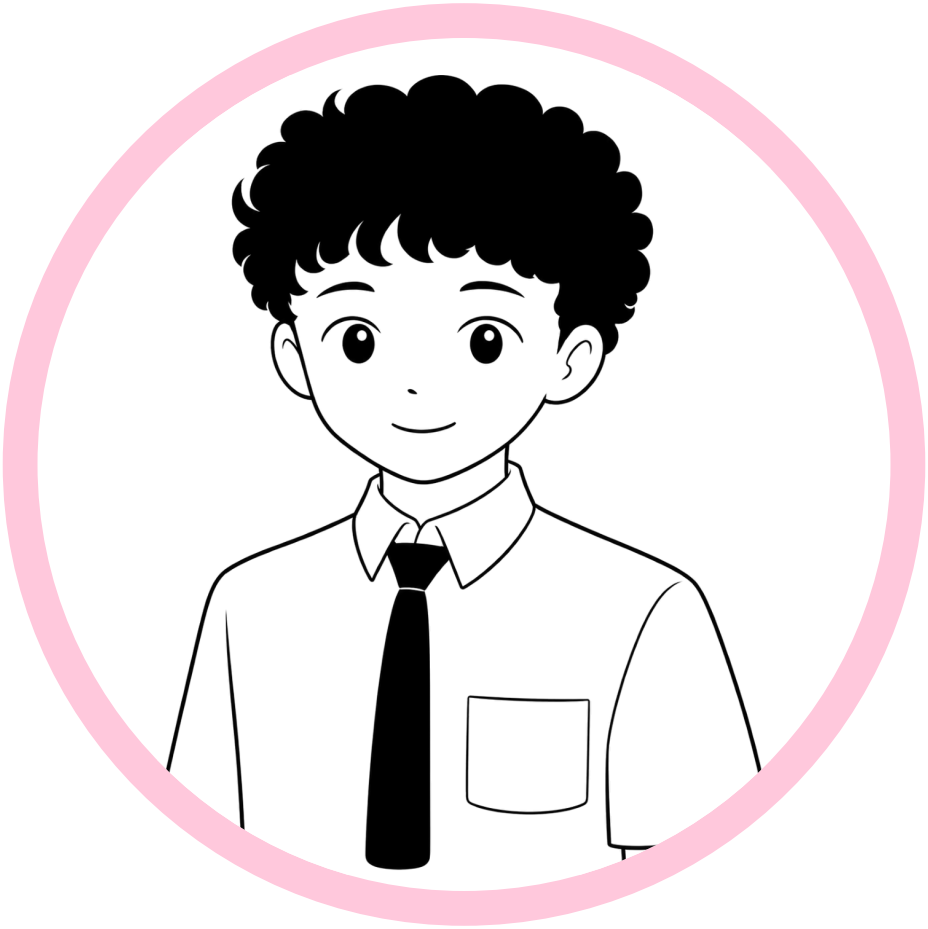
AQA A-LEVEL PSYCHOLOGY · 7182

PSYCHOLOGY



MARK SCHEME

3.2.3 CONTENT ANALYSIS

SCORE	PERCENTAGE
/121	%

STEMUP

These questions belong to AQA, not to us.

The examination questions, mark schemes and examiner reports in this pack were written and published by AQA. They are past assessment materials, reproduced here so that students can revise from them.

What we do not own

STEMUP is not affiliated with AQA and does not own, and makes no claim to own, any of the question, mark scheme or examiner report material in this pack. AQA has not endorsed, approved or been involved in the production of it. AQA and the qualification titles used here belong to their respective owners and appear for identification only.

Where to find the originals

AQA publishes its past papers, mark schemes and examiner reports free of charge. Always check the current specification at aqa.org.uk before you revise, because content and wording can change between series.

If you hold the rights to any material in this pack and would like it amended or removed, contact admin@stemup.co.uk and we will act on it.

Q1.

(a) **[AO2 = 4]**

Level	Marks	Description
2	3 – 4	Knowledge of the difference between primary and secondary data is clear and mostly accurate. The knowledge is applied appropriately. The answer is generally coherent with effective use of terminology.
1	1 – 2	Knowledge of the difference is evident but the answer lacks accuracy and detail. Application is limited, inappropriate or absent. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Application:

- primary data is gathered directly/first-hand from the participants, and is specific to the aim of the study whereas secondary data has previously been collected by a third party (another researcher or an official body), not specifically for the aim of the study, and then used by the researcher
- in this study, the interview recordings are primary data –gathered specifically for the purpose of investigating causes of aggressive behaviour whereas the school records are secondary data – pre-existing and not gathered for the purpose of investigating causes of aggressive behaviour.

(b) **[AO3 = 2]**

2 marks for a clear, coherent explanation of how thematic analysis could be carried out in this study

1 mark for a limited/muddled explanation.

Possible content

- use the recordings to make a transcription of the interview
- use coding to initially analyse the transcripts
- review the transcriptions/codes looking for emergent themes/ideas that might be linked to later aggressive behaviour, eg family violence, parental argument, alcohol misuse.

No credit for answers referring to **pre-determined** categories, codes, themes and/or counting frequencies.

Q2.

(a) **[AO2 = 4]**

Level	Marks	Description

STEMUP.CO.UK

2	3 – 4	Knowledge of the difference between primary and secondary data is clear and mostly accurate. The knowledge is applied appropriately. The answer is generally coherent with effective use of terminology.
1	1 – 2	Knowledge of the difference is evident but the answer lacks accuracy and detail. Application is limited, inappropriate or absent. Use of terminology is either absent or inappropriate.
	0	No relevant content.

Application:

- primary data is gathered directly/first-hand from the participants, and is specific to the aim of the study whereas secondary data has previously been collected by a third party (another researcher or an official body), not specifically for the aim of the study, and then used by the researcher
- in this study, the interview recordings are primary data – gathered specifically for the purpose of investigating causes of offending whereas the court/prison records are secondary data – pre-existing and not gathered for the purpose of investigating causes of offending behaviour.

(b) **AO3 = 2**

2 marks for a clear, coherent explanation of how thematic analysis could be carried out.

1 mark for a limited/muddled explanation.

Possible content

- use the recordings to make a transcription of the interview
- use coding to initially analyse the transcripts
- review the transcriptions/codes looking for emergent themes/ideas that might be linked to violent crime eg family violence, parental argument, alcohol misuse.

No credit for answers referring to **pre-determined** categories, codes, themes and/or counting frequencies.

Q3.

(a) **[AO2 = 4]**

Level	Marks	Description
2	3 – 4	Knowledge of the difference between primary and secondary data is clear and mostly accurate. The knowledge is applied appropriately. The answer is generally coherent with effective use of terminology.
1	1 – 2	Knowledge of the difference is evident but the answer lacks accuracy and detail. Application is limited, inappropriate or absent. Use of terminology is either absent or inappropriate.

STEMUP.CO.UK

	0	No relevant content.

Application:

- primary data is gathered directly/first-hand from the participants, and is specific to the aim of the study whereas secondary data has previously been collected by a third party (another researcher or an official body), not specifically for the aim of the study, and then used by the researcher
- in this study, the interview recordings are primary data – gathered specifically for the purpose of investigating causes of addiction to gambling behaviour whereas the debt counsellor reports are secondary data – pre-existing and not gathered for the purpose of investigating causes of addiction to gambling.

(b) **[AO3 = 2]**

2 marks for a clear, coherent explanation of how thematic analysis could be carried out.

1 mark for a limited/muddled explanation.

Possible content

- use the recordings to make a transcription of the interview
- use coding to initially analyse the transcripts
- review the transcriptions/codes looking for emergent themes/ideas that might be linked to later gambling addiction, eg family poverty, sensation-seeking, influence of peer group.

No credit for answers referring to **pre-determined** categories, codes, themes and/or counting frequencies.

Q4.

(a) **[AO2 = 3]**

One mark for knowledge of inter-rater (observer) reliability (this may be named or implicit in the application)

Plus

Up to two marks for applying knowledge of how reliability of the category system could be assessed in this study.

For example:

The consistency between the recordings of two researchers would be assessed by asking each researcher to categorise the essays independently for ‘references to love’. The data would then be compared and if similar then the analysis is reliable.

Credit reference to the fact that the correlation coefficient between the researchers’ data should exceed 0.8.

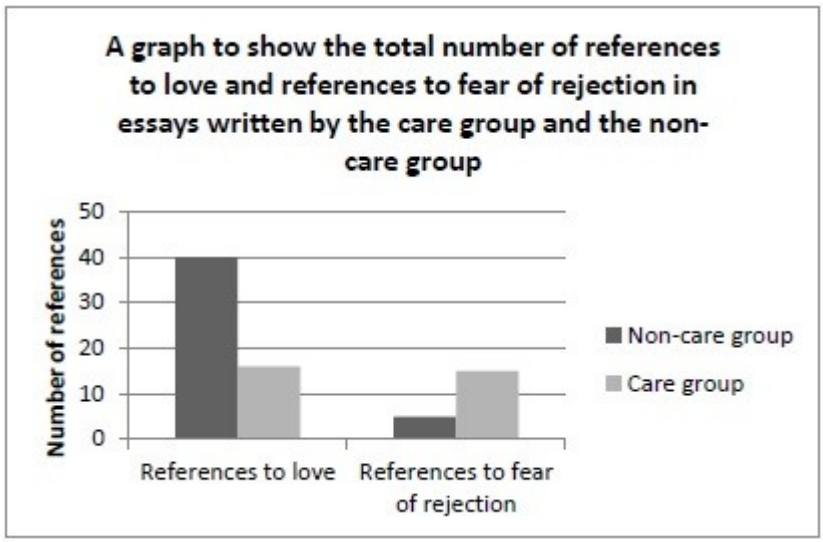
(b) **[AO2 = 3]**

Up to 3 marks for an accurate sketch of a bar chart to represent the data in the table

- **1 mark** for an appropriate title

STEMUP.CO.UK

- **1 mark** for correctly labelled axes
- **1 mark** for accurately plotted bars (4 in total)



(c) **[AO2 = 3]**

- **1 mark** for calculating the total number of references to love overall (16+40 = 56)
- **1 mark** for representing the total number of references to love in the care group as a fraction of the total number of references to love overall (16/56)
- **1 mark** for dividing both parts of the fraction by the lowest common denominator (16/8 = 2; 56/8 = 7) to produce the correct answer (2/7)

(d) **[AO3 = 3]**

3 marks for clear explanation plus coherent elaboration

2 marks for explanation plus some elaboration

1 mark for vague/muddled explanation

Students may make a single, elaborated point or a number of points in less detail.

Possible content

- The interviewer could have asked follow-up questions to gain greater insight into some of the points raised in the essay
- The interview would produce more detail/depth of information than the participant would have been able to reveal within the essay
- Interview data would have provided a further measure of reliability/validity of the original essay content
- The interviewer may have gained rapport with the participant so they have felt comfortable revealing more personal/sensitive information face-to-face

Accept other valid points.

STEMUP.CO.UK

(e) **[AO1 = 4 AO2 = 2]**

Level	Marks	Description
3	5 – 6	Knowledge of Bowlby's monotropic theory is clear and accurate. There is appropriate use of the data in the table and clear links made to Bowlby's theory. The answer is clear and coherent. Specialist terminology is used effectively.
2	3 – 4	Knowledge of Bowlby's monotropic theory is present though there may be some inaccuracy/lack of clarity. There is some attempt to use the data in Table 1 though the links to Bowlby's theory may not always be clear. There is some appropriate use of specialist terminology.
1	1 – 2	Knowledge of Bowlby's theory is briefly stated with little elaboration. The use of data in Table 1 in the context of Bowlby's theory may be inappropriate or absent. The answer may include inaccuracies and be poorly organised. Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

Knowledge of Bowlby's monotropic theory:

- Unique 'monotropic' relationship with mother-figure
- Notion of critical/sensitive period up to approx. 2 years
- Importance of internal working model for future relationships
- Social releasers to facilitate bond
- Reciprocal process

Accept other valid points.

Possible application:

- The care group made fewer references to love in their essays/more reference to fear of rejection which suggests their lack of monotropic bond may have affected the quality of their future relationships
- Failure to form internal working model in the care group
- Adopted at 5 so missed critical period for formation of bond

Q5.

(a) **[AO2 = 2]**

1 mark – the hypothesis should be directional

STEMUP.CO.UK

Plus

1 mark – because there is past research indicating the likely direction of the effect (or similar)

(b) **[AO1 = 2 AO3 = 2]**

2 marks for a clear and coherent explanation of operationalisation

1 mark for a brief or muddled explanation of operationalisation

Content: operationalisation involves clearly specifying/defining observable behaviours that represent the more general construct under investigation/to enable the behaviour under investigation to be measured

Plus

1 mark each for two observable behaviours that could represent 'riding a bike with care'.

Examples: use of cycle lanes/tracks, passing pedestrians at a distance of at least 1 metre, using bicycle bell.

Credit any relevant observable behaviour.

(c) **[AO2 = 3]**

1 mark for knowledge of the term face validity – where a behaviour appears at first sight (on the face of it) to represent what is being measured

Plus

2 marks for clear and coherent application of the concept of face validity to the context

1 mark for brief or muddled application of the concept of face validity to the context

Application: Having a dog on a lead appears at first glance to be measuring considerate behaviour because if a dog is on a lead it is less able/likely to upset other people by coming close, frightening, chasing, biting, growling etc.

Credit other relevant applications.

(d) **[AO1 = 4]**

1 mark for each of two types of validity identified

Plus

1 mark each for a brief outline of each type of validity identified

Content:

- Concurrent – where performance on one measure correlates highly with performance on another measure of the same variable
- Ecological – where a measure of a behaviour accurately reflects the way in which the behaviour would occur in normal circumstances

STEMUP.CO.UK

- Temporal – where findings from research that took place at a certain point in time accurately reflect the way that behaviour would occur at a different point in time

Credit also other types of validity eg criterion, content, construct, population, predictive.

(e) **[AO2 = 1]**

1 mark – C Event sampling

(f) **[AO2 = 3]**

1 mark for each of the following:

- The student pair should discuss and agree beforehand their interpretation of the behavioural categories
- Each student should then observe the same people/space/target at the same time but record/tally independently
- Their respective recordings/tallies should be correlated using an appropriate statistical test ascertain the level of agreement

(g) **[AO2 = 3]**

1 mark for the correct ratio: 3:2

Plus

2 marks for full workings: 23 + 12 + 19 = 54 and 10 + 17 + 9 = 36

54:36 both divisible by 9 (or 18)

54 ÷ 9 = 6 and 36 ÷ 9 = 4

6:4 can be simplified to 3:2

1 mark for partial workings eg first 2 of the above stages

(h) **[AO2 = 3]**

1 mark for each of the following:

- Data is categorical/nominal/frequency
- The students are looking for a difference or an association between two variables
- Design is independent/unrelated or categories are exclusive (observations cannot appear in more than one cell)

(i) **[AO2 = 2]**

1 mark for the correct answer: df = 2

Plus

1 mark for correctly substituting values into the formula as follows:

(2 − 1) x (3 − 1) = 1 x 2 = 2

(j) **[AO2 = 3]**

1 mark for each of the following:

- Yes, the result is significant
- Because the calculated value of Chi-square is more than the critical table value at 0.05, either 4.60 or 5.99, depending on whether student uses one or two-tailed values
- One-tailed is consistent with the hypothesis and Q13, but there is an argument that the Chi-square test should always be two-tailed so either can be credited
- Where df equals 2

(k) **[AO2 = 4]**

Level	Marks	Description
2	3 – 4	The paragraph is clear and coherent, showing sound understanding of the concept of levels of significance and effective application to the context. There is effective use of terminology.
1	1 – 2	The paragraph shows some understanding of the concept of levels of significance and/or some relevant application to the context. The answer lacks clarity and coherence. Terminology is either absent or inappropriately used.
	0	No relevant content.

Possible content:

- Explanation of levels of significance as an indication of the measure of the influence/effect of chance/random factors on the findings.
- With the present results there is a 95% confidence in accepting the research hypothesis/confidence that any difference/effect is due to the variables under investigation, in this case the location of the public spaces.
- There is a 5% possibility that the same frequencies would occur if there was no real difference between the two towns.
- The calculated value in this case well exceeds the critical value at 0.05 but does not meet the more stringent level of significance of 0.01.
- Possibility of type one error.

Credit other relevant material.

(l) **[AO3 = 3]**

1 mark for explaining that content analysis is suitable because the students are

STEMUP.CO.UK

analysing recordings which are a form of media.

Plus

2 marks for a clear, coherent account of how the content could be analysed

1 mark for a brief or muddled account of how the content could be analysed

Content:

Students could identify specific ideas/concepts that occur in the recordings

They could then set up a system of categories and tally the ideas/concepts

(m) **[AO3 = 1]**

1 mark for any relevant inconsiderate behaviour eg leaving rubbish, leaving dirty mugs/plates, playing music loudly, throwing books, shouting

Q6.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

(a) **AO1 = 2**

Content analysis is a technique for analysing qualitative data of various kinds. Data can be placed into categories and counted (quantitative) or can be analysed in themes (qualitative).

Award 1 mark for a brief statement and a further mark for elaboration.

(b) **AO3 = 4**

- The psychologist could have begun by watching some of the film clips of driver behaviour.
- This would enable the psychologist to identify potential categories which emerged from the data of the different types of distractions seen in the film.
- Such categories / themes might include: passenger distractions, gadget distractions, etc.
- The psychologists would then have watched the films again and counted the number of examples which fell into each category to provide

quantitative data.

Credit variations in so far as they explain the process.

Note: maximum 1 mark if no engagement with the stem.

AO3 Mark bands
4 marks Effective Effective explanation of the processes involved in content analysis referring to some or all of the above points.
2 – 3 marks Reasonable Reasonable accurate coverage of the processes involved.
1 mark Basic Basic identification of the processes involved in content analysis (‘watching the films and counting’).
0 marks No creditworthy material.

(c) **AO3 = 3**

1 mark for identification of an appropriate way of assessing reliability in this investigation. By far the most likely answers here are inter-rater reliability or test-retest reliability.

2 marks for some explanation / elaboration: ‘the two psychologists could carry out content analysis of the films separately and compare their answers’ or ‘they could re-code the films at a later date and compare the two sets of data’.

3 marks for an accurate and clear explanation which refers to deriving the categories and checking the data. ‘The two psychologists could watch the films separately and devise a set of categories. They could compare these and use categories they both agreed on. They could carry out content analysis of the films separately and compare their answers looking for agreement’.

(d) **AO3 = 3**

Candidates can cover one reason explained in detail here or several reasons in less detail.

A repeated measures design was chosen in this experiment:

- to remove the effects of individual differences in reaction times which would occur if an independent groups design was used
- to avoid the potential difficulties involved in matching participants
- to reduce the number of participants required for the experiment.

(e) **AO3 = 3**

This is a repeated measures design and is counter-balanced hence points about order effects and individual differences will not gain credit.

STEMUP.CO.UK

There are a range of potential extraneous variables here including:

- the nature and content of the conversation with the psychologist on the hands-free phone
- interaction between the sex of the psychologist and sex of participant which could influence the type of conversation
- the number of hazards in the computer-based test, hence difficulty of the tests
- the presence of the hands-free headset could have produced distraction.

Award 1 mark for basic identification of a confounding variable and a further 2 marks for elaboration of how this could have affected the dependent variable.

Example: The chat with the psychologist was not controlled (1 mark) so the difficulty or number of questions could have varied (2 marks). This would influence the DV as more or less attention would be required (3 marks).

(f) **AO3 = 4**

There are several potential ethical issues here. Candidates can focus on one in detail or several in less detail.

- Protection of participants from harm whilst studying the effects of a hands-free phone on driving. Two key issues here are the use of a computer-based test with no risk attached and of an experienced sample of police drivers.
- Informed consent: Participants should be given full information about the nature of both tasks before deciding whether or not to participate.
- Debriefing: A full debriefing should take place at the end of the experiment. This should provide feedback on performance and allow participants to ask questions if they wish to.
- Freedom to withdraw: Participants should be made aware of their freedom to withdraw before and during the experiment. They should be made aware of their right to withdraw their data after the experiment.
- Confidentiality: Individuals should not be identified, but should retain anonymity (use of numbers or initials instead of names).

Lists of ethical issues with no elaboration 1 mark.

AO3 Mark bands
4 marks Sound An appropriate ethical issue is identified and explained in detail. Material is accurate – or several issues are identified and discussed accurately in less detail.
2 – 3 marks Reasonable One or more appropriate ethical issues are identified and discussed. The answer is generally accurate.
1 mark Basic

Basic identification of an ethical issue (e.g. ‘right to withdraw’) or very brief answers which lack detail.
0 marks No creditworthy material.

(g) **AO3 = 5**

The standardised instructions should include the following information:

a. *You will take part in a simulated driving test which will last for three minutes.*

b. *Your task will be to identify potential hazards on the road ahead.*

c. *When you see a hazard, you should press the mouse button as quickly as possible.*

d. *Whilst you are doing the test, I will chat to you on a mobile phone and I would like you to reply using the hands-free mobile phone headset.*

e. *Do you have any questions?*

For full marks, the instructions should adopt an appropriate formal tone. Instructions which are not suitable to be read out should be awarded a maximum mark of 2.

AO3 Marks bands **Standardised instructions**
5 marks Effective The standardised instructions provide accurate detail of the procedure in a clear and concise form and participants’ understanding is checked.
4 – 3 marks Reasonable The standardised instructions provide sufficient detail of the procedure in a reasonably clear form.
2 marks Basic The standardised instructions provide some details of the procedure though these may not be clear.
1 mark Rudimentary The standardised instructions provide few details of the procedure and may be muddled and or inaccurate. Omissions in the instructions compromise the procedure.
0 marks No creditworthy material is presented.

(h) **AO3 = 3**

Students are required to identify an appropriate test and are asked to justify their choice.

Award 1 mark for identification of the Wilcoxon (signed ranks) test. Candidates

STEMUP.CO.UK

could receive credit for Sign test or related t test. Note that reasons / justification must be correct for the test supplied.

If an incorrect test is identified **no marks** can be awarded.

Award 1 mark for basic statement of a reason, and a further mark for elaboration, within the context of the experiment or a further reason.

e.g. for Wilcoxon test:

- A repeated measures design was used (1 mark) as drivers take part in both the hands-free phone and non-phone (silent) conditions (1 mark).
- A repeated measures design was used (1 mark) and the data can be treated as ordinal (1 mark).

Test of difference cannot gain credit.

(i) **AO3 = 2**

Students are told that the difference in reaction times was significant at the $p \leq 0.01$ level.

Award 1 mark for a basic understanding of this ('the result is highly significant') and a further mark for elaboration e.g. identifying that the probability of a Type 1 error here is less than 1 / 100.

(j) **AO3 = 3**

Replication is an important tool in the scientific method. It allows scientists to check findings and ensure that they are robust. In this study, replication is important, as the original sample is small (30 people) and specific (experienced police drivers). For this reason, replication on a larger sample will be used to check if findings apply outside this specific group.

Award 1 mark for a general answer on the importance of replication to check findings.

Q7.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

(a) **AO3 = 4**

Content analysis is a way of analysing data such as text using coding units

STEMUP.CO.UK

such as themes. In this case mothers were asked to write down how their child behaved, so students might suggest.

Create a checklist / categories
Relevant example(s) of behaviours eg aggression, crying
Read through the diaries / mothers' writing / reports
Counting behaviours or tallying
Compare before and after day care

Any 1 of these equals 1 mark
Any 2 of these equals 2 marks
For 3 marks any 3 components but must refer to reading diaries / mothers' writing / reports.
For 4 marks any 4 components but must refer to reading diaries / mothers' writing / reports.
Ie Max 2 marks if there is no reference to reading diaries.

AO3 Knowledge and understanding of content analysis
4 marks Effective explanation Explanation is accurate, reasonably detailed and demonstrates sound knowledge and understanding of how content analysis could be used. Includes reference to both coding / categorizing and counting.
3 marks Reasonable explanation Explanation is generally accurate but less detailed and demonstrates reasonable knowledge and understanding of how content analysis could be used.
2 marks Basic explanation Explanation demonstrates basic knowledge of how content analysis could be used.
1 mark Rudimentary explanation Explanation demonstrates rudimentary knowledge of how content analysis could be used.
0 marks No creditworthy material.

(b) **AO3 = 4**

Credit all possible limitations of this investigation such as mothers not having time to write much, or to problems in the analysis such as difficulties deciding on appropriate categories. Other limitations could be demand characteristics, mothers dropping out of the study, bias in recording, lack of control of time spent in day care, nine-month-olds not representative of all young children etc. Also ethical issues such as maintaining confidentiality could be made relevant.

Students may explain one limitation in detail, or more than one in less detail.

AO3 Knowledge and understanding of limitations of this investigation
4 marks Effective explanation Explanation is accurate, reasonably detailed and demonstrates sound knowledge and understanding of one or more limitations of this investigation.

STEMUP.CO.UK

3 marks Reasonable explanation Explanation is generally accurate but less detailed and demonstrates reasonable knowledge and understanding of one or more limitations of this investigation.
2 marks Basic explanation Explanation demonstrates basic knowledge of one or more limitations of this investigation.
1 mark Rudimentary explanation Explanation demonstrates rudimentary knowledge of one or more limitations of this Investigation.
0 marks No creditworthy material.

Q8.

Please note that the AOs for the new AQA Specification (Sept 2015 onwards) have changed. Under the new Specification the following system of AOs applies:

- AO1 knowledge and understanding
- AO2 application (of psychological knowledge)
- AO3 evaluation, analysis, interpretation.

Although the essential content for this mark scheme remains the same, mark schemes for the new AQA Specification (Sept 2015 onwards) take a different format as follows:

- A single set of numbered levels (formerly bands) to cover all skills
- Content appears as a bulleted list
- No IDA expectation in A Level essays, however, credit for references to issues, debates and approaches where relevant.

(a) **AO1 = 1**

A brief definition of the term is sufficient for 1 mark eg a technique for analysing data according to themes or categories.
Candidates who simply write ‘a way of analysing qualitative data’ are not meeting the requirement to say ‘what is meant by….?’

(b) **AO2 / 3 = 3**

- The psychologist would have identified a number of categories or themes by which to sort the drawings. Such categories/themes might include: the type of food depicted eg carbohydrate, protein; the state of the food eg cooked, raw etc; the portion size; the brightness of the colours used.

- He would have counted examples from each category to provide quantitative data.

- He could then compare the drawings according to these categories to see if there were changes over the four week period.

For full marks candidates can either outline three of the above or outline two with some elaboration.
For 2 marks candidates can either outline two of the above, or one with elaboration.
For 1 mark candidates simply outline one of the above eg “choose a theme like

STEMUP.CO.UK

size".
Note: maximum 2 marks if no engagement with the stem.

(c) **AO2 / 3 = 5**

The form would need to contain sufficient information for the participant to make an informed decision about whether to take part or not. The form should contain some of the following:

- The purpose of the study.
- The length of time required of the participants.
- The fact that participants would have to be isolated in a research institute for the duration of the study.
- Details about the diet.
- Right to withdraw.
- Reassurance about protection from harm e.g. the availability of medical supervision.
- The requirement to undertake a series of psychological tests.
- Reassurance about confidentiality of the data.

It is not necessary for candidates to include all of the above points for full marks. However, in order to access the top band, candidates must engage with the study and include sufficient information on both ethical and methodological issues for participants to make an informed decision.
Maximum of 3 marks if no ethical issues are included.

AO2/3 = 5 marks
5 marks Effective The 'consent form' demonstrates sound understanding. Information is given in a clear and concise form and is explicitly relevant. The form includes sufficient information so that participants can make a fully informed decision including the right to withdraw.
4 – 3 marks Reasonable The 'consent form' demonstrates reasonable understanding. Information is given in a reasonably clear and concise form and is mainly relevant. The form includes sufficient information so that participants can make an informed decision.
2 marks Basic The 'consent form' demonstrates basic understanding. There is some lack of clarity and conciseness and material is not always relevant. There are some omissions such that participants would find it difficult to make a decision.
1 mark Rudimentary The 'consent form' is rudimentary and demonstrates very little understanding. Information is not given in a clear and concise form. The form has significant omissions such that a decision is not possible.
0 marks

STEMUP.CO.UK

No creditworthy material is presented.

Q1.

(a) Most students could happily identify the primary and secondary data in the stem material and gained marks for doing so. However, very few answers received full credit for properly explaining the difference between primary and secondary data. There was widespread misunderstanding that the distinction hinges on who collects the data, with many answers stating that primary data is that which is ‘collected by the researcher’ whilst secondary data is ‘collected by someone else’. Such answers failed to recognise the proper distinctions, ie that primary data comes directly from the source (the participants) and is collected for the purposes of the study, whereas secondary data does not come directly from the source and is not specific to the purpose of the study. Various ways of making either of these points were accepted, for example, reference to primary as original data and secondary as not original.

(b) Many students left this question blank and most of those who did attempt an answer based their response on some form of quantitative analysis, referring to categories being established prior to analysis and tallying or counting frequencies. Very rarely did students refer to transcription of the recordings, coding or emergent themes.

Q2.

(a) Most students could happily identify the primary and secondary data in the stem material and gained marks for doing so. However, very few answers received full credit for properly explaining the difference between primary and secondary data. There was widespread misunderstanding that the distinction hinges on who collects the data, with many answers stating that primary data is that which is ‘collected by the researcher’ whilst secondary data is ‘collected by someone else’. Such answers failed to recognise the proper distinctions, ie that primary data comes directly from the source (the participants) and is collected for the purposes of the study, whereas secondary data does not come directly from the source and is not specific to the purpose of the study. Various ways of making either of these points were accepted, for example, reference to primary as original data and secondary as not original.

(b) Many students left this question blank and most of those who did attempt an answer based their response on some form of quantitative analysis, referring to categories being established prior to analysis and tallying or counting frequencies. Very rarely did students refer to transcription of the recordings, coding or emergent themes.

Q3.

(a) Most students could happily identify the primary and secondary data in the stem material and gained marks for doing so. However, very few answers received full credit for properly explaining the difference between primary and secondary data. There was widespread misunderstanding that the distinction hinges on who collects the data, with many answers stating that primary data is that which is ‘collected by the researcher’ whilst secondary data is ‘collected by someone else’. Such answers failed to recognise the proper distinctions, ie that primary data comes directly from the source (the participants) and is collected for the purposes of the study, whereas secondary data does not come directly from the source and is not specific to the purpose of the study. Various ways of making either of these points were accepted, for example, reference to primary as original data and secondary as not original.

(b) Many students left this question blank and most of those who did attempt an answer based their response on some form of quantitative analysis, referring to categories

being established prior to analysis and tallying or counting frequencies. Very rarely did students refer to transcription of the recordings, coding or emergent themes.

Q6.

(a) This question required a definition of content analysis which proved challenging for many students. Almost half of the answers achieved no marks at all. This was made more remarkable by the fact that most were able to gain some marks on part (b) where they were asked to explain how to carry out a content analysis for the data in question.

(b) Most students were able to gain some marks here despite poor performance on part (a) and could identify in a basic way how to carry out a content analysis on the video recordings. Some were able to provide a clear description of the process but few appreciated that behavioural categories need to come from somewhere, whether that is from pilot work or previous research.

(c) Most students were able to identify an appropriate method of testing the reliability of the content analysis and collect at least one mark. The most popular answers were test-retest and inter-rater reliability. Many failed to gain the three marks available as their explanation of how the method of checking reliability would be carried out lacked detail. A few students became side-tracked into improving reliability and a small number used split half which was inappropriate in relation to content analysis and gained no marks.

(d) This question required students to explain why a repeated measures design was used in the experiment. Many students provided a basic answer referring to the need for less participants or the removal of individual differences but were unable to provide further explanation of why this would be important in this experiment. Students who thought about the scenario and elaborated their explanation with reference to reaction times, concentration or driving skills, achieved full marks.

(e) There was a broad range of answers to this question and about 75% of students achieved no marks at all. Many students contradicted their previous answer to part (d) and referred incorrectly to individual differences in reaction times and a similar proportion referred to order effects which had been controlled by counterbalancing or driving experience. Some students picked up on the possibility of differences in the nature of the ‘chat’ on the phone which was encouraging. However, few students showed any awareness of the need to match the two hazard perception tests (stimulus materials / tasks) in this repeated measures design.

(f) Many answers to this question displayed a marked lack of common sense. Despite referring to a simple hazard perception test, which is a key component of the driving test, many students claimed that watching a 3-minute film of a road would be traumatic, leading police drivers to suffer psychological harm. Others referred to possible deception and failed to appreciate that the purpose of the experiment is rather obvious in a repeated measures design. Better answers took issues such as informed consent / right to withdraw and explained how these related to this research.

(g) The question on writing instructions was answered well, with around half of students achieving four or five marks. Some failed to gain full credit as their instructions referenced both conditions or failed to include a check of understanding. Very weak answers failed to refer to the conversation or made no reference to reacting as quickly as possible.

(h) This question required students to identify an appropriate statistical test and justify

STEMUP.CO.UK

their choice. About one third of students gained the full marks for identifying the Wilcoxon test with appropriate justification but just under half gained one mark only for identification of the test. Common problems included justification as a test of difference which gained no credit as it was included in the question. Other students were confused about the type of data required for the Wilcoxon test and many answers referred to 'not nominal' data.

(i) There is still evidence that few students understand the concepts of statistical error and well over half failed to gain any marks here. Some became confused between type 1 and type 2 errors and others referred to the number of hazards detected rather than reaction times.

(j) This question was answered reasonably well, with many students referring to the greater potential for generalisation in a larger sample of inexperienced drivers. Some also referred to the general importance of replication to check findings in the context of the experiment, which was creditworthy.

Q7.

(a) There were some competent answers to this question, where students knew what was involved in content analysis and how it could be applied in this instance. Some showed confusion between studying the children and studying the diaries. A substantial number of students did not attempt this question at all or scored no marks.

(b) There were some competent answers, especially where students obviously understood the procedure of content analysis. Students were able to focus on the problem of asking the mother to keep a diary and could suggest possible difficulties with demand characteristics, social desirability and problems of recording regularly and in sufficient detail. Some students did not read the stem carefully because their suggestions that the mother would not be at nursery to record the child's behaviour or the recording would be retrospective after two weeks, and thus subject to unreliable memory, were not limitations of this study.

Q8.

(a) Many candidates seemed unable to say what is meant by content analysis. In some cases, this was because of poor expression and the inability to define terms clearly. In others, it was simply that they did not know the term. Teachers and candidates must be aware that the Research Methods section of the PSYA4 specification builds on what was covered at AS. Anything that appears on the Research Methods specification at AS can be examined on PSYA4.

(b) When candidates understood the term they were able to apply their knowledge effectively. For example, they explained how the psychologist would identify themes or categories in the drawings, count examples of each category to provide quantitative data and compare categories of drawings for changes over the duration of the study.

(c) Many candidates wrote thorough consent forms using appropriate content and tone. But some just included procedural details with no mention of ethics or vice versa. Some had problems in including enough information to allow the participant to make an informed decision. Specifically there was often insufficient information on the stay in a research unit, the nature of the restricted diet and the need for testing. While some candidates referred to ethical issues, including right to withdraw, many did not. A few actually suggested that participants would be locked in if they agreed to take

STEMUP.CO.UK

part.