



**General Certificate of Education (A-level)
January 2013**

Psychology A

PSYA4

(Specification 2180)

**Unit 4: Psychopathology, Psychology in Action
and Research Methods**

Final

Mark Scheme

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Section A Psychopathology

Topic: Schizophrenia

Question 01

AO1 = 4 marks Outline of **one** biological therapy for schizophrenia

AO1 credit is awarded for an outline of one biological therapy which is suitable for schizophrenia. The most likely therapy to be described is the use of antipsychotic drugs, which work by blocking d2 (dopamine) receptors. There are different generations of antipsychotics:

- Typical antipsychotics – eg chlorpromazine, block d2 receptors in several brain areas
- Less typical antipsychotics – eg pimozide, often used as a last resort when other drugs have failed
- Atypical antipsychotics – eg risperidone. Some atypicals also block serotonin receptors.

Students can tackle this in a specific way (eg a specific drug) or by considering drugs generically.

Other biological therapies such as ECT and psychosurgery can gain AO1 credit. Descriptions of psychological therapies are not creditworthy.

AO1 Mark bands

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

AO2/AO3 = 8 marks

AO2 credit is awarded for an evaluation of the biological therapy offered in 01. Students are likely to consider issues of effectiveness and appropriateness given the focus of the Specification. Students are also likely to refer to the findings of outcome studies demonstrating effectiveness and issues around measuring effectiveness.

- antipsychotics have long been established as a relatively cheap, effective treatment, which rapidly reduce symptoms and enable many people to live relatively normal lives (May 1981)
- the atypical group appear to be the most effective, targeting a broader range of symptoms including negative symptoms such as apathy, with the fewest side effects
- typical antipsychotics are associated with higher levels of side effects
- about 30% of patients appear to be drug resistant
- drug treatments are generally more effective for positive symptoms than negative symptoms
- relapse is likely when drugs are discontinued.

Issues of appropriateness with drug treatment could include:

- drugs treat symptoms rather than causes
- antipsychotics produce a range of side effects including motor tremors and weight gain. These lead a proportion of patients to discontinue treatment
- ethical issues including informed consent, and the dehumanizing effects of some treatments.

Treatments other than drug therapy will need to be read carefully to assess the effectiveness of evaluation. Students who cover ECT as AO1 should make it clear that this treatment was used historically but has not been widely used for schizophrenia or deemed appropriate in recent years. However, its more recent use in conjunction with antipsychotics for drug resistant patients could provide effective evaluation. Similarly, psychosurgery has scarcely been used as a treatment for schizophrenia since the early 1970's when it was replaced by drug treatment. Answers focussing on these treatments are likely to be basic.

AO2/AO3 Mark bands

8 - 7 marks Effective

Evaluation demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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.

6 - 5 marks Reasonable

Evaluation demonstrates reasonable analysis and understanding. The answer is generally focussed 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.

4 - 3 marks Basic

Evaluation demonstrates basic, superficial understanding. The answer is sometimes focussed and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

2 - 1 marks Rudimentary

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.

0 marks

No creditworthy material is presented.

Question 02

AO1 = 4 marks Outline of **one** psychological therapy for schizophrenia

AO1 credit is awarded for an outline of one psychological therapy which is suitable for schizophrenia. Students can pick from a variety of treatments, the most likely being those based on CBT (eg coping strategy enhancement) family based interventions and social interventions including social skills training. Behavioural approaches which have been used to 'manage' schizophrenia such as token economy are also creditworthy.

There are some treatments which were used for schizophrenia in the past but are no longer considered suitable for most people, for example, psychodynamic therapies. Descriptions of such treatments are creditworthy but answers should make this clear as part of the description, if they are to achieve a mark above basic. Descriptions of therapies which are not appropriate for schizophrenia such as systematic desensitization are not creditworthy.

AO1 Mark bands

4 marks Sound

Knowledge and understanding are accurate and well detailed. Organization and structure of the answer are coherent.

3 marks Reasonable

Knowledge and understanding are generally accurate and reasonably detailed. Organisation and structure of the answer are reasonably coherent.

2 marks Basic

Knowledge and understanding are basic/relatively superficial. Organisation and structure of the answer are basic.

1 mark Rudimentary

Knowledge and understanding are rudimentary and may be very brief, muddled and/or inaccurate. Lacks organisation and structure.

0 marks

No creditworthy material.

AO2/AO3 = 8 marks

AO2 credit is awarded for an evaluation of the psychological therapy offered in 02. Students are likely to consider issues of effectiveness and appropriateness given the focus of the specification. Students are also likely to refer to the findings of outcome studies demonstrating effectiveness:

- Several studies have demonstrated the effectiveness of CBT interventions especially with drug resistant patients eg Drury et al (1996) faster improvement for clients receiving cognitive therapy than those on a social programme: Garety (1997) significant improvements in 60 drug resistant patients when CBT was combined with standard care: Zimmerman (2005) CBT is effective at treating positive symptoms
- Family interventions based on reducing expressed emotion have proved effective in reducing/preventing relapse rates
- Social skills training and token economy do not target symptom reduction but are focused on management of the disorder.

Students can also discuss problems of measuring effectiveness:

- When to measure, how to measure, and criteria to choose
- Wide range of symptoms – treatments might be effective for some but not others.

Issues of appropriateness with psychological treatments could include:

- factors affecting the choice of treatment, eg financial constraints including time taken for treatment, availability of appropriate therapists, accuracy of original diagnosis
- ethical issues including issues of informed consent.

AO2/AO3 Mark bands

8 - 7 marks Effective

Evaluation demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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.

6 - 5 marks Reasonable

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.

4 - 3 marks Basic

Evaluation demonstrates basic, superficial understanding.

The answer is sometimes focussed and shows some evidence of elaboration.

Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

2 - 1 marks Rudimentary

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.

0 marks

No creditworthy material is presented.

Topic: Depression

Question 03

AO1 = 8 marks

Depression is classified as an affective (mood) disorder. Both DSM IV and ICD 10 distinguish major depressive disorder (MDD) from bipolar disorder. Both are creditworthy.

For AO1 credit, students need to identify issues related to the classification and/or diagnosis of depression. The Specification directs them towards reliability and validity of C & D so these are likely to form part of the answer. Likely material includes:

- The reliability of ICD and DSM classification systems
- The reliability of diagnosis between different clinicians
- The benefits of diagnosis in accessing support/treatment
- The problem associated with diagnosis such as labelling and adopting a sick role
- The validity of diagnosis, eg the problem of co-morbidity with other disorders
- Culture and gender differences in symptom presentation

Depression is diagnosed by the existence of 5 symptoms which should be present for a two week period on all or most days. Students who merely present lists of signs and symptoms of depression, (eg depressed mood most of the day nearly every day, diminished interest or pleasure in activities) or who describe classification systems are not addressing the issues surrounding diagnosis and classification. Such material can gain a mark in the rudimentary band. However students who use symptoms effectively to discuss/illustrate issues can receive marks across the range. Examiners must read the material very carefully.

Examiners should be mindful of a depth/breadth trade-off – students can describe a few issues in detail or more issues in less detail. There is considerable overlap between the issues of classification and diagnosis so partial performance criteria do not apply. This is a challenging area for students and those who accurately identify issues should be rewarded.

AO1 Mark bands

<p>8 - 7 marks Sound Knowledge and understanding are accurate and well detailed. A good range of relevant material has been selected. There is substantial evidence of breadth and depth. Organisation and structure of the answer are coherent.</p>
<p>6 - 5 marks Reasonable Knowledge and understanding are generally accurate and reasonably detailed. A range of relevant material has been selected. There is evidence of breadth and/or depth. Organisation and structure of the answer are reasonably coherent.</p>
<p>4 - 3 marks Basic Knowledge and understanding are basic/relatively superficial. A restricted range of material has been presented. Organisation and structure of the answer are basic.</p>
<p>2 - 1 mark Rudimentary Knowledge and understanding are rudimentary and may be muddled and/or inaccurate. The material presented may be very brief or largely irrelevant. Lacks organisation and structure.</p>
<p>0 marks No creditworthy material.</p>

AO2 = 16 marks

AO2 credit is awarded for a discussion of the issues identified. This is likely to focus on the importance of reliable and valid C & D and the consequences of unreliability etc. For example:

- Depressive symptoms often occur as a result of unhappy experiences (eg loss) Additionally, mood variation is a common human experience, often seasonal (SAD) There is debate about whether or not this experience should be medicalised.
- Depression is often co-morbid with other disorders in adults, notably anxiety and alcoholism as well as with illnesses such as cancer (eg about 27% of sufferers have social phobias). Co-morbidity occurs in children with conduct disorders and disruptive behaviour. This is important as establishing the primary disorder influences the treatment offered.
- Diagnosis can produce benefits in access to treatment, but labelling can have negative effects, on employment prospects, motivation etc.
- Two people can be diagnosed with depression but show different symptoms with little overlap.
- Gender bias - diagnoses of depression are more common in women which could reflect diagnostic bias or the reluctance of men to present with symptoms.
- Cultural differences in symptom presentation (eg physical/somatic presentation in non-Western cultures).

It is acceptable to describe overarching issues as long as they have relevance to depression, eg the reliability of different clinicians in diagnosis (Beck 1961 54% inter rater reliability of 2 psychiatrists).

AO2/AO3 Mark bands

16 - 13 marks Effective

Commentary demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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.

12 - 9 marks Reasonable

Commentary demonstrates reasonable analysis and understanding. The answer is generally focussed 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.

8 - 5 marks Basic

Commentary demonstrates basic, superficial understanding. The answer is sometimes focussed and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

4 - 1 marks Rudimentary

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.

0 marks No creditworthy material is presented.

Topic: Phobic Disorders

Question 04

AO1 = 8 marks

AO1 credit is awarded for an outline of one biological therapy for phobic disorders and one psychological therapy for phobic disorders. Students can tackle this in a specific way (eg particular drug group, flooding) or by considering drugs or behaviour therapy generically. Students are most likely to cover drug treatment for the biological therapy. The most commonly used drugs include SSRIs, MAOIs and benzodiazepines.

Students can choose from several psychological therapies including:

- Behavioural therapies based on exposure (systematic desensitization, flooding)
- Behavioural therapies based on social learning (modelling)
- Cognitive behavioural therapies such as threat devaluation
- Psychodynamic therapies.

If students outline only one therapy, partial performance criteria apply for AO1 and AO2. PP criteria also apply for students who cover two biological (or psychological) therapies. In the latter case, the best answer should receive credit.

AO1 Mark bands

8 - 7 marks Sound Knowledge and understanding are accurate and well detailed. A good range of relevant material has been selected. There is substantial evidence of breadth and depth. Organisation and structure of the answer are coherent.
6 - 5 marks Reasonable Knowledge and understanding are generally accurate and reasonably detailed. A range of relevant material has been selected. There is evidence of breadth and/or depth. Organisation and structure of the answer are reasonably coherent. <i>OR Coverage of one therapy is accurate and well detailed with a good range of relevant material (maximum 6 marks).</i>
4 - 3 marks Basic Knowledge and understanding are basic/relatively superficial. A restricted range of material has been presented. Organisation and structure of the answer are basic. <i>OR coverage of one therapy is generally accurate and reasonably detailed.</i>
2 - 1 mark Rudimentary Knowledge and understanding are rudimentary and may be muddled and/or inaccurate. The material presented may be very brief or largely irrelevant. <i>Or coverage of one therapy is basic.</i> Lacks organisation and structure.
0 marks No creditworthy material.

AO2 = 16 marks

AO2 credit is awarded for a discussion of the effectiveness of the two therapies chosen. Better answers are likely to include reference to outcome studies. References to appropriateness must be explicitly linked to effectiveness to gain credit. Likely studies demonstrating effectiveness include:

- MAOI's more effective than BZ's for social phobias (Gelernter et al 1991)
- MAOI's are successful in between 60 and 80 % of cases and as effective as CBT (Heimberg et al 1998)
- Marks et al (1993) compared the effectiveness of BZ's (alprazolam) with exposure therapy and combined BZ/exposure for agoraphobia. Exposure therapy was about twice as effective as drug therapy and the gains were maintained whereas drug therapy was associated with relapse
- Marks et al (1990) found that about 80% of clients improve with some sort of exposure therapy.

Better students may also consider the effectiveness of therapies for different kinds of phobias. For example, there is strong evidence that MAOI's are effective for social phobias but not for specific phobias. Relapse and dropout rates from different kinds of therapies may also form part of effective evaluation. Drop-out rates tend to be higher in the more stressful exposure therapies.

As evaluation points can be relevant to more than one therapy, partial performance criteria do not apply if students have outlined two appropriate therapies for AO1.

AO2/AO3 Mark bands

<p>16 - 13 marks Effective Evaluation demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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>12 - 9 marks Reasonable Evaluation demonstrates reasonable analysis and understanding. The answer is generally focussed 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. <i>Partial performance is effective, maximum 10 marks.</i></p>
<p>8 - 5 marks Basic Evaluation demonstrates basic, superficial understanding. The answer is sometimes focussed and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive. <i>Partial performance is reasonable.</i></p>
<p>4 - 1 marks Rudimentary 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. <i>Partial performance is basic.</i></p>
<p>0 marks No creditworthy material is presented.</p>

Topic: Obsessive Compulsive Disorder

Question 05

AO1 = 4 marks

AO1 credit is awarded for an outline of the clinical characteristics of OCD. The main diagnostic criteria include:

- the presence of obsessions (recurrent, 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 & compulsions are repetitive and unpleasant and interfere with daily life.

For 4 marks, students should refer to both obsessions and compulsions. Examiners should be mindful of the time constraints when awarding credit.

AO1 Mark bands

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

Question 06

AO1 = 4 marks

AO1 credit is awarded for an outline of one psychological therapy for OCD. Answers are likely to focus on behavioural therapies (exposure and response prevention (ERP) or modelling) and cognitive behavioural approaches. Students can tackle this in a specific way (eg ERP) or by considering behavioural therapy generically.

- ERP - is based on the principles of classical conditioning, involving relaxation training, hierarchy construction and replacement of maladaptive responses with relaxation
- Modelling is based on the principles of social learning (ie observation and imitation)
- Cognitive behavioural – combines cognitive therapy (identifying and changing maladaptive beliefs) with behavioural approaches (eg homework)

Although rarely used, psychodynamic therapies can also receive credit providing the material is well shaped towards the treatment of OCD. Otherwise the description is rudimentary. Biological therapies cannot receive credit.

Students who present more than one therapy should receive credit for the best answer.

AO1 Mark bands

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

Question 07

AO2/AO3 = 16 marks

AO2 credit is awarded for an evaluation of psychological therapies in general for OCD.

Description of therapies cannot gain credit. Students can discuss the effectiveness of different psychological approaches to those offered in 06. Students are likely to consider issues of effectiveness and appropriateness given the focus of the Specification. Students are also likely to refer to the findings of outcome studies demonstrating effectiveness:

- Several studies have demonstrated the effectiveness of ERP interventions, eg Salkovskis and Kirk, 1997, Abramowitz et al 2005.
- Whittal 2008 compared cognitive therapy with ERP and found higher improvement (68%) in CT than ERP (54%). However both are equally effective after two years.
- Outcomes studies also demonstrate issues with measuring effectiveness - when to measure, how to measure, and criteria to choose.
- The ERP dropout rate is fairly high because it can be a stressful experience. CT dropout rates are lower.

Issues of appropriateness with psychological treatments could include:

- Ethical issues – ERP can be a stressful experience for sufferers who are made to face uncomfortable situations (linked to dropout).
- factors affecting the choice of treatment, eg financial constraints.
time taken for treatment – ERP and CT are relatively fast taking between 3 and 8 weeks.
- availability of appropriate therapists.

Given the focus of the question, students can use the effectiveness of biological based therapies (eg use of SSRI's and tricyclic antidepressants) for comparison with psychological approaches or as a critical commentary. The mark awarded will depend on how effectively this is shaped to comment on psychological therapies.

Partial performance criteria do not apply but students who cover only one therapy may produce an answer which is restricted/basic.

AO2/AO3 Mark bands

16 - 13 marks Effective

Evaluation demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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.

12 - 9 marks Reasonable

Evaluation demonstrates reasonable analysis and understanding. The answer is generally focussed 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.

8 - 5 marks Basic

Evaluation demonstrates basic, superficial understanding. The answer is sometimes focussed and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

4 - 1 marks Rudimentary

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.

0 marks

No creditworthy material is presented.

Section B Psychology in Action

Topic: Media

Question 08

AO1 = 4 marks

AO1 credit is awarded for an outline of one or more explanations of media influences on pro-social behaviour. Students are most likely to refer to social learning theory/modeling although other explanations (cognitive priming, the General learning model) could also be used. The focus of the explanation must be on pro-social not anti-social behaviour.

- For SLT the mechanisms of learning pro social behaviours through observation and imitation of role models and the role of vicarious reinforcement should be included. Students may also refer to more recent versions of SLT which incorporate cognitive factors
- Cognitive priming emphasizes how watching TV/films influence beliefs and perceptions about the world including schemas and scripts.

Note that students who present Bandura's bobo doll studies to demonstrate the learning of anti-social behaviour ONLY should not receive AO1 credit.

AO1 Mark bands

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

AO2 = 6 marks

AO2 is awarded for discussion and commentary on the explanation(s) of media influences on pro-social behaviour given as AO1. It is likely that research studies will form the basis of AO2 for this aspect of the question. Students may present research studies which support or contradict the principles of the explanation offered. There are a range of likely studies for example, Sprafkin (1975) Baron et al (1979) and Rosenkoetter (1999).

Methodological critique of studies which is explicitly linked back to the explanation is creditworthy. Where no link to the explanation is made methodological critique is rudimentary. Ethical criticisms of research studies are not creditworthy.

Students may also engage in a discussion of some of the difficulties associated with 'effects research in pro-social behaviour (short term follow up, demand characteristics etc). Alternative explanations can also be used as a tool for evaluation as can implications/applications of the explanation. The effectiveness of evaluation will depend on how well the discussion is focussed on the explanation. Examiners should be mindful of the time constraints in this question when awarding credit.

AO2/AO3 Mark bands (6 marks)

<p>6 marks Effective Commentary demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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>5 - 4 marks Reasonable Commentary demonstrates reasonable analysis, understanding. The answer is generally focussed 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>3 - 2 marks Basic Commentary demonstrates basic, superficial understanding. The answer is sometimes focussed 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>1 mark Rudimentary 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>0 marks No creditworthy material is presented.</p>

Question 09

AO2/AO3 = 10 marks

This question requires students to suggest features of a TV advert to reduce speed and apply their knowledge of the Hovland Yale model of persuasion to justify their suggestions. The Hovland Yale model focusses on the importance of the source, message, channel and audience in persuasive communications. In this scenario, the audience (car drivers) and channel (TV advert) are specified in the question along with the main function of the campaign (speed reduction). Students could refer to:

- The source of the communication: there is considerable evidence that experts/celebrities are generally thought to be most persuasive in TV adverts - personal stories which arouse empathy could be used in relation to speeding
- The message: students could discuss the role of fear in persuasion (Meyerowitz and Chaiken suggest moderate fear is most persuasive) they could also discuss the issue of constructing one versus two sided messages. Most TV campaigns of this nature focus on clear one sided messages given their target of a wide ranging audience
- Students could discuss the interaction between audience characteristics (eg intelligence, self esteem) and messages (one versus two sided arguments).

Students could also gain credit by referring to the stages of the communicative process (attention, comprehension, reactance and attitude change) identified by the Hovland Yale model. These are creditworthy provided they are linked appropriately to the scenario.

AO2/AO3 Mark bands: best fit

10 - 9 marks Effective

Explanation/application demonstrate sound analysis and understanding.
Application of knowledge is well focussed on features of the scenario and effective. Ideas are well structured and expressed clearly and fluently.

8 - 6 marks Reasonable

Explanation/application demonstrate reasonable analysis and understanding.
Application of knowledge is generally focused on features of the scenario..
Most ideas are appropriately structured and expressed clearly.

5 - 3 marks Basic

Explanation/application demonstrate basic analysis and superficial understanding.
Application is sometimes focused on features of the scenario.
Expression of ideas lacks clarity.

2 - 1 marks Rudimentary

Explanation/application are rudimentary demonstrating very limited understanding.
The answer is weak, muddled and may be mainly largely irrelevant.
The Hovland Yale model is described but there is no attempt to apply knowledge to the scenario.
Deficiency in expression of ideas results in confusion and ambiguity.

0 marks

No creditworthy material is presented.

Question 10

AO1= 4 marks

AO1 credit is awarded for an outline of findings of research into celebrity worship. Procedural details are not required and should not be awarded credit. Similarly, explanations of celebrity worship (eg evolutionary) cannot receive credit. Likely material includes:

- McCutcheon's Celebrity Attitude Scale (CAS) identifies three levels of celeb worship - entertainment social, intense personal and borderline pathological
- Giles and Maltby (2004) found that celeb worship was most common in teenagers who were not close to their parents
- Maltby et al (2002/2004) found that celeb worship was negatively correlated with religious beliefs
- There is some evidence that celebrity worship is linked to insecure attachments and lower self-esteem (McCutcheon 2002, McCann 2001) but some findings have contradicted these claims.

Students can obtain credit through depth (findings of one study in detail) or breadth in this question. Examiners should be mindful of time constraints operating here.

AO1 Mark bands

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

Topic: The Psychology of Addictive Behaviour

Question 11

AO1 = 4 marks

AO1 credit is awarded for an outline of the learning explanation of the maintenance of gambling. Maintenance of gambling can be explained by operant conditioning (positive reinforcement of winning or excitement of betting) or classical conditioning (association of gambling related stimuli such as lottery tickets/betting shop with excitement). SLT can gain credit provided it is shaped to reinforcement of gambling. Partial reinforcement schedules can also obtain credit.

AO1 Mark bands

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

Question 12

AO2 = 10 marks

AO2 credit is awarded for an application of knowledge to the scenario. The scenario contains references to a number of vulnerability factors relevant to Jenny, including age, stress and peer influence. There are also references to smoking in girls and the prevalent belief that smoking prevents weight gain.

One route to AO2 credit is to provide research evidence that demonstrates how these factors affect vulnerability to smoking addiction. There are many research studies demonstrating the importance of these factors, including Bricker 2006 on peer influence, Amos and Bostock 2007 on age and gender and Childs 2007 on stress. Students may also refer to studies such as Ogden and Fox (1994) which demonstrates the use of smoking as weight control/diet strategy in teenage girls.

Answers which identify and discuss relevant factors (eg age, stress and peer influence) without reference to research evidence can gain a maximum of 5 marks (Basic).

Although the question refers to factors, there are no partial performance criteria in this question. However, answers that cover one factor only are unlikely to gain a mark in the top band.

AO2/AO3 Mark bands: best fit

10 - 9 marks Effective

Explanation/application demonstrate sound analysis and understanding.
Application of knowledge is well focussed on the vulnerability factors in the scenario and there is reference to relevant research to support the claims.
Ideas are well structured and expressed clearly and fluently.

8 - 6 marks Reasonable

Explanation/application demonstrate reasonable analysis and understanding.
Application of knowledge is generally focussed on the vulnerability factors in the stem and there is reference to appropriate research to support some claims.
Most ideas are appropriately structured and expressed clearly.

5 - 3 marks Basic

Explanation/application demonstrate basic analysis and superficial understanding. The student identifies/discusses vulnerability factors included in the stem but without reference to relevant research or describes research studies without application.
Application is sometimes focussed. Expression of ideas lacks clarity.

2 - 1 marks Rudimentary

Explanation/application are rudimentary demonstrating very limited understanding.
The answer is weak, muddled and may be mainly largely irrelevant to the material included in the stem.
Deficiency in expression of ideas results in confusion and ambiguity.

0 marks

No creditworthy material is presented.

Question 13

AO1 = 4 marks

AO1 credit is awarded for a description of one biological intervention for addiction. Biological treatments are generally divided into agonist substitution, partial agonist and antagonist treatment. Students are likely to refer to these in the context of smoking, but biological interventions for other addictions (eg methadone) are creditworthy.

- Agonist substitution (eg nicotine replacement therapy, methadone) these provide the person with a safer drug. Nicotine patches mimic or replace the effects of nicotine. They may also desensitize nicotine receptors in the brain. They relieve withdrawal symptoms and stop cravings. The removal of withdrawal symptoms is an example of negative reinforcement.
- Partial agonists, eg varenicline binds with acetylcholine receptors preventing nicotine binding and reducing the reinforcing effects of smoking.
- Antagonist treatments (eg Bupropion) block the effects of the substance/drug, ie block nicotine receptors

Description could cover the biological action of the intervention as well as practical information (time taken, frequency, etc).

Students can take a specific route focusing on a particular drug group or a more general approach focusing on different types of drug treatment, both are creditworthy.

AO1 mark bands

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

AO2/AO3 = 6 marks

AO2/AO3 is awarded for evaluation of the effectiveness of the biological intervention presented as AO1. Students can refer to success rate, relapse/dropout rate, cost effectiveness. References to appropriateness must be explicitly linked to effectiveness to gain credit. Students may also make reference to outcome studies related to specific interventions, for example Watts (2002), O'Brien (1996). Ethical issues can be credited if linked to effectiveness.

AO2/AO3 Mark bands

6 marks Effective

Evaluation demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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.

5 - 4 marks Reasonable

Evaluation demonstrates reasonable analysis, understanding. The answer is generally focussed 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.

3 - 2 marks Basic

Evaluation demonstrates basic, superficial understanding. The answer is sometimes focussed and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

1 mark Rudimentary

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.

0 marks No creditworthy material is presented.

Topic: Anomalistic Psychology

Question 14

AO1 = 4 marks

AO1 credit is awarded for an explanation of two differences between science and pseudoscience. Pseudoscience actually means 'false science'. Pseudoscientific explanations can be difficult to identify because they are presented as being scientific even though they do not meet the criteria for true science.

There are many ways in which science and pseudoscience vary and credit should be awarded to any relevant differences. Likely material includes:

- Scientific findings are subjected to peer review before publication. Results of pseudoscience are published without peer review often in newspapers
- Science requires that experiments should be replicable but the results of many pseudoscientific studies cannot be replicated
- In science, hypotheses are formulated then data is gathered to test the hypothesis. In pseudoscience, data is collected first then explanations are formulated to fit observations
- In science, key terms are defined precisely but in pseudoscience, specialist terms (eg 'aura') are used vaguely and not clearly operationalised.

Students are asked to explain two differences. A balance between the two is not required for top band marks. Those who explain one in detail are showing partial performance and can receive a maximum mark of 3.

Answers that merely present characteristics of science and pseudoscience, maximum 1 mark.

AO1 Mark bands

4 marks	Outline of two differences is reasonably thorough, accurate and coherent.
3 – 2 marks	Outline of two differences limited, generally accurate and reasonably coherent OR one difference is thorough, accurate and coherent.
1 mark	Outline is weak and muddled or very limited.
0 marks	No creditworthy material.

Question 15

AO2/AO3 = 10 marks

This question asks students to apply their knowledge about the causes (explanations) of magical thinking to the examples given in the stem.

Magical thinking refers to a type of reasoning in which causal relationships are found between events and/or objects which are not logically related, and it is intrinsically linked to superstitious behaviour.

The first example of magical thinking in the scenario involves a causal relationship being made between an inanimate object (for example, a house) and the person who has been contact with it.

- One of the most fundamental explanations of magical thinking is the law of contagion proposed originally by James Frazer. This is the idea that an object which has been in contact with a person comes to possess the 'essence' of that individual. This would help to explain why people are unwilling to buy houses where a tragedy has happened. The law of contagion has been demonstrated experimentally (eg Nemeroff and Rozin 1994).

Magical thinking occurs in the second example when a causal relationship is made between a ritual and benefit or protection of some sort (illusion of connection).

- Reduction of anxiety: magical thinking is prevalent in times and places of uncertainty and danger. Malinowski argued that magical thinking helps people reduce their anxiety, to cope with uncertainty and gives a sense of control over an unpredictable world. This would help to explain why people in dangerous occupations (such as deep sea fishing) are likely to resort to magical thinking. It has been demonstrated that magical thinking is more prevalent in war zones (Keinan 1994). It has also been demonstrated experimentally with pre-operative patients awaiting major surgery (Shrimali and Broota 1987).

There are other explanations of magical thinking which could be applied here, for example magical thinking is more prevalent in some cultures than others, especially those where war is common (Blaisdell and Denniston 2002). Other psychological explanations of magical thinking can gain credit.

Students may attempt to use personality and cognitive factors (eg locus of control). Such responses would need to be carefully shaped to provide an explanation for either example in the scenario.

AO2/AO3 Mark bands: best fit

<p>10 - 9 marks Effective Explanation/application demonstrate sound analysis and understanding. Application of knowledge is well focussed and effective in relation to both examples. Ideas are well structured and expressed clearly and fluently.</p>
<p>8 - 6 marks Reasonable Explanation/application demonstrate reasonable analysis and understanding. Application of knowledge is generally focussed on the scenario. Most ideas are appropriately structured and expressed clearly.</p>
<p>5 - 3 marks Basic Explanation/application demonstrate basic analysis and superficial understanding. Application is sometimes focussed or there is an explanation of one example only. Expression of ideas lacks clarity.</p>
<p>2 - 1 marks Rudimentary 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>0 marks No creditworthy material is presented.</p>

Question 16

Psychic mediumship refers to the process in which a medium contacts a deceased person, on behalf of a 'sitter', generally in a trance state. Psychic mediumship is part of the belief system of some new age groups who refer to this ability as 'channeling'. This definition cannot receive credit.

AO1= 4 marks

AO1 credit is awarded for one or more explanations of psychic mediumship. There are a range of explanations for psychic mediumship. Generally, biological explanations seek underlying physiological correlates of trance states whereas cognitive explanations focus on the cognitive tendencies of believers and the techniques used by mediums to convince them:

- Biological explanations focus on mediumship as an altered state of consciousness and explore the psychophysiology behind trance states. Emphasis is placed on the role played by the limbic system in the trance like state
- Personality/mental health explanations: some researchers argue that mediumship an extreme form of dissociative identity disorder, eg Braude (1995)
- Cognitive explanations focus on the ways that believers interpret the information provided by psychic mediums. They assume that believers find connections between unrelated events and see patterns where none really exist. This is sometimes known as the tendency to make the Type I error (eg Brugger, 2001)
- Roe (1991) focusses on strategies employed by mediums (often called cold reading) to convince sitters about the validity of information provided to them.

Non-scientific explanations may also be presented. These should not receive credit.

AO1 mark bands

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

AO2 = 6 marks

AO2 credit is awarded for evaluation of the explanation(s) of psychic mediumship presented as AO1. This is likely to be in the form of supporting or contradictory evidence and commentary on methodological issues associated with the investigation of mediumship.

- There is some evidence to support the claim that mediumship is an altered state of consciousness, eg Winkelman (2000) argues that the trance state is characterised by a shift toward right hemispheric dominance, along with a dominance of the parasympathetic nervous system
- Studies show that biological indicators are not consistent across mediums
- Cognitive explanations point to the prevalence of 'Barnum' statements used by mediums which can apply to most people
- Roe (1991) has provided extensive evidence of the hierarchy of strategies used by mediums including cold reading (using non-verbal information) and warm reading (direct 'fishing' for information)
- Studies comparing DID and mediumship have found superficial similarities only: generally mediums display good mental health, in contrast to those suffering from DID (Riesel, 2003).

There are some impressive scientific trials of mediumship, for example Beischel and Schwartz (2007) which demonstrated mediumship using a triple blind procedure. Students can use studies of this nature to argue for clear evidence for mediumship. However, anecdotal accounts of famous mediums are unlikely to gain marks above rudimentary.

AO2/AO3 Mark bands

6 marks Effective

Commentary demonstrates sound analysis, understanding and interpretation. The answer is well focussed 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.

5 - 4 marks Reasonable

Commentary demonstrates reasonable analysis and understanding. The answer is generally focussed 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.

3 - 2 marks Basic

Commentary demonstrates basic, superficial understanding. The answer is sometimes focussed and shows some evidence of elaboration. Expression of ideas lacks clarity. Limited use of psychological terminology. Errors of grammar, punctuation and spelling are intrusive.

1 mark Rudimentary

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.

0 marks

No creditworthy material is presented.

Section C Research Methods

Question 17

AO2/AO3 = 2 marks

Award 2 marks for an appropriate non-directional hypothesis which is operationalised. 'There is a relationship between happiness scores on a questionnaire and intelligence test scores'.

Award 1 mark for a non-directional hypothesis which is not fully operationalised or lacks clarity ('there is a relationship between happiness and intelligence').

Award no marks for a null or directional hypothesis, or one that predicts a difference/link/association/connection.

Question 18

AO2/AO3 = 4 marks

An interview is the most likely answer. An interview would be a more appropriate method than a questionnaire as it enables questions to be clarified and responses to be probed, thus overcoming the main disadvantages of questionnaires.

Students could also make a case for the analysis of diaries/written materials as a way of collecting data about happiness. These would generally overcome the problems of social desirability and demand characteristics inherent in questionnaires.
Students could also make a case for the use of observation.

Award one mark for identifying an appropriate method. Award up to three further marks for an explanation of why this method would be better than a questionnaire.

Question 19

AO2/AO3 = 1 marks

Internal validity refers to how accurately a test or measuring instrument measures what it says it measures. Award one mark for a clear definition.
Award no marks for truth, truth value or accuracy.

Question 20

AO2/AO3 = 3 marks

There are a number of ways of assessing the internal validity of the happiness questionnaire. Students can gain credit by explaining one in detail or more than one in less detail:

- Concurrent validity involves assessing how closely the scores on the happiness questionnaire match a different measurement of happiness obtained from the same participants, for example from family/teacher reports
- Content validity involves asking experts in the field to check the content of the questionnaire to see how accurately it measures happiness
- Face validity is less rigorous and involves looking at the questions to see if they are genuinely asking about happiness.

Award 1 mark for identifying one or more of these methods and a further two marks for elaboration in relation to the happiness questionnaire.

Question 21

AO2/AO3 = 2 marks

Award 1 mark each for any two of the following reasons:

- Study is looking for a correlation (relationship)
- Suitable for pairs of scores
- The data type obtained is ordinal, at least ordinal or interval level
- Linear relationship between scores

Question 22

AO2/AO3 = 3 marks

Students should state that the obtained value of + 0.42 exceeds the critical value for a two-tailed test (.362) for N=30. The results are therefore statistically significant ($p \leq 0.05$)

Award 2 marks for a student who supplies two pieces of information.

Award 1 mark for a student who states that the results are significant but does not provide an explanation OR the student who states results are significant but uses incorrect values from the table.

Award 0 marks for students who argue that results are not significant.

Question 23

AO2/AO3 = 4 marks

This question requires students to interpret a further correlation co-efficient (this time demonstrating a non-significant negative correlation) and put both findings together. For full marks, answers should cover the two key bullet points below:

- At age 11, there is a significant positive correlation between happiness and intelligence, demonstrating that more intelligent children tend to be happier.
- At age 16, the correlation is not statistically significant.

Students may also make the point that there may be a weak tendency for more intelligent teenagers to be less happy at 16 years of age, although this is not statistically significant. Students may also refer to the contradiction in the results or provide an overall conclusion.

AO2/AO3 Mark bands

4 marks Effective

Effective analysis and understanding.

The answer includes the findings of the two studies which are expressed clearly and fluently with appropriate reference to intelligence and happiness. Effective use of statistical terminology.

3 marks Reasonable

Reasonable analysis and understanding.

The answer is generally focussed and includes reference to both of the key findings which are reasonably clear. There is reasonable use of statistical terminology.

2 marks Basic

Basic, superficial understanding.

The answer is sometimes focussed OR covers only one of the key conclusions. Expression of ideas lacks clarity. Limited use of statistical terminology.

1 mark Rudimentary

Rudimentary with very limited understanding.

The answer is weak, muddled 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.

0 marks

No creditworthy material is presented.

Question 24

AO1 = 2 marks

Peer review is the process of subjecting a piece of research to independent scrutiny by other psychologists working in a similar field who consider the research in terms of its validity, significance and originality.

0 marks for 'other psychologists look at the research'.

1 mark for a very brief outline eg 'other psychologists look at the research report before it is published'. Award one further mark for elaboration.

Question 25

AO2/AO3 = 4 marks

Peer reviewed research may be accepted, sent back for revisions or rejected. Peer review is an important part of the scientific process because:

- It is difficult for authors and researchers to spot every mistake in a piece of work. Showing the work to others increases the probability that weaknesses will be identified and addressed.
- It helps to prevent the dissemination of irrelevant findings, unwarranted claims, unacceptable interpretations, personal views and deliberate fraud.
- Peer reviewers also judge the quality and the significance of the research in a wider context.
- This process ensures that published research can be taken seriously because it has been independently scrutinised by fellow researchers.

No credit for merely re-stating what is meant by peer review.

AO2/AO3 marks

4 marks Effective

Effective analysis and understanding.

The answer contains a coherent explanation of the importance of peer review. Ideas are well structured and expressed clearly and fluently.

3 marks Reasonable

Reasonable analysis and understanding.

The answer includes one or more of the above points about the importance of peer review.

Most ideas appropriately structured and expressed clearly.

2 marks Basic

Basic, superficial understanding.

The answer shows a basic understanding of the importance of peer review.

1 mark Rudimentary

Rudimentary with very limited understanding.

The answer is weak, muddled and may be mainly irrelevant.

0 marks

No creditworthy material is presented.

Question 26

There are a number limitations of the proposal included in the stem. Some of the most obvious are as follows:

- The independent variable (exercise) is not operationalised. There is no attempt to specify the amount of exercise taken, frequency or intensity. These could vary substantially.
- The DV (happiness) is measured through an interview. Interviews are prone to demand characteristics and social desirability effects. Both of these could affect the validity of the measurement. Students may suggest using a happiness questionnaire to measure the DV.
- As the student proposes to carry out the interviews herself, there is a likelihood of investigator effects. An independent interviewer could be used to reduce this.
- There is a lack of a control group for comparison purposes. The experiment could be modified to use an independent group design, with a control group who do not undertake an exercise programme.
- The use of a volunteer sample means that the study is unlikely to be representative.
- Ethical issues – although a volunteer sample has been recruited, there is no mention of informed consent, confidentiality, debriefing etc.
- Competence, the student is unlikely to have received training to carry out interviews of this nature.

In order to gain credit, students are required to identify one or more of these limitations and suggest appropriate modifications. There is a depth - breadth trade off here: students can cover one limitation in detail or consider several limitations in less detail.

AO2/AO3 = 10 marks

AO3 Mark Bands

10 - 9 Effective

The answer demonstrates sound knowledge and understanding of research methods. The student clearly identifies and explains one limitation and provides a detailed discussion of ways to overcome it OR the student identifies and explains several limitations and suggests appropriate modifications for these in less detail.

8 - 6 Reasonable

The answer demonstrates reasonable knowledge and understanding of research methods. One or more limitations are identified and there are some reasonable suggestions for modifications.

5 - 3 Basic

The answer demonstrates limited knowledge and understanding of research methods. There is some awareness of one or more limitations of the study with weak suggestions for improvement

2 - 1 Rudimentary

The method demonstrates rudimentary knowledge of research methods. The explanation lacks clarity is muddled and incomplete.

0 marks

No creditworthy material presented.

Assessment Objectives Grid

Question	AO1	AO2/3	Total
Section A			
1	4	8	12
2	4	8	12
3	8	16	24
4	8	16	24
5	4	0	4
6	4	0	4
7	0	16	16
Section B			
8	4	6	10
9	0	10	10
10	4	0	4
11	4	0	4
12	0	10	10
13	4	6	10
14	4	0	4
15	0	10	10
16	4	6	10
Section C			
17	0	2	2
18	0	4	4
19	0	1	1
20	0	3	3
21	0	2	2
22	0	3	3
23	0	4	4
24	2	0	2
25	0	4	4
26	0	10	10

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