



Exemplars GCSE Psychology Paper 2



Research Methods

Question 2b: 3-mark question on frequency tables

Response 1

	Frequency	Tally
Passersby who looked at item, then ignored it		
Passersby who picked up item & handed it in		
Passersby who ignored walked away with the item		

Response 2

	Boys	girls
looked but ignored the item		
picked the item up and gave to a member of staff.		
walked away with the item.		



Question 5: 12 mark extended open response on field experiments

Response 1

Evaluate the use of field experiments to investigate human behaviour.

(12)

A field experiment is an experiment conducted in a natural environment, but where the independent variable is assigned and investigated by researchers. In terms of the Godden and Bradley Study, the ^{experiment} ~~environment~~ is not conducted in a lab, rather familiar dry land or underwater environments to the divers.

A strength of field experiment such as this one is that it holds ~~or~~ higher ecological validity than a study conducted in a lab and therefore we can assume it is more generalisable to real life situations. Therefore some argue it is more efficient at investigating real human

(cont.)



behaviour for this reason.

A disadvantage of a field experiment can be found for the same reason however. The investigators are still able to control the independent variable, in this case, learning and recalling words ^{under} or water or on land, however it is much more difficult to control extraneous situational variables in a natural environment rather than a fabricated one.

Due to the natural setting of a field experiment, researchers cannot control variables such as light intensity, noise levels, or presence of other people very easily and this could lead to disruption ^{during} in the study, and therefore unreliable results. It can also lower the validity as we can ~~to~~ not ensure that the ^{independent} variables ~~are~~ ^{is} being measured effectively due to influence of other variables.

Field experiments are useful in the way that they can often be cheaper than a lab experiment, as one doesn't have to spend money on ensuring the location is available and usable. This is beneficial to the researcher conducting the study.



Response 2

(12)

A field experiment is an experiment design conducted in a naturalistic environment with the experimenter ~~changing~~ manipulating the independent variable. Here, the independent variable was the environments used (on dry land or on water). This has many advantages.

For one, the independent variable and dependent variable can show a visible cause and effect.

For example, since there ~~was~~ were different locations used, we can understand that moving from one location to another for learning and recalling can reduce the ability to remember

(cont.)



things, shown by how the divers could ~~re~~ remember the word lists better when asked to learn and recall in the same environment. This is similar to Piliavin's ^{subway experiments} ~~1968~~ ~~who~~ where the victim's race being changed allowed the finding that people of same race have a tendency to help each other.

Also, Another advantage is that it takes place in a naturalistic environment. This adds validity to the experiment as scuba divers may deal with struggles in remembering instructions given on dry land when in the water. This adds ecological validity, making the results more ~~useful~~ useful for other ~~scuba~~ scuba divers. They may understand that they should be given instructions underwater to improve their memory. However, this result may not be generalisable to ~~p~~ non-scuba divers or even divers that aren't familiar with the same environments as the ~~on~~ participants were.

However, there have been measures to control extraneous variables, which are variables that could potentially affect the



dependent variable (ability to remember the word lists). For example, the intervals between the ~~tests~~ reading of the words was kept ~~as~~ at 2 seconds. This improves the reliability of the study. ~~otherwise~~

Also, the use of many different trials with different environment combinations improves the reliability and accuracy of the experiment since the relationships between the environments and memory can be clearly identified. However, since the scuba divers knew they were part of the experiment, their behaviour may have been unnatural and they may have shown demand characteristics (acting to satisfy the ~~given~~ aims of an experiment).

Therefore, Goden and Baddely ~~era~~ could have tried to have a covert investigation which would reduce the demand characteristics of the ~~sea~~ scuba divers. They could test different areas of water as well.

In conclusion, there are many benefits



and drawbacks of field experiments, but overall, it was the best choice to be able to investigate the memory. Although word lists may be less ecologically valid, the results are still applicable to real life scuba divers to improve memory.



Criminal Psychology

Question 12: 9 mark assess question (bandura ross & ross)

Response 1

Assess how well Bandura, Ross and Ross (1961) can explain the behaviour of Delun.

(9)

Bandura, Ross and Ross is a study that explores aggression levels in children, and whether boys or girls are more aggressive.

The results from his experiment explain that overall boys are more aggressive than girls, and both are more aggressive with an aggressive male role model. The children exposed to aggressive role models display much more aggressive behaviour compared to those with non-aggressive role models. Delun was exposed to some aggressive behaviour from Captain Michael Christ fighting bad guys, and so hurt another boy that was teasing a younger child.

Bandura, Ross and Ross have the strength of good reliability, as is a standardised procedure that is easily replicable. This means valid results can be taken with a different range of children, and these results can be compared. A weakness however is how it doesn't account for alternate external or internal factors, such as genetics. In Delun's case, he only modelled behaviour because a younger child was in need of being saved.



Response 2

Assess how well Bandura, Ross and Ross (1961) can explain the behaviour of Delun.

(9)

Bandura, Ross, Ross (1961) was a lab experiment that took place in the USA seeking to investigate social learning theory ~~through~~ on children's behaviour. It consisted of 72 children divided into male & female groups who watched a same-sex / different sex role model play with a doll. They then let each child play with the doll to see whether the child would follow social learning theory & mimic the behaviour of their role model. They found that boys were more likely to mimic aggressive behaviour, especially in the case of same-sex role model, as well as a general increase in aggression for those children who watched the aggressive role model regardless of sex. In the case of Delun, he has been mimicking the behaviour of his role model, who



is Captain Michael, by copying his actions and expressing his wants to be just like his role model. This is DeLam showing social learning theory as he is imitating the behaviours of his perceived role model who he has been exposed to through TV. DeLam's emotional outburst after being told his animosity of Captain Michael was bad shows his perception of him as a good role model.

Bandura, Ronald, (1961) can help explain DeLam's behaviour in many ways for example DeLam is a boy, and the study showed boys were more likely to copy model the behaviour of the role model. Additionally DeLam is the child in the study copied aggressive behaviour instead of DeLam copying Captain Michael's good behaviour - which provides further explanation from Bandura's study to support DeLam. Additionally, DeLam's role model is the same sex as him, and he has shown aggressive behaviour, similarly to the participants in Bandura. Also, DeLam is similar in age to the participants of Bandura, Ronald, (1961) as he is 7



and they were between 3-6 years. However Dehn is not in that said age bracket which may reduce support ~~for~~ for this explanation. Not only this, De Bandna was a lab experiment with controlled times for kids to watch their role model as well as low ecological validity due to simulated conditions which may invalidate support as a result. Additionally Ombert-Bachet et al (1990) found that kids who did not know ~~for~~ what toy / situation they were in displayed more aggression - perhaps Dehn was in

(Total for Question 12 = 9 marks)

an unfamiliar situation

TOTAL FOR SECTION B = 21 MARKS

so he behaved violently - This decreases support for Bandna, son, non (1961) try to explain Dehn's behavior



Question 19 The Self option:

9- mark question about Vohs and Schooler (2008)

Response 1

(9)

Vohs and Schooler (2008) conducted a study to investigate if free will and determinism had an influence on the tendency to cheat. They found that the participants who read about anti-free will (determinism) had higher tendency to cheat than those who read about free will. Therefore, the students that have taken the pictures of the test and sent it were deterministic as they believe (according to Vohs and Schooler) that the cheating was meant to happen anyways and they ~~can~~ cannot control it. Using Vohs Study, we can say that ~~the study they conducted, it is reliable therefore~~ was reliable as it is easily replicable and can be tested on those students.

However, the students who behaved using their free will (which is the belief in one's control over their lives), they deleted the messages as according to Vohs and Schooler, they had

(Cont.)



the option to choose the correct behaviour and do the right thing. As Vohs' study showed, the participants who read about free will were less likely to press the space bar and reveal the answer as they had a choice whether to act this way or not, the kids therefore chose to delete the message and not cheat. But Vohs' Schooler study ~~did~~ did not mean that a belief in free will lead to innocence as those who ~~press~~ pressed the space bar may have just been lazy.

Response 2

Vohs and Schooler conducted an experiment on free will and determinism to settle the debate and find out what a belief in each will do when presented in a real life situation. Here, the students have the chance to either cheat or be trustworthy in their test. This is very applicable to Vohs and Schooler because both the experiment and the scenario discuss (analyse) cheating, determinism and free will.

However, Vohs and Schooler's was conducted on 20 adults (13 female, 7 male) to assess their likelihood in cheating when faced with long, complex arithmetic



problems. The students here are presumably much younger as they are in a history classroom and not a setting in which they are likely to be allocated to a study on free will and determinism. ~~This is not very generalisable~~ Voss and Schooner is therefore not very generalisable to this situation as there is presumably a differing age representation.

Finally, in the Voss and Schooner experiment, the participants were split into two groups, ~~a~~ control groups. One read an article on free will and one read an article on determinism. They were assessed accordingly. The students have not been presented with either one of the articles and so may not have had much of an external influence on their choice. However, the groups of cheaters and non-cheaters will likely have ~~a~~ different mindsets. Voss and Schooner are therefore reliable

for this situation because one group of each has been more likely to cheat than the other. Yet, neither have been exposed to articles on free will or determinism so it is a slightly different scenario.

In conclusion, Voss and Schooner (2008) could ~~somehow~~ explain the behaviour of the students in a natural way and method, but slight ^{specifics such as} ~~as~~ morals and beliefs may impact the true reliability and ~~general~~ generalisability of the study to the scenario.

(Total for Question 19 = 9 marks)

TOTAL FOR SECTION C = 21 MARKS



Question 26: Perception option.

9-mark essay in direct (Gibson) theory of perception

Response 1

Assess how well the Direct Theory of Perception (Gibson, 1966) can explain how Liz was able to interpret her surroundings.

(9)

The direct theory of perception states that we fully perceive our surroundings through the processing of visual information;

~~The first~~ The speed of the train can be perceived through optical flow, which is the movement of light in our eyes. Liz could see that her surroundings were moving towards her really quickly so perceived she must be moving fast. She could tell the church was far away due to the texture gradient, which is when the further objects lack texture and detail. As the features of the church were blurred, she realized it must have been far away. The fields and trees, stretching far away is known as linear perspective, which is how lines are extended and come together the further they are from you.

Liz sees that the station is smaller than the trees and knows she isn't there yet. This is another depth cue known as size constancy, where the relative size of an object is compared to its actual size to determine its distance. As she realized the station was smaller than the trees, she knew it was smaller than the trees then she must've been far away so sits down again.



Response 2

Assess how well the Direct Theory of Perception (Gibson, 1966) can explain how Liz was able to interpret her surroundings.

(9)

Gibson's Direct theory of Perception ~~from~~ (1966) ~~had~~ states that we perceive things based on the visual information that enters our eyes; bottom-up processing. It says that our environment and its objects provides enough clues for us to appropriately perceive our surroundings. Liz could perceive that she was moving fast because of the optic flow, which is the patterns of moving light in our optic array. This could help her perceive that ~~she was~~ ~~that~~ the train was moving fast despite her feeling no movement. Gibson's Theory has been backed by research evidence, however it is also considered reductionist because ~~it~~ it does not consider ~~the~~ the effect of past experiences on our perception.

The use of visual cues to ~~aid our~~ ~~per~~ is also very crucial to help us perceive properly. Visual cues can be categorised into two - monocular and binocular, depends on whether only one eye is required to perceive or both eyes must be functioning ~~is~~ used monocular cues

(cont.)



such as relative size, which is ~~perceiving~~ that farther objects ~~look~~ smaller than closer objects, and texture gradient, which is that details on the surface of the object are less defined when they are far away, to analyse how far the train station was from the train and how far away the church was from her. The use of these cues ~~only~~ required ~~ing~~ to use one eye only, unlike binocular cues.

As opposed to Gibson's direct theory (1966), Gregory's Constructivist theory (1970) states that our perception is influenced by our previous knowledge and past experiences; top-down processing. It also emphasises on perceptual hypotheses, which is the estimate of what is most likely to be the ~~best~~ information ~~that~~ that is lost from the sensory input. This can help explain why we fall for visual illusions, because our brain keeps switching between the likely perceptual hypotheses. There is also ^{research} evidence that supports this theory, such as Haber and Levin (2001), showing that this may be a better explanation as to how we perceive ~~the~~ the things around us in our environment.



Question 32: Sleep and dreaming option

4-mark question on hormones based on novel scenario

Response 1

Strength

The amount of melatonin she produces will effect how Tilly feels tired. Surely she will have a lack of melatonin suggesting why she isn't tired.

Weakness

A Situational or environmental factor could be what is influencing Tilly's sleep. School could be stressful or it could just be that at night her blinds don't make her room dark enough to sleep in. Social media and technology could also influence Tilly's ability to sleep.

(Total for Question 32 = 4 marks)

Response 2

Strength

Kim et al found that when rats were sleep deprived they had ~~more~~ low melatonin levels. This explains the fact that Tilly may struggle sleeping at night as her pineal gland may not release enough melatonin causing her to not feel tired. She could then take melatonin pills to improve her sleep ^{cycle}.

Weakness

Using hormones to explain Tilly's sleep problems is reductionist as it fails to consider other factors affecting her sleep for example, Tilly may not see enough natural light during the ~~morning~~ morning causing her to sleep until 11am. Food or medication may also be affecting her sleep.

(Total for Question 32 = 4 marks)



Question 33: Sleep and Dreaming

9-mark question on external influences on sleep

Response 1

Assess how well the use of external influences could help Artez with his sleep.

(9)

External influences are things within the environment and outside factors such as light and temperature that can affect sleep. Light-for example- sends a signal to the supra chiasmatic nuclei to signal the production of melatonin. These external factors help trigger sleep and inform the body when to sleep.

So Artez who is a paramedic and works in the night may feel sleepy at work or affect his sleep pattern as the external cues are telling his body to sleep when he needs to be alert and working. The colleague suggesting bright lighting and thick curtains will help Artez manipulate external cues of light in order to regulate ~~the~~ melatonin production and help maintain a sleep pattern with his shift work.

A weakness of using external influences ~~to help Artez~~ to help Artez is that perhaps other influences on sleep such as stress with his job as a paramedic



may be causing change in his sleep patterns. Also maybe the bright lights, curtains and strict meal schedule may not help Artez.

One strength of using external influences though is that there is supporting research evidence from Siffre that emphasises the importance of external cues on sleep as his sleep ~~was~~ cycle varied from 18-51³/₄ hrs without light to influence his sleep and body. This is a strength as it helps validate methods of using lights and blackout curtains to help Artez.

Response 2



Assess how well the use of external influences could help Artez with his sleep.

(9)

External influences on sleep are factors outside of the body which have an impact on sleep cycles. For example, diet, sunlight, and lifestyle are all external factors which could affect a person's sleep. However, internal influences are factors related to the body that could affect sleep such as hormones.

Artez works night shifts. This means that he is working throughout the night when it is darker, and sleeping in the day when it is lighter. When it is darker, the pineal gland releases melatonin which signals the need for sleep, making Artez feel tired.

Artez's colleague suggests to use bright lighting when Artez wakes up. This is because light is a zeitgeber and if so if Artez is exposed to bright light when he wakes up, his pineal gland will stop producing ~~more~~ melatonin.

Furthermore, ~~the~~ diet is an external influence on sleep. So, by eating a big breakfast, Artez will be

(Cont.)



supplied with plenty of energy for the night shift which may further reduce his tiredness.

A strength of using external influences to ~~explain~~ help Artez with his sleep is that there is research evidence to suggest that external influences play an important role in sleep. For example, Siffert found that when he spent 6 months in a cave without access to light (an external factor), he came out with ~~severe~~ weakened vision and poor dexterity, as well as losing his perception of time. This case study provides evidence that external influences impact the sleep-wake cycle. However, as this was a case study, the findings are not representative and thus lack generalisability.

A weakness of using external influences to help Artez is that it is reductionist as it ignores ~~biological~~ internal influences on sleep. For example, some people with insomnia ~~have~~ ^{have} damaged or ~~missing~~ ^{are missing} the ~~an~~ ^{an} ~~in~~ ⁱⁿ the brain that produce orexin / hypocretin, which plays a role in the sleep-wake cycle. Therefore, by ignoring internal influences on sleep, ~~the~~ solely using ~~an~~ external influences could be considered reductionist.

In conclusion, external influences are ^{ineffective} ~~an~~ ^{an} ~~good~~ ^{ineffective} way of helping Artez with his sleeping problems.



9-mark question on linguistic determinism.

Response 1

Assess how well linguistic determinism can explain why Naadir talks about the laptop as a television.

(9)

Linguistic determinism is when language determines the way you ~~see~~^{view} the world. Naadir only has limited technology so when she sees a laptop her only ~~word~~^{word} for one was television. One strength of linguistic determinism is that it helps show how people view the world.

Sapir Whorf's hypothesis is that the language you use directly influences the way you perceive the world. Naadir doesn't ~~stop~~ stop calling the laptop a television because in her mind the laptop is a TV. This is a limitation as linguistic determinism is highly reductionist, as it only looks at one aspect so cannot be generalised to the bigger population.

The Dani tribe have only ~~2~~ 2 words for colour warm and cold, when researched it was found the tribe could tell the difference between

different colours but just ~~didn't~~ didn't have the words for it in their language. Naadir can probably tell the difference between the laptop and a television she just doesn't have the word to express it. This is a limitation as linguistic relativism is a better explanation of Naadir's language.



Response 2

Assess how well linguistic determinism can explain why Naadir talks about the laptop as a television.

(9)

Linguistic determinism suggests that the language we speak limit our abilities to think about the world only in a way our language splits-out. Here, Naadir could not understand what the visitor meant by the words 'laptop computer' or 'the internet', and instead referred to it as a television and the computer keyboard as a remote control. This is because Naadir lives in a remote tribal community where there is limited technology. Perhaps, ~~the~~ ~~the~~ the language Naadir spoke did not include the words for 'laptop' and the 'internet' and only for 'television', as that was the only thing he had. That is why he did not understand what the foreign objects were. It could be supported by the evidence from the Pirahã tribe, who only have numbers for one, two and many, so when foreigners introduced the concept of other numbers, like 5, the people from the tribe could not understand ~~them~~ them. Thus, linguistic determinism could be used to explain why Naadir talks about the laptop as a TV.

(Cont.)



~~20~~ However, linguistic determinism can explain Naadir's misunderstanding to a limited extent. Linguistic determinism is reductionist as it suggests that we can only think about the world as ~~we~~^{much} as our language allows us. This can be disproven by the evidence found in the First Native Canadian community. It was first thought that they had 200 words for snow, but that was later proven wrong and it ~~was~~ was found that they only had 2. This suggests that linguistic relativism - the idea that language influences the way we think about the world, but we are not limited in understanding it. Linguistic relativism could also explain why Naadir thought of the computer as a TV, as he only has a TV in his tribe, so his language affected his understanding. It doesn't mean he is incapable of understanding the concept of a TV if given an explanation.

Boroditsky conducted a study between American and ~~then~~ Chinese students to see how the language we spoke influenced the way we think about time. She found that there was a difference in cultures, and that Mandarin speakers thought about time vertically, whereas English speakers thought about it horizontally. ~~This~~ This suggests that there are cultural differences in the way we think, and Boroditsky's finding could be used to explain why Naadir called a computer a TV; because of the difference in cultures. Boroditsky's