

Edexcel GCSE (9-1) Psychology

Student Book answers

Topic 1

Page 6: Exam-style question

Define what is meant by 'egocentrism'.

Suggested answer: Egocentrism is the term that explains how children in the pre-operational stage are not able to take the view of someone else. They can only see the world 'through their own eyes'. For example, a young child does not recognise that a parent is tired.

Page 7: Apply it

Suggested answer: Freda is in the formal operational stage of development and can think abstractly, using quite complex reasoning. She has to use information about three animals and does not have 'concrete' things to use when reasoning. Simon is in the concrete operational stage of development and can put things into order, such as pens into sizes. He can use seriation, which means he can sort objects in different ways, such as into size.

Page 11: Exam-style question

For each child, state whether they have a fixed or a growth mindset.

Suggested answer: Fixed; Growth; Fixed

Tom does not do well at school because he does not try anything new	Fixed
Kani now reads better having asked her mother to help her to practice	Growth
Fi was told she would never be good at Maths	Fixed

Page 11: Apply it

Suggested answer 1: According to Dweck's theory, the teacher believes that the students' ability is fixed as 'not good' or 'good' - a fixed mindset. A fixed mindset sees someone as having an ability at birth (or not having it). The teacher's comments focus on the person being 'good' or 'not good enough' at writing, implying they have, or do not have, that ability.

Suggested answer 2: Saying to Sanjit (who scored a low mark): 'You need to work on your sentence structures,' and to Sue (with a high mark): 'Your writing is very good, but to improve, focus on giving a short conclusion' uses a growth mindset. A growth mindset is more likely to lead to improvement because it involves seeing ability as something that is able to be changed.

Page 16: Apply it

Suggested answer: Ria has asked her brother to describe something she can see, but he cannot, so he cannot play the game. However, according to Piaget, Ria does not realise her brother is not able to play her game. Ria is asking her brother to do something he cannot do but she is annoyed as, being just five years old, she is in the

pre-operational stage, and is egocentric. According to Piaget, she will not realise that her brother is not able to see what she can see. Therefore, she thinks he is refusing to play, which annoys her.

Page 22: Exam-style question

Explain the differences shown between the three types of praise in Table 1.4.

Suggested answer: For both the 'percentage of all utterances' and the 'percentage of praise utterances', the most praise was 'other' (1.97% and 66% in each case). A main difference is that 'other' praise was much higher than process and person praise in both the mean percentage of all parental utterances (where 'other' was 1.97% compared with 0.59% and 0.45%) and the mean percentage of all parental praise (where 'other' was 66% compared with 18% and 16%). This suggests that parents do praise children but there is a lot of other talk going on. When they do praise children not a very high percentage is process or person praise, a much higher percentage is 'other' praise comments.

Both process and person praise were there in more or less the same proportions (0.59% and 0.45% in each case when considering all utterances, and 18% and 16% in each case when considered as a percentage of praise utterances). Therefore, there was very little difference between person and process praise when measured as a percentage of all parental praise (0.59% and 0.45%) and very little difference between process and person praise as a percentage of all parental comments (18% and 16%). This suggests that parents do not focus praise on process or person in particular, there tends to be an even spread between process and person praise. Having said that, these are mean percentage figures and they can hide individual differences.

Page 27: Apply it

Suggested answer: Piaget's theory of moral development is about how a child cannot reason about right and wrong as an older child can, and their understanding of right and wrong is not as complex. According to Piaget's moral development theory, before the age of five a child would not know about right and wrong- so Suki would not understand the rules. By the age of seven, the child would believe that rules cannot be changed and that what is wrong is what is punished by adults and this suits Andi. By the age of eleven, the child has developed moral reasoning enough to realise that as long as everyone agrees to a rule change that would not be 'wrong'. Bee knows rules can be changed.

Topic 2

Page 30: Exam-style question

Define what is meant by the following terms:

- encoding
- storage.

Suggested answer: Encoding is the cognitive process of turning sensory information into an electrochemical form that can be used and stored by the memory system.

Storage is the cognitive process of holding electrochemical traces in the memory system whilst it is being used or for later retrieval.

Page 32: Apply it

Suggested answer: Imogen rushed to the shops so the shopping list is being rehearsed in short term memory. Short term memory can only store a limited amount of the list as it has a limited capacity of 7 plus or minus 2 items. This is why Imogen gets to the shop and can only remember 7 items from the list.

Page 33: Apply it

Suggested answer: Mataius has suffered a head trauma which means that he has been unable to consolidate the memories prior to the incident into his long term memory. This is an example of retrograde amnesia.

Page 35: Apply it

Suggested answer: Ali may have remember the incident as an argument between two people that resulted in a gunshot to one of the people. Ali likes to watch violent action movies, which have formed part of his schema associated with a loud bang and shouting. Ali's schema for these movies will affect his recall of the actual event. This has resulted in familiarisation according to the movies. He has rationalised the shouting and loud bang as according to reconstructive memory we alter memories according to our schema to make them make sense.

Page 39: Exam-style question

Explain **two** differences between short-term and long-term memory. You should refer to the Multi-store Model of memory in your answer.

Suggested answer: Short term memory has a capacity of 7 plus or minus 2 items, whereas long term memory has a potentially infinite capacity.

Short term memories last around 18 seconds, whereas long term memories lasts potentially a lifetime.

Short term memory uses acoustic encoding, whereas long term memory uses semantic encoding.

Page 41: Exam-style question

Explain **one** way that Bartlett found that 'The War of the Ghosts' story changed when it was remembered.

Suggested answer: In the story, the description of a canoe became transformed to a boat as a result of familiarisation. The description of black coming from the man's mouth became his dying breath as a result of rationalisation.

Page 42: Apply it

Suggested answer: Malik may change the image to look more like an owl as he perceives these features as being prominent as he experiences the picture.

Page 44: Apply it

Suggested answer: Elliot may have forgotten Fraser's telephone number as his rehearsal of the number was interrupted. This means that he was unable to maintain the number in short term memory or to transfer it to long term memory. Peterson and Peterson would explain that they found a similar disruption to memory when participant's rehearsal was interrupted when counting backwards in threes.

Page 45: Apply it

Suggested answer: Portia's explanation of anorexia can be considered reductionist because it narrow the explanation to brain functioning as a singular argument. Reem similarly is seen as reductionist because it takes a single explanation. Nick takes a less reductionist stance because he is taking into account both the role of the media and brain functioning, and he is able to understand the role of culture in the development of anorexia. Taking multiple views and understanding how these interact is the least reductionist opinion.

Page 47: Exam-style question

Assess to what extent memory research is reductionist.

Suggested answer: Memory research can be considered reductionist because the theories used to describe or explain how memory works tends to focus on one aspect of memory rather than interrelationships between different cognitive functions.

Laboratory experiments are commonly used by cognitivists. Laboratory experiments tend to isolate one or two variables to study memory without considering multiple factors/variables that affect memory, so can be considered reductionist methodology.

Bartlett's explanation of memory was least reductionist because he was able to appreciate the influence of life experiences on perception and recall. Our schema are unique to us as formed through experiences. These schema can explain how a multitude of factors influence recall.

Topic 3

Page 51: Apply it

Suggested answer: Marzia's doctor might think she is suffering from depression as she is showing many symptoms of the disorder. For example, she feels tired all the time even though she is sleeping a lot, suggesting her sleep is not relieving her tiredness. She is also not eating regularly, which could be a sign that she has a poor appetite. Another sign she may have depression is that she bursts into tears and says she feels sad all the time which indicates she has low mood.

Page 55: Apply it

Suggested answer: If Vijay believes that the text message was not answered straight away because Aaron was busy, then he would feel confident that Aaron will reply when he has time and will not be worried.

If Vijay believes that the text message was ignored because Aaron was annoyed with Vijay having seen the film already and he did not want to see the comedy film, then Vijay may be worried about not hearing from Aaron. Vijay might start to feel bad about himself for seeing the film without Aaron and think that Aaron might not want to be his friend any more.

Page 56: Exam-style question

- a) Describe the cognitive theory of unipolar depression.
- b) Explain **one** strength and **one** weakness of the cognitive theory of unipolar disorder.

Suggested answer a: The cognitive theory of unipolar depression says that depression is caused by abnormal thought processes. The person develops a negative or irrational way of

thinking about things and this is what causes the symptoms of their depression. Beck talked about the 'triad' of thinking, where the person has a negative way of viewing themselves, the world and the future which results in them showing symptoms like feeling down and lacking motivation to do anything. Ellis talked about the ABC of depression. There is an Activating event that starts the negative feelings, and the Beliefs the person has about this event will have Consequences that could be symptoms of depression like withdrawal.

Suggested answer b:

Strengths could include:

- the fact that CBT, based on the cognitive theory, is so effective at treating depression
- the cognitive theory accepts that depression might be caused by both internal and external factors, and so doesn't ignore the different possible causes.

Weaknesses could include:

- that we cannot tell what makes the thought processes become a problem – it could be caused by underlying biological factors
- that it isn't clear if the negative thoughts are the cause of the depression or if they are the result of being depressed.

Page 58: Apply it

Suggested answer: Bella will be asked to discuss her symptoms with the therapist so that they can identify exactly what thought processes lead to her symptoms. The therapist will then encourage Bella to challenge any irrational thoughts into more rational thoughts instead. This should help her to reduce the negative feelings that lead to her depressive symptoms.

Evidence suggests that CBT is very effective for treating depression, and when combined with drug therapy, studies have shown that patients are likely to show positive improvements to their symptoms which can last over time.

Page 65: Exam-style question

- a) Explain why Amaya might be worried about this, referring to the genetic explanation for addiction in your answer.
- b) Explain **one** strength and **one** weakness of the genetic explanation of addiction.

Suggested answer a: Amaya shares genes with her biological mother and she might be worried that she has inherited a gene that makes her more prone to becoming an addict. Adoption studies have found that an adoptee with a biological parent who is an alcoholic are more likely to develop problems with alcohol themselves.

Suggested answer b:

Strengths could include:

One strength of the genetic explanation of addiction is that it might help to explain why some people develop addictions to common behaviours or substances while others don't. If someone has a gene variation that makes them prone to addiction, then they may become addicted while another person without the gene could avoid becoming addicted.

Weaknesses could include:

One weakness of the genetic explanation of addiction is that it is reductionist as it fails to take into account the more complex social factors involved in developing addictions. For

example, it is unlikely that something as diverse and complicated to diagnose as addiction can be explained simply by the presence or absence of a certain gene variation.

Page 69: Exam-style question

Explain what conclusions the researcher can make using the data presented in the table.

Suggested answer: Conclusions might include:

- CBT seems to be an effective treatment for gambling addiction.
- Participants in both the CBT and no treatment group had almost the same ratings of symptoms at the start of the study.
- At week 6 the CBT group had a reduction in their symptoms while the no treatment group stayed about the same.
- By week 12 the CBT group had reduced their symptoms even more, but the no treatment group were still about the same as at the start.

Page 73: Apply it

Suggested answer: Jeremy might have 2 long versions of the 5HTT gene making him more prone to depression following a stressful life event. On the other hand Lucy might have at least one short version of the 5HTT gene which would explain why she is feeling very down since they moved.

Topic 4

Page 81: Apply it

Suggested answer: Jenna might have issues with being able to understand things in the world around her (perception). This might include something like being able to name an object in a picture or matching a name to a face she knows.

Because the occipital lobe controls vision, Sayed might have problems with being able to see clearly. This could be anything from blurred vision, to loss of vision, among other things.

Page 83: Apply it

Suggested answer: Broca's area is known to play a significant role in the production of speech. Because Shaun has damaged this area of his brain, his doctor might advise him to expect some problems when trying to talk, such as stuttering or finding it hard to identify an object verbally.

Page 84: Apply it

Suggested answer: As Jasper is male, he would be thought to have better spatial skills which would explain why he likes to build models. As Jasmine is female, she would be thought to have better language skills, explaining why she likes stories and talking to friends.

Page 87: Exam-style question

Explain the role of neurotransmitters, making sure you refer to Jana in your answer.

Suggested answer: Neurotransmitters are chemicals in the nervous system that pass messages between nerve cells and then around the body. In Jana's case the drug is making

sure there is more serotonin available in her nervous system which should make her feel less depressed.

Page 92: Exam-style question

Explain **one** strength and **one** weakness of Damasio et al.'s (1994) study.

Suggested answer: One strength of Damasio et al.'s study is that the research has good validity because the researchers were able to build a model of Phineas Gage's skull using his actual skull as a guide. This means that the conclusions drawn about which parts of his brain were damaged in the accident were gathered using modern technology but using his actual skull showing where the damage occurred.

One weakness of the study is that it is impossible to generalise the information gathered from this study to other people. The accident and brain damaged suffered by Gage were unique to him and it is very unlikely that another person would have the same damage and the same effects.

Page 97: Exam-style question

Asses how the study of psychology has changed over time. You should refer to how studying the brain has changed in your explanation.

Suggested answer: Psychology has been studied for many years, but the way we have studied behaviour and the explanations that have developed have changed dramatically over time. Early psychologists, like Wilhem Wundt in the 1870s, investigated behaviour by using introspection which involved asking participants to describe the thoughts in their mind as they were performing different tasks. People became interested in the way that the brain worked after cases of patients like Phineas Gage showed how behaviour can change following serious brain injury. Phineas Gage was involved in an accident that badly damaged his frontal lobe and after this he turned from a sober and reliable individual into someone who was aggressive, forceful and unreliable. Cases like this sparked interest in not just how people think, but also how their physiology can influence their behaviour. This led to the development of methods that allow us to study the brain and how it works.

One way psychologists began to study the brain was to conduct post-mortem examinations. This allowed psychologists to look for any signs of damage or abnormality once the brain has been removed once a patient has died. They could then compare this information to any symptoms or changes in behaviour that the person experienced before they died, and this helped to understand how the brain may have affected their behaviour. While this was useful information, once the person had already died the knowledge could not help psychologist in any real way.

Because of this, other brain study methods have been developed in order to investigate a living brain. For example, brain scans like EEGs can help us to see how active different parts of the brain are during tasks and it can help to identify areas that are not functioning properly. Other scans, like PET scans, can even show a live image of the brain inside the head, which can allow psychologists to not only see which parts of the brain are more or less active, but also spot any abnormalities in both the structure and functions of the brain. This information has helped us to identify how a normal living brain works as well, for example, we now know which areas of the brain are involved in processing speech based information because if we get people to listen to spoken language we can see which part of the brain is doing the most work.

Some of the most modern research is going even further into studying human behaviour and looking into how individual neurons can influence behaviour. Some studies have used very high-powered microscopes to look at the number of certain types of neurons a person has in different parts of their brain. This information has then been used to understand how these different neurons influence different behaviours. For example, evidence has shown that people with risk-taking behaviour may have a lack of neurons that are designed to reduce dopamine levels (Zald et al, 2008). This results in higher levels of dopamine in the brains of those with the risk-taking behaviour.

Topic 5

Page 101: Apply it

Suggested answer: Olwen went along with her friends because of conformity. She has internalised the behaviour of her friends and become vegetarian because of informational social influence. Amanda has become vegetarian even though she did not want to. This is an example of compliance, where she goes along with the majority of her friends due to normative social influence.

Page 102: Exam-style question

Complete the table with the correct term for each description.

Description	Term
Although Eliot preferred classical music, he listened to pop music with his friends because they liked it.	Compliance
Louis saw a person stumble and fall in the street. He thought they must be drunk so he did not stop to help.	Bystander effect
When Carolyn put on her police uniform for work she could not be her usual silly and fun-loving self because she was expected to act as a police officer would.	Identification

Page 104: Apply it

Suggested answer: Jerome may have failed to help because there were many other people on the street so he diffused responsibility to other passersby. He could have been showing pluralistic ignorance, where other people on the street were not responding to the situation, so he copied them and carried on walking past. If Jerome thought the person was drunk, he may have felt that helping would be risky, so did not help because the cost would be greater than the guilt he would feel from not helping.

Page 105: Exam-style question

Explain, using your knowledge of bystander intervention, why some people are willing to give money to the Salvation Army while others choose to walk on by.

Suggested answer: Some people may be more likely to give to charity because they are in a good mood. Being happy increases the likelihood of being helpful. If we have been in need of charity at some point, we may perceive ourselves as similar to those needing help from the Salvation Army. Similarity to the person in need will increase our likelihood of donating.

Page 107: Apply it

Suggested answer: The fifth student may have been unsure of the answer and looked to the other students for reference. As the first four students chose Sydney as their answer, the first student displayed informational social influence. This was more likely because of the number of students who selected Sydney as their answer.

Page 110: Exam-style question

- a) Calculate the percentage of participants who continued to obey when the authority figure was present.
- b) Explain **one** conclusion Leonard can make regarding the obedience of participants.
- c) Explain **one** way Leonard might improve his study.

Suggested answer a: 40%

Suggested answer b: The participants were more likely to be obedient when the authority was present compared to when there was no authority figure present.

Suggested answer c: The study could be made more realistic by getting participants to perform a more everyday task which would give the study greater ecological validity.

Page 111: Apply it

Suggested answer: Proximity of the stern looking teacher could explain why participants continued to harass the people completing the jigsaw.

The authority figure was stern looking which may explain why the participants continued with the task.

Page 113: Apply it

Suggested answer: Bessie found that people were more likely to give more hot sauce to a person when they were in a larger group. This can be explained by deindividuation, where you lose your sense of personal responsibility in large groups. This means that they would have felt less responsible for inflicting pain.

Page 114: Apply it

Suggested answer: To prevent these types of air accidents, first officers could be trained to question their captain rather than blindly obey. They could be given strategies to distance themselves from the captain to make questioning their decision making more likely. On a plane, the first officer could be assigned social support from other crew members, so they feel supported when they feel the need to question their captain.

Page 116: Apply it

Suggested answer: Bystanders are more likely to stop and help the victim if they are of the same race as the victim who stumbled. They are more likely to help if the victim appeared non-threatening or if the bystander was with a friend who was also willing to help. If the bystander had experienced a similar situation beforehand, they are also more likely to intervene.

Page 117: Apply it

Suggested answer: The teacher may have rejected Lysander and Ellie's study on ethical grounds. Someone collapsing in an airport could cause distress to other travellers and disrupt journeys if the airport were unaware of the study taking place.

Page 120: Apply it

Suggested answer: Darian is likely to conform to the role of football supporter and adopt hooligan type behaviours associated with the role. Because he wears a football shirt, he is stripped of his normal personal identity and assigned the identity of a football supporter, which would reinforce his behaviour. Darian may not feel like an individual in the football group and he may therefore take more risky and aggressive behaviour because the consequences would not be solely with him.

Page 123: Exam-style question

Assess how culture influences group behaviour. Use concepts, theory and research from social influence in your answer.

Suggested answer: Culture is a set of shared beliefs and practises associated with a collective group of people. Culture can influence group behaviour because of the beliefs and customs that are shared. Obedience, for example, is more likely to be seen as a desirable behaviour in collectivistic cultures because of the importance of group cooperation and respect for authority. However, research does not really support the influence of culture on obedience and findings have been inconsistent.

Culture can also influence conformity. Individualistic cultures are less likely to conform because there is less need to comply to the group, whereas collectivistic cultures value conformity to group norms. This was demonstrated by Bond and Smith, who found that participants from collectivistic cultures were more likely to conform in an Asch study replication.

Topic 11

Page 132: Apply it

Suggested answer:

1. The independent variable is cats or dogs, and the dependent variable is how long they sleep.
2. The independent variable is age and the dependent variable is the amount of sleep we need.
3. The independent variable is the type of praise we receive, and the dependent variable is the grades achieved in exams.

Page 133: Apply it

Suggested answer:

Participant variable:

1. Volunteer participants recruited from a social media site.

Situational variable:

2. A variety of male and female researchers conducted the study.

Page 134: Apply it

Suggested answer: They would need to control the number of people in the shopping centre by selecting a similar time of day for each staged event. They may also need to have the person dropping the shopping as either the same person or if they are taking in turns they should dress similarly.

They would need to control the volume and song selected so that all participants heard the same song at the same volume for the same duration of time. Headphones could be used to block out other noise.

Page 135: Apply it

Suggested answer: There will be no difference in the time taken to run a maze by trained or untrained rats, and any difference found will be due to chance.

There will be no relationship between hours spent on social media and exercise, and any relationship found will be due to chance.

Page 137: Exam-style question

Give **two** strengths of the random sampling technique.

Suggested answer: One strength of a random sampling technique is that everyone has an equal chance of being selected so it will not result in a biased sample.

It is the most representative way of generating a sample which means that the findings of the study are more likely to be general.

Page 142: Apply it

Suggested answer: Basic consent form for Bartlett's War of the Ghosts

Thank you for agreeing to consider participating in this study of memory. Before we continue your fully informed consent is needed. You will be required to read a culturally unfamiliar story to yourself. Once finished you will be required to either repeat the story to another participant or reproduce the story on paper. You may be asked to reproduce the story immediately or sometime later. You should be prepared to be asked to come back to the lab and retell the story after several months.

Your name will not be recorded and you will not be able to be identified from the results of this investigation into memory. The results will be published, and you have the right to withdraw yourself from the study, or your results any time until that point.

It is important that you know that this is not a test of intelligence and you will not be judged on your ability to recall the story.

If you agree to take part, please sign your name here

Date.....

Page 143: Exam-style question

Describe how you would design a laboratory experiment to test the influence of exercise on sleep. In your description, you should include variables, apparatus, research and experimental design, and controls.

Suggested answer: Variables: An independent variable is exercise, so half of the participant group will be required to take part in one hour of exercise on an exercise bike each day for a week, and the other half of the participant group are asked to not take part in exercise during the week of the study. The dependent variable is the amount of sleep participants have during each night of the study week as measured by participant phone app.

Apparatus: Exercise bike, sleep phone app and phone.

Research design: Independent groups design.

Controls: Participants are asked to make sure that they either complete the exercise program or ensure that they do not take part in any exercise during the study week. Participants are asked to make accurate records of when they go to sleep and when they wake as recorded on their sleep app. Individual differences are controlled by randomly allocating participant to the experiment or control group.

Page 144: Apply it

Suggested answer:

1. Natural experiment
2. Field experiment
3. Laboratory experiment

Page 145: Exam-style question

Explain what type of interview would be most suitable for this type of investigation.

Suggested answer: An unstructured interview may be appropriate as the research is investigating the individual experiences of women during postnatal care. Postnatal care is likely to be very different for most women so it would be appropriate to have flexibility with the questions asked and it allows the research to explore different areas of the conversation freely.

Page 147: Apply it

Suggested answer: Closed-ended question: Do you have a phobia Yes/No

Open ended question: Describe your fear in terms of how you feel and behave around the phobic object.

Page 148: Apply it

Suggested answer:

1. Negative correlation; as we experience more negative life events, we show decrease in mood.
2. Positive correlation; the greater the happiness, the older we are.

Page 150: Exam-style question

Explain **one** strength and **one** weakness of an observation.

Suggested answer: One weakness of an observation is that the presence of an observer may affect the behaviour of the participants being observed. This may result in unnatural behaviour being recorded, particularly if it is an overt observation and participants are aware of the presence of the observer.

One strength of an observation is that interrater reliability can be established if more than one observer records the same participant behaviour. The observer's data can be compared to ensure consistency in what is being measured. This is more likely in a structured or controlled observation where participant behaviour can be recorded or videoed.

Page 151: Exam-style question

- a) Give each of these reaction times to 2 decimal places.
- b) Using your answer to part a, explain **one** problem with using 2 decimal places.

Suggested answer a: 0.248 is 0.25 giving just two decimal places. 0.251 is 0.25 giving two decimal places.

Suggested answer b: One problem is that the difference in reaction times for left and right hand responses is 0.003 milliseconds and this difference is lost when just two decimal places are given. Using two decimal places, someone might conclude that there is no difference at all when the two times are compared. Given that the timing is in milliseconds, 0.003 is actually a difference. Reducing data, such as reducing the number of decimal places, can mean information is lost.

Page 153: Apply it

Suggested answer: Ati found a ratio of 6 to 3 (6:3) for females and males, which can be written as 2 to 1 (2:1).

Page 154: Apply it

Suggested answer: Koko needs to work out the fractions, the decimal form of the fractions and then the fractions as percentages, always giving two decimal places when using decimal form, including the percentages.

Strongly agree: $35/80$ as a fraction (which can be $7/16$). This is 0.4375, which is 0.44 in decimal form to two decimal places. This is 43.75%.

Agree: $14/80$ as a fraction (which can be $7/40$). This is 0.175, which is 0.18 in decimal form to two decimal places. This is 17.50%.

Disagree: $12/80$ as a fraction (which can be $3/20$). This is 0.15 in decimal form, using two decimal places. This is 15.00%.

Strongly disagree: $19/80$ as a fraction. This is 0.2375, which is 0.24 in decimal form, using two decimal places. This is 23.75%.

(Note $43.75 + 17.50 + 15.00 + 23.75 = 100$ and this is a way of checking that an answer is correct).

Page 155: Exam-style question

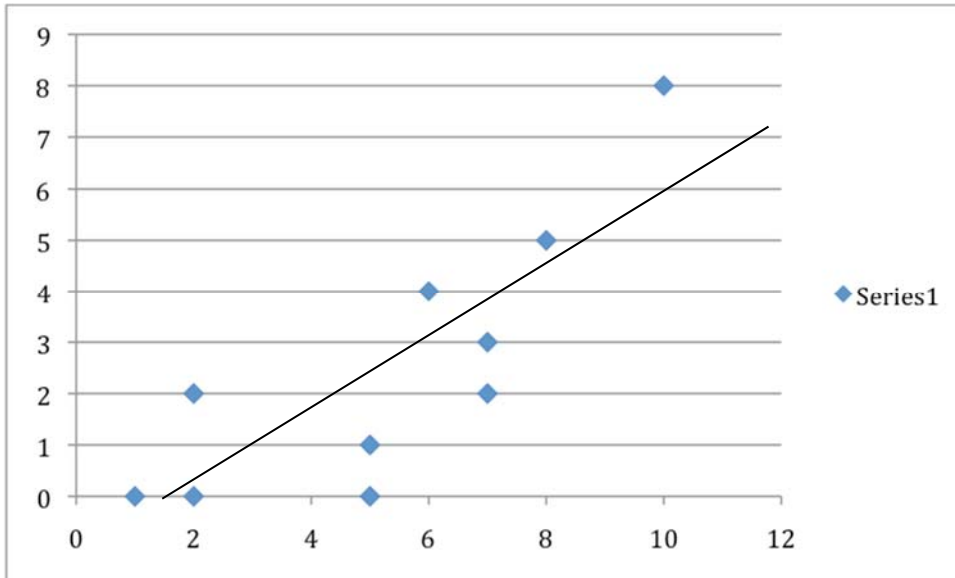
- Using Figure 11.5, calculate the mean score for females to 2 decimal places.
- Give a conclusion from the means for male and female scores in Figure 11.5.

Suggested answer a: $15+12+11+16+14+12+9+10+17+15 \div 10 = 13.10$

Suggested answer b: For the males the mean is 9 minutes and for the females the mean is 13.10 minutes. The females took quite a bit longer than the males to complete the jigsaw.

Page 160: Apply it

Suggested answer a: the scatter diagram and line of best fit to show a positive relationship between self-report rating of stress and number of doctor visits



x axis is rating of stress out of a score of 10

y axis is number of doctor visits

Suggested answer b: Isabella found a positive relationship as shown by the line of best fit, which rises from left to right, and so shows a positive relationship.

Suggested answer c: The more stress someone said they were under the more times they visited their doctor over the last year. The line of best fit shows quite a strong positive correlation. This did fit Isabella's thinking. She thought the more stress they admitted to, the more often they would have visited their doctor and that is what was found.

Page 162: Exam-style question

Explain **two** differences between qualitative and quantitative data.

Suggested answer: One difference between qualitative data and quantitative data is that qualitative data provide insights and detail that quantitative data cannot provide because quantitative data use measurements and numbers that cannot provide depth. For example, a case study of someone with brain damage can provide more insights and detail than giving measurements of different parts of the brain.

Another difference is that qualitative data can explore a topic that has not been studied much before. An example might be looking at the effects of social media on someone's attitudes to people from other races. This might not have been studied before. Insight would be useful and specific hypotheses could come from such insight. Quantitative data do not offer insight, so might give less valid data, however, they are good for drawing reliable conclusions. Studies gathering quantitative data can come from exploratory qualitative data and the exploratory data can indicate what questions to ask.

Topic 6

Page 169: Exam-style question

Explain what type of reinforcer is shown in this example.

Suggested answer: The most likely form of reinforcement here is negative reinforcement. Reinforcement occurs when a behaviour is encouraged, which is why

Richard comes back to steal more money. He is returning when the room is empty and therefore avoiding punishment for stealing.

Page 169: Apply it

Suggested answer: The siblings are being punished by removing something that they enjoy, which is negative punishment.

Page 171: Apply it

Suggested answer: The next time the friends go shopping they are likely to repeat the shoplifting behaviour because they have identified with the original role model and want to be seen as 'cool' too.

Page 174: Apply it

Suggested answer: Kiran is more likely to have a personality that could become criminal. According to Eysenck Kiran has an extravert personality, which will make him difficult to socialise and he will engage in risk taking behaviour.

Page 176: Apply it

Suggested answer: Tom may have reoffended because prison may not be an effective deterrent to reoffending. Whilst in prison he is being exposed to more criminal role models and learning new ways to commit crime from them. Because Tom may find it difficult to get employment with a criminal record once released, he may resort to crime in order to get by.

Page 178: Apply it

Suggested answer: Benjamina will be asked whether she would meet up with the burglar who robbed her. This will involve a meeting with an intermediary that would help them talk about the crime and its impact upon the Benjamina. This is often done in a neutral environment, and Benjamina can express her feelings to the burglar.

Page 179: Apply it

Suggested answer: Greenlink prison would have to consider the nature of the tokens that they use and the reinforcers that each prisoner might be motivated to behave for. The prison would have to draw up a list of behaviours that they would like the prisoners to work towards in order to achieve the tokens and staff would need to be trained to recognise and reward these behaviours.

Page 180: Exam-style question

Explain how treatment might be described to Joe before he begins rehabilitation, using your knowledge of anger management programmes.

Suggested answer: Someone would need to explain to Joe that anger management is a program designed to help him control his anger which caused his violent behaviour. He would need to be told about the stages of cognitive preparation, which would help him identify the causes of his anger and what triggers it. Joe would be asked to reflect on how his anger affects himself and other people. He would be told that he would learn new skills such as relaxation techniques and then would be required to practise these skills in role play situations.

Page 183: Apply it

Suggested answer: Bandura, Ross and Ross would explain that Dmitri is modelling the behaviour of superheroes that he has seen or read about and is copying their

behaviour. This was shown in the Bobo doll study where the children copied the aggressive behaviour of the adults they observed.

Page 185: Exam-style question

Describe **one** way that Charlton et al.'s (2000) study on the introduction of television to the island of St Helena could be improved.

Suggested answer: One way that the study could be improved is by conducting a replication of the study in a different community to see if the same findings happened. Another way to improve the study would be to ensure that the children were exposed to the same television programmes as mainland children to make the comparison fairer.

Topic 7

Page 188: Apply it

Suggested answer: From about 18 months, Lu would have developed a categorical self, which would be defined according to categories that her society would use, such as age, gender and other characteristics like height. This is according to Lewis. At some stage, Lu has seen herself as tall for her age as she has categorised herself as 'tall', probably because others have called her tall and she can see others are often shorter. Rather than someone's categorical self-remaining the same all their lives, they would change how they saw themselves according to how their situation and how cultural expectations changed. Average height in a developed country is likely to have changed as it has in the UK, where average height has risen a little as has waist size and average weight. When Lu is much older she might also not be as tall as she was for various reasons. She is likely to judge others as taller and larger. Her categorical self is likely, therefore, to change, and she categorises herself as 'short' and 'light'.

Page 189: Exam-style question

Explain the influence of others on the self for both theories.

Suggested answer: Lewis thought that the categorical self-developed through understanding categories used in society such as age, gender and other characteristics. It was also thought that the categories used varied between cultures and over time, meaning others influence our idea of our categorical self.

Rogers also suggests our self-concept comes from our experiences with others. The ideal self, for example, has ideas of what we should be like and these come from others as well as from our beliefs. Our beliefs are likely to come from our experiences in the world. Therefore, both Lewis and Rogers involve experiences with the world and with others in their ideas about self.

Page 192: Apply it

Suggested answer: It seems that Simon believes in free will as he did not want to rob the woman, which suggests he thinks he usually would have a choice. A belief in free will is said by Baumeister to lead to more pro-social behaviour, because people feel more responsibility for their actions and are likely to control their actions more because of that. It is suggested that Simon is stealing the bag reluctantly and he says 'sorry' which suggests pro-social behaviour is what he would normally do. However, if we believe in free will that means we believe in responsibility and our justice system rests on that idea. This means Simon should be punished as he did steal the bag.

Another consequence of a belief in free will is that it improves someone's control over their actions. Simon seemed to have control over his actions in reality, as he stole the bag, however, he was forced to do so, being threatened. His behaviour was not determined by his nature or his experiences - he acts out of free will- it is just that he chooses not to be hurt rather than not to steal. Baumeister says that Sartre's believed that there is always a choice, and Simon's actions bear that out. This means Simon should be punished as his action was the result of free will even though he was threatened. Simon did steal the bag, had a choice, and should be punished.

However, the justice system would probably take into account that he was threatened and the punishment might be lowered because of that. It could be said that his genes, his brain processing, and his world experiences including his upbringing were what led him to take the bag. This is determinism. However, it is not a useful explanation. Baumeister points out that free will is having control over actions and being able to make choices and Simon did that.

Page 194: Apply it

Suggested answer: Bruno might have an ideal self that included him not crying and 'being a man' - which implies a man like his father. His father comes over as rather strict and unbending, so Bruno's ideal self is likely to represent those qualities.

Bruno's self-image is likely to be low as he was told he was good only when he did well at school, which did not happen often. Bruno felt unloved, so his self-image might be that he is unlovable. Bruno's father set up conditions of worth so Bruno might feel he is only worthy if he fits those conditions, which are about being strong. Bruno is not doing well at school so he will not see himself as strong. Bruno is likely to be in a state of incongruence because his self-image (low) does not match his ideal self (strong). His father used conditional positive regard rather than unconditional positive regard, giving conditions of worth. Unconditional positive regard, congruence and a strong self-image are what give good mental health so Bruno is likely to suffer from something like depression.

Page 196: Exam-style question

Describe **two** ways in which temperament is an internal influence on the self and self-esteem.

Suggested answer: A temperament where negative emotions are apparent is more likely to lead to low self-esteem and a negative view of self, as someone with negative emotions rather than positive ones might suffer more from anxiety.

Another aspect of temperament is effortful control. Someone with effortful control self regulates and so can, for example, pay attention when they need to. This can help when interacting with others and having friends. Having good self-regulation might give higher self-esteem, which affects the view of the self. Both these ideas come from Robins et al., 2010.

Page 197: Apply it

Suggested answer: Sam would have high self-efficacy in anything to do with biology as he had success in that area. Experiences would be good given his success as a guitar player as well, again giving himself efficacy in that area. It would be expected that others would praise him and he would get admiration. His view of how others see him would be positive. Others would react well to him and as Argyle says, a positive self-image comes from praise and attention. He may have been criticised somewhat regarding his Maths result, though going on to have such success in biology may have

overridden that experience. On the other hand he might still feel 'not good at maths' because of his experience. The social role of presenter is held in high regard so again his experience would support his high self-esteem. Despite perhaps a feeling of not being so good at maths he would be expected to have high self-efficacy in many areas and high self-esteem, coming from his experiences with (and of) others.

Page 199: Apply it

Suggested answer: Amav needs to avoid response bias which might occur if someone gets into the habit of using 'strongly agree', for example, for all the items. He makes sure that some of his statements go 'against' someone saying 'Agree' or 'Strongly agree' for being conscientious or agreeable as well as some requiring 'Agree' or 'Strongly agree' when measuring these two traits. Using 'I often forget tasks' means he is focusing on someone not conscientious. For this item for the answer 'Strongly agree' he would score 1 rather than the usual 5 or 7 depending on his scale. This is when he is scoring people's conscientiousness (such as 'I like things to be in order'). The same would be done for 'I ignore other people's problems' which is 'against' agreeableness so someone who is agreeable would say 'Strongly disagree' to this item and would get the top score in the scale. Doing this helps to avoid bias and helps the validity of the data.

Page 203: Exam-style question

- a) Give the difference between the mean 'cheating's core of participants who read the passage about determinism and those who did not.
- b) Explain this difference according to Vohs and Schooler's study.

Suggested answer a: 4.33 is the difference between the two mean 'measures of cheating' scores.

Suggest answer b: This difference is quite large (it is between 14.0 and 9.67). This suggests, according to the study, that when someone reads that behaviour is deterministic and not done through choice or free will they are more willing to cheat than if they do not read something about determinism and free will. The study drew the conclusion that the cheating is more likely because if there is determinism the person will not feel responsible for their actions so they would be more likely to act in a way that is not moral. This further suggests that a belief in free will is what maintains someone's moral behaviour and the study suggests that belief in free will is rather easily challenged.

Page 204: Apply it

Suggested answer: Vohs and Schooler in 2008 found that when someone read about behaviour being determined, being caused by nature or nurture but not through someone's free will, they were more likely to cheat when they could than people who did not read about determinism. Agata had also read about determinism and was then in a position to either behave according to social customs or not. Before she read about determinism she obeyed rules. Afterwards she obeyed them a lot less. Her behaviour matched the study's findings in that if someone believes behaviour is determined they are less likely to feel responsible for their actions and more likely, therefore, to behave in a way that is not so moral. She did not actually cheat, as Vohs and Schooler's participants had done, however, she did obey rules less and this can be seen as her feeling less responsible for her actions and so not so bothered about being 'good'.

Page 205: Exam-style question

Explain why participants were matched in the Van Houtte and Jarvis (1995) study.

Suggested answer: Van Houtte and Jarvis (1995) wanted to see whether owning a pet helped with self-esteem, self-concept, autonomy and attachment to pets. A problem was that participants, though in two groups (pet owners or non-pet owners) would have other differences, too. Those differences might cause any differences found in self-concept and the other variables of interest. Variables that the researchers thought might cause differences were number of brothers and sisters, parental marital status and social class. To cancel out such differences they matched one pet owner with one non-pet owner each time on the three variables they wanted to control (parental marital status, number of brothers and sisters and social class). That meant the groups were matched for these three variables which meant if there were differences in self-esteem, self-concept, autonomy and attachment to animals in the findings, these differences would not be down to parental marital status, number of brothers and sisters and social class. That is why they had to do the matching.

Topic 8

Page 211: Apply it

Suggested answer: Tom and Tamsie saw the green area of grass in the distance. Because it was far away the texture of the grass would have appeared closer together and denser, which would have made it look greener even though when they actually got there it was very patchy.

Page 211: Exam-style question

- a) Identify **one** example of a depth cue.
- b) Explain how this depth cue is shown.

Suggested answer a: One depth cue shown is linear perspective.

Suggested answer b: Because the 2 sides of the train track seem to move together as they get further apart.

Page 218: Apply it

Suggested answer: Gregory's theory states that the brain will develop one or more hypotheses to explain the visual information it can see. In the case of the necker cube there are 2 possible hypotheses that could make sense – either the cube is facing up and to the left, or down and to the right. Because it is a line drawing both of these hypotheses are possible so the brain will switch between these 2 ways of perceiving the cube.

Page 219: Exam-style question

Explain why the two groups perceived the picture differently, using your knowledge of expectation as a form of perceptual set.

Suggested answer: The first group heard a story about an old woman which meant when they saw the picture they expected to see an old lady which is why they saw her first. In the other group, the story about the young woman made them expect to see the young lady first which is why they saw her before the old woman.

Page 224: Apply it

Suggested answer: If Jan had seen the ferry before, or knew which type of ferry she was looking for (i.e. a big car ferry or smaller passenger ferry) then she would have prior information about the type of boat to be looking out for. This would have made it easier for her to judge the size of the object in the distance, and helped her to identify whether it was a ferry or a container ship she could see.

Page 227: Exam-style question

Assess whether the findings from Carmichael, Hogan and Walter (1932) can explain the results of Alexi's experiment.

Suggested answer: The results showed that language influences perception because the pictures drawn changed to be similar to the description they were given. The results of Alexi's study are very similar to those of Carmichael, Hogan and Walter (1932) who also found that language influences the perception of an image. However Alexi only used 5 images so we don't know how strong this influence was. In Carmichael, Hogan and Walter (1932) they had 12 images, and each was described in 2 different ways to 2 different groups of participants, and then this was compared to the control group who heard no description. This makes the Carmichael, Hogan and Walter study more valid than Alexi's version because they could see how much influence 2 different descriptions had on the drawings participants did. In Alexi's study, he only used 10 male participants meaning that the sample is much more limited than the sample used by Carmichael, Hogan and Walter (1932). Although the 2 study results seem similar, there are more problems with Alexi's study in terms of generalisability because of the small sample size and not using any females.

Topic 9

Page 232: Exam-style question

Explain the difference between the sleep cycle and the sleep-wake cycle

Suggested answer: The sleep cycle involves cycles of about 90 minutes and there are about five such cycles over a night's sleep. The sleep cycle is an ultradian rhythm as it lasts for less than 24 hours. The sleep cycle involves Stages 1 to 4, which move someone from very light sleep to deep sleep, as well as REM sleep, which is where dreaming takes place. The sleep-wake cycle is a circadian rhythm lasting around 24 hours where we are awake for part of it and sleep for part of the 24 hours. Within the sleep part is the sleep cycle which helps to underline the differences between the sleep cycle and the sleep-wake cycle.

Page 234: Apply it

Suggested answer: Ava works shifts and these will include some night work if not all nights. When she works at night she comes home to sleep during the day. However, environmental cues will be against her sleeping. Zeitgebers affect the body clock, such as daylight. Ava is trying to sleep when it is light. The hormone melatonin will not be produced to help her to sleep because it is not dark. Her body clock when she is working will trigger sleep including the pineal gland producing melatonin, which is even more likely to mean she will not be sleepy during the day. Depending on whether she had a large meal at work, she might also have the wrong environmental cues around hunger. She might be hungrier in the day than at night, which will again make it harder to sleep during the day.

Page 236: Apply it

Suggested answer: Dom is falling asleep and it seems that this is involuntary (happening without his control). This excessive daytime sleepiness (EDS) is already a symptom of narcolepsy so the doctor might have it in mind straight away. The doctor will also look for any muscle control problems Dom reports and whether he has periods of paralysis during the day. Dom might talk about having vivid dreams and hallucinations. These are symptoms that would alert the doctor to the possibility of a diagnosis of narcolepsy.

Page 243: Exam-style question

Little Hans acted out some role play and represented his father as his grandfather. Explain how this role play may help to reduce Hans's anxiety according to Freud's theory.

Suggested answer: Hans reported playing and in his play his mother could be 'mother' but his father was 'grandfather'. Freud thought that in the Oedipus Complex in the phallic stage boys wanted their mother and saw their father as a rival- not only a rival, but also wanting to castrate them. This would be a very strong fear. Hans cast his father in the role of grandfather. This reduced the fear because it moved his father out of the way in his play, leaving his mother there, which was not threatening.

Page 246: Apply it

Suggested answer: According to the idea of zeitgebers in Sol's environment synchronising his internal body clocks, it will be daylight and dark that affect whether Sol is tired or not, as well as other cues. Light is a strong indicator to the body that it is time to wake. The pineal gland is affected by light coming into the eye and the brain receives information from external cues about whether it is light or dark. Melatonin, for example, is a hormone that is found when it is dark and triggers sleep. When light arrives in the morning internal mechanisms are tuned to wakefulness. That is why Sol feels comfortable with his daily cycle. He is able to sleep when his body is set to do so, according to melatonin levels, for example. He is awake when environmental triggers suggest time to be awake. Such triggers work to a 24-hour day, so that is the 'day' Sol works to as well. Siffre found that without zeitgebers he did not stick to a 24-hour day, which is evidence that light and dark govern our sleep-wake cycle. Sol was not isolated so usual zeitgebers were available to him. Siffre also developed psychological problems without cues to daily rhythms suggesting Sol needs to stick to his successful patterns. External factors govern Sol's cycle not he himself and his 'nature'.

Topic 10

Page 252: Exam-style question

Identify which of these is pre-linguistic thought and which is pre-intellectual language.

Suggested answer: The baby playing with bricks is an example of pre-linguistic thought and the child saying 'tatata' is an example of pre-intellectual language.

Page 254: Apply it

Suggested answer: To control extraneous variables three controls would be a) the set time that the control group looks at the stimulus sheet should be the same as the time those in the experimental group take to name the colours. This is because otherwise those naming or those not naming might have a different length of time to look at the colours, affecting their learning. b) It would be important for Tammy to make

sure that the instructions to both groups was standardised so that everyone heard the same to avoid any bias. c) It might be useful for the control group participants (those not naming the colours) and the experimental group participants (those naming the colours) to be matched so that individual differences are controlled for.

If not controlled for confounding variables would be a) time to study the colours before picking them out from another sheet b) having different instructions so one group might have more information to help them with the task than the other group c) individual differences between the two groups of participants, such as one group being more 'arty' than the other so being more aware of colours.

Page 255: Exam-style question

Explain **one** strength and **one** weakness of linguistic relativity as a theory.

Suggested answer: A strength is that linguistic relativity is a theory backed by experimental evidence such as from Boroditsky in 2001. She used careful controls such as making sure instructions are in English both for the English and the Mandarin speakers (who could also speak English). Experiments give strong reliable conclusions and this is a strength of the theory. However, a weakness is that studies tend to look at concepts such as time rather than about people. If a theory looks at a specific aspect of human behaviour then that limits its generalisability, which is a weakness.

Page 260: Apply it

Suggested answer: Bees using the waggle dance were communicating to the other bees in the hive about the distance to pollen. Asha felt there was meaning in the dance, which she thought of as semanticity, one of Aitchison's features of language. The bees watching the dance understood the meaning of the dance. So Asha felt she could call the dance a 'language'. However, there was no complexity in the meaning and the dance seemed to be done reflexively rather than consciously, which suggests there was no semanticity. Also, the dance did not use creativity as symbols were not used to give a novel meaning. The bees were 'talking' about distance and so about something not present, which gives an idea of displacement, however, which is another of Aitchison's features of language. There was also structure to the dance, indeed the structure was the meaning. Asha had some justification for calling the dance a language - there was displacement and some structure. There were also reasons for not calling the dance language, in that the meaning was not complex as human language is complex, and there was no creativity.

Page 260: Exam-style question

Explain why Aitchison's creativity/productivity can be said to be an important feature of language.

Suggested answer: Creativity/productivity in a language is important. It means being able to use the language to create new utterances that someone listening and sharing the language can understand. For example, we can say 'the door was nailed up-side-down onto the bridge' which we might not have said before but is understandable. This is an important feature of language because we want to talk about new ideas and to develop ourselves and our understanding. Humans do problem-solving, for example, and invent solutions.

Page 262: Apply it

Suggested answer: Abram was using closed posture, suggesting lack of interest. He could have shown interest by using open posture which is seen as less defensive and more positive. To come over as more interested in the job, Abram could have moved so that he was sitting forward in the chair. He could open his arms up and uncross his legs, opening himself up to questions and showing himself as more open to the job.

Page 270: Exam-style question

Assess the conclusions of Boroditsky (2001) about the relationship between language and thought.

Suggested answer: Boroditsky (2001) concluded that language can affect thought. The Mandarin language 'talks' about time in a vertical way (March being above April) and English talks about time horizontally (March being before April). In experiments Boroditsky (2001) found Mandarin speakers were quicker to say 'March comes earlier than April' is true if they were primed to think 'vertically' and English speakers were quicker to answer 'true' or 'false' to 'time' statements if primed to think 'horizontally'. The conclusion was that their language, in this case about time, affected their thinking about time.

An issue is that the Dani language has two colour words but Dani people can learn the English words for colours. To learn them they must be able to think about them, so the two words for colours did not limit the Dani thinking about colours. This goes against Boroditsky's conclusions. Nevertheless, the conclusions came from experiments using careful controls such as controlling the timing of slides participants were shown. So there should be reliability in Boroditsky's findings. One point is that colours are in a way physical, more so than time, which is an abstract concept, so perhaps language about abstract concepts affects thinking more.

Another feature of Boroditsky's conclusions is that the experimental method was used and it was found that the Mandarin way of talking about time (vertically) affected how they thought about time (measured as time taken to tell the truth of a question about time, such as whether March comes earlier than April). It should be noted that actually Boroditsky found that Mandarin speakers were not quicker to answer the truth of a statement about time that used 'before' and 'after' so this does limit the findings somewhat.

There were three experiments in Boroditsky's (2001) study, and they had findings that back each other up, showing reliability. One conclusion, from Experiment Two, was that if Mandarin speakers learn English early on they have less of an effect of Mandarin on thinking about time than if they learn English later. This suggests our language affects our thinking (about time) less if other languages are learned at an early age.

A strength of this conclusion is that it is useful as a practical application - it is good for a child's range of thinking if they learn more than one language and it is done early on perhaps. A problem is generalising from the students used in the study because conclusions relate just to them really and the Mandarin speakers all spoke English and were in a US university, which makes them rather special perhaps.

There also might be issues with the validity. The study used two very different languages and it would be useful to see the findings of studies using two more similar languages. Also there was priming and then questions asked, which is a task that is not ecologically valid as not something that happens in real life.

In conclusion, to assess Boroditsky's conclusions, it can be claimed that on balance the study's conclusions are reliable, interesting and useful. However, they might lack generalisability and validity. As with many experiments they are reductionist in their approach so lack focus on the whole situation. The strength of the scientific way the study is carried out means almost inevitably a weakness in lacking in validity.