

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Pre-U Certificate

MARK SCHEME for the May/June 2014 series

9773 PSYCHOLOGY

9773/03

Paper 3 (Key Applications), maximum raw mark 120

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, Pre-U, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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There are three types of question on this paper and for each applied option these are labelled Section A, Section B and Section C.

Section A includes short-answer questions and although each question is marked out of 3, each question has its own specific mark scheme.

Section B includes essay questions and although the indicative content varies for each question, the mark scheme for both question parts (a) and (b) is the same. It has to be to allow standardisation across the 5 options.

Section C is the application question and although the question will vary the mark scheme does not.

This means that the mark schemes for Section B questions (a) and (b) will appear once (immediately below) and will not be repeated for each individual question as will the mark scheme for Section C question parts (a) and (b). Indicative content for each question appear after the mark schemes.

SECTION B question part (a)	
This mark scheme applies to questions 3 & 4, 8 & 9, 13 & 14, 18 & 19, 23 & 24	AO1=12
<p>Quality of description and depth of knowledge is impressive. Description of knowledge (theories/studies) is accurate, coherent and detailed. Use of terms is accurate and use of psychological terminology is comprehensive. The theories/studies described are wide-ranging. Understanding (such as elaboration, use of example, quality of description) is very good. The answer is competently structured and organised (global structure introduced at start and followed throughout). Quality of written communication is very good.</p>	10–12
<p>Quality of description and depth of knowledge is very good. Description of knowledge (theories/studies) is mainly accurate, coherent and reasonably detailed. Use of terms is mainly accurate and use of psychological terminology is competent. The theories/studies described cover a reasonable range. Understanding (such as elaboration, use of example, quality of description) is good. The answer has some structure and organisation. Quality of written communication is good.</p>	7–9
<p>Quality of description and depth of knowledge is competent. Description of knowledge (theories/studies) is often accurate, generally coherent but lacks detail. Use of terms is basic and use of psychological terminology is adequate. The theories/studies described cover a limited range. Understanding (such as elaboration, use of example, quality of description) is reasonable. The answer is lacking structure or organisation. Quality of written communication is adequate.</p>	4–6

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<p>Quality of description and depth of knowledge is poor. Description of knowledge (theories/studies) is mainly inaccurate, lacks coherence and lacks detail. Use of terms and use of psychological terminology is sparse or absent. The theories/studies described cover a very limited range. Understanding (such as elaboration, use of example, quality of description) is poor. The answer is unstructured and lacks organisation. Quality of written communication is poor.</p>	1–3
No or irrelevant answer.	0

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SECTION B question part (b)

This mark scheme applies to questions 3 & 4, 8 & 9, 13 & 14, 18 & 19, 23 & 24	AO2=16
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Any appropriate evaluative point to receive credit.

Most likely:

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

<p>Evaluation (balance of positive and negative points) is comprehensive. Quality and depth of argument (or comment) is impressive. Selection and range of arguments is balanced which are competently organised into issues/debates, methods or approaches. Effective use of appropriate supporting examples which are explicitly related to the question. Analysis (valid conclusions that effectively summarises issues and arguments) is evident throughout. Evaluation is detailed and quality of written communication is very good. Understanding and usage of psychological concepts, issues, and approaches is extensive.</p>	13–16
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<p>Evaluation (positive and negative points) is very good. Quality and depth of argument (or comment) is clear and well developed. Selection and range of arguments is balanced which are logically organised into issues/debates, methods or approaches. Good use of appropriate supporting examples which are related to the question. Analysis (key points and valid generalisations) is often evident. Evaluation is quite detailed and quality of written communication is very good. Understanding and usage of psychological concepts, issues, and approaches is competent.</p>	10–12
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<p>Evaluation (positive and negative points) is good. Quality and depth of argument (or comment) is limited. Selection and range of arguments may be imbalanced with some organisation into issues/debates, methods or approaches evident. Limited use of appropriate supporting examples which are related to the question. Analysis (key points and valid generalisations) is sometimes evident. Evaluation is lacking in detail and quality of written communication is good. Understanding and usage of psychological concepts, issues, and approaches is adequate.</p>	7–9
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Page 5	Mark Scheme	Syllabus	Paper
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<p>Evaluation (positive and negative points) is limited. Quality and depth of argument (or comment) is poor. Selection and range of arguments is often imbalanced with little or no organisation into issues/debates, methods or approaches evident. Sparse use of appropriate supporting examples which are often peripherally related to the question. Analysis (key points and valid generalisations) is sparse. Evaluation is lacking in detail and quality of written communication is good. Understanding and usage of psychological concepts, issues, and approaches is poor.</p>	4–6
<p>Evaluation (positive and negative points) is basic. Quality and depth of argument (or comment) is weak. Selection and range of arguments is imbalanced with little or no organisation into issues/debates, methods or approaches evident. Sparse or no use of appropriate supporting examples which are peripherally related to the question. Analysis (key points and valid generalisations) is barely discernible. Evaluation is severely lacking in detail and quality of written communication is poor. Understanding and usage of psychological concepts, issues, and approaches is weak.</p>	1–3
No or irrelevant answer.	0

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SECTION C question part (a)	
This mark scheme applies to questions 5, 10, 15, 20, 25	AO2=8
In this question part, candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme.	
<p>Suggestion is appropriate to the question and based explicitly on psychological knowledge.</p> <p>Description of applied knowledge is accurate, coherent and detailed.</p> <p>Understanding (such as elaboration, use of example, quality of description) is very good.</p>	7–8
<p>Suggestion is appropriate to the question and based on psychological knowledge.</p> <p>Description of applied knowledge is mainly accurate, coherent and reasonably detailed.</p> <p>Understanding (such as elaboration, use of example, quality of description) is good.</p>	5–6
<p>Suggestion is largely appropriate to the question and based largely on psychological knowledge.</p> <p>Description of applied knowledge is often accurate, generally coherent but lacks detail.</p> <p>Understanding (such as elaboration, use of example, quality of description) is reasonable.</p>	3–4
<p>Suggestion is mainly inappropriate to the question and vaguely based on psychological knowledge.</p> <p>Description of applied knowledge is mainly inaccurate, lacks coherence and lacks detail.</p> <p>Understanding (such as elaboration, use of example, quality of description) is poor.</p>	1–2
No or irrelevant answer.	0

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SECTION C question part (b)	
This mark scheme applies to questions 5, 10, 15, 20, 25	AO1=6
<p>In this question part, candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a). Two (or more) components may be presented here (full marks can be gained for just one):</p> <ul style="list-style-type: none"> • Knowledge of methodology, • Knowledge of appropriate topic area and/or key study. 	
<p>Quality of explanation and depth of argument is impressive. Description of knowledge is accurate, coherent and detailed. Use of terms is accurate and use of psychological terminology is comprehensive. Understanding (such as elaboration, use of example, quality of description) is very good. The issue is effectively explained in relation to the topic area.</p>	5–6
<p>Quality of explanation and depth of argument is competent. Description of knowledge is mainly accurate, coherent and reasonably detailed. Use of terms is mainly accurate and use of psychological terminology is competent. Understanding (such as elaboration, use of example, quality of description) is good. The issue is adequately explained in relation to the topic area.</p>	3–4
<p>Quality of explanation and depth of argument is poor. Description of knowledge is often accurate, generally coherent but lacks detail. Use of terms is basic and use of psychological terminology is adequate. Understanding (such as elaboration, use of example, quality of description) is poor. The issue is poorly explained in relation to the topic area.</p>	1–2
No or irrelevant answer.	0

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ABNORMALITY

SECTION A

1 From the study by Thigpen and Cleckley on multiple personality:

(a) Describe one piece of anecdotal evidence.

[3]
AO1=3

Most likely:

- Thigpen reports that 'we were puzzled by a recent trip for which she had no memory'. Apparently Eve White went shopping and bought lots of expensive clothes. She denied doing this when the clothes were delivered.
- Thigpen received a letter. It had apparently been written by Eve White, but some ambiguous words at the end suggested someone was playing a prank. Not only was the handwriting different, but also the tone changed from serious to light-hearted.
- Eve 'White' disappeared into the woods, which were forbidden territory, when she was 6 years old and on her return denied it and was severely punished. It was Eve Black playing another prank to get Eve White into trouble.

3 marks for accurate and detailed description of one piece of evidence with understanding.

2 marks for accurate description of piece of evidence with some understanding.

1 mark for vague description of one piece of evidence with little or no understanding.

(b) Describe three other pieces of evidence.

[3]
AO1=3

Most likely:

- IQ: Mrs White obtained an IQ of 110 and Miss Black 104 on the Wechsler-Bellevue Intelligence Scale. Both scores are lowered by anxiety and tenseness, and superficiality and slight indifference to success, respectively.
- Memory: Miss Black's memory function is on the same level as her IQ, while Mrs White's is far above her IQ.
- The **Rorschach** record of Miss Black is by far healthier than that of Mrs White. Miss Black has a hysterical tendency, while Mrs White's shows anxiety, obsessive-compulsive traits, rigidity and an inability to deal with her hostility.
- The drawings of human figures indicate repression in Mrs White and regression in Miss Black.
- Physiological evidence: EEG for Eve Black is 12.5 cps; Eve White and Jane 11cps.

1 mark for accurate description of each piece of evidence.

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(c) Contrast the usefulness of anecdotal with psychometric evidence.

[3]
AO2=3

Most likely:

- Anecdotal evidence may be totally true, partially true, exaggerated or totally false. It is a story that has no supporting or scientific evidence.
- Psychometrics is the 'science of assessment' and such tests are said to be reliable, valid and as they are standardised with quantitative data, they are often preferred to anecdotes.
- Any answer should use these (or any other) appropriate differences.

3 marks: explicit **contrast** with supporting evidence/examples and good understanding.

2 marks: explicit **contrast** possibly with supporting example(s) but with limited understanding.

1 mark: Description of anecdotal followed by a description of psychometric without the contrast being explicit.

2 From the study by Shapira et al on brain activation by disgust-inducing pictures:

(a) Describe the results when activation is compared for healthy volunteers and OCD subjects.

[3]
AO1=3

Quoting directly from the article:

Comparing Activation in Healthy Volunteers and OCD Subjects

Activation during the threat-inducing condition in the OCD subjects showed a similar pattern as that found in healthy volunteers (no significant differences at any site for $p < .01$).

In contrast, the level of activation during the disgust-inducing condition was significantly greater for OCD subjects than for volunteers at several sites, especially in the region of the insula, as predicted, but also in the PHc and BA 47 (see Table 3, Figure 3). Group differences at the putamen and BA 9/46 also approached significance.

3 marks: appropriate and **detailed** description of results for both threat-inducing (n.s.) and disgust inducing (significance).

2 marks: accurate description of both results but with lack of detail or clarity.

1 mark: for description of one aspect, or vague comments related to both.

(b) Briefly explain the statistical implications of these results.

[3]
AO2=3

Most likely:

- One result is said to be not significant and the other is significant. However, they state that it is not significant at $p < 0.01$ (not $p < 0.05$) and so a candidate could refer to: What is meant by a non-significant result in relation to the hypothesis and conclusions that can be drawn; what is meant by significance and the $p = 0.05$ 'standard'; type one and type 2 errors with the value of p being moveable.

3 marks: for appropriate explanations with detailed descriptions and understanding of *these results*.

2 marks: for appropriate explanations, with some understanding.

1 mark: for vague explanation with little understanding.

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- (c) **Shapira et al. suggest more participants will be used in future studies. Suggest why testing more participants might not be necessary in physiological studies.** [3]
AO2=3

Most likely:

- Physiological studies, such as brain activation studies look at structures which may be the same in every person. These physiological processes might not be subject to social or any external influence. We are more likely to be able to generalise from physiological studies (rather than social ones) and the number of individual differences may be significantly less.

3 marks: for appropriate and detailed suggestion with understanding of psychological issues and approaches, possibly with the use of examples.

2 marks: for appropriate suggestion with some knowledge of psychological issues and approaches.

1 mark: for vague suggestion with limited knowledge.

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SECTION B

- 3 (a) Describe the key study by Ahn et al. on beliefs about essences and mental disorder. [12]
AO1=12

Abstract from study:

Do people believe mental disorders are real and possess underlying essences? The current study found that both novices and practicing clinicians held weaker essentialist beliefs about mental disorders than about medical disorders. They were also unwilling to endorse the idea that mental disorders are real and natural. Furthermore, compared with novices, mental health clinicians were less likely to endorse the view that there is a shared cause underlying a mental disorder and that one needs to remove the cause to get rid of the mental disorder. Clinicians were polarized on their views about whether mental disorders are categorical or dimensional. These findings reflect current controversies about mental disorders in the field at large.

- (b) Evaluate the key study by Ahn et al. on beliefs about essences and mental disorder. [16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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4 (a) Describe research and applications for impulse control disorders.

[12]
AO1=12

Specification:

Research:

- Treatment of Kleptomania Using Cognitive and Behavioural Strategies (Kohn and Antonuccio, 2002). Internet Gambling (Griffiths, 2002).

Key study:

- Tice, D. M., Bratslavsky, E. and Baumeister, R. F. (2001) Emotional distress regulation takes precedence over impulse control: If you feel bad, do it! *Journal of Personality and Social Psychology*, 80, 53–67.

Applications:

- Treatments for impulse control disorders: Psychotherapy, behavioural modification and drug therapy.

Candidates should focus specifically on research and applications (as above) and this could include the Key Study. It should not include theory. Answers which focus exclusively on the key study should receive no more than half marks because such answers are ignoring the ‘applications’ component.

(b) Evaluate research and applications for impulse control disorders.

[16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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SECTION C

5 The key study by Brewer et al linked impaired olfactory identification with schizophrenia. In 2012 researchers from the University of Dresden found people born without a sense of smell were at increased risk from depression.

- (a) Using your knowledge of psychology, suggest how you would investigate the whether people born without a sense of smell are more susceptible to depression. [8]**
AO2=8

In this question part, candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question does not specify a particular method, the candidate can choose an experiment, observation, self-report or any other appropriate method.

- (b) Explain the evidence on which your study is based. [6]**
AO1=6

In this question part, candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).

Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology.
- Knowledge of the Brewer et al. study on olfaction.
- Knowledge of the topic area of depression.

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CRIME

SECTION A

- 6 (a) Describe one case study of a successful offender profile. [3]
AO1=3

Specification:

- A case study of applied profiling (e.g. Canter's profile of John Duffy); profiling failures.

Most likely:

- The case of John Duffy (the 'railway murderer') where the profile by Canter had 17 items of which 13 were found to be correct. Duffy was arrested and Canter a hero.

3 marks for clear and concise description of profile/case study with at least three relevant and well explained points

2 marks description with some understanding and at least two relevant points.

1 mark for vague description.

- (b) Describe one case study of an unsuccessful offender profile. [3]
AO1=3

Specification:

- A case study of applied profiling (e.g. Canter's profile of John Duffy); profiling failures.

Most likely:

- The case of the murder of Rachel Nickell in 1992 where Colin Stagg was arrested and tried simply because he fitted the profile devised by Paul Britton. Stagg won £700,000 compensation and Britton was disciplined by the BPS for professional misconduct.

3 marks for clear and concise description of profile/case study with at least three relevant and well explained points.

2 marks description with some understanding and at least two relevant points.

1 mark for vague description.

- (c) Outline three reasons why one profile was successful when the other was not. [3]
AO2=3

Most likely:

- Canter used the 'British' approach that is based more on scientific fact, whereas Britton used the FBI/US approach based on the characteristics of serial killers.
- Canter was very specific in his profile; Britton was very vague and could have applied to many people.
- Canter used a geographical profiling approach based on where the murders were actually committed and so a 'pattern of fact' was revealed. There were significantly more murders and rapes on which to build the profile. Britton had only one murder to go on, so there was no geographical profile or pattern.

1 mark for each appropriate difference between the two profiles.

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7 The study by Rubin et al on the bombings in London in 2005 used a telephone survey.

(a) Describe how the telephone survey was conducted.

[3]
AO1=3

Quotes from study:

- *A cross sectional telephone survey using random digit dialling was conducted to contact a representative sample of adults. Respondents were asked to participate in an interview enquiring about current levels of stress and travel intentions.*
- *Market and Opinion Research International (MORI) conducted a telephone survey by using a random digit dialling method for all London telephone numbers. The survey used proportional quota sampling, a standard method for opinion polls that entails setting quotas for participants on a range of demographic factors and ensures that the sample interviewed is representative of the population of interest. In this survey, we set quotas with regard to sex, age, working status, residential location, housing tenure, and ethnicity to make our sample representative of the demographic distribution of London as shown in the most recent census data.*
- *We invited people aged 18 or over and who spoke English to participate in an interview about “issues facing Londoners.” The 20 minute interviews took place in the evenings from Monday 18 July to Wednesday 20 July 2005 and were completed before a second failed attack on London’s transport network on Thursday 21 July.*

3 marks: for clear and concise description of telephone survey with full understanding (at least three relevant points).

2 marks: description of telephone survey with some understanding.

1 mark: for vague description of telephone survey.

(b) Give three advantages of telephone surveys.

[3]
AO2=3

Most likely:

- It provides more random and accurate results because the sample is less self-selective. The percentage of those contacted who respond is higher than for mail surveys.
- It is usually quicker to complete. The results can often be gathered in days rather than weeks.
- It is more adaptable. Since a live person (trained) is administering the survey, there is room for some flexibility in the manner and order of the questions.
- The survey caller also can guide respondents through any questions that might not be understood.
- Quality control is generally better, because a handful of trained individuals are entering the answers.

Any appropriate advantage to receive credit.

1 mark for each appropriate advantage.

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(c) Outline one disadvantage of telephone surveys using an example from this study. [3]
AO2=3

Most likely:

- Telephone surveys are generally limited to a maximum of 15 minutes. The longer a phone survey continues, the more people will "drop out" and will not fully answer all the questions. In this study 64 participants did not have time to continue.
- Questions must be simple and clearly stated. Since those responding cannot see or read the questions, complicated or long questions are not appropriate for telephone surveys. In this study we assessed whether "as a result of the London bombings," participants had experienced substantial stress, defined as responding "quite a bit" or "extremely" to one or more of five symptoms. Other possible responses were "not at all," "a little bit," and "moderately." This means that a participant may have to go through this long question again or may forget the different category of answers. This could apply to a number of questions.
- There may be interviewer bias. Some people may prefer male/female. In this study there was no choice of interviewer given.

Any other appropriate disadvantage to receive credit

3 marks: Appropriate disadvantage **plus** example with elaboration showing good understanding.

2 marks: Appropriate disadvantage **plus** example with some elaboration and understanding (or one very good and one basic).

1 mark: Appropriate disadvantage **or** example.

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SECTION B

8 (a) Describe the key study by Mann et al. on suspects, lies and videotape.

[12]
AO1=12

Abstract from study:

This study is one of the very few, and the most extensive to date, which has examined deceptive behaviour in a real-life, high-stakes setting. The behaviour of 16 suspects in their police interviews has been analysed. Clips of video footage have been selected where other sources (reliable witness statements and forensic evidence) provide evidence that the suspect lied or told the truth. Truthful and deceptive behaviours were compared. The suspects blinked less frequently and made longer pauses during deceptive clips than during truthful clips. Eye contact was maintained equally for deceptive and truthful clips. These findings negate the popular belief amongst both laypersons and professional lie detectors (such as the police) that liars behave nervously by fidgeting and avoiding eye contact. However, large individual differences were present.

(b) Evaluate the key study by Mann et al. on suspects, lies and videotape.

[16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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9 (a) Describe what psychologists have learned about punishment and treatment of offenders.

[12]

AO1=12

Specification:

Theory:

- Types and functions of punishment (prison and probation).
- The psychological effects of imprisonment: depersonalisation (e.g. Zimbardo), suicide (e.g. Topp, 1979) depression (e.g. Paulus, 1988).

Research:

- The Prison-Based Sex Offender Treatment Programme – STEP 3 (Home Office).

Key study:

- Cann, J. (2006) Cognitive skills programmes: impact on reducing reconviction among a sample of female prisoners. Home Office Findings 276

Applications:

- Anger management treatments (e.g. Ireland, 2000).
- Sexual Offender Treatment Programmes (e.g. Beech et al., 1998).
- Restorative justice, cognitive skills programmes (e.g. Cann, 2006).

(b) Evaluate what psychologists have learned about punishment and treatment of offenders.

[16]

AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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SECTION C

10 Many studies have been conducted to determine biases amongst members of a jury, such as racial bias and defendant attractiveness. Another possibility is whether the regional accent of a defendant biases members of a jury. It is your task to find out.

(a) Using your knowledge of psychology, suggest how you would investigate the effect of regional accent on juror bias.

[8]

AO2=8

In this question part, candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question does not specify a particular method, the candidate can choose an experiment, observation, self-report or any other appropriate method.

(b) Explain the evidence on which your suggested study is based.

[6]

AO1=6

In this question part, candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).

Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of the chosen method.
- Knowledge of jury biases.

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ENVIRONMENT

SECTION A

11 From the study by Drury et al. on behaviour in emergency situations:

(a) Describe the model of mass emergent sociality.

AO1=3

Most likely:

- 1 It looks at the creation of social bonds (rather than their dissolution or maintenance).
- 2 It looks at how an event can create 'we-ness' in a very short period of time, transforming individual strangers into people who then help, assist, have courtesy for others in the same predicament.
- 3 It is explained by social identity or social categorisation theory; people realizing that they have something in common with those who were previously strangers.

3 marks: for clear and concise description of the sociality model with understanding.

2 marks: description of the sociality model with some understanding.

1 mark: for vague description of the sociality model.

(b) Describe the affiliation model of behaviour in emergency situations.

[3]

AO1=3

Most likely:

The affiliation model suggests that:

- 1 In conditions of threat, we are motivated to seek the familiar rather than simply exit and
- 2 The presence of familiar others (affiliates) has a calming effect, working against the 'fight or flight' reaction (Mawson, 2005).
- 3 This model seems to explain the evidence that people prefer to remain with loved ones even at risk of death, rather than escape alone (Sime, 1983).

3 marks: for clear and concise description of the affiliation model with understanding.

2 marks: description of the affiliation model with some understanding.

1 mark: for vague description of the affiliation model.

(c) Contrast the affiliation model with the ‘mass panic’ approach in relation to social bonds. [3]

AO2=3

Most likely (*other appropriate answers to receive credit*):

- The essential difference is that the ‘mass panic’ approach emphasises the **dissolution** of social bonds, the affiliation (and normative) approaches stress their **maintenance**.
- For Le Bon (1895) for example ‘instinct’ is said to overwhelm socialisation, with an ‘every man for himself’ approach meaning that collective bonds dissolve, and personal survival becomes the overriding concern (Strauss, 1944), resulting in competitive behaviours within the crowd and ‘mass panic’.
- Details of the affiliation model appear in **(b)** above.
- NB the model of **sociality** (part **(a)** above) is different from the affiliation model in stressing the creation of bonds, not their maintenance.

3 marks: concise and explicit contrast (where both sides are clearly presented) with understanding.

2 marks: explicit contrast with some understanding.

1 mark: description of affiliation and description of ‘mass panic’ approach without explicit contrast.

12 From the study by North et al on musical style and consumer spending:

(a) What was found in relation to spending on wine? [3]

AO1=3

From the study:

TABLE 2
Means (and Standard Deviations) by Music Condition and MANOVA
and Tukey HSD Results

Variable in £	Classical Music	Pop Music	No Music	Total	F	p
Starters	4.917 ^{ab} (1.047)	4.038 ^a (1.818)	3.930 ^b (1.834)	4.275 (1.670)	4.17	0.017
Main Course	14.720 (1.447)	14.519 (1.344)	14.487 (1.058)	14.571 (1.2840)	0.38	0.684
Dessert	3.424 (1.534)	2.554 (1.818)	2.746 (2.032)	2.892 (1.838)	2.40	0.095
Coffee	1.068 ^{ba} (0.646)	0.802 (0.682)	0.535 ^a (0.772)	0.793 (0.731)	5.41	0.005
Bar	3.510 (2.073)	3.060 (1.607)	2.981 (1.456)	3.174 (1.723)	1.33	0.267
Wine	4.875 (3.928)	4.489 (3.738)	5.054 (4.343)	4.802 (3.990)	0.26	0.771
Total drink	8.385 (4.125)	7.550 (3.336)	8.035 (4.593)	7.975 (4.030)	0.48	0.621
Total food	24.130 ^{ab} (2.243)	21.912 ^a (2.627)	21.697 ^b (3.332)	22.531 (2.969)	8.89	< 0.001
Total spend	32.515 ^{ab} (4.358)	29.462 ^a (4.248)	29.732 ^b (5.156)	30.507 (5.158)	4.37	0.014

NOTE: df= 2, 133 in all cases. Within each row, means marked by matching subscripts differ significantly ($p < .05$).

On the basis of previous research it was expected that more wine would be purchased when classical music was played. As can be seen from the table, this did not happen. More wine was purchased when no music was played. This difference, using one-way MANOVA, was not statistically significant.

3 marks: correct interpretation of result, awareness of three conditions (IV) and with a comment on one aspect of data, either means or statistical test/significance with full understanding.

2 marks: Correct interpretation of result with comment on either IV or data analysis.

1 mark: for vague description of one aspect of finding.

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(b) Suggest why this finding did not support the findings of previous research in relation to spending on wine.

[3]

AO2=3

Question is speculative because the study makes no comment about individual breakdown of wine, making more general comments instead.

Most likely:

- The total amount spent on drink was greater for classical music, comprising coffee, bar and wine;
- Spending on 'bar' was greater for classical music so maybe people chose wine from the bar rather than at the table;
- In previous studies (e.g. Areni and Kim) only wine was available. If beer is also available, some people may prefer beer to wine.

3 marks: for clear and concise suggestion with full understanding (e.g. previous research mentioned).

2 marks: suggestion with some understanding.

1 mark: for vague suggestion.

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- (c) North et al. give three explanations for why classical music leads to greater spending. Using evidence, suggest why one of these reasons might not be correct. [3]

AO2=3

There are two possible studies (from the spec and referred to in the introduction to the study):

Most likely:

- Explanation 1: The first of these is that the classical music was synergistic with other aspects of the restaurant atmosphere and that this synergy promoted spending.
 - Reason incorrect 1: This cannot explain why North and Hargreaves (1998) found that classical music increased spending in a student cafeteria (in which, as they noted, classical music was not synergistic with other atmospheric variables such as décor).
- Explanation 2: A second potential explanation is that, in all three studies, classical music was simply preferred by the participants, and some form of transfer effect meant that liking for the music fed through into increased spending.
 - Reason incorrect 2: Neither the North et al study nor that by Areni and Kim (1993) and North and Hargreaves provided data on customers' musical preferences, such that musical preference remains a possible explanation (although it seems implausible that North and Hargreaves' student participants would have preferred classical over pop music).
- Explanation 3: Classical music promotes an upmarket atmosphere, and this primes contextually appropriate, congruent behaviour—namely, increased purchase intentions.
 - Reason incorrect 3: There is no evidence at this moment to suggest that this reason is incorrect, and it will be interesting to see what is suggested if a candidate goes for this explanation.

Any appropriate answer receives credit.

3 marks: identification of explanation, reason for being incorrect and evidence to support.

2 marks: identification of explanation, reason for being incorrect or evidence to support.

1 mark: vague answer with partial performance on any one of three components.

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SECTION B

13 (a) Describe theory and research on crowds.

[12]
AO1=12

Specification:

Theory:

- Definitions of crowds.
- Types of crowd (Brown, 1965: acquisitive, baiting (Mann, 1981), panicky, apathetic, peaceful).
- Explanations of crowd behaviour: Emergent norm (Turner, 1972) Deindividuation (Zimbardo, 1969) Social identity theory (Reicher, 1984).

Research:

- Studies on Individuation and deindividuation: laboratory (e.g. Zimbardo, 1969 and field studies Diener et al., 1976). Johnson and Downing (1979) Social identity theory (Reicher 1984b St Pauls riots).

Key Study:

- Diener, E., Fraser, S. C., Beaman, A. L. and Kelem, R. T. (1976) Effects of deindividuation variables on stealing among Halloween trick-or-treaters. *Journal of Personality and Social Psychology*, Volume 33, Issue 2, February 1976, Pages 178–183.

Applications:

- Controlling potentially aggressive crowds (e.g. Waddington, 1987).
- Individuating using CCTV (e.g. Ainsworth and Pease, 1987).

Candidates should focus specifically on theory and research (as above) and this could include the Key Study. It should not include applications. Answers which focus exclusively on applications should receive no marks or ignored if part of a theory and research answer.

(b) Evaluate theory and research on crowds.

[16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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14 (a) Describe the key study by Evans and Wener on crowding on a train.

[12]
AO1=12

Abstract from study:

Mass transit users frequently experience crowding during their commutes. In this study of 139 urban passenger train commuters during rush hour, we found that the density of the train car was inconsequential for multiple indices (self-report, salivary cortisol, performance aftereffects) of stress whereas the immediate seating density proximate to the passenger significantly affected all three indices. When people had to sit close to other passengers, they experienced adverse reactions. These results are consistent with prior work indicating that individual spacing among persons that leads to personal space invasions is a more salient environmental condition than density per se. The findings also have implications for the design of mass transit vehicles.

(b) Evaluate the key study by Evans and Wener on crowding on a train.

[16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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SECTION C

15 It is often said that women cannot read maps. Some say that this is because women are less able to process spatial information. Maybe it is because women are empathisers rather than systemisers (as distinguished by Baron-Cohen et al. when investigating autism).

(a) Using your knowledge of psychology, design a study to investigate the relationship between using maps and the ability to systemise.

[8]

AO2=8

In this question part, candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question does not specify a particular method, the candidate can choose an experiment, observation, self-report or any other appropriate method.

(b) Explain the evidence on which your study is based.

[6]

AO1=6

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part **(a)**.

Three components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of the method appropriate to the topic being investigated.
- Knowledge of the individual differences in way-finding/reading maps.
- Knowledge of systemising and empathising.

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HEALTH

SECTION A

16 The key study by Tapper et al is based on an earlier study by Woolner (involving ‘Jarvis and Jess’) that had a fifteen-month follow-up.

(a) Suggest why it is important for health promotion studies of this type to have a ‘follow-up’.

[3]

AO2=3

Most likely answers:

- A follow-up allows a judgment about the **effectiveness** of an intervention programme. A programme usually consists of an intervention, a maintenance phase and then an assessment to judge the success of the intervention.
- Post intervention reports often show people **say** they will change behaviour, but only a **follow-up** after a period of time looking at **actual behaviour** can really make a judgment regarding the effectiveness of the programme.

3 marks: for clear and concise suggestion with full understanding.

2 marks: suggestion with some understanding.

1 mark: for vague suggestion.

(b) Describe the results of the ‘Jarvis and Jess’ follow-up?

[3]

AO1=3

Most likely answers:

Jarvis and Jess in the nursery

- The results showed that following the introduction of the intervention, **fruit consumption** at snack-time rose from 30 per cent to 71 per cent. The intervention was followed by a maintenance phase during which there were no videos, and the rewards became more intermittent. **At follow-up, 15 months later**, consumption levels were 79 per cent. The effects at lunchtime mirrored those at snack-time, rising from a baseline of 17 per cent to 76 per cent at the 15-month follow-up.
- Similarly, in the case of **vegetables**, consumption during snack-time rose from 34 per cent at baseline to 87 per cent following the intervention, and was still at 86 per cent at **the follow-up nine months later**. The increases for lunchtime consumption of vegetables were even larger, rising from 20 per cent at baseline to 89 per cent at follow-up. **Three years later**, with very intermittent maintenance procedures, the culture of the nursery school has altered so that children are now consuming approximately 80 per cent of the fruit and vegetables presented to them in the snack-time and lunchtime settings.

3 marks: Description of range results clear and accurate with some numbers included.

2 marks: Description of limited range of results with some numbers included.

1 mark: Vague description of some results or some numbers.

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- (c) Give one disadvantage of a longitudinal study and suggest why it did not apply to the Tapper et al. study. [3]

AO2=3

Most likely:

- Attrition (sample size reducing). This did not apply in this study because the children were all at school and so could not opt-out.
- Once a study has started, changes to the design cannot be made. The study was well-planned and the Food Dues were designed to run over time and no design changes were necessary.
- Cross-generational – those from one generation cannot be compared to another generation due to the social conditions of society changing over time. This study was not conducted over a long period of time, so this does not apply.
- Experimenters may become emotionally attached to participants and this may bias the outcome or results of the study. Study is on eating fruit and vegetables using the 'food-dudes'. No experimenter(s) to become attached to.

3 marks: Description of disadvantage is clear, accurate and detailed. Reference to Tapper et al study included.

2 marks: Description of disadvantage is vague. Reference to Tapper et al study mentioned.

1 mark: Description of disadvantage is vague. No reference to Tapper et al study.

- 17 From the study by Bridge et al on relaxation and imagery in the treatment of breast cancer:

- (a) Describe the three conditions of the independent variable.

[3]

AO1=3

Most likely:

- 1 **Relaxation group** were taught a relaxation technique which by a process of direct concentration, focuses sensory awareness on a series of individual muscle groups. These patients were also given instructions for diaphragmatic breathing, which slows respiration, induces a calmer state, and reduces tension.
- 2 **Relaxation plus imagery:** In addition to the breathing and relaxation, each patient in the relaxation plus imagery group was taught to imagine a peaceful scene of her own choice as a means of enhancing the relaxation.
- 3 **Controls** received neither relaxation training or imagery technique and were encouraged to talk about themselves.

3 marks for clear and full **description** of each condition with understanding.

2 marks for basic description of each condition with some understanding, or correct **identification** of all three groups.

1 mark for vague description of groups which has limited or no understanding.

- (b) Bridge et al. presented mean scores for mood states for the three conditions. The data were analysed using analysis of covariance. Suggest why this test was used. [3]
AO2=3

Most likely:

- It is the correct test! i.e. it is 'two dimensional data' with relaxation as one variable and profile of mood states as a second variable. Analysis can then be done on each variable as well as the interaction between the two. At a simpler level, the test is one of difference using scores (rather than frequencies) and where the three groups are independent of each other.

3 marks for clear and full description of reason for test with understanding.

2 marks for reasonable description of reason for test with some understanding.

1 mark for vague description of reason for test which has limited or no understanding.

- (c) With reference to the comparison of initial with six-week data, what conclusions can be drawn for the three conditions in relation to tension? [3]
AO1=3

Table II from article:

Profile of mood states	Relaxation			p Value* (one tailed)
	Relaxation group (n=39)	plus imagery group (n=43)	Controls (n=46)	
Tension:				
Initial	11.2 (7.0)	11.3 (7.9)	10.6 (7.0)	
Six weeks	9.5 (7.7)	8.8 (5.0)	10.7 (8.1)	0.043
Depression:				
Initial	7.4 (7.2)	8.3 (9.2)	5.5 (6.5)	
Six weeks	6.9 (8.5)	5.8 (5.2)	7.5 (10.8)	0.023
Vigour:				
Initial	18.5 (7.5)	16.6 (7.7)	17.3 (6.6)	
Six weeks	18.5 (6.3)	17.4 (8.3)	18.9 (7.9)	0.254
Fatigue:				
Initial	9.2 (8.1)	8.7 (7.1)	8.7 (6.5)	
Six weeks	11.9 (8.5)	10.4 (8.0)	11.9 (8.0)	0.152
Anger:				
Initial	7.9 (6.0)	7.8 (6.9)	5.6 (5.2)	
Six weeks	7.8 (8.3)	5.9 (4.4)	5.5 (6.4)	0.149
Confusion:				
Initial	7.5 (4.9)	6.8 (5.4)	6.8 (4.2)	
Six weeks	7.3 (5.0)	5.7 (4.1)	7.0 (5.2)	0.066
Total mood disturbance:				
Initial	61.7 (31.2)	59.6 (34.5)	54.4 (26.0)	
Six weeks	61.9 (34.8)	53.9 (27.4)	61.4 (38.7)	0.036

*For linear trend in analysis of covariance, controlling for initial scores.

The important part is the data at the top of the table.

The control group shows very little difference and lowest variation (10.6 to 10.7); the relaxation group shows a six week improvement (11.2 to 9.5) and the relaxation plus imagery group shows most improvement/reduction in tension (from 11.3 to 8.8) on the Profile of Mood States. The programme is effective over a six-week period.

3 marks for clear and full description of all three groups for tension with understanding.

2 marks for reasonable description of all three groups for tension with some understanding.

1 mark for vague description of one or two groups for tension which has limited or no understanding.

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SECTION B

- 18 (a) Describe the key study by McKinstry and Wang on 'putting on the style'. [12]
AO1=12

Abstract from study:

The aim of this study was to determine how acceptable patients found different styles of doctors' dress and whether patients felt that a doctor's style of dress influenced their respect for his or her opinion. A total of 475 patients from five general practices in Lothian were surveyed using photographs of different styles in a male and female doctor and questions about their attitudes to doctors' dress in general. Overall, patients seemed to favour a more formal approach to dress, with the male doctor wearing a formal suit and tie and the female doctor in a white coat scoring the more high marks. This was particularly true of older patients and those in social classes 1 and 2. The male doctor wearing a tweed jacket and informal shirt and tie scored fewer low marks and this was therefore the least disliked of the outfits. There was a marked variation between preferences of patients registered with different practices. When asked, 28% of patients said they would be unhappy about consulting one of doctors shown, usually the ones who were informally dressed. However, some patients said they would dislike their doctor wearing a white coat. Although there are more important attributes for a general practitioner than the way he or she dresses, a majority of patients (64%) thought that the way their doctor dressed was very important or quite important. Given that 41% of the patients said they would have more confidence in the ability of one of the doctors based on their appearance it would seem logical for doctors to dress in a way that inspires confidence. This may only be an important factor, however, for patients who see their doctor infrequently.

- (b) Evaluate the key study by McKinstry and Wang on 'putting on the style'. [16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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19 (a) Describe pain management techniques for adults and children.

[12]
AO1=12

Specification:

Theory:

- Types of pain (acute and chronic).
- Measuring pain (psychometric e.g. MPQ, visual rating scales, observation e.g. UAB). Pain in a laboratory (cold-pressor procedure).

Research:

- Patient controlled analgesia (Citron et al. 1986), placebos and pain (Levine et al. 1979)

Key study:

- Simons, S. H. P., van Dijk, M., Anand, K. S., Roofthoof, D., van Lingen, R. A. and Tibboel, D. (2003) Do we still hurt newborn babies: A prospective study of procedural pain and analgesia in neonates. Archives of Paediatrics and Adolescent Medicine, 2003 – American Medical Association, Vol. 157.

Applications:

- Pain management techniques: medical, behavioural (e.g. biofeedback), cognitive (e.g. redefinition and imagery).
- Pain and children (Simons et al., 2003)

Candidates should focus specifically on pain management techniques (applications) as above. This could also include the Key Study because it is about pain management. Answers could also include the research areas (above) because they too involve pain management. Answers which focus exclusively on theory of measurement should receive no marks because such answers are not answering the question set, or ignored if these topics are part of the answer.

(b) Evaluate pain management techniques for adults and children.

[16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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SECTION C

20 One explanation of why people smoke cigarettes is because they have a Freudian oral fixation. If this is true, people trying to quit smoking should find ‘cigarette substitutes’ more effective than nicotine patches.

(a) Using your knowledge of psychology, design a study to investigate whether cigarette substitutes are more effective than nicotine patches.

[8]

AO2=8

In this question part, candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question does not specify a particular method, the candidate can choose an experiment, observation, self-report or any other appropriate method.

(b) Explain the evidence on which your suggestion is based.

[6]

AO1=6

In this question part candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).

Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology, specifically that of an observation.
- Knowledge of explanations of why people smoke such as the nicotine regulation model and Freudian oral fixation.

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SPORT

SECTION A

21 From the study by Waters and Lovell on homefield advantage in soccer players:

(a) In study 2 participants were interviewed about sleep. What was found? [3]
AO1=3

Quote from study:

Sleep: There were large differences in players' sleep patterns when playing at home and away.

- 1 When at home, all players reported sleeping for a normal length of time, if not longer. In one case, a player slept for twelve hours the night before a home game.
- 2 Conversely, when playing away all the players complained of sleeping poorly and of their sleep not being normal: 'it wasn't the usual sleep you know, with being in the hotel, different bed, pillows and that'. Another player complained that 'you can always tell the difference between a hotel bed to the one at home'. This is an important discovery as sleep was deemed as one of the most important factors by the players in their preparation.

3 marks for accurate and detailed description of both findings with clear understanding.

2 marks for accurate description of both findings with some understanding.

1 mark for vague description of both findings.

(b) Suggest one advantage and one disadvantage of interviewing in this study. [3]
AO2=3

Most likely:

Advantages:

- Interview is face-to-face so interviewer can clarify any ambiguity about the questions or rating scales.
- Interview is more likely to be completed if a person is asking questions on the spot rather than questionnaire completed (or not) at a later date.

Disadvantages:

- Interviews were conducted in short time before a game and players may not have been willing to give detail.
- Interviewer may have to repeat questions if a player could not remember the rating scale.

3 marks for appropriate advantage **and** disadvantage **both** related to study.

2 marks for appropriate advantage **and** disadvantage **not** related to study, or one advantage **or** disadvantage related to study.

1 mark for one advantage **or** disadvantage **not** related to study.

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- (c) Suggest what negative effect a lack of sleep might affect a players' performance. [3]
AO2=3

Quotes from study:

These results suggest that a main contributor to the home advantage may well be the basic human requisite of sleep. Players all complained that when travelling they just did not sleep properly, for the normal length of time or in the usual way. If sleep is a crucial part of the preparation, then a bad night's sleep could contribute the players not performing at their optimal level.

According to Weinberg and Gould (1999), fatigue results in:

- impaired decision-making,
- lack of focus and intensity, and other mental breakdown.

If the quantitative data is examined related to quality of sleep, however, it can be seen that there was only a very slight decrease in quality when competing away. This again reflects the inconsistencies shown in this investigation between actual and respective accounts of competing at home and away, and between quantitative and qualitative data.

3 marks for appropriate suggestion with clear understanding.

2 marks for appropriate suggestion with some understanding.

1 mark for vague but appropriate suggestion.

- 22 (a) Outline one of the three studies quoted by Moore et al. on the impact of sporting events on victimisation. [3]
AO1=3

Quoting directly from the article:

Three studies have examined how sporting events impact on victimization.

First, Sachs and Chu (2000) developed the hypothesis that 'Super Bowl Sunday is often the biggest day of the year for domestic violence' (p. 1192), and subsequently evaluated the relationship between emergency department admissions of women, domestic violence calls to the local police department and local American football team match outcome. Data indicated a trend such that greater domestic violence was identified on match days.

Second, Sivarajasingam et al. (2005) analysed the relationship between Cardiff emergency department (ED) attendance and the outcome of 106 Welsh international matches: 74 rugby and 32 soccer (association football) international matches between 1995 and 2002. When Wales won at home, controlling for match attendance, there were higher numbers of ED attendances for treatment of assault injuries than with other results. This was also the case when Wales played away from home, in Paris or Johannesburg for example.

Third, White et al. (1992) found that assault, stabbings and shootings of women increased in Washington, DC when the local ice hockey team (Washington Redskins) won compared with non-match days, but neither increased nor decreased when the local team lost.

3 marks: appropriate and detailed description of study with understanding.

2 marks: appropriate description of study with some understanding.

1 mark: basic description of study with limited understanding.

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(b) Suggest why the frustration-aggression hypothesis does not explain why there is more aggression following a win.

[3]

AO2=3

Most likely (*any appropriate disadvantage to be given credit*):

- The frustration–aggression hypothesis of Dollard et al. (1939) proposes that aggression is a consequence of thwarting an individual’s efforts to attain a goal. The goal of sports fans is to see their team win and so frustration and aggression might result from their team losing.

3 marks for appropriate and detailed suggestion (and knowledge of frustration-aggression) with clear understanding.

2 marks for appropriate suggestion (and knowledge of frustration-aggression) with limited understanding.

1 mark for vague suggestion or suggestion with **no** frustration-aggression hypothesis.

(c) Suggest why there is more aggression following a win.

[3]

AO2=3

Most likely (*any appropriate feature to be given credit*):

- One alternative explanation is that there is a direct relationship between match outcome and aggression. White et al. (1992) interpreted their findings in terms of winning heightening fans’ self-confidence, assertiveness and patriotism, which in turn promotes aggression generally and violence specifically against rival fans. In other words it heightens feelings of ethnocentrism, in-group favouritism and out-group discrimination.

3 marks for appropriate and detailed suggestion with clear understanding.

2 marks for appropriate suggestion with some understanding.

1 mark for vague but appropriate suggestion.

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SECTION B

- 23 (a) Describe the key study by Kajtna et al. on personality in high risk sports athletes. [12]**
AO1=12

Abstract from study:

The research investigated personality traits of high-risk sports athletes. The aim was to investigate the personality dimensions and compare the results to the results of non-risk sports athletes and non-athletes. Thirty eight high-risk sports athletes participated in the research (alpinists, sky divers, paragliders, white- water kayakers, downhill mountain-bikers, motocross riders, downhill skiers and ski jumpers). The non-risk sports athletes consisted of 38 swimmers, track athletes, sailors, flat-water kayakers, rowers, Nordic skiers, sports climbers and karatekas. The non-athletes were equalled with both groups in age and education and included 76 non-athletes. The Big Five Observer Scale was used. It was found that high-risk sports athletes scored highest in emotional stability, they were followed by the non-athletes and the lowest scores were achieved by non-risk sports athletes. The same order of groups was shown in conscientiousness and energy. Openness was highest in the non-risk sports athletes, followed by the non-athletes and the lowest score was achieved by the high-risk sports athletes. The differences in acceptability were not significant. Four out of five hypotheses were accepted.

- (b) Evaluate the key study by Kajtna et al on personality in high risk sports athletes. [16]**
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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24 (a) Describe what psychologists have found about leadership and team cohesion. [12]
AO1=12

Specification

Theory:

- Fiedler's contingency model (1967).
- Chelladurai's multidimensional model of leadership (1978).
- Grusky (1963).

Research:

- Cohesiveness in sport: Carron's conceptual system (determinants and consequences) (1982),
- Widmeyer et al. (1985) Elements of Cohesion and Measures of it (GEQ).

Key study:

- Widmeyer, W. N. and Williams, J. M. (1991) Predicting Cohesion in a Coacting Sport. Small Group Research, 1991; 22; 548.

Applications:

- Developing team cohesion (e.g. Cox, 1994).
- Coach behaviour/effectiveness (Smith et al. 1977, 1979).

(b) Evaluate what psychologists have found about leadership and team cohesion. [16]
AO2=16

Any appropriate evaluative point to receive credit.

Evaluation of theory:

- Internal strengths and weaknesses;
- Theoretical issues: reductionism, determinism, ethnocentrism.
- Supporting/contradicting evidence;
- Comparisons and contrasts with alternative theory.

Evaluation of research:

- Strengths and weaknesses of methods, sample, controls, procedure.
- Evaluation of and comparisons and/or contrasts with alternative approaches.

Evaluation of issues and debates:

- Any relevant debate can be raised, such as objective versus subjective data, snapshot versus longitudinal studies, extent of ecological validity, nature versus nurture; freedom versus determinism; reductionism versus holism. Issues can be raised such as ethics, validity, ethnocentrism, effectiveness, application to real life.

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SECTION C

25 Everyone expected Jessica Ennis to win an Olympic gold medal in 2012. She coped with the pressure and anxiety of that expectation and won the heptathlon. What might have made her different from the athletes who couldn't cope with pressure?

(a) Using your knowledge of psychology, design a study to investigate individual differences in anxiety and sport performance.

[8]

AO2=8

In this question part, candidates are either directed to design a study based on a named method or are free to suggest any way in which the assessment request could be investigated. Each answer should be considered individually as it applies to the mark scheme. As the question does not specify a particular method, the candidate can choose an experiment, observation, self-report or any other appropriate method.

(b) Explain the evidence on which your study is based.

[6]

AO1=6

In this question part, candidates are expected to justify his or her decisions or evidence presented regarding the design made in answer to question part (a).

Two components may be presented here (full marks can be gained for just one):

- Knowledge of methodology.
- Knowledge of anxiety management techniques (e.g. Suinn).
- Knowledge of anxiety and sport performance in general such as zones of optimal functioning.