

Q.2 Outline the procedures of Milgram's (1963) research 'Behavioural study of obedience'.

[12]

Credit **could** be given for the following:

- Biographical data of the forty participants.
- Description of memory/learning research set - up.
- Description of the role of the 'learner'.
- Description of shock generator.
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of procedures is accurate and well detailed. Language (grammar, punctuation and spelling) is relevant, well-structured and accurate.
7 - 9	Knowledge and understanding of procedures is reasonably accurate and less detailed. Language (grammar, punctuation and spelling) is accurate, structured and clear.
4 - 6	Knowledge and understanding of procedures is appropriate but basic and limited in range. Language shows some inaccuracies (grammar, punctuation and spelling).
1 - 3	Knowledge and understanding of procedures is superficial, muddled and/or incoherent. Language (grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding.

- Q.3** Describe the findings **and** conclusions of Langer & Rodin's (1976) research '*The effects of choice and enhanced personal responsibility for the aged: A field experiment in an institutional setting*'. [12]

Credit **could** be given for the following:

- In the pre - tests, the two groups (RIG & CG) were very similar.
- 48% of the residents in the RIG reported feeling happier, compared to only 25% of the residents of the CG.
- Residents in the RIG reported themselves to be significantly more active after the experimental treatment than residents in the CG.
- The RIG showed increases in the proportion of time spent in 'active' activities (e.g. visiting people from outside the home) and less time engaging in 'passive' activities (e.g. watching television).
- Nurses' ratings indicate a positive average total change score of 3.97 for the RIG, as compared with a negative average total change score of – 2.37 for the CG.
- 93% of the residents in the RIG were considered to have improved, compared to 21% of the CG. 71% of the CG were rated as having debilitated over the three week period.
- Attendance at movie night and participation in a 'Jellybean' guessing competition, was higher in the RIG than in the CG.
- Langer & Rodin concluded that 'Some of the negative consequences of aging might be retarded, reversed, or possibly prevented, by returning to the aged the right to make decisions.'
- Other relevant details.

Marks	AO1
10 - 12	Knowledge and understanding of findings and conclusions are accurate and well detailed. Depth and range are displayed, though not necessarily in equal measure. The use of language including grammar, punctuation and spelling will be relevant, well structured, coherent and accurate.
7 - 9	Knowledge and understanding of findings and conclusions are reasonably accurate and less detailed. Depth or range is displayed. The use of language including grammar, punctuation and spelling will be accurate, structured and clear.
4 - 6	Knowledge and understanding of findings and/or conclusions is appropriate but basic and limited in range OR Knowledge and understanding of findings or conclusions is accurate and detailed. The use of language may show some inaccuracies in grammar, punctuation and spelling.
1 - 3	Knowledge and understanding of findings and/or conclusions is superficial, muddled and/or incoherent OR Knowledge and understanding of findings or conclusions is appropriate but basic in detail and limited in range. Language (grammar, punctuation and spelling) has errors.
0	No relevant knowledge or understanding.

- Q.4** Evaluate the methodology of Loftus & Palmer's (1974) research '*Reconstruction of Automobile Destruction: an example of the interaction Between Language and Memory*'. [12]

Credit **could** be given for the following:

- Methodological issues – laboratory based, e.g. advantages such as ability to control variables (e.g. which question each participant is asked) more easily; disadvantages such as problems establishing validity of the estimated speeds given by participants.
- Validity issues (internal/external) e.g. does the use of film clips in a laboratory really produce the same response as reacting to an unexpected car crash in real life?
- Reliability issues (internal/external) e.g. produced similar results to other research (e.g. Marshall, 1969).
- Ethical issues, e.g. participants did not give fully informed consent, as they did not know the true aim of the research.
- Sampling issues, e.g. use of college students alone may not reflect the general population.
- Other methodological issues.

Marks	AO2
10 - 12	Evaluation of methodology is clearly structured, thorough and there is evidence of coherent elaboration. Depth and range are displayed, although not necessarily in equal measure.
7 - 9	Evaluation of methodology shows some coherence. Depth or range is displayed in an effective manner.
4 - 6	Evaluation of methodology is appropriate but limited.
1 - 3	Evaluation of methodology is superficial. Material is muddled.
0	No relevant evaluation.

Q.5 Evaluate the methodology of Gardner & Gardner's (1969) research 'Teaching Sign Language to a Chimpanzee'. **[12]**

Credit **could** be given for the following:

- Methodological issues – case studies, e.g. advantages include the ability to attempt in - depth research with one chimpanzee; disadvantages such as inability to generalise to other chimpanzees.
- Validity issues (internal/external) e.g. use of Washoe's own caretakers to assess success of the research.
- Reliability issues. e.g. use of non - human animal in psychological research.
- Sampling issues, e.g. use of sole chimpanzee may not reflect the language abilities of all chimpanzees, Washoe may have been a 'genius' or a 'stupid' chimpanzee.
- Other methodological issues.

Marks	AO2
10 - 12	Evaluation of methodology is clearly structured, thorough and there is evidence of coherent elaboration. Depth and range are displayed, although not necessarily in equal measure.
7 - 9	Evaluation of methodology shows some coherence. Depth or range is displayed in an effective manner.
4 - 6	Evaluation of methodology is appropriate but limited.
1 - 3	Evaluation of methodology is superficial. Material is muddled.
0	No relevant evaluation.

- Q.6** With reference to alternative evidence, critically assess Buss's (1989) research 'sex differences in human mate preferences'. **[12]**

Credit **could** be given for the following:

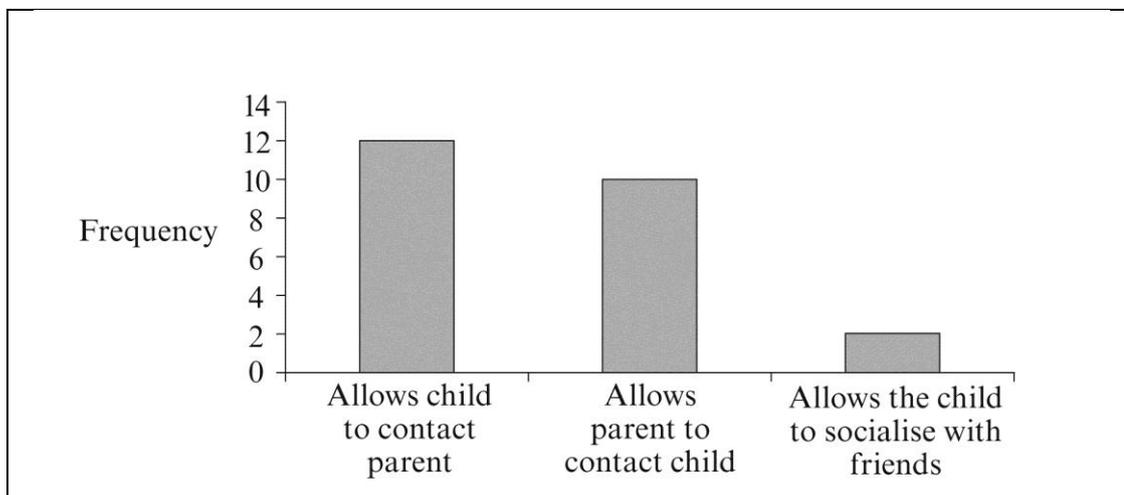
Alternative evidence can be supportive or contradictory and could be published before **or** after the core study. Relevant issues and alternative evidence might include discussion of the following:

- Evolutionary theories – Trivers's (1972) parental investment theory argues men and women use different criteria when choosing mates.
- Using secondary, rather than primary data – Dunbar & Waynforth (1995) found more males requested a youthful, physically attractive mate than females and more males reported their economic status/earning power when describing themselves. More women used 'physically attractive' terms to describe themselves.
- Limitation of evolutionary explanations – Rose (2001) claims socio - biology explains the way in which certain behaviours are selected to increase the propagation of genes as a 'Darwinianised' story, i.e. very imaginative, but totally lacking in fact or evidence.
- Other relevant evidence.

Marks	AO2
10 - 12	Evaluation of the core study is clearly structured and thorough with clear, overt references to more than one piece of alternative evidence. Depth and range are displayed, although not necessarily in equal measure.
7 - 9	Evaluation of the core study shows some coherence and is reasonably thorough with clear reference to more than one piece of alternative evidence. Depth or range is displayed.
4 - 6	Evaluation of the core study is appropriate, but limited. There is some reference to alternative evidence.
1 - 3	Evaluation of the core is superficial. Reference to alternative evidence is muddled and/or incoherent OR Makes minimal evaluative comments only (e.g. this 'supports'/'contradicts' the core study).
0	No relevant evaluation of the core study OR Describes alternative evidence but makes no evaluative connection to the core study.

SECTION C

- Q.7** A team of psychologists wanted to investigate the reasons why parents give their children mobile phones. The researchers asked a self - selected (volunteer) sample of parents to complete a questionnaire on parenting in which there were some questions about mobile phones. They were asked to rank order possible reasons for giving their child a mobile phone, from most relevant to least relevant. The most relevant reasons given by parents are presented in the bar chart below.



- (a) Outline **one** advantage and **one** disadvantage of using a questionnaire in this research. **[3]**

Credit **could** be given for:

- Advantage, e.g. allows psychologists to ask many parents about their possible reasons for giving their child a mobile phone easily and quickly.
- Disadvantage, e.g. social desirability bias such as parents may not tell the truth regarding their possible reasons for giving their child a mobile phone.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are noted, both are clearly linked to the novel situation.
2	An appropriate advantage and disadvantage are noted; there is a weak link to the novel situation OR An appropriate advantage and disadvantage are noted but only one of these is linked to the novel situation.
1	An appropriate advantage and disadvantage are noted; there is no link to the novel situation OR An appropriate advantage or disadvantage is noted with some link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed.

- (b) Identify **one** issue of reliability in this research and describe how you could deal with this issue of reliability. [3]

Credit **could** be given for:

- Issue of reliability, e.g. whether the questionnaires for possible reasons for giving their child a mobile phone are assessed in a consistent way.
- Way of dealing with issue, e.g. used a standardised way of assessing the questions about possible reasons for giving their child a mobile phone.
- Other appropriate issue of reliability and way of dealing with it.

Marks	AO3
3	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted and linked to the novel situation.
2	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted with weak link to the novel situation.
1	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted with no link to the novel situation OR An appropriate issue of reliability is identified and linked to the novel situation.
0	The issue of reliability and way of dealing with it are inaccurate OR The issue of reliability is not addressed.

- (c) Identify **one** issue of validity in this research and describe how you could deal with this issue of validity. [3]

Credit **could** be given for:

- Issues of validity (internal/external) e.g. parents give socially desirable answers.
- Way of dealing with issue, e.g. remind the parents they need to be truthful when giving their reasons for giving their child a mobile phone.
- Other appropriate issue of validity and way of dealing it.

Marks	AO3
3	An appropriate issue of validity and an appropriate way of dealing with the identified issue are noted and linked to the novel situation.
2	An appropriate issue of validity and an appropriate way of dealing with the identified issue are noted and with weak link to the novel situation.
1	An appropriate issue of validity and an appropriate way of dealing with the identified issue are noted with no links to the novel situation OR An appropriate issue of validity is identified and linked to the novel situation.
0	The issue of validity and way of dealing with it are inaccurate OR The issue is not addressed.

- (d) Outline **one** advantage and **one** disadvantage self - selected (volunteer) sampling in this research. **[3]**

Credit **could** be given for:

- Advantage, e.g. research biases do not affect selection of participants, as it is the parents who choose whether to participate or not.
- Disadvantage, e.g. parents who volunteer may not be representative of all parents.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are noted, both are linked to the novel situation.
2	An appropriate advantage and disadvantage are noted; there is some link to the novel situation OR An appropriate advantage and disadvantage are noted but only one of these is linked to the novel situation.
1	An appropriate advantage and disadvantage are noted; there is no link to the novel situation OR An appropriate advantage or disadvantage is noted with some link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed

- (e) Discuss **one** ethical issue that might arise in this research. **[3]**

Credit **could** be given for:

- Failure to obtain fully informed consent – this may occur if the parents are not told the real aim for the research, i.e. reasons for purchasing a mobile phone for their child.
- Other appropriate ethical issue.

Marks	AO3
3	An appropriate ethical issue is identified and thoroughly discussed with clear links to the novel situation.
2	An appropriate ethical issue is identified and reasonably discussed with some link to the novel situation.
1	An appropriate ethical issue is discussed but with no links to the novel situation OR A reasonable ethical discussion which is clearly linked to the scenario but the issue is not clearly identified.
0	An ethical issue is not discussed.

- (f) State **one** conclusion that can be drawn from the bar chart in this research.

[3]

Credit **could** be given for:

- Example – the least selected reason for parents allowing their child to have a mobile phone was that it allows the child to socialise with friends.
- Other appropriate conclusion.

Marks	AO3
3	An appropriate and accurate conclusion has been stated fully and clearly with a link to the novel situation.
2	An appropriate and accurate conclusion has been stated with a weak link to the novel situation OR candidate has drawn an inferential conclusion from descriptive data which has been clearly linked to the novel situation.
1	An appropriate and accurate conclusion has been stated but there is no link to the novel situation.
0	An inappropriate or inaccurate conclusion has been stated OR the issue is not addressed.

- Q.8** A psychologist conducted a natural experiment into whether teenagers who smoke cigarettes have fewer friends than teenagers who do not smoke cigarettes. A random sample of teenagers were selected and they reported to the psychologist whether they smoked cigarettes or not and were then asked to estimate how many friends they had. The psychologist then reported the median number of friends for both the cigarette smokers and the non - smoker groups.

	Median number of friends
Cigarette smokers	7
Non - smokers	9

- (a) Outline **one** advantage and **one** disadvantage of using a natural experiment in this research. **[3]**

Credit **could** be given for:

- Advantage, e.g. fewer ethical issues when investigating behaviours such as whether people who smoke have more or less friends than those who do not smoke.
- Disadvantage, e.g. social desirability bias such as participants may not tell the truth regarding the number of friends that they have.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are noted; both are linked to the novel situation.
2	An appropriate advantage and disadvantage are noted; there is some link to the novel situation OR An appropriate advantage and disadvantage are noted but only one of these is linked to the novel situation.
1	An appropriate advantage and disadvantage are noted but there is no link to the novel situation OR An appropriate advantage or disadvantage is noted with some link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed.

- (b) Identify **one** issue of reliability in this research and describe how you could deal with this issue of reliability. [3]

Credit **could** be given for:

- Issue of reliability, e.g. whether the teenagers are consistent in their definition of 'cigarette smoker'.
- Way of dealing with issue, e.g. the psychologist gives all the teenagers a definition (e.g. smoke daily).
- Other appropriate issue of reliability and way of dealing with it.

Marks	AO3
3	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted and linked to the novel situation.
2	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted and with weak link to the novel situation.
1	An appropriate issue of reliability and an appropriate way of dealing with the identified issue are noted with no link to the novel situation OR An appropriate issue of reliability is identified and linked to the novel situation.
0	The issue of reliability and way of dealing with it are inaccurate OR The issue is not addressed.

- (c) Identify **one** issue of validity in this research and describe how you could deal with this issue of validity. [3]

Credit **could** be given for:

- Issues of validity (internal/external) e.g. social desirability.
- Way of dealing with issue, e.g. camouflage the questions regarding number of friends amongst other questions relating to sociability.
- Other appropriate issue of validity and way of dealing it.

Marks	AO3
3	An appropriate issue of validity and an appropriate way of dealing with the identified issue are noted and linked to the novel situation.
2	An appropriate issue of validity and an appropriate way of dealing with the identified issue are noted and with weak link to the novel situation.
1	An appropriate issue of validity and an appropriate way of dealing with the identified issue are noted with no links to the novel situation OR An appropriate issue of validity is identified and linked to the novel situation.
0	The issue of validity and way of dealing with it are inaccurate OR the issue is not addressed.

- (d) Outline **one** advantage and **one** disadvantage of random sampling in this research. [3]

Credit **could** be given for:

- Advantage, e.g. the researcher does not influence which teenagers are selected.
- Disadvantage, e.g. few of the teenagers selected may smoke cigarettes.
- Other appropriate advantage and disadvantage.

Marks	AO3
3	An appropriate advantage and disadvantage are noted, both are linked to the novel situation.
2	An appropriate advantage and disadvantage are noted; there is some link to the novel situation OR An appropriate advantage or disadvantage are noted but only one of these is linked to the novel situation.
1	An appropriate advantage and disadvantage are noted; there is no link to the novel situation OR An appropriate advantage or disadvantage is noted with some link to the novel situation.
0	An appropriate advantage or disadvantage is noted but there is no link to the novel situation OR The issue is not addressed.

- (e) Discuss **one** ethical issue that might arise in this research. [3]

Credit **could** be given for:

- Failure to protect the participant's privacy – participants may feel embarrassed regarding the number of friends they have.
- Other appropriate ethical issue.

Marks	AO3
3	An appropriate ethical issue is identified and thoroughly discussed with clear links to the novel situation.
2	An appropriate ethical issue is identified and reasonably discussed with some link to the novel situation.
1	An appropriate ethical issue is discussed but with no links to the novel situation OR A reasonable ethical discussion which is clearly linked to the scenario but the issue is not clearly identified.
0	An ethical issue is not discussed.

- (f) State **one** conclusion that can be drawn from the median numbers in this research. **[3]**

Credit **could** be given for:

- Example - Those teenagers who are non - cigarette smokers had a higher median number of friends compared to those teenagers who smoked cigarettes.
- Other appropriate conclusion.

Marks	AO3
3	An appropriate and accurate conclusion has been stated fully and clearly with a link to the novel situation.
2	An appropriate and accurate conclusion has been stated with a weak link to the novel situation OR An inferential conclusion has been given which has been clearly linked to the novel situation.
1	An appropriate and accurate conclusion has been stated but there is no link to the novel situation.
0	An inappropriate or inaccurate conclusion has been stated OR the issue is not addressed.

GCE PSYCHOLOGY - PY3

SECTION A

- Q.1** Researchers carried out a natural experiment measuring the stress levels of ten participants who continued to live near a volcano even after an eruption. These were compared with the stress levels of ten participants who lived outside the danger zone of a volcanic eruption.

Stress levels were measured on a ten - point scale, with one being low stress and ten being high stress.

	Inside danger zone	Outside danger zone
Mean stress score	8.2	3.1

- (a) (i) Define what is meant by the term 'natural experiment'. [2]

Marks	AO1
2	Clear and detailed definition (e.g. research when the IV is not under the direct control of the experimenter).
1	Definition is limited in detail (e.g. variables are not under control).
0	No relevant definition.

- (ii) Explain **one** advantage and **one** disadvantage of a 'natural experiment'. [4]

Advantage

- More natural behaviour/mundane realism/ecological validity.
- Lack of demand characteristics.
- Any other relevant advantage.

Disadvantage

- No control over confounding variables.
- Lack of objectivity when measuring abstract terms.
- Any other relevant disadvantage.

Marks	AO2
4	One clear advantage and one clear disadvantage identified and both explained in detail.
3	One clear advantage/disadvantage identified and explained in detail and one disadvantage/advantage only partially explained.
2	One advantage and one disadvantage only partially explained OR Only one advantage/disadvantage identified and explained in detail.
1	Only one advantage OR one disadvantage identified.
0	No relevant information.