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A-LEVEL

# Psychology A

PSYA4R: Psychopathology, Psychology in Action and Research Methods  
Mark scheme

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2180  
June 2015

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Version 1.1: Final Mark Scheme

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Mark schemes are prepared by the Lead Assessment Writer and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all associates participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the students' responses to questions and that every associate understands and applies it in the same correct way. As preparation for standardisation each associate analyses a number of students' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, associates encounter unusual answers which have not been raised they are required to refer these to the Lead Assessment Writer.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of students' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this Mark Scheme are available from [aqa.org.uk](http://aqa.org.uk)

## PSYA4 RM Assessor

## Glossary of annotations summer 2015

Stamp	Usage for PSYA4
	Correct
	Text box for comment to be inserted
	A01
	A02 / 3
	Use to show blank page / crossed through material
	Meaning unclear
	Engagement
	Effective evaluation
	Attempted evaluation
	Irrelevant
	Incorrect
	Repetition
	Benefit of the doubt
	Application
	Not in use
	Not in use
	Not in use
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	Not in use

## Section A – Psychopathology

### Schizophrenia

**01** Outline **one** issue relating to the classification **and/or** diagnosis of schizophrenia.

**[4 marks]**

#### AO1 = 4 marks

AO1 credit is awarded for a description of one issue concerned with the classification and/or diagnosis of schizophrenia, most of which will be related in some way to reliability and validity. Some issues are specifically relevant to schizophrenia, such as those associated with the range of symptoms and the subtypes of schizophrenia. Other issues surrounding the classification and/or diagnosis of mental disorders in general can receive credit as long as they are made relevant to schizophrenia.

Possible issues include:

- the reliability of schizophrenic diagnoses by the major classification systems (note that students may refer to either ICD, DSM IV or DSM V)
- the lack of homogeneity in the symptoms of schizophrenia
- symptom overlap and the inclusion of mixed disorders (such as schizo-affective disorder) in classification systems
- comorbidity, e.g. with depression
- reliability of diagnosis between different clinicians
- problems with the diagnosis such as labelling
- culture and gender differences in symptom presentation.
- Lack of a single unified syndrome

Research can be credited provided that it is used explicitly to elaborate the issue outlined. Examiners should be mindful of possible overlaps between issues. Where issues are clearly linked together they should be treated as one.

Students who simply offer lists of signs and symptoms of schizophrenia or describe the classification systems are not addressing issues surrounding diagnosis and/or classification. Such material cannot earn marks.

#### AO1 4 marks knowledge and understanding

<p><b>4 marks Sound</b>            Knowledge and understanding are accurate and well detailed.            Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>            Knowledge and understanding are generally accurate and reasonably detailed.            Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>            Knowledge and understanding are basic/relatively superficial.            Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>            Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.            Lacks organisation and structure.</p>
<p><b>0 marks</b> no creditworthy material.</p>

**02** Outline and evaluate **one or more** biological explanations for schizophrenia.

**[4 marks + 16 marks]**

Students may present one or more explanations, and examiners should be sensitive to depth/breadth trade-offs

**AO1 = 4 marks**

AO1 credit is awarded for an outline of biological explanations for schizophrenia. There are a range of possible explanations:

- genetics – there is considerable evidence for a genetic influence in schizophrenia (given the difficulty of describing genetic explanations in detail, AO1 credit can be given for straight descriptions of twin, family and adoptive studies which outline the genetic explanation of schizophrenia.)
- biochemistry/neurotransmitters – the DA model. Apart from this neurotransmitters such as serotonin and glutamate have been implicated in schizophrenia
- neuroanatomy – studies show structural abnormalities in some patients with schizophrenia, such as enlarged ventricles and/or decreased size of temporal lobe and whole brain

Other explanations such as season of birth, viral influences and birth complications may receive credit if the explanation is clearly linked to biological/neurological factors.

**AO1 4 marks knowledge and understanding**

<b>4 marks Sound</b> Knowledge and understanding are accurate and well detailed. Organisation and structure of the answer are coherent
<b>3 marks Reasonable</b> Knowledge and understanding are generally accurate and reasonably detailed. Organisation and structure of the answer are reasonably coherent
<b>2 marks Basic</b> Knowledge and understanding are basic/relatively superficial Organisation and structure of the answer are basic
<b>1 mark Rudimentary</b> Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate Lacks organisation and structure
<b>0 marks</b> no creditworthy material

**AO2/3 = 16 marks Evaluation of one or more biological explanations**

AO2/AO3 credit is awarded for an evaluation of the explanation(s) outlined or identified. Evaluation will depend on the explanation offered, but is likely to include supporting evidence and methodological critique of that evidence.

Note that methodological evaluation of research studies is only creditworthy if the implications for the explanation are made explicit.

Likely AO2/3 material includes:

- Genetics – quality of evidence, difficulties in separating environmental and genetic influences in family history and twin studies, sample sizes in twin studies, changes in diagnostic criteria for schizophrenia and zygosity. Where studies have been credited as AO1 outline of the genetics explanations they cannot also be credited as AO2/AO3.

- Biochemistry – difficulties in establishing cause and effect, supporting evidence from post mortem/scanning/drug studies and animal studies.
- Neuroanatomy – difficulties in establishing cause and effect, side effects of drugs, supporting evidence from post mortem/scanning studies.

Comparison with psy explanations may be used for AO2/3 credit but must be explicitly linked to bio explanations in a sustained manner if it is to be credited

Undeveloped generic evaluations (eg more scientific/supports nature side of nature nurture hypothesis/ deterministic /reductionist) should receive rudimentary credit.

### AO2/3 16 Marks Evaluation

<p><b>16-13 marks Effective</b>  Evaluation demonstrates sound analysis, understanding and interpretation.  The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>12-9 marks Reasonable</b>  Evaluation demonstrates reasonable analysis and understanding.  The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.  Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.</p>
<p><b>8-5 marks Basic</b>  Evaluation demonstrates basic, superficial understanding.  The answer is sometimes focused and shows some evidence of elaboration.  Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive</p>
<p><b>4-1 marks Rudimentary</b>  Evaluation is rudimentary, demonstrating a very limited understanding.  The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.  Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b>  No creditworthy material is presented.</p>

## Depression

**03** Outline **one** issue relating to the classification **and/or** diagnosis of depression. **[4 marks]**

### AO1 = 4 marks

For AO1 credit, students need to identify one issue relating to the classification and/or diagnosis of depression. These may include:

- the reliability of diagnosis of depression by ICD and DSM systems
- the reliability of the diagnosis between different clinicians
- the value of accurate diagnosis in accessing support and treatment
- problems associated with the diagnosis such as labelling
- the issue of comorbidity with other conditions such as schizophrenia and OCD
- culture and gender differences in symptom presentation.
- No single unified syndrome which covers all forms of depression.

Research can be credited provided that it is used explicitly to elaborate the issue outlined.

Examiners should be mindful of possible overlaps between issues. Where issues are clearly linked together they should be treated as one.

Students who simply offer lists of signs and symptoms of depression or describe the classification systems are not addressing issues surrounding diagnosis and/or classification. Such material cannot earn marks.

Note: Depression is classified as an affective (mood) disorder. Both DSM and ICD systems distinguish major depressive disorder (MDD, unipolar disorder) from bipolar disorder. These are creditworthy either individually or if used together to illustrate one issue in classification and diagnosis.

### AO1 4 marks knowledge and understanding

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial.          Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.          Lacks organisation and structure.</p>
<p><b>0 marks</b>          no creditworthy material.</p>

**04** Outline and evaluate **one or more** biological therapies for depression.

**[4 marks + 16 marks]**

Students may present one or more biological therapies, and examiners should be sensitive to depth/breadth trade-offs.

**AO1 = 4 marks**

AO1 material for this question consists of an outline of one or more biological therapies for depression. The most likely therapies to be outlined are drug therapy and ECT. The main groups used in the treatment of depression are monoamine oxidase inhibitors (MAOIs), tricyclic antidepressants, and selective serotonin reuptake inhibitors (SSRIs).

Students may present, for example, an overview of appropriate drugs as their therapy or may focus on a single drug.

Note: simply listing biological therapies up to 2 marks maximum.

**AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial          Organisation and structure of the answer are basic</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate          Lacks organisation and structure</p>
<p><b>0 marks</b> no creditworthy material</p>

**AO2/3 = 16 marks**

Evaluation will depend to some extent on the therapies outlined, but is likely to focus on issues of appropriateness and/or effectiveness. Better answers are likely to refer to the findings of outcome studies demonstrating effectiveness, and issues around measuring effectiveness.

Issues of appropriateness could include:

- compliance
- factors affecting the choice of treatment, such as financial constraints
- ethical issues such as side-effects of drugs and ECT (memory loss), informed consent, dehumanising effects of some treatments (especially ECT)

Issues of effectiveness could include:

- findings of studies comparing drug therapy with psychological therapies
- use of ECT for severe drug-resistant depression
- problems of measuring effectiveness
- placebo effects with drug therapy
- wide range of symptoms, with some responsive to therapy and others not
- combined therapies are often more effective than single therapies



Reference to psychological therapies may gain AO2/3 credit but only where it is used to provide a sustained commentary on biological therapies.

Undeveloped generic evaluations (eg more scientific/supports nature side of nature nurture hypothesis/ deterministic /reductionist) should receive rudimentary credit.

### AO2/3 16 Marks Evaluation

<p><b>16-13 marks Effective</b>            Evaluation demonstrates sound analysis, understanding and interpretation.            The answer is well focused and shows coherent elaboration and/or a clear line of argument.            Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>12-9 marks Reasonable</b>            Evaluation demonstrates reasonable analysis and understanding.            The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.            Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.</p>
<p><b>8-5 marks Basic</b>            Evaluation demonstrates basic, superficial understanding.            The answer is sometimes focused and shows some evidence of elaboration.            Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive</p>
<p><b>4-1 marks Rudimentary</b>            Evaluation is rudimentary, demonstrating a very limited understanding.            The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.            Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b>            No creditworthy material is presented.</p>

### Phobic Disorders

**05** Outline the clinical characteristics of phobic disorders.

**[4 marks]**

#### AO1 = 4 marks

For this question part AO1 marks are awarded for an outline of the clinical characteristics of phobias, including:

- A persistent fear of particular objects or situations
- Irrational fear of particular objects or situations
- This persistent fear disrupts daily life

- Leads to avoidance behaviour of the object /situation concerned
- Exposure to the phobic stimulus causes an anxiety response
- Subcategories include - specific phobias, social phobia and agoraphobia.

Answers that focus on one subcategory of phobic disorder may receive marks across the scale if sufficiently detailed.

A sufficiently detailed bulleted list of characteristics may receive marks across the scale. To receive credit above Basic answers must refer to a persistent and irrational fear of particular objects or situations.

#### **AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial.          Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.          Lacks organisation and structure.</p>
<p><b>0 marks</b>          no creditworthy material.</p>

**06** Outline and evaluate **one or more** psychological therapies for phobic disorders.

**[4 marks + 16 marks]**

Students may present one or more therapies, and examiners should be sensitive to depth/breadth trade-offs.

#### **AO1 = 4 marks**

AO1 marks will be awarded for an outline of one or more psychological therapies explicitly related to phobic disorders. Likely material includes:

- Systematic desensitisation, based on counter-conditioning: involves relaxation techniques, establishment of a hierarchy of fears, and graded exposure: may be carried out in vivo or in vitro
- Exposure therapy (flooding) and modelling – exposure therapy is based on the assumption that high levels of anxiety in the presence of the phobic object are impossible to maintain for very long and must extinguish; modelling is assumed to operate via vicarious reinforcement of approach responses to the phobic object or situation
- Cognitive-behavioural therapies – RET involves challenging irrational beliefs through confrontation and dispute; Meichenbaum's SIT involves the use of positive self-statements to eradicate faulty internal dialogue; credit other CBT approaches relevant to phobias
- Psychoanalytic therapy focus on dealing with childhood causes of inner conflict

Therapies which are not explicitly shaped to phobic disorders (for example a straightforward description of therapy) cannot move out of rudimentary.

### AO1 4 marks knowledge and understanding

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial          Organisation and structure of the answer are basic</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate          Lacks organisation and structure</p>
<p><b>0 marks</b>          no creditworthy material</p>

### AO2/3 = 16 marks

AO2/3 credit is awarded for an evaluation of one or more psychological therapies. Students are likely to refer to the findings of outcome studies demonstrating effectiveness, and issues around measuring effectiveness. Comparison with biological therapies (e.g. drugs) would be an effective route to AO2/3 credit, but must be explicitly linked to treatment for phobias.

Issues of appropriateness could include:

- requirement for motivation and commitment on the part of the client
- factors affecting the choice of psychological therapy, such as financial constraints, availability of therapies
- readiness to engage with the therapist
- ethical issues relating to therapies

Issues of effectiveness could include:

- reference to outcome studies
- problems of measuring effectiveness
- systematic desensitisation/exposure therapies have shown success rates of around 75-80% (McGrath et al 1990; Marks, 1990), but dropout rates are high. In vivo procedures tend to be more effective than covert desensitisation
- CBT – produces long term improvement and is more effective than relaxation and drugs for agoraphobia (Beck, 1994). Threat devaluation is more effective for agoraphobia and social phobias than specific phobias
- psychoanalytic therapy is time-consuming and there is limited evidence of effectiveness. More recent studies (Knijnik et al, 2004) have suggested some improvements over placebo

**AO2/3 16 Marks Evaluation**

<p><b>16-13 marks Effective</b>  Evaluation demonstrates sound analysis, understanding and interpretation.  The answer is well focused and shows coherent elaboration and/or a clear line of argument.  Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>12-9 marks Reasonable</b>  Evaluation demonstrates reasonable analysis and understanding.  The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident.  Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.</p>
<p><b>8-5 marks Basic</b>  Evaluation demonstrates basic, superficial understanding.  The answer is sometimes focused and shows some evidence of elaboration.  Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive</p>
<p><b>4-1 marks Rudimentary</b>  Evaluation is rudimentary, demonstrating a very limited understanding.  The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.  Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b>  No creditworthy material is presented.</p>

**Obsessive compulsive disorder**

**07** Outline the clinical characteristics of obsessive compulsive disorder.

**[4 marks]**

For this question AO1 marks are awarded for an outline of the clinical characteristics of OCD. The main diagnostic criteria include:

- obsessions (recurrent and persistent thoughts, impulses or images) and/or compulsions (repetitive behaviours that the person feels driven to perform) on most days for a period of two weeks or more
- obsessions and/or compulsions are repetitive, unpleasant, cause anxiety and interfere with daily life.

A sufficiently detailed bulleted list of characteristics may receive marks across the scale. For 4 marks students should refer to both obsessions and compulsions.

**AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>  Knowledge and understanding are accurate and well detailed.  Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>  Knowledge and understanding are generally accurate and reasonably detailed.  Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>  Knowledge and understanding are basic/relatively superficial.  Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>  Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.  Lacks organisation and structure.</p>
<p><b>0 marks</b>  no creditworthy material.</p>

**08** Outline and evaluate **one or more** psychological explanations for obsessive compulsive disorder.

**[4 marks + 16 marks]**

**AO1 = 4 marks**

AO1 marks will be awarded for an outline of one or more psychological explanations for OCD. There is a range of such explanations, such as:

- psychodynamic - Freud's idea of fixation at the anal stage
- behavioural - conditioned associations for instance between compulsive checking and reduction of anxiety; social learning theory, imitation and vicarious reinforcement
- cognitive - irrational thoughts become extreme and disabling.

Students may present one or more explanations, and examiners should be sensitive to depth/breadth trade-offs.

**AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>  Knowledge and understanding are accurate and well detailed.  Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>  Knowledge and understanding are generally accurate and reasonably detailed.  Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>  Knowledge and understanding are basic/relatively superficial.  Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>  Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.  Lacks organisation and structure.</p>
<p><b>0 marks</b>  no creditworthy material.</p>

**AO2/3 = 16 marks**

AO2/3 will be awarded for the evaluation of the explanations outlined or identified. Evaluation could take various forms:

- the extent to which explanations are supported by research evidence, including the effectiveness of therapies based on the explanation.
- the limitations of explanations for instance, the cognitive explanation maybe more of a description of the disorder rather than an explanation of its origins
- general commentary on, for instance, problems in actually testing explanations

Comparison with alternative explanations, eg other psychological explanations, biological, diathesis stress approach must form part of sustained commentary on the evaluation.

**AO2/3 16 Marks Evaluation**

<p><b>16-13 marks Effective</b> Evaluation demonstrates sound analysis, understanding and interpretation. The answer is well focused and shows coherent elaboration and/or a clear line of argument. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>12-9 marks Reasonable</b> Evaluation demonstrates reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration and/or a line of argument is evident. Most ideas appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling only occasionally compromise meaning.</p>
<p><b>8-5 marks Basic</b> Evaluation demonstrates basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.</p>
<p><b>4-1 marks Rudimentary</b> Evaluation is rudimentary, demonstrating a very limited understanding. The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant. Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure, often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b> No creditworthy material is presented.</p>

## Section B – Psychology in Action

### Media Psychology

09 Discuss **one or more** explanations of how the media influences anti-social behaviour.

**[4 marks + 6 marks]**

#### AO1 = 4 marks

AO1 credit is given for an outline of one or more explanations of media influences on anti-social behaviour. The most likely explanations include:

- observational learning, imitation of models in the media (social learning theory)
- viewing an aggressive model creates memories of the behaviour which are stored as scripts/schemas. Situational cues then trigger these aggressive schema (cognitive priming)
- frequent viewing of aggressive behaviour in the media reduces the sensitivity of the observer to aggression in the real world (desensitisation).

Explanation without reference to both media and antisocial behaviour Max 2 marks.

Reference to any form of media is appropriate.

#### AO1 4 marks knowledge and understanding

<p><b>4 marks Sound</b>            Knowledge and understanding are accurate and well detailed.            Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>            Knowledge and understanding are generally accurate and reasonably detailed.            Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>            Knowledge and understanding are basic/relatively superficial.            Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>            Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.            Lacks organisation and structure.</p>
<p><b>0 marks</b>            No creditworthy material.</p>

**AO2/3 = 6 marks**

Commentary might include:

- Research evidence. This must be linked to an identifiable explanation to receive credit to receive credit.
- Research findings; these are often inconsistent, and reference to conflicting evidence would be a highly effective route to AO2/AO3 credit.
- Methodological evaluation of studies. This may only earn credit if the implications for the explanation are explicit, eg in terms of reliability and validity of findings. This is particularly important in relation to Bandura's Bobo doll studies; note that reference to these studies must be in the context of media effects on antisocial behaviour, and not simply SLT as such.
- Comparison of explanations.

Reference to influences of the media on pro-social behaviour may only earn credit if explicitly embedded in the discussion of anti-social behaviour.

**AO2/AO3 mark bands**

<p><b>6 marks Effective</b>          Commentary demonstrates sound analysis, understanding and interpretation. The answer is well focused and shows coherent elaboration and/or a clear line or argument.          Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>5-4 marks Reasonable</b>          Commentary demonstrates reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration. Most ideas are appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling occasionally compromise meaning.</p>
<p><b>3-2 marks Basic</b>          Commentary demonstrates basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.</p>
<p><b>1 mark Rudimentary</b>          Commentary is rudimentary demonstrating a very limited understanding. The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant. Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b>          No creditworthy material is presented.</p>



**10** Using your knowledge of the persuasiveness of TV advertising, what advice would you give to the company so that it could make the TV advertising campaign as effective as possible? Refer to psychological research to justify your advice.

**[10 marks]**

**AO2/3 (Application) = 10 marks**

Students are required to apply their knowledge of the persuasiveness of television advertising to the scenario. The two components of the question are firstly, advice to the company, secondly, to justify their advice with reference to psychological research. There is a wide range of material that would be creditworthy in this answer, but students are likely to draw on models mentioned in the Specification:

- Hovland–Yale model – features could include: reference to communication processes, attention, comprehension, source (celebrity/personal endorsement), message (one or two sided arguments and interaction with audience), audience, media
- Elaboration Likelihood model – central route (arguments about the specific features of the phone - these may be designed to appeal to older users) and peripheral routes (preference for images, imaginative contexts and emotional rather than fact-based arguments, eg showing people using the accessory with friends).

Credit other relevant material eg hard sell, soft sell.

The term ‘research’ includes both theory and studies, and findings of studies could be used effectively to illustrate the use of TV in advertising campaigns.

Answers that offer relevant advice but without any reference to psychological research (models/studies) maximum 5 marks.

Answers that describe psychological research (models/studies) but do not engage with the scenario can receive a maximum of 4 marks.

**AO2/AO3 mark bands**

<p><b>9-10 marks Effective</b>  Explanation /application demonstrate sound analysis and understanding.  Application of knowledge is well focused and effective.  Ideas are well structured and expressed clearly and fluently.</p>
<p><b>6-8 marks Reasonable</b>  Explanation /application demonstrate reasonable analysis and understanding.  Application of knowledge is generally focused.  Most ideas are appropriately structured and expressed clearly.</p>
<p><b>3-5 marks Basic</b>  Explanation /application demonstrate basic analysis and superficial understanding.  Application is sometimes focused.  Expression of ideas lacks clarity.</p>
<p><b>1-2 marks Rudimentary</b>  Explanation /application are rudimentary demonstrating very limited understanding.  The answer is weak, muddled and may be mainly largely irrelevant.  Deficiency in expression of ideas results in confusion and ambiguity.</p>
<p><b>0 marks</b>  No creditworthy material is presented.</p>

**11** Outline the findings of **one or more** studies of intense fandom.

**[4 marks]**

**AO1 = 4 marks**

In the Specification ‘intense fandom’ includes celebrity worship and celebrity stalking. There are a variety of studies from these areas, eg:

Maltby et al (2001) – links between celebrity worship and psychological wellbeing. Maltby used CAS (celebrity attitude scale) and GHQ (general health questionnaire) and found that scores on the intense personal and borderline pathological sub-scales correlated positively with anxiety and depression scores.

Maltby (2004) found in a sample of 372 people aged 18 – 47 less than 2% were considered to be borderline pathological on the CAS.

James (2008) found over two thirds of stalkers who attempted to attack British royals were mentally ill, 48% showing psychotic behaviour.

McCutcheon (2006) found that college students who reported insecure attachments as children were more likely to condone celebrity stalking.

Mullen et al (1999) – found different motives in five types of stalkers

Note that only findings of the studies can be credited.

**AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial.          Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.          Lacks organisation and structure.</p>
<p><b>0 marks</b>          no creditworthy material.</p>

## The Psychology of Addictive Behaviour

12 Discuss the learning approach to explaining initiation of gambling.

[4 marks + 6 marks]

### AO1 = 4 marks

AO1 marks will be awarded for an outline of the learning approach to explaining the initiation of gambling. Key features of the learning approach are:

- Operant conditioning – the shaping of behaviour by rewards and punishments; partial schedules of reinforcement can be applied to gambling
- Classical conditioning – associations between reflexive behaviours such as excitement and arousal and environmental stimuli. Can explain initiation of gambling behaviour as an association between the context and the excitement of gambling
- Social learning – development of behaviours through observation and imitation, based on vicarious reinforcement. Can explain the initiation of gambling behaviour through media, parental, and peer influences.

Examiners should be sensitive to depth/breadth trade-offs; for instance detailed application of operant conditioning to the initiation of gambling could receive maximum marks.

Generic descriptions of a mode of learning which are not applied to the initiation of gambling can receive rudimentary credit.

### AO1 4 marks knowledge and understanding

<p><b>4 marks Sound</b> Knowledge and understanding are accurate and well detailed. Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b> Knowledge and understanding are generally accurate and reasonably detailed. Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b> Knowledge and understanding are basic/relatively superficial. Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b> Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate. Lacks organisation and structure.</p>
<p><b>0 marks</b> no creditworthy material.</p>

### AO2/3 = 6 marks

AO2/3 credit is given for discussion and evaluation of the learning approach to the initiation of gambling. Points that can be made include:

- Relevant research evidence. Note: methodological evaluation of research studies may only earn credit if the implications for the learning explanation are explicit
- Operant conditioning is a less effective explanation for the initiation of gambling behaviour, than its maintenance – before rewards have been experienced. However reference to observational learning and vicarious reinforcement can cover this gap

- The learning approach has problems explaining individual differences in susceptibility to gambling
- The learning approach ignores biological (genetic) factors in the initiation of gambling behaviour. As long as the focus on evaluating the learning approach is sustained, consideration of alternative explanations would be an effective route to AO2/3 marks

### AO2/AO3 mark bands

<p><b>6 marks Effective</b>          Commentary demonstrates sound analysis, understanding and interpretation. The answer is well focused and shows coherent elaboration and/or a clear line or argument.          Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>5-4 marks Reasonable</b>          Commentary demonstrates reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration. Most ideas are appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling occasionally compromise meaning.</p>
<p><b>3-2 marks Basic</b>          Commentary demonstrates basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.</p>
<p><b>1 mark Rudimentary</b>          Commentary is rudimentary demonstrating a very limited understanding. The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant. Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b>          No creditworthy material is presented.</p>

**13** Using your knowledge of risk factors in the development of addiction, explain Dan's desire to play the slot machines. **[10 marks]**

### AO2/3 (application) = 10 marks

Risk factors in the Specification are stress, peers, age and personality. The scenario includes references to all of these, though not all need to be covered for marks across the scale as there can be depth/breadth trade-offs.

- Stress – Dan's final exam results will determine his degree and his chances of going on to a successful career
- Peers – Dan's introduction to slot machines was through the influence of his peers
- Age – addiction is more likely to develop in young adults

- Personality – Dan shows some features associated with addiction, in particular sensation-seeking (he enjoys risky sports such as caving and rock climbing)

Use of relevant research to support explanations should be credited.

Answers that do not engage with the scenario can receive a maximum of 4 marks.

### AO2/AO3 mark bands

<p><b>9-10 marks Effective</b>  Explanation/application demonstrate sound analysis and understanding.  Application of knowledge is well focused and effective.  Ideas are well structured and expressed clearly and fluently.</p>
<p><b>6-8 marks Reasonable</b>  Explanation/application demonstrate reasonable analysis and understanding.  Application of knowledge is generally focused.  Most ideas are appropriately structured and expressed clearly.</p>
<p><b>3-5 marks Basic</b>  Explanation/application demonstrate basic analysis and superficial understanding.  Application is sometimes focused.  Expression of ideas lacks clarity.</p>
<p><b>1-2 marks Rudimentary</b>  Explanation/application are rudimentary demonstrating very limited understanding.  The answer is weak, muddled and may be mainly largely irrelevant.  Deficiency in expression of ideas results in confusion and ambiguity.</p>
<p><b>0 marks</b>  No creditworthy material is presented.</p>

**14** Outline the theory of planned behaviour (TPB) as a model of addiction prevention. **[4 marks]**

**AO1 = 4 marks**

The theory of planned behaviour (TPB) consists of three components:

- Personal attitudes to the behaviour, including expectations about outcomes of the behaviour, eg understanding negative effects of smoking
- Subjective norms – derived from other people’s views on the change in behaviour and how susceptible the individual is to social conformity
- Perceived behavioural control, or self-efficacy – how confident the individual is that they can carry out the behaviour successfully, eg giving up smoking.

The interaction between these components leads to behavioural ‘intentions’, which may or may not lead in turn to behaviour change.

Addiction prevention can refer to both initiating and cessation.

For 4 marks there should be reference to the three components of TPB. There need not be as much details as in the bullet points above, but there must be reference to addiction prevention.

Outlines of the model without reference to addiction prevention cannot gain more than 2 marks. Diagrams, if sufficiently detailed and with an indication of process, can earn credit across the scale.

**AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>            Knowledge and understanding are accurate and well detailed.            Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>            Knowledge and understanding are generally accurate and reasonably detailed.            Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>            Knowledge and understanding are basic/relatively superficial.            Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>            Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.            Lacks organisation and structure.</p>
<p><b>0 marks</b>            no creditworthy material.</p>

**Anomalistic Psychology**

**15** Outline **one or more** methodological issues related to the use of the Ganzfeld procedure in the study of paranormal cognition. **[4 marks]**

**AO1 = 4 marks**

AO1 credit is given for an outline of one or more methodological issues related to the use of the Ganzfeld procedure in the study of paranormal cognition. Relevant issues include:

- Possible cheating by participants.

- Lack of control in early studies, eg order of presentation, sensory leakage, insecure storage of images
- Possible researcher bias, eg sceptical researchers v psi believers can influence the amount of elaboration by the receiver
- Influence of the receivers' beliefs (the sheep-goat effect).

Credit can be awarded for the effects/implications of the issue(s) outlined on the results of studies using the Ganzfeld procedure.

#### AO1 4 marks knowledge and understanding

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial.          Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.          Lacks organisation and structure.</p>
<p><b>0 marks</b>          no creditworthy material.</p>

- 16** Use your knowledge of the role of coincidence **and/or** probability judgements in anomalous experience to explain Joe's behaviour and his belief in the power of the scarf.

**[10 marks]**

#### AO2/3 (Application) = 10 marks

Psychological explanations for Joe's behaviour and beliefs are based around the idea that humans have a deep-seated need to seek causality for everything that happens. This makes us look for causes for random events which are actually the product of chance. In general, people have a poor understanding of chance and probability.

Potential explanations Joe's beliefs and behaviour include:

- Probability misjudgement: people who believe in the paranormal and are superstitious show less understanding of chance and coincidence than non-believers
- Subjective validation: this is a cognitive bias in which people tend to remember 'hits' and overlook the 'misses'. Joe remembers the times the team wins when he wears his scarf and overlooks the times they don't, or attributes the losses to other factors
- Operant conditioning: Joe was rewarded initially for wearing the scarf. Subsequently, even if the team loses some matches, when they win it provides additional reinforcement. This is a partial (intermittent) schedule that has been shown to sustain behaviour
- Although the focus of the question is on coincidence/probability, Joe's behaviour can also be described as 'superstitious'. References to superstitious behaviour/magical thinking are therefore creditworthy as long as the focus of the answer is on coincidence/probability

- Individual differences related to superstitious behaviour; Joe may have characteristics related to belief in the paranormal ie he is a sheep, not a goat, and so ignores the role of probability and coincidence

Use of relevant research to support explanations should be credited.

Note: students need not cover all of these points to access full marks, and examiners should be sensitive to a depth/breadth trade-off.

**Answers that do not engage with the scenario can receive a maximum of 4 marks.**

### AO2/AO3 mark bands

<p><b>9-10 marks Effective</b>  Explanation /application demonstrate sound analysis and understanding.  Application of knowledge is well focused and effective.  Ideas are well structured and expressed clearly and fluently.</p>
<p><b>6-8 marks Reasonable</b>  Explanation /application demonstrate reasonable analysis and understanding.  Application of knowledge is generally focused.  Most ideas are appropriately structured and expressed clearly.</p>
<p><b>3-5 marks Basic</b>  Explanation /application demonstrate basic analysis and superficial understanding.  Application is sometimes focused.  Expression of ideas lacks clarity.</p>
<p><b>1-2 marks Rudimentary</b>  Explanation /application are rudimentary demonstrating very limited understanding.  The answer is weak, muddled and may be mainly largely irrelevant.  Deficiency in expression of ideas results in confusion and ambiguity.</p>
<p><b>0 marks</b>  No creditworthy material is presented.</p>



**17** Discuss psychological research studies that have investigated psychic healing.

**[4 marks + 6 marks]**

**AO1 = 4 marks**

AO1 credit is given for an outline of psychological research studies that have investigated psychic healing.

Psychic healing refers to the treatment and cure of illness and disease through paranormal influences and in the absence of conventional medical therapies.

Psychological research has included controlled investigations with eg untreated and/or placebo control groups (eg Attevelt, 1988, psychic healing and asthma; Benson et al, 2006, psychic healing through prayer of those suffering from post-operative complications following cardiovascular surgery).

Further studies include Wirth's work (Wirth, 1990) on therapeutic touch (TT), which claimed to show that TT speeded up wound healing. Also from Wirth's group, Cha et al., (2001) studied the power of prayer in helping women being treated for infertility become pregnant. They found that twice as many women prayed for by strangers became pregnant, compared with those women not prayed for.

Anecdotal material should not receive credit.

Partial performance applies to AO1. Up to 3 marks for one study.

**AO1 4 marks knowledge and understanding**

<p><b>4 marks Sound</b>          Knowledge and understanding are accurate and well detailed.          Organisation and structure of the answer are coherent.</p>
<p><b>3 marks Reasonable</b>          Knowledge and understanding are generally accurate and reasonably detailed.          Organisation and structure of the answer are reasonably coherent.</p>
<p><b>2 marks Basic</b>          Knowledge and understanding are basic/relatively superficial.          Organisation and structure of the answer are basic.</p>
<p><b>1 mark Rudimentary</b>          Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate.          Lacks organisation and structure.</p>
<p><b>0 marks</b>          no creditworthy material.</p>

**AO2/3 = 6 marks**

AO2/3 credit is awarded for commentary on psychological research studies of psychic healing.

Relevant points include:

- Controlled studies usually find no support for psychic healing, but provide evidence for significant placebo effects
- Single case studies provide support for psychic healing, but are usually methodologically unsound, eg lack of control for the natural healing process or for placebo effects
- Single case studies rarely satisfy Randi's (1987) criteria for valid studies of psychic healing.
- Wirth's work on TT has failed to be replicated, even by Wirth. Cha has subsequently been accused of plagiarism, and Wirth himself convicted of criminal fraud, raising serious doubts about the validity of their findings

- Lyvers et al (2006), in a study of psychic healing at a distance, found no objective evidence for psychic healing, but also that ‘believers’ thought they had improved

### AO2/AO3 mark bands

<p><b>6 marks Effective</b></p> <p>Commentary demonstrates sound analysis, understanding and interpretation. The answer is well focused and shows coherent elaboration and/or a clear line or argument.</p> <p>Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling.</p>
<p><b>5-4 marks Reasonable</b></p> <p>Commentary demonstrates reasonable analysis and understanding. The answer is generally focused and shows reasonable elaboration. Most ideas are appropriately structured and expressed clearly. Appropriate use of psychological terminology. Minor errors of grammar, punctuation and spelling occasionally compromise meaning.</p>
<p><b>3-2 marks Basic</b></p> <p>Commentary demonstrates basic, superficial understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.</p>
<p><b>1 mark Rudimentary</b></p> <p>Commentary is rudimentary demonstrating a very limited understanding. The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant. Deficiency in expression of ideas results in confusion and ambiguity. The answer lacks structure often merely a series of unconnected assertions. Errors of grammar, punctuation and spelling are frequent and intrusive.</p>
<p><b>0 marks</b></p> <p>No creditworthy material is presented.</p>

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**Section C - Psychological Research and Scientific Method**

**1 | 8** Identify an appropriate sampling technique for this study and justify your choice. **[2 marks]**

**AO3 = 2 marks**

1 mark for identification of an appropriate sampling technique.  
1 further mark for a justification appropriate to the technique selected.

Possible responses include:

- Opportunity sample – quicker and easier than a random sample
- Random sample – participant selection is less biased because every student in the college stands an equal chance of being selected
- Volunteer sample – participants would be interested in the task and likely to take it seriously.

Note that the second mark is for the justification rather than a description of the technique.  
For credit “quick and easy” must be qualified eg comparison

Credit other relevant responses

**1 | 9** Explain why it would be important for the psychologist to carry out a pilot study in relation to the second part of the study. **[4 marks]**

**AO3 = 4 marks**

Possible responses might include checking:

- Whether the faces were clear representations of the various facial expressions
- Whether the order of presentation of faces is important, eg presentation should be random
- Whether the exposure time was appropriate, avoiding ceiling and floor effects
- Whether the number of stimuli was appropriate – sufficient to give reliable data, not too many to produce fatigue, ie the length of the study
- Whether the software recording correct identifications was working reliably.

Answers with no engagement with the second part of the study max 1 mark

There is no credit for describing a pilot study.

**AO3 4 marks knowledge and understanding**

<b>4 marks Sound</b>
Knowledge and understanding of the purposes of a pilot study in relation to the second part of the study are accurate and well detailed.
<b>3 marks Reasonable</b>
Knowledge and understanding of the purposes of a pilot study in relation to the second part of the study are generally accurate and reasonably detailed.
<b>2 marks Basic</b>
Knowledge and understanding of the purposes of a pilot study in relation to the second part of the study are basic/relatively superficial.
<b>1 mark Rudimentary</b>
Knowledge and understanding of the purposes of a pilot study are rudimentary and may be very brief, muddled and/or inaccurate or there is no engagement with the second part of the study
<b>0 marks</b>
No creditworthy material.

<b>2</b>	<b>0</b>	What is meant by 'reliability'? Explain how the psychologist might assess the reliability of her questionnaire. <b>[1 mark + 3 marks]</b>
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**AO1 = 1 mark; AO3 = 3 marks**

The two parts of the question need not be linked, so that students who outline one form of reliability and then assess another form may receive marks across the scale.

1 mark for a definition of reliability.

Generic definitions of reliability, eg linking reliability to consistency of findings, data, or participant responses, sufficient for 1 mark. Reliability may also be defined in terms of types of reliability eg internal or external. Merely naming internal/external reliability is not creditworthy.

Up to 3 marks for explaining how (ie explaining the procedure for assessing) reliability of the questionnaire can be assessed.

Internal reliability means that the items making up the questionnaire are assessing the same characteristic; external reliability means that the same person taking the questionnaire at two different times produces the same score.

Possible answers might include:

- Split-half (Internal reliability): scores on half the items (1 mark), are correlated with scores on the other half (1 mark) and the higher the correlation the more reliable the questionnaire (1 mark).
- Test-retest (External reliability): the questionnaire is given to the same participants again (1 mark). The scores on the two tests are correlated (1 mark) and the higher the correlation the more reliable the questionnaire (1 mark).

Students who do not use the terms internal and external but who clearly understand the term 'reliability' as reflected in their answer may be credited.

No credit for merely naming a method used to assess reliability eg split half, test retest.

2 | 1

State whether this calculated value of  $r_s$  is significant. Using **Table 1** below explain your answer.

[1 mark + 2 marks]

**AO3 = 3 marks**

1 mark for correctly stating that the results are significant.

If the decision is incorrect or no decision provided no marks can be awarded for the explanation.

2 further marks for explaining the decision in relation to the table.

- 1 mark for an explanation that makes an appropriate reference to the table, eg the calculated value of rho is greater than table value.
- 2 marks for a detailed explanation, eg the calculated value (+0.490) for N = 28 is significant at the  $p < 0.01$  level as it is greater than the critical value of 0.483.

The result is significant at both  $p < 0.05$  and  $p < 0.01$  levels; reference to either is acceptable.

2 | 2

What is meant by a 'Type 1 error'? Explain why the psychologist thought that she had **not** made a Type 1 error.

[1 mark + 3 marks]

**AO1 = 1 mark; AO3 = 3 marks**

1 mark for definition

A Type 1 error is when the results are accepted as significant when in fact they are not; the alternative hypothesis is accepted when it is false. Accept definitions in terms of null hypothesis.

Up to 3 marks for explanation which might include:

- The results are significant at  $p < 0.01$
- $p < 0.01$  is a stringent level of significance.
- The more stringent the significance level the less the chance of a Type 1 error.
- The likelihood of the psychologist making a Type 1 error is 1 in 100 or less.

1 mark for brief explanation, eg 'the results had a high level of significance'.

Additional marks for showing a coherent understanding of Type 1 error, link to level of significance, and reference to actual p values.

**2 3** The psychologist submitted her report on the study for peer review.

Discuss the purpose of peer review.

**[6 marks]**

**AO1/AO3 = 6 marks**

The term 'discuss' implies that students should consider the purpose of peer review and its strengths and/or limitations.

In peer review research reports are checked in terms of suitability for publication, appropriateness of the theoretical background, methodology, statistics and conclusions.

Definitions of peer review are only creditworthy in so far as they outline the purpose.

Discussion is likely to focus on

- The work is methodologically sound, valid and does not involve e.g. plagiarism of other people's research
- The findings are novel, interesting and relevant, and add to knowledge of a particular research area
- The authors are not making unjustified claims about the importance of their findings
- Peer review ensures research is reviewed by fellow experts
- Peer review maintains the standards of published work and allows University research departments to be rated and funded in terms of their quality;
- It helps to ensure that poor quality work is not published in reputable journals
- Bias – it has been established that a publication bias occurs towards prestigious researchers and research departments
- Bias towards positive findings - negative findings and replications are rarely published, though these can be critical in establishing whether important findings are reliable
- Bias in favour of 'established' research areas – novel or unusual research is hard to publish
- Time consuming and expensive – peer review can take months, or in some cases where revisions are necessary, years, so delaying publication of important findings
- As reviewers are usually working in the same field as the submitted work and competing for limited research funds, there is a temptation to delay or even prevent the publication of competing research
- Peer review sometimes fails to prevent scientific fraud

Answers that merely outline the purpose of the peer review process can receive a maximum of 2 marks

<b>6 marks Sound</b> Discussion demonstrates sound knowledge, understanding, analysis and interpretation. The answer is well focused and shows coherent elaboration. Ideas are well structured and expressed clearly and fluently. Consistently effective use of psychological terminology. Appropriate use of grammar, punctuation and spelling. Reference to a range of relevant points.
<b>5-4 marks Reasonable</b> Discussion demonstrates reasonable knowledge, understanding and analysis. The answer is generally focused and shows reasonable elaboration. Most ideas are appropriately structured and expressed clearly. Appropriate use of psychological terminology. Reference to at least two relevant points.
<b>3-2 marks Basic</b> Discussion demonstrates basic, superficial knowledge and understanding. The answer is sometimes focused and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology.
<b>1 mark Rudimentary</b> Discussion is rudimentary demonstrating a very limited knowledge and understanding. The answer is weak, muddled and incomplete. Material is not used effectively and may be mainly irrelevant.
<b>0 marks</b> No creditworthy material is presented.

- 2 | 4** Identify the independent variable and the dependent variable in this follow-up study. **[2 marks]**

**AO3 = 2 marks**

1 mark for independent variable: high or low empathy scores. Accept 'empathy score'.  
1 mark for dependent variable: scores on a measure of helping behaviour. Accept 'helping behaviour'.

- 2 | 5** Explain how the psychologist might measure the dependent variable. **[3 marks]**

**AO3 = 3 marks**

1 mark for a practical idea, 2 further marks for increasingly detailed outline of how the DV would be measured. 3 marks for a practical idea that is fully explained.

Dependent variable: this is a measure of helping behaviour, so there is a range of possibilities. Eg Friends and family could be asked to rate the helpfulness of the participant eg on a scale from 1-10; alternatively a scenario could be set up without the pps knowledge to observe their helping behaviour e.g. a confederate of the researcher drops books, and the number of people helping/not helping is recorded. There are further ways of operationalizing helping behaviour, but they must be practical and feasible to receive credit.

Merely naming a research method eg interview, questionnaire receives not credit.

No credit can be awarded for unethical suggestions or really impractical suggestions.

2	6
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Identify an appropriate statistical test that the psychologist could use and justify your choice.

**[3 marks]**

**If the answer to Q25 does not provide recognisable data no credit can be awarded for Q26**

**AO3 = 3 marks**

1 mark for the identification of an appropriate test, 2 further marks for the justification.

- A test of difference is required.
- An independent groups design.
- A test appropriate to the level of measurement. If the data can be treated as at least ordinal then a Mann Whitney U test would be appropriate; if the data can be categorised then a Chi Square could be used. Credit also appropriate reference to the independent t-test.

The test must be correct for justification for marks to be awarded.

2	7
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Identify ethical issues in this follow-up study and explain how the psychologist could deal with them.

**[4 marks]**

**AO3 = 4 marks**

There are a range of ethical issues that may be relevant, depending upon the design of the study. If the dependent variable is based on ratings by friends, for instance, then ethical issues in relation to the participant may be include lack of informed consent, lack of confidentiality of data, and not being allowed the right to withdraw at any time.

Additional issues of deception and participant psychological harm may come into play. Marks may only be awarded where ethical issues are clearly relevant to the stem and/or the material presented in their response to Q25.

1 mark for identifying one or more ethical issues.

3 further marks for outlining methods of dealing with them, eg

- Lack of informed consent: informed consent, obtained through using a consent letter that the participant must sign
- Consent letter containing outline details of the study (informed consent) and referring to the right to withdraw and confidentiality of data.
- In cases of deception, presumptive consent may be used, and full debriefing would be essential.



- Deception: debriefing, explaining the purpose of the study and why deception was necessary
- Deception: presumptive consent, asking non-participants if they would be happy to do the study
- Protection from harm eg if participants are categorised as “low empathy” they should be offered counselling.

Students may cover one ethical issue in detail (e.g. deception, covering debriefing and presumptive consent) or more than one in less detail.

For full marks there must be explicit linkage to either the stem or the student’s response to Q25

## Assessment Objectives

Question	A01	A02/A03	Total
<b>Section A</b>			
01	4		4
02	4	16	20
03	4		4
04	4	16	20
05	4		4
06	4	16	20
07	4		4
08	4	16	20
<b>Section B</b>			
09	4	6	10
10		10	10
11	4		4
12	4	6	10
13		10	10
14	4		4
15	4		4
16		10	10
17	4	6	10
<b>Section C</b>		<b>A03</b>	
18		2	2
19		4	4
20	1	3	4
21	0	3	3
22	1	3	4
23	2	4	6
24		2	2
25		3	3
26		3	3
27		4	4