| Contains some generalisations and statements consistent with current psychological understandings **or** produces a short answer without reference to empirical evidence. | 1 |
| No answer. | 0 |
| **Application to scenario** | **3** |
| Application is consistent and appropriate | 2-3 |
| Application is attempted but not applied throughout | 1 |
| No application to scenario or application is irrelevant | 0 |
| **Evidence** | **3** |
| Detailed description of two or more examples of relevant psychological research. | 2-3 |
| Refers to one or more examples of research but lacks detail. | 1 |
| No evidence or evidence is irrelevant | 0 |
| **Quality of Extended Response** | **3** |
| Well-structured response. Well-developed sentences and paragraphs. Regular use of appropriate psychological language and level of sophistication. | 3 |
| Response is coherent and has satisfactory sentence and paragraph structure. Use of clear, everyday language. | 2 |
| Lacks structure, ideas still clear. Colloquial language. | 1 |
| Response is too short or is irrelevant. | 0 |
| **Total** | **34** |

Answers must be in the context of the question.

Learning – a relatively permanent change, often of behaviour, that occurs as a result of experience.

Stimulus-Response models of learning (Classical and Operant Conditioning) suggest we learn through the association of a stimulus to an action/response.

JB Watson and Little Albert – Human Classical Conditioning

Little Albert was introduced to a white rat and was unafraid (conditional stimulus). Watson then made a loud noise (unconditioned stimulus), which frightened Little Albert (respondent behaviour). After several pairing, Little Albert showed fear at the presence of the rat (conditioned response). This fear was later generalized to other similar things such as white beards and fur coats.

Georgia’s parents wanted her to be afraid of snakes and made a loud noise everytime she saw a snake which results in a conditioned response of fear upon seeing a snake.

Operant conditioning - Learning through experiencing consequences, we repeat behaviours that are rewarded and drop responses that are punished (Thorndike’s Law of Effect).

Skinner and the Skinner Box

Box has a number of levers that can be pressed by the animal (rat or pigeon). Food, water, light or a buzzer can be triggered. Animal learns which lever to push (and which to avoid) to get desired outcome.

Georgia was rewarded when she showed a fear of snakes as her parents thought it important for her to know to avoid them. Whenever they saw a snake and she moved away from it, she was given praise.

Observational Learning

Also called modeling or imitation, suggests we learn or modify behaviours through observing other people’s actions and the consequences of their actions. Reciprocal determinism – a person’s behaviour is influenced by and also influences the environment.

Bandura and the Bobo Dolls

(Bobo doll – large inflatable balloon-shaped creature with a weight in the bottom which makes it bob back up when knocked over) Introduced two groups of children to a bobo doll. Before introduction, one group was shown videos of a woman ‘playing’ with a bobo doll, kicking it and knocking it over, yelling at it aggressively. The other group did not see any video. Children who saw the film imitated the woman’s interactions with the bobo doll, they imitated the behaviour without any reinforcement or punishment. In later experiments, Bandura found that we also choose whose behaviour to imitate.

Georgia admires her parents/older siblings and noted that they showed fear when they came across a snake, she models this behaviour.

Token economies are artificial systems of reward and reinforcement. Symbolic markers are given to reward behavior. Markers can then be exchanged for something tangible. Stops a person from becoming “full” and ceasing to respond to reinforce. Markers are not usually withdrawn as a penalty (use other punishment).

Georgia can have a star chart where everytime she reacts with less fear to a snake, she gets a star, after 10 stars, she is given a nice prize.

Systematic desensitization – the application of classical conditioning to fears and phobias in humans. Aim to replace the fear response with a more relaxed response. Undertaken by a psychologist, teaches relaxation techniques, draw up list of most-fear provoking through to least, gradually expose patient to the list from least to most, practicing relaxation in between until patient is comfortable – graded exposure.

Georgia can seek the help of a psychologist to undergo systematic desensitization.

CBT is used to modify a person’s dysfunctional thoughts, beliefs, feelings and behaviours into those that are more helpful. Helping patients understand, manage and change their thoughts and behaviours. Help replace negative feelings with positive ones, reinforce positive actions.

Georgia can seek the help of a psychologist to undergo CBT.