



PSYCHOLOGY

9773/03

Paper 3 Key Applications

May/June 2016

MARK SCHEME

Maximum Mark: 120

Published

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.

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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 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)	
Q18 This mark scheme applies to questions 3 & 4, 8 & 9, 13 & 14, 18 & 19, 23 & 24	
<p><u>Quality of description</u> and <u>depth of knowledge</u> is <u>impressive</u>. Description of <u>knowledge</u> (theories/studies) is <u>accurate, coherent and detailed</u>. Use of <u>terms</u> is <u>accurate</u> and use of psychological <u>terminology</u> is <u>comprehensive</u>. The <u>theories/studies</u> described are <u>wide-ranging</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>very good</u>. The answer is <u>competently structured</u> and <u>organised</u> (global structure introduced at start and followed throughout). Quality of <u>written communication</u> is <u>very good</u>.</p>	10–12
<p><u>Quality of description</u> and <u>depth of knowledge</u> is <u>very good</u>. Description of <u>knowledge</u> (theories/studies) is <u>mainly accurate, coherent and reasonably detailed</u>. Use of <u>terms</u> is <u>mainly accurate</u> and use of psychological <u>terminology</u> is <u>competent</u>. The <u>theories/studies</u> described cover a <u>reasonable range</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>good</u>. The answer has <u>some structure</u> and organisation. Quality of <u>written communication</u> is <u>good</u>.</p>	7–9
<p><u>Quality of description</u> and <u>depth of knowledge</u> is <u>competent</u>. Description of <u>knowledge</u> (theories/studies) is <u>often accurate, generally coherent but lacks detail</u>. Use of <u>terms</u> is <u>basic</u> and use of psychological <u>terminology</u> is <u>adequate</u>. The <u>theories/studies</u> described cover a <u>limited range</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>reasonable</u>. The answer is <u>lacking structure</u> or organisation. Quality of <u>written communication</u> is <u>adequate</u>.</p>	4–6
<p><u>Quality of description</u> and <u>depth of knowledge</u> is <u>poor</u>. Description of <u>knowledge</u> (theories/studies) is <u>mainly inaccurate, lacks coherence and lacks detail</u>. Use of <u>terms</u> and use of psychological <u>terminology</u> is <u>sparse or absent</u>. The <u>theories/studies</u> described cover a <u>very limited range</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>poor</u>. The answer is <u>unstructured</u> and lacks organisation. Quality of <u>written communication</u> is <u>poor</u>.</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

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.

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.

13–16

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.

10–12

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.

7–9

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<p><u>Evaluation</u> (positive and negative points) is <u>limited</u>. <u>Quality</u> and <u>depth of argument</u> (or comment) is <u>poor</u>. Selection and range of <u>arguments</u> is often <u>imbalanced</u> with <u>little or no organisation</u> into issues/debates, methods or approaches evident. <u>Sparse use</u> of appropriate supporting <u>examples</u> which are often <u>peripherally related</u> to the question. <u>Analysis</u> (key points and valid generalisations) is <u>sparse</u>. <u>Evaluation</u> is <u>lacking in detail</u> and quality of <u>written communication</u> is <u>good</u>. <u>Understanding</u> and usage of psychological concepts, issues, and approaches is <u>poor</u>.</p>	4–6
<p><u>Evaluation</u> (positive and negative points) is <u>basic</u>. <u>Quality</u> and <u>depth of argument</u> (or comment) is <u>weak</u>. Selection and range of arguments is <u>imbalanced</u> with little or <u>no organisation</u> into issues/debates, methods or approaches evident. <u>Sparse or no use</u> of appropriate supporting <u>examples</u> which are <u>peripherally related</u> to the question. <u>Analysis</u> (key points and valid generalisations) is <u>barely discernible</u>. <u>Evaluation</u> is <u>severely lacking in detail</u> and quality of <u>written communication</u> is <u>poor</u>. <u>Understanding</u> and usage of psychological concepts, issues, and approaches is <u>weak</u>.</p>	1–3
No or irrelevant answer.	0
Section C question part (a)	
This mark scheme applies to questions 5, 10, 15, 20, 25	
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><u>Suggestion</u> is <u>appropriate</u> to the question and based <u>explicitly</u> on psychological knowledge. <u>Description</u> of applied knowledge is <u>accurate, coherent and detailed</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>very good</u>.</p>	7–8
<p><u>Suggestion</u> is <u>appropriate</u> to the question and based on psychological knowledge. <u>Description</u> of applied knowledge is mainly <u>accurate, coherent and reasonably detailed</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>good</u>.</p>	5–6
<p><u>Suggestion</u> is <u>largely appropriate</u> to the question and based largely on psychological knowledge. <u>Description</u> of applied knowledge is <u>often accurate, generally coherent but lacks detail</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>reasonable</u>.</p>	3–4
<p><u>Suggestion</u> is <u>mainly inappropriate</u> to the question and vaguely based on psychological knowledge. <u>Description</u> of applied knowledge is mainly <u>inaccurate, lacks coherence and lacks detail</u>. <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>poor</u>.</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

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):

- Knowledge of methodology,
- Knowledge of appropriate topic area and/or key study.

<u>Quality of explanation and depth of argument is impressive.</u> <u>Description of knowledge is accurate, coherent and detailed.</u> Use of <u>terms</u> is <u>accurate</u> and use of <u>psychological terminology</u> is <u>comprehensive</u> . <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>very good</u> . The <u>issue</u> is <u>effectively explained</u> in relation to the topic area.	5–6
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<u>Quality of explanation and depth of argument is competent.</u> <u>Description of knowledge is mainly accurate, coherent and reasonably detailed.</u> Use of <u>terms</u> is <u>mainly accurate</u> and use of <u>psychological terminology</u> is <u>competent</u> . <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>good</u> . The <u>issue</u> is <u>adequately explained</u> in relation to the topic area.	3–4
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<u>Quality of explanation and depth of argument is poor.</u> <u>Description of knowledge is often accurate, generally coherent but lacks detail.</u> Use of <u>terms</u> is <u>basic</u> and use of <u>psychological terminology</u> is <u>adequate</u> . <u>Understanding</u> (such as elaboration, use of example, quality of description) is <u>poor</u> . The <u>issue</u> is <u>poorly explained</u> in relation to the topic area.	1–2
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No or irrelevant answer.	0
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Psychology and Abnormality

Section A

1 From the Brewer et al. study on impairment of olfactory identification:

- (a) What was the objective of the study and to what extent did the findings support the objective? [3]

Quoting the article:

Objective: Previous investigation has revealed stable olfactory identification deficits in neuroleptic-naive patients experiencing a first episode of psychosis, but it is unknown if these deficits predate illness onset.

Results: There was a significant impairment in olfactory identification ability in the ultra-high-risk group that later developed a schizophrenia spectrum disorder but not in any other group.

- 3 marks: appropriate and detailed description of both objective and findings.
 2 marks: appropriate and detailed description of objective or findings, but poor on the other OR basic description of both.
 1 mark: basic description of objective or findings.

- (b) Describe three ways participants were assessed for olfaction and cognition. [3]

Most likely: (but any other appropriate problem to be credited)

All subjects were assessed for olfaction and cognition with the following.

- Olfactory identification ability was measured with the University of Pennsylvania Smell Identification Test, a standardized, self-administered multiple-choice scratch-and-sniff test consisting of four booklets, each containing 10 items.
- Estimated premorbid IQ was assessed with the Australian-adjusted version of the National Adult Reading Test.
- Details of smoking history were also obtained (although not cognition it does appear in the article as such)
- Diagnosis of psychopathology and ratings of the ultra-high-risk subjects were made with the Structured Clinical Interview for DSM-IV, the Brief Psychiatric Rating Scale (BPRS), and the Scale for the Assessment of Negative Symptoms (SANS).

1 mark: for each different assessment.

- (c) The 'healthy comparison' participants were partially recruited through a newspaper advertisement. Give three disadvantages of recruiting participants in this way. [3]

Most likely: (but any other appropriate problem to be credited).

- The newspaper may only target a restricted geographical area;
- The newspaper may have to be bought and this may eliminate some participants;
- The advertisement may not be seen by potential participants;
- Only participants with 'volunteer' characteristics may respond to the advert.

1 mark: for each different disadvantage.

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2 (a) Describe the psychodynamic explanation for anxiety disorders. [3]

Most likely: Conflict between the id and the ego causes anxiety. The id is the source of selfish urges, which can cause anguish, embarrassment and stress to a person, so they are repressed by the ego into the unconscious mind by defence mechanisms. One defence mechanism is displacement, meaning that anxiety may be displaced onto something else. The classic case study is that of little Hans, who had a phobia of horses that was displaced from a fear of his father.

3 marks: for accurate and detailed description with understanding and clear psychological knowledge.

2 marks: for accurate description with some understanding.

1 mark: for vague description with little understanding.

(b) Give two weaknesses of the study by Freud on little Hans. [3]

Most likely (according to Freud):

Little Hans was not a normal child and so no generalisations can be made to others.

Research was done by “his father inflected with my prejudices” and so is devoid of any scientific worth. Any other appropriate evaluative acceptable.

3 marks: two distinct weaknesses which have understanding and evidence of psychological knowledge.

2 marks: two basic weaknesses or one weakness which has understanding and evidence of knowledge.

1 mark: one basic weakness.

(c) Contrast the psychodynamic explanation of anxiety disorders with the learning theory explanation of anxiety disorders. [3]

Quoting directly from the article:

Psychodynamic explanation above.

Learning theory is that fears and phobias can be learned. Prime example is the study by Watson and Raynor (1920), who classically conditioned little Albert.

3 marks: appropriate contrast with supporting example(s) and good understanding of psychodynamic and learning explanation.

2 marks: appropriate contrast possibly with supporting example(s) with limited understanding of psychodynamic and learning explanation.

1 mark: Description of psychodynamic and description of learning explanation.

1 mark: if a comparison is given.

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Section B

3 (a) Describe the key study by Silberg et al. on depression amongst adolescent girls. [12]

Abstract from the study:

Background: The possible causes of greater depression among adolescent girls were investigated by examining variation in the influence of genetic and environmental risk factors among 182 pre-pubertal female, 237 pre-pubertal male, 314 pubertal female, and 171 pubertal male twin pairs from the Virginia Twin Study of Adolescent Behavioral Development. **Objectives:** To compare the trajectory of depressive symptoms among boys and girls from childhood to adolescence; to analyze the role of genetic, shared, and unique environmental factors in depression among pre-pubertal and pubertal male and female twins; and to investigate a possible link between liability to depression and one salient index of the child's environment: past-year life events.

Methods: Child-reported depression was assessed using the Child and Adolescent Psychiatric Interview and ratings of past-year life events and pubertal status obtained by maternal questionnaire and interview, respectively.

Results: The impact of life events on depression was particularly evident in the adolescent girls. The results from model fitting indicate increased heritability for depression in this group, and its long-term consistency was mediated primarily by latent genetic factors. Model fitting also showed that at least part of the liability to depression and to life events can be linked to a common set of genes in the adolescent girls, and there is a notable developmental increase in the genetic variance for life events.

Conclusions: The greater heritability for depression in pubertal girls, its genetic mediation over time, and the increase in genetic variance for life events may be one possible explanation for the emergence of increased depression among pubertal girls and its persistence through adolescence.

(b) Evaluate the key study by Silberg et al. on depression amongst adolescent girls. [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 theory and research on dissociative disorders. [12]

Syllabus:

Theory:

- Types of dissociative disorders: Dissociative Identity Disorder. Depersonalisation. Dissociative Amnesia and Fugue.
- Characteristics of dissociative disorders (DSM IV).
- Explanations of dissociative disorders (e.g. exposure to trauma, stress).

Research: A case of multiple personality (Thigpen, H. and Cleckley, H., 1954). Family Etiology and Remission in a Case of Psychogenic Fugue (Venn, 1984).

Key study: Simeon, D., Gross, S., Guralnik, O., Stein, D. J., Schmeidler, J. and Hollander E. (1997) Feeling unreal: 30 cases of DSM-III-R depersonalization disorder. American Journal of Psychiatry, Aug 1997; 154:1107–1113.

Applications: Psychodynamic Psychotherapy. Hypnosis. Drug Therapy.

(b) Evaluate theory and research on dissociative disorders. [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.

Section C

5 There is often debate as to which treatment for mental disorder is best. There is a need for a study which compares treatments.

(a) Using your knowledge of psychology, design an experiment to investigate which treatment is most effective for a mental disorder of your choice. [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 is 'experiment' then this could be a laboratory or field experiment, and knowledge of IVs, DVs, controls and any other appropriate methodology should be evident in the answer.

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(b) Explain the evidence on which your study is based. [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 experimental design.
- Knowledge of treatments for mental disorder. The three listed in the syllabus are: Psychodynamic Psychotherapy. Hypnosis. Drug Therapy. If there is any other its relevance needs to be justified.

Psychology and Crime

Section A

6 From the study by Mann et al. on suspects, lies, and videotape:

(a) Describe how inter-rater reliability was applied in this study. [3]

Quote from the study:

Two observers independently coded the eight behaviours, and Pearson's correlations were conducted between the two sets of data from the two coders to assess similarities in judgement. Coding of most of the behaviors took place with a coding system utilized by us in previous studies. The coders were blind to the veracity (truth or lie) of the clips they scored. The two coders were merely instructed "to code the video footage" and were not informed about the hypotheses and nature of the video clips. Hence, they were not informed that the persons on the videotape were either lying or telling the truth. Coder1 coded all clips and Coder2 coded a random sample of 36 clips (including clips of each of the 16 suspects) for inter-rater agreement checking (i.e., 55% of the total number of clips). Ideally, both coders would have coded all clips. However, given the sensitivity of the video footage it was desirable that as few people outside the police as possible would be shown the tapes. We, therefore, decided to let the second coder code a sample of the clips first and perform coder reliability checks on this sample.

3 marks: for clear and concise description of inter-rater reliability in this study with full understanding.

2 marks: description of inter-rater reliability in this study with some understanding.

1 mark: for vague description of inter-rater reliability in this study.

NB: direct quoting of detail from abstract not needed and neither do answers need every detail for full marks.

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(b) How high was inter-rater reliability in this study? [3]

Quoting directly from the article:

The behaviors observed and the inter-rater correlations (measured with Pearson's correlations) were:

Gaze aversion: $r = .86$; Blinking: $r = .99$; Head movements: $r = .95$; Self-manipulations: $r = .99$; Illustrators: $r = .99$; Hand/finger movements: $r = .99$; Speech disturbances: $r = .97$; Deviations from the official English language $r = .55$. Pauses $r = 0.55$ The Pearson's correlations show evidence of a strong consistency between the two coders. Furthermore, as used by other t tests were used to test for average differences between the two coders to ensure that the average scores for the two coders did not differ. None of these t tests were significant.

3 marks: clear and accurate description of results with understanding.

2 marks: attempt at description of results with some understanding.

1 mark: description of results basic.

(c) Give one limitation of the way in which the video clips used were obtained and suggest how this limitation could be resolved. [3]

Any reasonable comment acceptable, for example:

- Different interviewers were used for different participants,
- Sometimes more than one interviewer was present,
- The total number of people present varied depending on number of interviewers, presence of attorney, appropriate adult.
- The truths that were selected were chosen so as to be comparable in nature to the lies.
- However, we acknowledge that we can never be sure that the clips we compared were comparable in ways other than veracity.

3 marks: appropriate weaknesses with elaboration and understanding.

2 marks: appropriate weaknesses with little or no elaboration and limited understanding.

1 mark: weakness with limited understanding.

7 (a) Describe the juror bias scale devised by Kassir. [3]

Quoting directly from the article:

Kassir and Wrightsman (1983) constructed a Juror Bias Scale to measure individual differences in pre-trial bias among jurors. The scale assesses both the jurors' pre-trial expectancies that the defendant is guilty, and their values regarding conviction and punishment.

It consists of 22 questions each answered on a 5 point scale: strongly agree through strongly disagree. It is scored using a key: some questions are defence biased (scored at face value), some are prosecution-biased (reversed scored) and some questions are irrelevant 'filler' questions. The total score is the sum of the two.

In mock juror evaluation studies, the scale reliably detected individuals who were 'prosecution biased' in that they were more ready to return a guilty verdict and held less stringent standards on reasonable doubt.

3 marks: for clear and concise description of juror bias scale with full understanding.

2 marks: description of juror bias scale with some understanding.

1 mark: for vague description of juror bias scale.

NB: direct quoting of detail from abstract not needed and neither do answers need every detail for full marks.

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(b) Give one weakness in the application of the juror bias scale. [3]

Any reasonable weaknesses acceptable, for example:

- The scale could be used in selection to identify those who might be unsuitable for the jury but, as Kassin and Wrightsman note, 'One obvious and perhaps insurmountable problem would be eliciting the judge's approval for handing out a written questionnaire'
- As this is a questionnaire answers could be socially desirable.

3 marks: appropriate weakness with elaboration and understanding.

2 marks: appropriate weakness with little or no elaboration and limited understanding.

1 mark: weakness with limited understanding.

(c) Suggest how the validity of the juror bias scale could be tested. [3]

Candidates should be able to say what validity is, suggest an appropriate way to test validity and relate this to the measure in question, the juror bias scale. Validity is concerned with whether an experiment or procedure for collecting data actually measures or tests what it purports or claims to measure or test. There are several types of validity:

- concurrent validity: a method for assessing validity by comparing it with some other measure that has been taken at the same time, that is occurring concurrently.
- construct validity: a method for assessing validity by seeing how it matches up with theoretical ideas about what it is supposed to be measuring.
- criterion validity: a method for assessing validity by comparing it with some other measure. If the other measure is assessed at roughly the same time as the original one, the type of criterion validity being applied is concurrent validity; if it is taken much later, it is predictive validity.
- face validity: the degree to which a test or measure appears on the surface as though it probably measures what it is supposed to.
- predictive validity: a method of assessing validity by seeing how well the test correlates with some other measure, which is assessed later, after the test has been taken.

3 marks: for definition, relevant test and related to the juror bias scale.

2 marks: for aspects above but less well done, or two of above aspects only.

1 mark: for one or two aspects of above that are basic, or basic overall sentence.

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Section B

8 (a) Describe the key study by Pinizzotto and Finkel on criminal personality profiling. [12]

Abstract from study:

In this work we examine outcome and process differences in criminal personality profiling among groups of profilers, detectives, psychologists, and students, using closed police cases—one sex offense and one homicide. Two major questions guide this research: (1) Are professional profilers more accurate than nonprofilers in generating personality profiles and correctly identifying offender features from crime scene details? and (2) Is the process that the profilers use qualitatively different from that of the nonprofilers? In the written profile task, the task that is most representative of what profilers actually do, profilers write richer, more detailed, and more valid profiles than the nonprofilers for both the sex offense case and homicide case. An analysis of correct responses concerning the known offender for the sex offense case revealed that the profilers scored significantly better than the other three groups in a variety of measures; similar results were not revealed for the homicide case. Profilers, however, do not appear to process this material in a way qualitatively different from any other group.

(b) Evaluate the key study by Pinizzotto and Finkel on criminal personality profiling. [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 the key study by Cann on cognitive skills programmes. [12]

This evaluation retrospectively matched female programme participants to comparison (female) offenders.

Selection was based on their match on five static variables predictive of reconviction in UK literature: 1. ethnicity (white, black, Asian, other); 2. offence type (violent, acquisitive, drugs, other); 3. sentence length; 4. year of discharge (1996, 1997, 1998, 1999, 2000) and 5. Offender Group Reconviction Scale revised. (OGRS2).

The participant sample comprised 180 offenders who started either ETS or R&R between 1996 and 2000. Included were offenders who began but did not complete a programme (8%, n=14). The comparison sample comprised 540 female offenders who had not participated in these programmes during their custodial sentence. All offenders were discharged from prison in England and Wales during 1996–2000 and spent at least one year in the community following a custodial sentence of six months or more.

Results:

- OGRS2 scores were calculated for all offenders. Comparison of these, within each risk group and overall, revealed no statistically significant differences.
- Independent t-tests revealed no significant differences between programme participants and comparisons on any other matching variable.
- Criminal conviction histories were obtained for all offenders from the Offenders Index and used to calculate one- and two-year reconviction rates. There were no statistically significant differences between those of programme participants and matched comparisons.
- The comparison group showed lower levels of reconviction overall and within all risk groups, except the high risk at one year, although no difference was statistically significant.

(b) Evaluate the key study by Cann on cognitive skills programmes. [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 According to the most recent British Crime Survey, people have a fear of crime. But what are they fearful of? You have been employed to design a questionnaire to find out.

(a) Using your knowledge of psychology, design a questionnaire to investigate fear of crime in your area. [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 specifies 'questionnaire' then a candidate is expected to show appropriate methodological knowledge about questionnaires. The questionnaire may be open or closed and if closed show use of a rating or Likert type scale. There should also be some evidence of how the questions will be analysed or scored.

(b) Explain the evidence on which your study is based. [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 questionnaire design.
- Knowledge of the British Crime Survey or studies on fear of crime.

Psychology and Environment

Section A

11 (a) Describe the results of the study by Little on cultural differences in personal space. [3]

Most likely (quote from article):

- There was considerable agreement among the groups, (United States American, Swedish, Greek, Southern Italian, and Scot) as to the ordering of the distances for the different transactions,
- but significant differences among nationalities as to the mean distance at which the various interactions were judged as taking place.
- The hypothesis that the Mediterranean cultures would have closer interaction distances as compared to North Europeans was confirmed at a high level of significance;
- the hypotheses that all interaction involving female surrogates would be seen as occurring at closer distances than those involving males was not supported.
- In general, female-female transactions of an intimate nature, or those involving unpleasant topics, will be judged as occurring at closer distances than male-male interaction.
- For interactions with authority figures or with superiors, on the other hand, the female-female distances will be judged as occurring at substantially greater than male-male.

3 marks: for accurate and detailed description of range of results.

2 marks: for accurate description of range of results.

1 mark: for vague description of limited range of results.

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- (b) Briefly describe the procedure used by Little in the study on cultural differences in personal space. [3]

Most likely (quote from article):

Each subject was tested individually. The dolls were of the same sex as the subject in every case. Instructions were to place the pair of dolls on a piece of 12 X 18-inch newsprint so that they "looked natural" for the specified transaction. Each item had been typed on a 3 X 5-inch card which was handed to the subject with the request that he read it aloud before arranging the dolls. He was informed that the sheet of paper represented a fairly large, quiet room and that there were no other people around. After the subject had placed the dolls to his satisfaction, he was asked how the conversation might go between the two individuals. The experimenter then drew a line around the base of each figure to mark position and angle of placement, and proceeded to the next item with a new piece of newsprint. Ten different random orders of the 19 experimental items were used; the example item and practice item were always administered first. The stimulus figures were apparently sufficiently abstract so that subjects had no difficulty "projecting" different roles onto them.

3 marks: for accurate and detailed description of most aspects of procedure.

2 marks: for accurate description of range of some aspects of procedure.

1 mark: for vague description of limited aspects of procedure.

- (c) Suggest three weaknesses with the methodology of this study. [3]

Most likely (other appropriate answers to receive credit):

- The use of dolls rather than real people
- The placement of dolls on a piece of 12x18 newsprint is unrealistic
- The measure may be inaccurate. Little believed that 1/12th inch for dolls will be about 1 inch for humans
- Dolls were same sex; no information on opposite sex dolls
- 16 social situations presented to participants might not be representative or apply beyond 1968.

1 mark: for each appropriate suggestion.

12 From the study by Evans et al. on crowding on the train:

- (a) Describe how physiological data were gathered by the researchers. [3]

From the study:

"Salivary cortisol was collected with a Salivette in the train station at the end of the participant's morning trip to work and at the same time of day on the following weekend at the respondent's home. Samples were placed under -20°C until assay. Cortisol was analysed by a time resolved immunoassay with fluorescence detection."

3 marks: for accurate and detailed description of most aspects of data collection.

2 marks: for accurate description of range of some aspects of data collection.

1 mark: for vague description of limited aspects of data collection.

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(b) Suggest why this type of data is said to be reliable. [3]

Most likely (other appropriate answers to receive credit):

According to the researchers, [salivary cortisol a] “neuroendocrine hormone [has] been shown to be reliable.”

But why? 1. Salivary cortisol is present in every person and is not under their subjective control. 2. It is the result of an autonomic physiological process. 3. Analysis of the sample is scientific and the result can be compared with every other individual tested.

3 marks: suggestion is appropriate and the candidate shows good understanding of reliability, term may be defined, and how it applies in this case.

2 marks: suggestion is appropriate with some understanding of reliability and how it applies in this case.

1 mark: for basic suggestion with limited understanding of reliability and how it applies in this case.

(c) Suggest why this type of data is said to be valid. [3]

Most likely (other appropriate answers to receive credit):

According to the researchers, [salivary cortisol a] “neuroendocrine hormone [has] been shown to be valid marker of stress.”

But why? 1. Measures of salivary cortisol have concurrent validity (e.g. the key study by Wang et al.). 2. Rather than take just one measure (that could be caused by many factors rather than the train journey) they take a measure at home when the participant is relaxed to get a baseline. 3. As this control measure is taken it reduces the possibility of confounding variables.

3 marks: suggestion is appropriate and the candidate shows good understanding of validity, term may be defined, and how it applies in this case.

2 marks: suggestion is appropriate with some understanding of validity and how it applies in this case.

1 mark: for basic suggestion with limited understanding of validity and how it applies in this case.

Section B

13 (a) Describe the key study by Aginsky et al. on strategies for learning a route in a driving simulator. [12]

Abstract of study:

The study of human navigation has long been dominated by the so-called stage theory, i.e. the notion that there are three distinct types of spatial knowledge (landmark, route, and survey knowledge), that are acquired sequentially during spatial learning and development. Based on the results of a route learning experiment in a driving simulator, an alternative to the stage theory is proposed. The authors suggest that subjects follow either a visually dominated or a spatially dominated strategy to solve a route-learning problem. In the visually dominated strategy, subjects base their wayfinding decisions on visually recognizing decision points along a route; the decision points are not integrated into any kind of survey representation. In the spatially dominated strategy, on the other hand, subjects represent the environment as a survey map right from the start; that is, they do not pass through a landmark or route stage. These strategies may be subserved by different cortical areas recently characterized in neurophysiological studies of animals solving maze problems.

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- (b) Evaluate the key study by Aginsky et al. on strategies for learning a route in a driving simulator.** [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.

- 14 (a) Describe theory and research on noise.** [12]

Syllabus:

Theory:

- Definitions of noise (annoyance factors and individual differences) e.g. Kryter
- Transportation noise and children (Bronzaft, 1975); (Evans and Maxwell, 1997)

Research:

- Negative effects of noise on aggression (Donnerstein and Wilson, 1976) and helping (Matthews and Cannon, field study 1975).
- Perceived control of noise (Sherrod and Downs, 1974).

Key Study:

North, A. C., Shilcock, A. and Hargreaves, D. J. (2003) The Effect of Musical Style on Restaurant Customers' Spending. *Environment and Behavior*, 35; 712.

Applications:

Positive benefits of music: on health (Chafin 2004) on performance (the Mozart effect) and on consumer behaviour (North et al. 2003)

- (b) Evaluate theory and research on noise.** [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 The UK rioters in August 2011 were described by a police chief as a “greedy crowd”. Many of the rioters wore ‘hoodies’ during the riots to deindividuate themselves and try to prevent themselves from being identified, but CCTV was used to identify them and many were later arrested.

- (a) Using your knowledge of psychology, design an observation to investigate the different ways in which people may deindividuate themselves. [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 requires an observation, then the type of observation (controlled, naturalistic, participant, non-participant) should be explicit along with details of how data will be recorded and what response categories will be used. Use of inter-rater reliability may also be mentioned.

- (b) Explain the evidence on which your suggestion is based. [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 observation.
- Knowledge of deindividuation and/or types of crowd.

Psychology and Health

Section A

16 From the study by McKinstry and Wang on ‘putting on the style’:

- (a) What were the three aims of the study? [3]**

Quoting from the study:

The aims of the present study were:

- 1 to determine whether patients think the way their doctor dresses is important and how they prefer their doctor to dress;
- 2 to try to establish if patients think the way their doctor dresses affects his or her effectiveness as a doctor (that is whether they think it makes them more likely to follow his advice) and
- 3 to establish if certain demographic groups or the patients of particular practices prefer different styles of dress.

1 mark for each aim.

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(b) Identify one variable that was controlled by the researchers and suggest why it was important to control this variable. [3]

Possible answers:

- An attempt was made to survey patients at different times of day.
- The interviewer visited each surgery on five occasions.
- Patients were asked to look at eight photographs (and so the same photographs were used each time). The intention was that patients' responses to the photographs should be as spontaneous as possible and so they were not told the reason for the study (what was said *could* have been standardised) but this also might not have been controlled.
- As far as possible the model posed in the same way for all the photographs.
- Relatively young (male and female) models were used as we felt older models dressed informally would seem a little unlikely to patients.
- The questionnaires were all administered by the same trained research assistant. It is important to control variables to ensure that cause and effect are more likely; to ensure that the procedure can be replicated; so that the study is less likely to be confounded.

3 marks: controlled variable clearly described and psychological reason for controlling variables clearly stated.

2 marks: controlled variable described but psychological reason for controlling variables lacking or vice versa.

1 mark: vague comments (guess) about controlled variable and/or reason for controlling variables.

(c) Suggest how one uncontrolled variable might affect the validity of the study. [3]

Most likely (other appropriate answers to receive credit):

- In the busier surgeries the interviewer was unable to see all the patients and if queues became too long patients were told they could leave. On average, just over 70% of patients attending the surgeries at these times were included in the survey.
- The photographs were in two sets, one of the same man dressed in five different styles and the other a woman dressed in three different styles. Fewer styles of women's dress were used as it was felt that there were fewer discernible female styles of dress in use in general practice.

3 marks: non-controlled variable clearly described and understanding of, and relationship to, validity evident.

2 marks: description of non-controlled variable or validity lacking.

1 mark: vague comments (guess) about non-controlled variable and/or validity.

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17 From the study by Lewin et al. on providing information:

- (a) Outline three of the findings of the study for the heart manual group. [3]**

From the study:

- Psychological adjustment improved in the Heart Manual group at one year
- Fewer members of the Heart Manual group re-admitted to hospital in first six months
- Heart Manual group had less contact with GPs in first year
- Heart Manual patients clinically anxious or depressed on discharge from hospital showed reductions in anxiety and depression compared to control group patients
- The Heart Manual was acceptable to almost all patients.

1 mark: for each correct identification up to max 3.

- (b) Suggest why it was an advantage that ‘the clinical staff were blind as to group membership’. [3]**

Most likely:

The term ‘single blind’ is where a participant does not know what condition of the study they are in and this eliminates many demand characteristics. A double blind is where neither the participants nor the experimenters know which condition a participant is in. This means that the experimenters cannot intentionally or unintentionally influence the behaviour of the participants. In this study the clinical staff did not know whether a patient had received the manual or not and so they could not give any preferential treatment or bias the outcome of the study.

3 marks: for accurate and detailed description of ‘blind’ and how it applies here.

2 marks: for accurate description of ‘blind’ and how it applies here.

1 mark: for vague description of ‘blind’ and how it applies here.

- (c) Describe why the use of a longitudinal method is an advantage in this study. [3]**

Most likely:

The study is longitudinal because patients were assessed at six months and at one year. This is an advantage because in relation to a heart attack a measure taken after one day or one week may not have given time for the advice in the heart manual to be followed and to have any long-term effect on the patient. The effectiveness can only be judged after a period of time and in clinical terms if there is no recurrence after one year then the treatment is judged to be effective.

3 marks: for accurate and detailed description of longitudinal and why this is an advantage.

2 marks: for accurate description of longitudinal and why this is an advantage.

1 mark: for vague description of longitudinal and why this is an advantage.

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Section B

18 (a) Describe theory and research on substances.

[12]

From syllabus:

Theory:

- Definitions: physical and psychological dependence, addiction.
- The nicotine regulation model; Freudian oral fixation.
- Why people smoke: reasons (e.g. Leventhal and Cleary, 1980).
- Why people continue to smoke: reasons (e.g. Tomkins, 1966).

Research: Optimistic bias in smokers. Schoenbaum (1997).

Key study: McVey, D. and Stapleton, J. (2000) Can anti-smoking television advertising affect smoking behaviour? Controlled trial of the Health Education Authority for England's anti-smoking TV campaign. Tobacco Control 2000, British Medical Journal, 9, 273–282.

Applications:

- Preventing smoking: community-wide strategies (McVey and Stapleton, 2000).
- Quitting smoking: nicotine replacement therapy. Behavioural strategies: rapid smoking; self management strategies.

(b) Evaluate theory and research on substances.

[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 the key study by Bridge et al. on relaxation and imagery in the treatment of breast cancer. [12]

Abstract of study:

Objective – To see whether stress could be alleviated in patients being treated for early breast cancer.

Design – Controlled randomised trial lasting six weeks.

Setting – Outpatient radiotherapy department in a teaching hospital.

Patients – One hundred fifty four women with breast cancer stage I or II after first session of six week course of radiotherapy, of whom 15 dropped out before end of study.

Intervention – Patients saw one of two researchers once a week for six weeks. Controls were encouraged to talk about themselves; relaxation group was taught concentration on individual muscle groups; relaxation and imagery group was also taught to imagine peaceful scene of own choice to enhance relaxation. Relaxation and relaxation plus imagery groups were given tape recording repeating instructions and told to practise at least 15 minutes a day.

Endpoint – Improvement of mood and of depression and anxiety on self-rating scales.

Measurements and main results – Initial scores for profile of mood states and Leeds general scales for depression and anxiety were the same in all groups. At six weeks total mood disturbance score was significantly less in the intervention groups, women in the combined intervention group being more relaxed than those receiving relaxation training only; mood in the control group was worse. Women aged 55 and over benefited most. There was no difference in Leeds scores among the groups.

Conclusions – Patients with early breast cancer benefit from relaxation.

(b) Evaluate the key study by Bridge et al. on relaxation and imagery in the treatment of breast cancer. [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 Imagine that for your psychology coursework you have studied non-adherence to medical requests at your local health centre. Rather than asking people questions, you decide to use an objective measure giving quantitative data.

(a) Using your knowledge of psychology, design a study to measure non-adherence to medical requests. [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 is 'design a study' then this could be a laboratory or field experiment, self-report (questionnaire or interview) or an observation. Methodology specific to each method should be explicit.

(b) Explain the evidence on which your study is based. [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 non-adherence to medical requests.

Psychology and Sport

Section A

21 (a) Outline Zajonc's study of social facilitation in animals. [3]

Most likely:

Zajonc tested his theory (that the mere presence of other animals caused social facilitation or inhibition) using cockroaches (Zajonc, Heingartner, and Herman 1969). Cockroaches have a natural tendency to run from the light to darker areas. In this experiment, Zajonc set up two mazes, one simple and one complex. In both mazes, a light was shown on the cockroach at one end of the maze, which had to get to the darkened box at the end of the maze. The two mazes were both tested with two different conditions. In one condition, the roach was in the maze alone with no observers. In the other condition, there were other roaches observing from audience boxes along the maze. In the simple maze condition, cockroaches found the darkened box faster when there were other roaches observing. In the complex maze condition, however, the cockroaches completed the task slower when other roaches were observing (Zajonc et al., 1969).

3 marks: for accurate and detailed description of study with clear understanding.

2 marks: for accurate description of study with some understanding.

1 mark: for vague description of study with little understanding.

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(b) Briefly discuss the extent to which animal studies can be generalised to humans. [3]

Discussion involves a debate (plus point and minus point).

- the mere presence hypothesis can apply to both animals and humans;
- social facilitation is a social behaviour and animals have social behaviour in addition to humans.
- animals are 'simple' and complex behaviours can easily be isolated.
- However, behaviour of animals more biologically determined; humans more learning and cultural effects;
- humans can find respite from crowd, animals cannot
- humans more capable of adaptation and adjustment

3 marks: Discussion is appropriate, shows good understanding and relevant psychological knowledge.

2 marks: Discussion appropriate but basic and lacking detail. Some understanding.

1 mark: Discussion is basic with little elaboration or understanding.

(c) Give one weakness of Zajonc's theory of social facilitation. [3]

Any appropriate answer to receive credit but most likely is via alternative theory:

- Cottrell (1968) proposes the evaluation apprehension theory. It is suggested that it is not the mere presence of others, but the apprehension created when being evaluated by others.
- Baron (1986) proposes the distraction-conflict theory. Here it is suggested that we can only process a limited amount of information at once. If a task/activity is simple, it needs little attention and we can 'process' an audience too. However, if a task/activity is complex and we process the audience we are overloaded and performance declines.

3 marks: Weakness is appropriate, shows good understanding and relevant psychological knowledge.

2 marks: Weakness appropriate but basic and lacking detail. Some understanding.

1 mark: Weakness is basic with little elaboration or understanding.

22 From the study by Davis and Cox on direction of anxiety in Hanin's zone of functioning:

(a) What were the two main hypotheses that were tested? [3]

Quoting directly from the article:

1. Swimming performance scores associated with somatic and cognitive anxiety scores that fall within a participant's IZOF will be significantly better than performance scores that fall out of a participant's IZOF.
2. Directionality scores associated with somatic and cognitive anxiety scores that fall within a participant's IZOF will be significantly more facilitative than directionality scores that fall outside of a participant's IZOF.

While not central to the purposes of the investigation, two additional hypotheses were tested (and these hypotheses should receive no credit) a. that swimming performance scores (and b. directionality scores) that fall above and below a participant's IZOF will be equal.

3 marks: appropriate and detailed description of both hypotheses.

2 marks: appropriate and detailed description of one hypothesis, poor on the other OR basic description of both.

1 mark: basic description of one hypothesis.

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(b) Describe the zone of optimal functioning model.

[3]

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

Now updated to the individual zones of optimal functioning (IZOF) model, performance is successful when pre-competition anxiety is within or near the individually optimal zone. When anxiety falls outside the optimal zone, performance deteriorates.

People have different levels of anxiety and arousal that are unique in making them perform at their best. Some people perform their best with low anxiety, some with a medium amount and others with a high amount. The amount of anxiety/arousal that an individual requires to perform their best is based on individual characteristics.

This means that skilled athletes are aware of, and are able to accurately recall and anticipate, their pre-competition anxiety. To say “the harder you try, the better you’ll do” is wrong. Too much activation or arousal can lead to feelings of agitation and tension and a shift of attention from the activity at hand to oneself or others. Of course, too little activation can lead to feelings of apathy and result in too little focus on the details necessary to perform.

3 marks: for accurate and detailed description of theory with clear understanding.

2 marks: for accurate description of theory with some understanding.

1 mark: for vague description of theory with little understanding.

(c) Suggest three reasons why it is difficult to generalise from the restricted sample of participants in this study.

[3]

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

The volunteer participants in this study were 21 male members of a racially diverse swim team from a large, suburban high school. Participants were 14- to 18-year-olds ranging in skill level from beginner to state qualifier. The research was pre-approved by the campus human subjects Institutional Review Board. Generalising is problematic because of the restricted sample. The participants

- were all swimmers (and so other sports not tested);
- were all male;
- were all aged 14-18;
- were all from the same suburban high school
- CDSII is a questionnaire that gathers quantitative data.

1 mark: for each appropriate feature up to max 3.

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Section B

23 (a) Describe theory and research on sport aggression. [12]

From syllabus:

Theory:

- Definitions of aggression. Hostile and instrumental aggression.
- Assertiveness (e.g. Silva, 1980). Situational factors in aggression (e.g. Cox, 1994).
- Theories of sport aggression: Instinct/psychoanalytic (Freud, 1950), frustration aggression (e.g. Berkowitz and LePage, 1967). Social Learning Theory (Bandura, 1973).

Research: Reducing aggression in sports: catharsis and learning theory (e.g. Wann et al., 1999).

Key study: Moore, S. C., Shepherd, J. P., Eden, S. and Sivarajasingam, V. (2007) The effect of rugby match outcome on spectator aggression and intention to drink alcohol. *Criminal Behaviour and Mental Health*, 17:118–127 (2007).

Applications: Aggression in spectators (Moore et al., 2007).

(b) Evaluate theory and research on sport aggression. [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.

24 (a) Describe theory and research on sport personality. [12]

From syllabus:

Theory:

Personality theories:

- Trait theories: Eysenck (1975), Cattell (1965).
- Five factor model (Costa and McCrae, 1985).

Research:

Measurement of Personality:

- 16pf (Cattell, 1967).
- NEO-PI (Costa and McCrae, 1985).
- EPQ (Eysenck, 1986).

Key study: Kajtna, T., Tusak, M., Baric, R. and Burnik, S. (2004) Personality in high risk sports athletes. *Kinesiology*, 36(1) 24–34.

Applications: Sensation-seeking and sport: Zuckerman (1978), Kajtna et al. (2004).

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(b) Evaluate theory and research on sport personality. [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.

Section C

25 The Coach Effectiveness Training (CET) programme designed by Smith et al. has been taught to more than 18 000 coaches in the US and Canada. An estimated 1.5 million children have benefited from it.

(a) Using your knowledge of psychology, design a study to investigate whether the Coach Effectiveness Training programme really is effective. [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 is 'design a study' then this could be a laboratory or field experiment, self-report (questionnaire or interview) or an observation. Methodology specific to each method should be explicit.

(b) Explain the evidence on which your study is based. [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 Coach Effectiveness Training programme.