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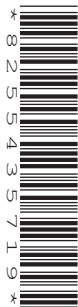
Friday 8 October 2021 – Morning

A Level Psychology

H567/02 Psychological themes through core studies

Time allowed: 2 hours

No extra materials are needed.



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s) StemUp Model Solution

Last name

INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.

INFORMATION

- The total mark for this paper is **105**.
- The marks for each question are shown in brackets [].
- Quality of extended response will be assessed in questions marked with an asterisk (*).
- This document has **16** pages.

ADVICE

- Read each question carefully before you start your answer.

SECTION A: Core studies

Answer **all** the questions.

- 1 (a) Identify the dependent variable in Maguire et al.'s (2000) study into the brains of taxi drivers.
The volume of grey matter in the hippocampus (anterior, body and posterior, left and right), measured by voxel-based morphometry and pixel counting. [1]
- (b) Give **two** ways in which the taxi drivers and the control group were matched in this study.
Firstly, both groups were all right-handed males. Secondly, the control group were matched to the taxi drivers on health (all were healthy with no neurological or psychiatric problems) and on age, with a similar mean age and age range. [2]
- (c) Outline **one** strength of the type of data collected in this study.
The data was quantitative (volume of grey matter in mm³), so it was objective and not open to the researchers' interpretation. This made it easy to compare the two groups statistically to see if the taxi drivers' hippocampi really were structured differently from the controls. [2]
- 2 (a) Chaney et al. (2004) used a repeated measures design in their Funhaler study.
- (i) Explain how this design was used.
A repeated measures design means the same participants take part in every condition. In Chaney's study each of the 32 asthmatic children first used their standard spacer inhaler for a week and their adherence was measured, then the same children used the Funhaler for a week and adherence was measured again. [2]
- (ii) Outline **one** strength of using a repeated measures design in this study.
A strength is that participant variables cannot act as extraneous variables, because the same children used both devices. Any improvement in adherence to the Funhaler therefore cannot be explained by differences in the children's personality, severity of asthma or the support of the family. [2]

- (b) Briefly discuss the extent to which Kohlberg's (1968) study into moral development may be considered ethnocentric.

Kohlberg's study can be considered ethnocentric to some extent. The main longitudinal sample was 75 American boys from Chicago, followed from age 10 to 16 and then to 22 to 28, so the stage theory of moral development was built mainly on a Western, male sample. The moral dilemmas (such as Heinz stealing the drug) may also be more relevant to some cultures than others. Kohlberg also implied that children in villages in Turkey and Yucatan developed more slowly than American children, suggesting a cultural deficiency when their values may simply differ. However, he did test boys in five other cultures (Taiwan, Mexico, Turkey, Great Britain and Canada), finding the same invariant sequence of stages, and he adapted the story for Taiwanese boys (the man steals food for his wife), showing some cultural awareness. Overall the study is partly ethnocentric but did attempt to test universality. [4]

- 3 (a) (i) Explain **one** way in which the procedure of Grant et al.'s (1998) study into memory increased the reliability of the research.

Reliability means the procedure is consistent so it can be replicated and give the same results. Grant et al used standardisation: every participant read the same two-page article on psychoimmunology, wore headphones in both the silent and noisy conditions, and had the same recall and recognition tests after a two minute break. Because the procedure was identical for all 39 participants, differences in recall were due to the study and test context and not to variations in the procedure, so the study can be repeated exactly. [3]

- (ii) Outline **one** conclusion that was drawn from this study.

Grant et al concluded that there are context-dependency effects for newly learned meaningful material, regardless of whether a short answer or multiple choice test is used. Students are therefore likely to perform better in exams if they study in a quiet environment similar to the exam room. [2]

- (b) (i) Outline the apparatus used in Moray's (1959) study into attention.

Moray used a modified Brenell Mark IV stereophonic tape recorder with two amplifiers, which gave two independent outputs so that a different message could be played into each earpiece of a pair of headphones. This allowed dichotic listening, with the volume matched at around 60dB in each ear. [2]

- (ii) Outline **one** weakness of using an experimental method in this study.

One weakness is that the laboratory experiment lacked ecological validity. Having two different prose passages or lists of words played simultaneously through headphones while shadowing one message is an artificial task, so the results may not reflect how attention works in everyday situations such as a conversation at a party. [2]

- 4 (a) Explain how the procedure from Piliavin et al.'s (1969) study relates to the key theme of responses to people in need.

In Piliavin's study a male confederate posed as a person in need by staggering and collapsing on the floor of a New York subway carriage, lying there until helped. He appeared either drunk (smelling of alcohol, carrying a bottle in a paper bag) or disabled (sober, carrying a black cane). Observers then measured the passengers' responses to this person in need, including how many helped and how quickly they responded (latency), so the study directly measures responses to people in need. [3]

- (b) Levine et al. (2001) carried out a study into responses to people in need.

- (i) Give **two** results from this study.

- 1 *The only significant relationship was between economic productivity and helping: cities with a lower PPP (less wealthy) were more helpful.*
- 2 *Rio de Janeiro was the most helpful city (93%) and Kuala Lumpur the least (40%); New York was the least helpful of the American cities.*

[2]

- (ii) Explain why this study can be described as a quasi experiment.

A quasi experiment is one where the independent variable is naturally occurring rather than manipulated by the researcher. In Levine's study the IV was the city or country the person lived in. Participants' place of residence is predetermined and could not be controlled or allocated by the researchers, so it was a quasi experiment. [2]

- 5 Discuss to what extent Hancock et al.'s (2011) study into the language of psychopaths changes our understanding of individual, social and/or cultural diversity.

Hancock et al changes our understanding of individual diversity to a reasonable extent. By analysing the speech of 52 Canadian murderers using the Wmatrix and DAL programs, they showed that psychopaths (identified by the PCL-R) use more subordinating conjunctions such as 'because' and 'so that', more references to basic needs like food and money, more past tense verbs and fewer emotional words. This demonstrates that individual differences such as psychopathy can be measured objectively through specific behaviours like language, which extends our understanding of abnormal behaviour and could help identify and reduce future offending. However, the extent is limited for social and cultural diversity: the sample was a small group of male Canadian prisoners who had all committed murder and are likely to share similar backgrounds, so it tells us little about psychopaths in the general population or about women. It does extend research beyond the USA, but does not compare cultures, so it adds little to our understanding of cultural diversity overall. [6]

Turn over for next question

SECTION B: Areas, perspectives and debates

Answer **all** the questions.

- 6 (a) (i) Outline **two** defining principles and concepts of the developmental area.

One defining principle of the developmental area is that change and development continues throughout the whole lifespan and never stops, so the way we think, feel and behave changes from childhood through to old age. A second principle is that development is driven by both nature and nurture: some behaviour develops through biological maturation in pre-determined stages that are the same for everyone, while other behaviour is learned from the environment and experiences, so it develops on an individual basis.

[4]

- (ii) Explain how Lee et al.'s (1997) study into lying and truth-telling relates to these principles and concepts.

Lee et al's study relates to the first principle because the Chinese and Canadian children aged 7, 9 and 11 showed changes in their moral judgements with age. For example, older Chinese children rated lying about a good deed more positively than younger children, showing that moral development is ongoing and changes with age and experience. It relates to the second principle because within both cultures morality changed with age (maturation, nature), but the Chinese children increasingly rated lying about good deeds positively while Canadian children did not, showing that the cultural norm of modesty is learned from the environment (nurture).

[4]

- (b) Describe **one** application of the developmental area.

One application of the developmental area is curriculum planning in education. Research by Kohlberg and others has shown that children's cognitive and moral development happens in set stages, so schools organise the curriculum as a sequence of learning that follows this pattern, for example teaching concrete ideas before abstract concepts. Because children are thought to mature at a similar rate dependent on age, children are taught in year groups or key stages based on age. This means that children are supported to develop at the right pace, not too quickly or too slowly, and can work with peers at the same stage. [4]

- (c) Consider the strengths and weaknesses of the developmental area in psychology.

One strength of the developmental area is that it gives a better understanding of how people develop, which has the potential to improve lives. For example, Chaney et al's Funhaler improved asthmatic children's adherence to medication from 10% to 73% by applying the principles of positive reinforcement to a child's level of development. A second strength is that it allows early identification of problems and intervention: Lee et al and Kohlberg show what normal moral development looks like, so children who deviate from this can be identified and supported. A third strength is that it considers both nature and nurture: Lee et al showed moral judgement is partly universal (changing with age in both cultures) and partly learned from Chinese or Canadian norms. However, a weakness is that some theories are too rigid and deterministic, for example Kohlberg's invariant stages do not allow for people who do not follow the expected pattern, so it is not always a good predictor of behaviour. Another weakness is an over-reliance on children as participants: Bandura's and Lee's children were easily influenced by demand characteristics and may not have been able to articulate their reasons, and using children raises ethical issues of consent and harm, as when Bandura's children were frustrated and shown aggression. Finally, longitudinal research such as Kohlberg's suffers from attrition, while cross-sectional comparisons like Lee's may not use comparable groups. Overall the area is useful but must be applied flexibly. [8]

- (d)* Discuss the individual/situational debate in psychology. Use examples of research from the developmental area to support your answer.

The individual/situational debate concerns whether behaviour is caused by factors internal to the person, such as personality, biology and dispositions, or by the situation and external factors that a person finds themselves in. The individual side supports scientific research because individual differences can be measured and studied precisely, but it can place too much blame on the individual and makes generalisation difficult. The situational side is more holistic and allows behaviour to be predicted and changed by altering situations, but it underplays individual differences and takes responsibility away from the person.

Research from the developmental area supports the situational side. Bandura et al showed that children who observed an aggressive adult model imitated specific physical and verbal aggression towards the Bobo doll, whereas children who saw a non-aggressive model showed very little, so aggression was a response to the role model in the situation. Chaney et al showed that simply changing the situation from a standard spacer to the Funhaler, which gave positive reinforcement through a spinner and whistle, raised the number of children medicated the previous day from 59% to 81%. Lee et al found that Chinese children increasingly rated lying about a good deed positively while Canadian children did not, showing that social and cultural norms shape moral judgement.

However, the same studies also support the individual side. In Bandura's study boys were more physically aggressive than girls and children imitated same-sex models more, suggesting that individual factors such as sex influence learning. In Chaney's study a small number of children did not comply even with the Funhaler, so individual dispositions still matter. Kohlberg found universal and invariant stages of moral development driven by biological maturation, unaffected by situational factors such as culture or class, and Lee found that within each culture age affected judgements, which is an individual factor.

In terms of applications, situational approaches such as the Funhaler are practical and generalisable but assume changing the situation automatically changes behaviour and ignore free will, whereas individual approaches recognise uniqueness but are harder to apply widely. The debate also links to nature/nurture and reductionism; the situational side ignores nature and the individual side can be reductionist. In conclusion, the developmental evidence suggests behaviour is best explained by an interaction, with the situation acting on individuals who differ in maturation and disposition.

[15]

SECTION C: Practical applications

Answer **all** the questions.

The changing view of homosexuality

In the 1950s and 1960s, some therapists used aversion therapy in an attempt to cure male homosexuality which they saw as an illness. This typically involved showing pictures of naked men to patients while giving them electric shocks or drugs to make them vomit. These methods proved entirely ineffective.

Homosexuality was listed as a mental disorder when the first American list of disorders (DSM) was published in 1968. In 1973, the American Psychiatric Society who publish this list voted on whether they believed homosexuality to be a mental disorder. 5845 psychiatrists voted to remove it from DSM and 3810 voted to keep it.

Homosexuality was removed but replaced with 'sexual orientation disturbance' for people 'in conflict with' their sexual orientation.

Finally, in 1987, homosexuality was completely taken out of the list.

Meanwhile, the World Health Organisation only removed homosexuality from its classification (the ICD-10) published in 1992.

This highlights that concepts of mental disorder can rapidly evolve as society changes.

- 7 (a) Outline what is meant by socially sensitive research and explain how it may apply to this article.

Socially sensitive research refers to studies, theories and ideas that are controversial or have social consequences for the group they represent, for example by risking stereotyping, prejudice and discrimination, being subject to social values, or being open to misuse politically or legally. This applies to the article because classifying homosexuality as a mental disorder stereotyped gay men as abnormal and ill, and the aversion therapy that followed discriminated against people because of their sexuality and harmed them. Removing homosexuality from the DSM by a vote shows the classification was subject to the social values of the time, and such 'treatments' remain open to abuse where they are still legal. [4]

- (b) Outline the procedure used in Chaney et al.'s (2004) Funhaler study and briefly explain how this relates to the use of aversion therapy for homosexuality.

Chaney et al used a repeated measures field experiment on 32 asthmatic children aged 1.5 to 6 years in Perth, Australia. The children first used their normal standard spacer device and parents completed a questionnaire about adherence. The children then used the Funhaler for two weeks; its spinner and whistle only worked when the child breathed correctly, so it was self-reinforcing. Parents were then interviewed by phone with a matched questionnaire so adherence to each device could be compared. This relates to aversion therapy because both try to change behaviour through conditioning; the Funhaler used positive reinforcement to increase a desired behaviour, whereas aversion therapy used punishment (shocks and vomiting) to try to remove a behaviour that, unlike inhaler use, was not under environmental control. [5]

- (c) Describe the free will/determinism debate and explain how it can be applied to this article.

Free will is the idea that individuals are in control of their own destiny and make conscious choices that affect their behaviour, so they are responsible for what they do. Determinism is the idea that behaviour is caused by forces beyond the individual's control, which may be internal (biological determinism, such as genes and brain structure, as in Maguire's or Sperry's research) or external (environmental determinism, where behaviour is shaped by conditioning and the environment, as in Bandura's study). Determinists argue behaviour can be predicted, whereas free will accounts stress personal choice. Applying this to the article, the therapists' belief that homosexuality could be 'cured' with aversion therapy reflects environmental determinism, as it assumes a person can be manipulated by conditioning to behave differently with no reference to their own desires. The idea that sexual behaviour can be changed also implies an element of choice, and if aversion therapy failed it could be blamed on the individual's wilfulness. In contrast, the complete failure of these methods and the removal of homosexuality from the DSM and ICD-10 suggests that sexuality cannot be changed because it is biologically determined and outside a person's control, not a free choice or an illness. [8]

- (d) Using your knowledge of psychology, suggest ways in which people can be encouraged to show more tolerance towards individuals who are homosexual.

One way to encourage tolerance is through the use of positive role models, based on social learning theory and Bandura et al's research. Bandura showed that children imitate the behaviour of adult models they observe, especially models who are similar to them or who are seen as powerful. Television programmes, films and advertising could therefore show openly homosexual characters and celebrities, as well as popular heterosexual role models (footballers, musicians, teachers) who treat gay people with respect and challenge homophobic comments. Children and adults would observe tolerant behaviour being rewarded with approval (vicarious reinforcement) and would be more likely to imitate it. A second way is operant conditioning, drawing on Chaney et al's Funhaller study, which showed that positive reinforcement increases a desired behaviour. Schools and workplaces could reinforce tolerant behaviour, for example through praise, rewards and recognition for inclusive language and for students who stand up for others, while homophobic behaviour and language is punished through consistent sanctions so it is less likely to be repeated. A third way is education to change attitudes and schemas. Lee et al showed that children's moral judgements are shaped by the cultural norms they are taught, so lessons from primary school onwards that present different sexualities as normal and present homophobia as morally wrong would help children develop tolerant schemas before prejudice becomes fixed. Education could also include the historical facts in the article to show that homosexuality is not a disorder.

[8]

- (e) Evaluate the suggestions you have made in part (d) with reference to themes and debates you have studied in psychology. [10]

My suggestions can be evaluated in terms of usefulness. Using positive role models is useful because Bandura demonstrated real imitation of adult behaviour and the method can be applied cheaply through media to large audiences. However, Bandura's findings came from laboratory observations of young children copying aggression towards a Bobo doll, so it is a reductionist and low ecological validity account; tolerance of real people is a far more complex attitude than imitating a specific act, and adults with established prejudice may not simply copy a role model.

In terms of individual/situational explanations, my second suggestion assumes that tolerance is situational and can be increased just by changing the reinforcement in schools and workplaces, as the Funhaler changed adherence. This ignores individual differences, such as strong religious or personal beliefs, and in Chaney's study some children still did not comply. Punishing homophobic behaviour may also only suppress it in public rather than changing private attitudes, so the behaviour could reappear when sanctions are absent. There is also a free will/determinism issue, as rewarding and punishing people treats them as determined by their environment and ignores their conscious choice to change, which may be more lasting.

Education raises issues of nature/nurture and social sensitivity. Lee et al suggests moral values are learned (nurture), so teaching tolerant norms early should work, but Kohlberg suggests moral reasoning develops in biologically determined stages, so younger children may not be able to reason about the morality of discrimination until they mature. Teaching about sexuality in schools is socially sensitive and controversial for some parents and cultures, so it must be handled carefully to avoid a backlash. There are also ethical considerations: role models who are openly gay may face abuse, and punishment...

END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).

7(e) schemes must be fair. Finally, the evidence base is limited in ethnocentrism and validity. Bandura,
..... Chaney and most research is Western, whereas Lee shows that moral norms differ between cultures,
..... so a programme that works in one society may not generalise to another. Overall, a combination of all
..... three suggestions is most likely to work, because it targets both the situation and the individual's
..... attitudes over time.

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