



ASSESSMENT and
QUALIFICATIONS
ALLIANCE

Mark scheme

June 2003

GCE

Psychology A

Unit PYA3

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UNIT 3
QUALITY OF WRITTEN COMMUNICATION

2 marks	The work is characterised by the ACCURATE and CLEAR expression of ideas, a BROAD RANGE of specialist terms and only MINOR ERRORS in grammar, punctuation and spelling.
1 mark	The work is characterised by a REASONABLE expression of ideas, the use of a REASONABLE RANGE of specialist terms and FEW ERRORS of grammar, punctuation and spelling.
0 marks	The work is characterised by a POOR expression of ideas, LIMITED USE of specialist terms and POOR grammar, punctuation and spelling.

ASSESSMENT OBJECTIVES ONE, TWO AND THREE

AO1	Assessment objective one = knowledge and <i>understanding</i> of psychological theories, terminology, concepts, studies and methods and communication of knowledge and understanding of psychology in a clear and effective manner.
AO2	Assessment objective two = analysis and <i>evaluation</i> of psychological theories, concepts, studies and methods and communication of knowledge and understanding of psychology in a clear and effective manner.
AO3	Assessment objective three = <i>design, conduct</i> and <i>report</i> psychological investigation (s) choosing from a range of methods, and taking into account the issues of reliability, validity and ethics, and collect and draw conclusions from the data.

SECTION A: SOCIAL PSYCHOLOGY**1****Total marks for this question: 30 marks****(a)** Outline **two** ethical issues that have arisen in psychological research. *(3 marks + 3 marks)***Marking criteria**

There are several ethical issues that candidates might offer, the most likely ones being those given in the specification (i.e. deception, informed consent and protection of participants from psychological harm). However, other issues are also acceptable (e.g. confidentiality, right to withdraw.)

If a candidate offers more than two ethical issues then all should be marked and credit given to the best two.

Note that an ethical issue is not the same as an ethical guideline, and candidates should make some effort to demonstrate evidence of the former in their answer.

Debriefing is not an ethical issue, it is one way of dealing with ethical issues.

Marking allocation

For each issue:

3 marks	Outline of an ethical issue is both accurate and detailed . For example, a candidate offers an accurate and detailed explanation of the use of deception which shows explicitly why this is an important ethical issue (e.g. removes the opportunity for informed consent).
2 marks	Outline of an ethical issue is generally accurate but less detailed . For example, a candidate offers a less detailed explanation of deception, which shows some understanding of why this is an important ethical issue.
1 mark	Outline of an ethical issue is basic, lacking detail , and may be muddled and/or flawed . For example, a candidate offers a basic explanation of the use of deception, which shows little understanding of why this is an important ethical issue.
0 marks	Explanation of an ethical issue is inappropriate (for example, the issue offered is not an ethical one) or the explanation is incorrect .

(b) Describe the aims and findings of one study of conformity (majority influence). (6 marks)

Marking criteria

The studies most likely to be offered are those given on the specification (i.e. Sherif, Asch and Zimbardo). However, other studies of majority influence are also acceptable (e.g. Crutchfield, Jenness). As the question explicitly asks for aims and findings, candidates who describe procedures or conclusions should not receive credit for this material. For example, the aim of Asch's experiment was to investigate conformity to an unambiguous stimulus, in response to the earlier work of Sherif who had used an ambiguous situation.

Candidates who describe more than one study should have all of them marked and the best one credited; note that variations of Asch's studies can be counted as one study. If Zimbardo's prison simulation study is offered, in order to receive credit the aims and findings must be explicitly related to majority influence (rather than to obedience)

Marking allocation

6-5 marks	Description of the aims and findings of a study of majority influence is both accurate and detailed . For example, the candidate has covered aims and findings but not necessarily in the same amount of detail.
4-3 marks	Description of the aims and findings of a study of majority influence is limited . It is generally accurate but less detailed . Alternatively, description of either the aims or findings of the study is accurate and detailed.
2-1 marks	Description of the aims and findings of a study of majority influence is basic, lacking detail , and may be muddled and/or flawed . Alternatively, description of either the aims or findings of the study is generally accurate but less detailed.
0 marks	The description of the aims or findings is inappropriate (for example, the candidate has described a study which was not concerned with majority influence) or the description is incorrect .

(c) To what extent does social influences research (theories **and/or** studies) display ecological validity? (18 marks)

Marking criteria

AO1 is a description of any social influence research (theories and/or studies). This description may be of procedures, findings or conclusions, but must relate to ecological validity for the top band.

AO2 should be given for a consideration of whether or not it has ecological validity.

This question asks candidates to consider whether or not social influence research can be considered to display ecological validity. There are several studies that might be offered, some of which can be argued to lack ecological validity (e.g. Asch, Sherif, and Crutchfield); others which were conducted in the real world and may be claimed to have high ecological validity (e.g. Hofling et al, Bickman); while a third group have ambiguous ecological validity. For example, Orne and Holland argued that Milgram's research lacked ecological validity since it was carried out in a laboratory. However, other psychologists claim that the situation was in fact very real to the participants and had high ecological validity. (Astute candidates could also comment that although Hofling's research was carried out in the real world, it could be claimed to lack ecological validity. Rank and Jacobsen point out that the situation was in fact unrealistic and not the sort of situation nurses would usually encounter.)

Other forms of validity are creditworthy as commentary, such as cross-cultural validity, replication over time etc.

Candidates may introduce further theories/studies as a form of commentary/evaluation. The degree to which candidates use this material as part of a critical commentary, rather than simply *describing* alternatives, will constitute the *effectiveness* of the evaluation and hence the number of marks awarded for AO2. Since the question asks 'to what extent' the more able candidate should be able to offer some judgement as to the degree to which the studies are ecologically valid. Candidates who offer no commentary may still be judged to have selected appropriate material and thus commentary can be described as 'just discernible'.

Marking allocation**AO1**

6-5 marks	Outline of social influence research is both accurate and detailed . For example, candidates may offer a detailed and accurate account of ecologically valid or invalid research.
4-3 marks	Outline of social influence research is limited . It is generally accurate and/or less detailed . For example, candidates might offer a less detailed account.
2-1 marks	Outline of social influence research is basic, lacking detail , and may be muddled and/or flawed .
0 marks	Outline of social influence research is inappropriate (for example, the candidate may offer an outline of research that is not related to social influence) or the description is incorrect .

AO2

12-11 marks	There is an informed commentary on ecological validity in social influence research and reasonably thorough analysis of relevant psychological material, which has been used in an effective manner, within the time constraints of answering this part of the question.
10-9 marks	There is a reasonable commentary on ecological validity in social influence research and slightly limited analysis of relevant psychological material, which has been used in an effective manner.
8-7 marks	There is a reasonable commentary on ecological validity in social influence research but limited analysis of relevant psychological material, which has been used in an effective manner.
6-5 marks	There is a basic commentary on ecological validity in social influence research with limited analysis of relevant psychological material, which has been used in a reasonably effective manner.
4-3 marks	There is superficial commentary on ecological validity of social influence research and rudimentary analysis of relevant psychological material. There is minimal interpretation of the material used.
2-1 marks	Commentary on ecological validity in social influence research is just discernible (for example, through appropriate selection of material). Analysis is weak and muddled . The answer may be mainly irrelevant to the problem it addresses.
0 marks	Commentary is absent or wholly irrelevant to the problem it addresses.

2

Total marks for this question: 30 marks

(a) Outline **two** psychological processes that may be involved in obedience to authority.
(3 marks + 3 marks)

Marking criteria

There are several psychological processes that candidates might offer: the agentic shift (agency theory), binding factors or gradual commitment, socialisation (being exposed to legitimate authority) and individual differences (e.g. the authoritarian personality). Material relating to the resistance of obedience can also be credited, provided that the candidate makes the ‘processes’ involved explicit.

It is not sufficient for a candidate to describe the results of (for example) Milgram’s studies without outlining the psychological processes that may explain these results. ‘Proximity of victim’ and ‘presence of experimenter’ are not processes but situational factors. Some candidates may attempt to offer a factor without explicitly linking it to a process; such an answer would be ‘muddled and flawed’. If they can link it to a process then they can achieve full marks.

Marking allocation

For each outline:

3 marks	Outline description of the psychological process involved in obedience is both accurate and detailed . For example, the candidate may offer a detailed and accurate outline of the nature of gradual commitment.
2 marks	Outline description of the psychological process involved in obedience is limited . It is generally accurate but less detailed . For example, the candidate may offer a less detailed outline of the nature of gradual commitment.
1 mark	Outline description of the psychological process involved in obedience is basic, lacking detail , and may be muddled and/or flawed .
0 marks	Outline description of the psychological process involved in obedience is inappropriate (for example, the candidate may offer an outline description of a process that is more to do with conformity than obedience) or the outline description is incorrect .

(b) Outline the findings of **one** study of minority influence and give **one** criticism of this study.
(3 marks + 3 marks)

Marking criteria

The most likely studies to be offered are those given as examples in the specification (i.e. Moscovici, Clark) although any study that has investigated minority influence would be acceptable. However, the studies of *majority* influence carried out by Asch, Crutchfield and others would not be acceptable here unless they are explicitly interpreted as studies of minority influence and should not receive credit. Zimbardo's study of conformity to roles is not creditworthy here.

Since the question asks for findings, candidates who offer aims, procedures or conclusions should not receive credit for this material.

The criticism offered will depend on the study chosen. These could include ethical concerns (deception and lack of informed consent); or practical concerns such as a lack of ecological validity.

Marking allocation

For the findings:

3 marks	Outline of the findings is both accurate and detailed . For example, the candidate may offer a detailed and accurate outline of the findings of one of Moscovici's experiment
2 marks	Outline of the findings is limited . It is generally accurate but less detailed . For example, the candidate may offer a less detailed outline of the findings of one of Moscovici's experiment.
1 mark	Outline of the findings is basic, lacking detail , and may be muddled and/or flawed .
0 marks	Outline of the findings is inappropriate (for example, the candidate may offer an outline of the procedures) or the outline is incorrect .

For the criticism:

3 marks	The criticism is both accurate and detailed . For example, the candidate may offer a detailed and accurate criticism of one of Moscovici's experiment.
2 marks	The criticism is generally accurate but less detailed . For example, the candidate may offer a less detailed criticism of one of Moscovici's experiment.
1 mark	The criticism is basic, lacking detail , and may be muddled and/or flawed .
0 marks	The criticism is inappropriate (for example, the candidate may offer a statement about the conclusions) or the criticism is incorrect .

(c) “Some of the procedures used by social psychologists such as Asch, Zimbardo and Milgram are ethically questionable.”

Briefly outline some of the procedures used in social influence research (theories **and/or** studies) and evaluate whether these procedures are ethical. *(18 marks)*

Marking criteria⁷

AO1 credit should be given for a description of some of the procedures used in social influence research.

AO2 credit should be given for an evaluation of whether such procedures can be considered ethical. Commentary and analysis are also relevant to **AO2**.

Although the quote directs candidates to consider Asch and Zimbardo, clearly any procedures used in social influence research would be relevant.

Candidates need to consider the ethical issues surrounding the procedures they have outlined. They could do so by using ethical guidelines and considering the extent to which the procedures used broke such codes. They might consider the criticisms of Milgram’s work put forward by Baumrind (i.e. that his procedures violated the ethical guidelines and could not be accepted on ethical grounds). They could consider whether Zimbardo protected his participants sufficiently, even though he obtained informed consent prior to the study. On the other hand, psychologists such as Aronson argued that sometimes psychologists need to consider the wider implications of their research. He argued that the procedures used by psychologists such as Milgram and Zimbardo produced findings that were so important that this outweighed their ethical limitations.

One way to consider whether the procedures are ethical could be to consider the application of the findings. For example, Milgram’s findings being used to excuse the perpetrators of the Holocaust, a criticism made by Mandle (1998).

Candidates may introduce further studies as a form of commentary/evaluation. The degree to which candidates use this material as part of a critical commentary, rather than simply describing alternatives, will constitute the effectiveness of the evaluation and hence the number of marks awarded for AO2. Candidates who offer no commentary may still be judged to have selected appropriate material and thus commentary can be described as ‘just discernible’.

Marking allocation**AO1**

6-5 marks	Outline of a description of procedures used in social influence research is both accurate and detailed . For example, candidates may offer detailed and accurate accounts of research procedures.
4-3 marks	Outline of a description of procedures used in social influence research is limited . It is generally accurate and/or less detailed . For example, the candidate may mention the procedures but not in much detail.
2-1 marks	Outline of a description of procedures used in social influence research is basic , lacking detail , and may be muddled and/or flawed .
0 marks	Outline of procedures used in social influence research is inappropriate (for example, the candidate may describe some theories) or the outline is incorrect .

AO2

12-11 marks	There is an informed commentary on the ethics of social influence research procedures and reasonably thorough analysis of relevant psychological material, which has been used in an effective manner, within the time constraints of answering this part of the question.
10-9 marks	There is a reasonable commentary on the ethics of social influence research procedures and slightly limited analysis of relevant psychological material, which has been used in an effective manner.
8-7 marks	There is a reasonable commentary on the ethics of social influence research procedures but limited analysis of relevant psychological material, which has been used in a reasonably effective manner.
6-5 marks	There is a basic commentary on the ethics of social influence research procedures with limited analysis of relevant psychological material, which has been used in a reasonably effective manner .
4-3 marks	There is superficial commentary on the ethics of social influence research procedures and rudimentary analysis of relevant psychological material. There is minimal interpretation of the material used.
2-1 marks	Commentary on the ethics of social influence research procedures is just discernible (for example, through appropriate selection of material). Analysis is weak and muddled . The answer may be mainly irrelevant to the problem it addresses.
0 marks	Commentary is absent or wholly irrelevant to the problem it addresses.

SECTION B: RESEARCH METHODS**3****Total for this question: 30 marks**

A teacher in a small secondary school wanted to find out whether there was any truth in her idea that students who used a computer regularly for their homework achieved higher exam grades than those who did not.

She decided to interview a sample of 30 students taken from across the school. She tape-recorded all the interviews. She later obtained their end of year exam grades from their reports.

- (a) (i) Name **two** different methods that the teacher might have used to select her sample (2 marks)
- (ii) Explain how she would have carried out **one** of the methods of selection named in part (i). (2 marks)

Marking criteria

The method of selection identified on the specification is random sampling and given that the teacher would have access to the school registers, this would be a likely method. Other possible methods could include opportunity or convenience sampling (just select any student who is available); stratified sampling (knowing the composition of students in the school she could select representative strata); self-selecting or volunteer sampling (put up a notice asking for students to take part in her study).

Marking allocation

For the methods of sampling:

2 marks	Both methods of sampling are appropriate .
1 mark	Only one method of sampling is appropriate .
0 marks	No appropriate methods of sampling are identified or incorrect methods identified.

For the method of implementation:

2 marks	The method is both accurate and detailed .
1 mark	The method is brief or muddled .
0 marks	The method is inappropriate or the method is incorrect .

(b) (i) Outline one advantage of using interviews in psychological research.	(2 marks)
(ii) Outline one weakness of using interviews in psychological research.	(2 marks)

Advantages of interviews:

- They can provide more detailed information than other methods.
- It is possible for the participant to give his or her own, subjective opinion.
- Interviewer can adapt questions.
- Allows personal topics to be studied.

Weakness of interviews:

- The interviewer might misinterpret the data.
- Interviewers might not be able to express themselves clearly.
- Interviewer effects: the interviewer's looks may influence the interviewee.
- Demand characteristics: interviewee might try to please the interviewer etc.

No requirement to be contextualised.

Marking allocation

For the advantage/weakness

2 marks	Accurate and detailed identification of the advantage/weakness.
1 mark	Brief or muddled identification of the advantage/weakness.
0 marks	No identification of the advantage/weakness or incorrect identification.

- | |
|---|
| (c) Outline one way in which the teacher could check the reliability of the data concerning computer use that she collected from the interviews with the students. <i>(2 marks)</i> |
|---|

Marking criteria

Reliability refers to the consistency of the measuring tool, whether there will be similar results if repeated.

By repeating the interviews, the teacher could see whether she obtains the same or similar responses from the students. For example, test-re-test, equivalent forms of reliability, split-half reliability and inter-rater reliability.

Marking allocation

2 marks	Accurate and detailed outline of a method of checking reliability.
1 mark	Brief or muddled outline of a method of checking reliability.
0 marks	No outline of a method of checking reliability or incorrect answer.

- | |
|--|
| (d) What is meant by the term validity in the context of research? <i>(2 marks)</i> |
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Marking criteria

Validity refers to the extent to which a test/procedure measures what it intends to measure. It is also possible to accept answers referring to specific types of validity, such as internal validity or external validity.

Marking allocation

2 marks	Accurate and detailed definition.
1 mark	Brief or muddled definition.
0 marks	No definition or incorrect definition.

(e) Give **one** factor that could affect the validity of the interviews with the students. (2 marks)

Marking criteria

Reliability can affect validity; if the interviews are not reliable, they then will not be valid.

Misleading questions can cause students to provide incorrect information.

Demand characteristics can influence the students' responses so that they distort the truth.

The candidate must be able to suggest what causes the problem, merely stating that interviews lack ecological validity, or that they cannot be generalised is not appropriate and will not receive credit.

Marking allocation

2 marks	The factor given is both accurate and detailed
1 mark	The factor given is brief or muddled .
0 marks	No factor is given or the factor is incorrect .

(f) Identify **one** ethical issue that the teacher might have considered and explain how she might have dealt with it. (1 mark + 2 marks)

Marking criteria

Possible ethical issues that she might consider are:

- Right to withdraw; all the students should be told that they do not have to take part and that if they do, they may leave at any time.
- Confidentiality: she should assure all students that their responses will remain confidential.
- Anonymity: all responses should be anonymous.
- Parental consent should be obtained, as the students are school aged.

How the ethical issue is overcome will depend on the issue chosen. However, it is likely that candidates will choose the current BPS Guidelines for that issue, although there are other possible solutions.

Marking allocation

For the identification of the ethical issue:

1 mark	Appropriate ethical issue identified.
0 marks	No appropriate ethical issue identified or incorrect identification.

For the explanation of how to overcome the issue:

2 marks	Explanation is both accurate and detailed .
1 mark	Explanation is brief or muddled .
0 marks	Explanation is inappropriate or the explanation is incorrect .

- (g) (i) Identify **one** appropriate measure of central tendency for the time students spent on the computer each week and explain how you would calculate it. (2 marks)
- (ii) Outline **one** disadvantage of the measure of central tendency you have identified in (i). (2 marks)

Marking criteria

Since time is an interval level of measurement, the mean would be an appropriate measure, however candidates could also make a case for using the median or the mode. Whichever of the three that is offered, the candidate must explicitly state *how* it would be calculated. For example, the median involves placing all the data in numerical order and selecting the middle value(s).

The disadvantage offered will depend on the measure of central tendency chosen. For example, if the mean is offered, a disadvantage is that it is affected by outliers.

Marking allocation

For the measure of central tendency:

2 marks	The suggestion for calculating a measure of central tendency is both accurate and detailed .
1 mark	The suggestion for calculating a measure of central tendency is basic, lacking detail , and may be muddled and/or flawed .
0 marks	The suggestion for calculating the measure of central tendency is inappropriate (for example, the candidate may offer a way of calculating the range) or the suggestion is incorrect .

For the disadvantage:

2 marks	The disadvantage of the measure of central tendency is both accurate and detailed .
1 mark	The disadvantage of the measure of central tendency is basic, lacking detail , and may be muddled and/or flawed .
0 marks	The disadvantage of the measure of central tendency is inappropriate (for example, the candidate may suggest that it is difficult to calculate the mean) or the suggestion is incorrect .

(h) The teacher decided to conduct an experiment to see whether giving students more time using computers would improve their exam grades.	
(i) Suggest a non-directional hypothesis for this experiment.	(2 marks)
(ii) Identify an appropriate design.	(1 mark)
(iii) Using the design identified in (ii) outline the procedures that could be used for this experiment.	(6 marks)

Marking criteria

(i) An appropriate non-directional hypothesis could be: the time spent on computers will affect exam grades. To achieve both marks, the hypothesis must be non-directional and must identify the two variables.

No marks for a directional hypothesis.

Marking allocation

For the hypothesis:

2 marks	The hypothesis is both accurate and detailed . For example it is non-directional and the variables are identified.
1 mark	The hypothesis basic, lacking detail , and may be muddled and/or flawed . For example, the hypothesis is non-directional but the variables are not both identified.
0 marks	The hypothesis is inappropriate (for example, the candidate may offer a null hypothesis) or no hypothesis is offered.

(ii) An appropriate experimental design could be: independent groups design, repeated measures design or matched pairs design.

For the design:

1 mark	Appropriate design is identified .
0 marks	No appropriate design identified or incorrect identification.

(iii) If (ii) is incorrect or answer is absent, then (iii) receives 0 marks.

Candidates could consider several aspects of their experiment, but they should provide sufficient information so that it is possible to see how the procedures relate to the design in (ii).

- What stimulus material will be used.
- How will the participants be selected, who they will use?
- Ethical issues.
- What they intend to measure and how they will do so.
- Analysis of data could also be considered.

All of these have to be considered in the context of the design. Candidates must show some understanding of the design they mention in (ii).

For the outline of the procedures:

6-5 marks	Description of the procedures is both accurate and detailed . For example, the candidate has provided sufficient detail to show how the experiment would be conducted, including some of the topics outlined above.
4-3 marks	Description of the procedures is limited . It is generally accurate but less detailed . For example, a brief outline is provided, but lacking details, some aspects of the procedure is unclear.
2-1 marks	Description of procedures is basic, lacking detail , and may be muddled and/or flawed . For example, it would be difficult to replicate the experiment.
0 marks	The description is inappropriate (for example not related to the procedures) or the description is incorrect .

ASSESSMENT GRID

Question	AO1	AO2	AO3	Total
1 (a)	6			6
(b)	6			6
(c)	6	12		18
Total for Qn 1	18	12		30
2 (a)	6			6
(b)	6			6
(c)	6	12		18
Total for Qn 2	18	12		30
3 (a)			4	4
(b)		4		4
(c)			2	2
(d)	2			2
(e)			2	2
(f)	1		2	3
(g)		2	2	4
(h)			9	9
Total for Qn 3	3	6	21	30
QoWC	2			2
Totals	39	30	21	92
Total for unit				62