



International Baccalaureate®
Baccalauréat International
Bachillerato Internacional

Psychology

Higher and standard level

Specimen papers 1, 2 and 3

For first examinations in 2019

CONTENTS

Psychology standard level paper 1 specimen question paper

Psychology standard level paper 1 specimen markscheme

Psychology higher level paper 1 specimen question paper

Psychology higher level paper 1 specimen markscheme

Psychology standard level paper 2 specimen question paper

Psychology higher level paper 2 specimen question paper

Psychology higher and standard level paper 2 specimen markscheme

Psychology higher level paper 3 specimen question paper

Psychology higher level paper 3 specimen markscheme

Psychology
Standard level
Paper 1

SPECIMEN PAPER

2 hours

Instructions to candidates

- Do not turn over this examination paper until instructed to do so.
- Section A: answer all the questions.
- Section B: answer one question.
- The maximum mark for this examination paper is **[49 marks]**.

Section A

Answer **all** questions in this section. Marks will be awarded for focused answers demonstrating accurate knowledge and understanding of research.

Biological approach to understanding behaviour

1. Explain how **one** hormone may influence **one** human behaviour. [9]

Cognitive approach to understanding behaviour

2. Outline **one** study investigating schema. [9]

Sociocultural approach to understanding behaviour

3. With reference to a study investigating acculturation, outline **one** strength and **one** limitation of a research method used in the study. [9]

Section B

Answer **one** question in this section. Marks will be awarded for demonstration of knowledge and understanding (which requires the use of relevant psychological research), evidence of critical thinking (for example, application, analysis, synthesis, evaluation), and organization of answers.

4. Discuss ethical considerations linked to genetic research into human behaviour. [22]
5. To what extent do findings from **one or more** psychological studies related to schema theory support the understanding of memory processes? [22]
6. Discuss how stereotypes may arise and affect human behaviour. [22]
-

Markscheme

Specimen

Psychology

Standard level

Paper 1

This markscheme is **confidential** and for the exclusive use of examiners in this examination session.

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Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1–3	<ul style="list-style-type: none"> • The response is of limited relevance to or only rephrases the question. • Knowledge and understanding is mostly inaccurate or not relevant to the question. • The research supporting the response is mostly not relevant to the question and if relevant only listed.
4–6	<ul style="list-style-type: none"> • The response is relevant to the question, but does not meet the command term requirements. • Knowledge and understanding is accurate but limited. • The response is supported by appropriate research which is described.
7–9	<ul style="list-style-type: none"> • The response is fully focused on the question and meets the command term requirements. • Knowledge and understanding is accurate and addresses the main topics/problems identified in the question. • The response is supported by appropriate research which is described and explicitly linked to the question.

Section A

Biological approach to understanding behaviour

1. Explain how *one* hormone may influence *one* human behaviour.

[9]

The command term “explain” requires candidates to give a detailed account including reasons and causes of how one hormone influences a chosen human behaviour.

Responses should make a clear link between the function of the hormone and human behaviour.

A number of different hormones may include chosen, including: adrenaline, cortisol, melatonin, testosterone, estrogen, oxytocin.

Any aspect of human behaviour (*eg* aggression, depression, stress, attachment) is acceptable as long as the response focuses on how the hormone influences the particular behaviour.

Examples of how hormones influence human behaviour could be but are not limited to:

- the influence of cortisol on recall
- oxytocin on attachment
- testosterone on aggression
- melatonin on sleep patterns

Responses that address the influence of neurotransmitters such as dopamine, serotonin, GABA and acetylcholine should not be awarded any marks. Where a neurotransmitter and hormone are chemically the same (*eg* noradrenaline) answers should make it clear that they are explaining the hormonal function.

Responses should address just one hormone’s influence, and where candidates have provided more than one example, credit should be given only to the first response.

Cognitive approach to understanding behaviour

2. Outline *one* study investigating schema processing.

[9]

The command term “outline” requires candidates to give a brief account or summary of one study investigating schema processing.

The outline of the study could include aim, method, results of the chosen study to support the response on how the study investigated schema processing.

The research studies chosen to investigate schema processing may include, but are not limited to:

- Loftus and Palmer (1974) on schema processing as a consequence of leading questions
- Anderson and Pichert’s (1978) study on the effect of schema processing on memory encoding and retrieval
- Wynn and Logie’s (1998) study using real-life experiences in schema processing
- Brewer and Treyen’s (1981) “office schema” study
- Bartlett’s (1932) seminal study (“War of the Ghosts”)

Sociocultural approach to understanding behaviour

3. With reference to a study investigating acculturation, outline *one* strength and *one* limitation of a research method used in the study. [9]

The command term “outline” requires candidates to give a brief account of one strength and one limitation of a method used in the chosen study [18 marks].

One definition of acculturation is Berry’s (2005) in that “acculturation is the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members”.

Candidates should support their response on the basis of a specific research study. Research studies may include, but are not limited to:

- Schwartz *et al.*, (2010) “The acculturation of Sudanese adolescents”
- Ernest (2006) “Acculturaion of adolescents and young refugees”
- Rogler *et al.*, (1991) “Acculturation and mental health issues among Hispanics”
- Pantiru and Barley (2014) “Acculturation of Romanian immigrants in the UK”

Candidates should state the research method used in the study and outline one strength and one limitation of the research method.

Section A markbands

Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1 to 3	The response is of limited relevance to or only rephrases the question. Knowledge and understanding is mostly inaccurate or not relevant to the question. The research supporting the response is mostly not relevant to the question and if relevant only listed.
4 to 6	The response is relevant to the question, but does not meet the command term requirements. Knowledge and understanding is accurate but limited. The response is supported by appropriate research which is described.
7 to 9	The response is fully focused on the question and meets the command term requirements. Knowledge and understanding is accurate and addresses the main topics/problems identified in the question. The response is supported by appropriate research which is described and explicitly linked to the question.

Section B assessment criteria

A — Focus on the question

To understand the requirements of the question students must identify the problem or issue being raised by the question. Students may simply identify the problem by restating the question or breaking down the question. Students who go beyond this by **explaining** the problem are showing that they understand the issues or problems.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	Identifies the problem/issue raised in the question.
2	Explains the problem/issue raised in the question.

B — Knowledge and understanding

This criterion rewards students for demonstrating their knowledge and understanding of specific areas of psychology. It is important to credit **relevant** knowledge and understanding that is **targeted** at addressing the question and explained in sufficient detail.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	The response demonstrates limited relevant knowledge and understanding. Psychological terminology is used but with errors that hamper understanding.
3 to 4	The response demonstrates relevant knowledge and understanding but lacks detail. Psychological terminology is used but with errors that do not hamper understanding.
5 to 6	The response demonstrates relevant, detailed knowledge and understanding. Psychological terminology is used appropriately.

C — Use of research to support answer

Psychology is evidence based so it is expected that students will use their knowledge of research to support their argument. There is no prescription as to which or how many pieces of research are appropriate for their response. As such, it becomes important that the research selected is **relevant** and useful in **supporting** the response. One piece of research that makes the points relevant to the answer is better than several pieces that repeat the same point over and over.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	Limited relevant psychological research is used in the response. Research selected serves to repeat points already made.
3 to 4	Relevant psychological research is used in support of the response, and is partly explained. Research selected partially develops the argument.
5 to 6	Relevant psychological research is used in support of the response and is thoroughly explained. Research selected is effectively used to develop the argument.

D — Critical thinking

This criterion credits students who demonstrate an enquiring and reflective attitude to their understanding of psychology. There are a number of areas where students may demonstrate critical thinking on the knowledge and understanding used in their responses and the research used to support that knowledge and understanding.

The areas of critical thinking are:

- research design and methodologies
- triangulation
- assumptions and biases
- contradictory evidence or alternative theories or explanations
- areas of uncertainty.

These areas are not hierarchical and not all areas will be relevant in a response. In addition, students could demonstrate a very limited critique of methodologies, for example, and a well-developed evaluation of areas of uncertainty in the same response. As a result, a holistic judgement of their achievement in this criterion should be made when awarding marks.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	There is limited critical thinking and the response is mainly descriptive. Evaluation and/or discussion, if present, is superficial.
3 to 4	The response contains critical thinking, but lacks development. Evaluation and/or discussion of most relevant areas is attempted but is not developed.
5 to 6	The response consistently demonstrates well developed critical thinking. Evaluation and/or discussion of relevant areas is consistently well developed.

E — Clarity and organisation

This criterion credits students for presenting their response in a clear and organized manner. A good response would require no re-reading to understand the points made or the train of thought underpinning the argument.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	The answer demonstrates some organization and clarity, but this is not sustained throughout the response.
2	The answer demonstrates organization and clarity throughout the response.

Section B

4. Discuss ethical considerations linked to genetic research into human behaviour. [22]

The command term “discuss” requires candidates to offer a considered and balanced review of ethical issues linked to genetics in human behaviour.

Possible ethical considerations could be but are not limited to:

- possible misuse of genetic data
- anonymity and confidentiality
- informed consent and right to withdraw data
- ownership of genetic data

Possible research studies linked to ethical research may include, but are not limited to:

- Bouchard (1990) “Minnesota Twin Study”
- Plomin and Petrill’s (1997) study on IQ
- Caspi *et al.*, (2003) on genes and depression

Areas of possible discussion could be, but are not limited to:

- how the research studies included in the response have been conducted in terms of ethical issues such as informed consent, confidentiality, psychological harm, right to withdraw and deception
- how the findings of research have been interpreted and applied, including the possible abuse of findings
- whether genetic research is ever ethically neutral
- implications of the findings for individuals and groups of individuals
- genetic predisposition does not necessarily mean that an individual will develop a disease or a disorder.

Candidates may discuss a relatively small number of ethical considerations in greater depth or a greater number in less depth, thereby demonstrating a breadth of understanding. Both approaches are equally acceptable.

Responses referring to research conducted on animals as long as they are linked to human behaviour are acceptable.

5. To what extent do findings from *two or more* psychological studies related to schema theory support the understanding of memory processes? [22]

To what extent do findings from two or more psychological studies related to schema theory support the understanding of memory processes?

The command term to what extent asks candidates to consider the usefulness of psychological studies related to schema theory in supporting the understanding of memory processes.

Candidates may refer to a smaller number of studies in order to demonstrate depth of knowledge, or may refer to a larger number of studies in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Psychological studies investigating schema theory include but are not limited to:

- Anderson and Pichert's (1978) study on the effect of schema processing on memory encoding and retrieval
- Bartlett's (1932) seminal study ("War of the Ghosts")
- Loftus and Palmer (1974) on reconstructive memory
- Brewer and Treyens (1981) role of office schemas in remembering objects in a room
- Bransford and Johnson (1972) on contextual conditions for understanding and remembering.

Candidates may address the question by explaining schema theory as well as the theory's underlying assumptions. In addition, it would be appropriate to link this explanation to specific studies that investigate how cognitive schemas may affect memory processes to finally assess the usefulness of the theory in relation of the findings of the studies.

6. Discuss how stereotypes may arise and affect human behaviour.**[22]**

The command term “discuss” requires candidates to offer a considered and balanced review of how stereotypes may arise and affect human behaviour.

A link should be made between how a stereotype may arise and affect human behaviour with reference to research studies and theories.

Candidates may address the question by first explaining how stereotypes arise and focus on the effect of stereotypes of behaviour. Although the response needs to include reference to both the rise and the effect of stereotypes on behaviour, a balanced approach is not necessary.

Explanations for how stereotypes may arise include but are not limited to:

- Stereotypes arise and are learned in a social and cultural setting (Princeton Trilogy)
- Stereotypes may be shared by social groups as social representations
- Stereotypes may arise as part of social categorisation (social identity theory).

Effects may include, but are not limited to:

- stereotypes may be internalized as templates and affect individual behaviour *eg* in relation to intellectual performance (stereotype threat), Steele and Aronson’s study (1995)
 - stereotypes may lead to prejudice and discrimination against individuals as demonstrated in studies such as Gibbins (1969), Buckhout (1974), Duncan (1976)
 - stereotypes often lead to selective attention and information processing so that the stereotype is confirmed (confirmation bias)
 - misdiagnosis in mental health due to gender and cultural bias (Zhang, 1998)
-

**Psychology
Higher level
Paper 1**

SPECIMEN PAPER

2 hours

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- Section A: answer all the questions.
- Section B: answer one question.
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Section A

Answer **all** questions in this section. Marks will be awarded for focused answers demonstrating accurate knowledge and understanding of research.

Biological approach to understanding behaviour

1. Explain how **one** hormone may influence **one** human behaviour. [9]

Cognitive approach to understanding behaviour

2. Outline **one** study investigating schema. [9]

Sociocultural approach to understanding behaviour

3. With reference to a study investigating acculturation, outline **one** strength and **one** limitation of a research method used in the study. [9]

Section B

Answer **one** question in this section. Marks will be awarded for demonstration of knowledge and understanding (which requires the use of relevant psychological research), evidence of critical thinking (for example, application, analysis, synthesis, evaluation), and organization of answers.

4. Discuss ethical considerations linked to genetic research into human behaviour. [22]
5. Discuss how the use of digital technology affects **one** cognitive process. [22]
6. Discuss how stereotypes may arise and affect human behaviour. [22]
-

Markscheme

Specimen

Psychology

Higher level

Paper 1

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Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1–3	<ul style="list-style-type: none"><li data-bbox="244 427 1187 454">• The response is of limited relevance to or only rephrases the question.<li data-bbox="244 459 1342 486">• Knowledge and understanding is mostly inaccurate or not relevant to the question.<li data-bbox="244 490 1453 555">• The research supporting the response is mostly not relevant to the question and if relevant only listed.
4–6	<ul style="list-style-type: none"><li data-bbox="244 600 1235 665">• The response is relevant to the question, but does not meet the command term requirements.<li data-bbox="244 669 970 696">• Knowledge and understanding is accurate but limited.<li data-bbox="244 701 1198 728">• The response is supported by appropriate research which is described.
7–9	<ul style="list-style-type: none"><li data-bbox="244 772 1453 799">• The response is fully focused on the question and meets the command term requirements.<li data-bbox="244 804 1358 869">• Knowledge and understanding is accurate and addresses the main topics/problems identified in the question.<li data-bbox="244 873 1453 929">• The response is supported by appropriate research which is described and explicitly linked to the question.

Section A

Biological approach to understanding behaviour

1. Explain how **one** hormone may influence **one** human behaviour.

[9]

The command term “explain” requires candidates to give a detailed account including reasons and causes of how one hormone influences a chosen human behaviour.

Responses should make a clear link between the function of the hormone and human behaviour.

A number of different hormones could be chosen, including: adrenaline, cortisol, melatonin, testosterone, oestrogen, oxytocin.

Any aspect of human behaviour (eg aggression, depression, stress, attachment) is acceptable as long as the response focuses on how the hormone influences the particular behaviour.

Examples of how hormones influence human behaviour may include, but are not limited to:

- the influence of cortisol on recall
- oxytocin on attachment
- testosterone on aggression
- melatonin on sleep patterns.

Responses that address the influence of neurotransmitters such as dopamine, serotonin, GABA and acetylcholine should not be awarded any marks. Where a neurotransmitter and hormone are chemically the same (eg noradrenaline) answers should make it clear that they are explaining the hormonal function.

Responses should address just one hormone’s influence, and where candidates have provided more than one example, credit should be given only to the first response.

Cognitive approach to understanding behaviour

2. Outline one study investigating schema.

[9]

The command term “outline” requires candidates to give a brief account or summary of one study investigating schema processing.

The outline of the study could include aim, method, results of the chosen study to support the response on how the study investigated schema processing.

The research studies chosen to investigate schema processing may include, but are not limited to:

- Loftus and Palmer (1974) on schema processing as a consequence of leading questions
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- Wynn and Logie’s (1998) study using real-life experiences in schema processing
- Brewer and Treyen’s (1981) “office schema” study
- Bartlett’s (1932) seminal study (“War of the Ghosts”)

Sociocultural approach to understanding behaviour

3. With reference to a study investigating acculturation outline **one** strength and **one** limitation of a research method used in the study. [9]

The command term “outline” requires candidates to give a brief account of one strength and one limitation of a method used in the chosen study.

One definition of acculturation is Berry (2005) it that "acculturation is the dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members".

Candidates should support their response on the basis of a specific research study.

Research studies may include but are not limited to:

- Schwartz *et al.*, (2010) “The acculturation of Sudanese adolescents”
- Ernest (2006) “Acculturation of adolescents and young refugees”
- Rogler *et al.*, (1991) “Acculturation and mental health issues among Hispanics”
- Pantiru and Barley (2014) “Acculturation of Romanian immigrants in the UK”

Candidates should state the research method method used in the study and outline one strength and one limitation of the research method.

Section B assessment criteria

A — Focus on the question

To understand the requirements of the question students must identify the problem or issue being raised by the question. Students may simply identify the problem by restating the question or breaking down the question. Students who go beyond this by **explaining** the problem are showing that they understand the issues or problems.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	Identifies the problem/issue raised in the question.
2	Explains the problem/issue raised in the question.

B — Knowledge and understanding

This criterion rewards students for demonstrating their knowledge and understanding of specific areas of psychology. It is important to credit **relevant** knowledge and understanding that is **targeted** at addressing the question and explained in sufficient detail.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	The response demonstrates limited relevant knowledge and understanding. Psychological terminology is used but with errors that hamper understanding.
3 to 4	The response demonstrates relevant knowledge and understanding but lacks detail. Psychological terminology is used but with errors that do not hamper understanding.
5 to 6	The response demonstrates relevant, detailed knowledge and understanding. Psychological terminology is used appropriately.

C — Use of research to support answer

Psychology is evidence based so it is expected that students will use their knowledge of research to support their argument. There is no prescription as to which or how many pieces of research are appropriate for their response. As such it becomes important that the research selected is **relevant** and useful in **supporting** the response. One piece of research that makes the points relevant to the answer is better than several pieces that repeat the same point over and over.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	Limited relevant psychological research is used in the response. Research selected serves to repeat points already made.
3 to 4	Relevant psychological research is used in support of the response, and is partly explained. Research selected partially develops the argument.
5 to 6	Relevant psychological research is used in support of the response and is thoroughly explained. Research selected is effectively used to develop the argument.

D — Critical thinking

This criterion credits students who demonstrate an inquiring and reflective attitude to their understanding of psychology. There are a number of areas where students may demonstrate critical thinking about the knowledge and understanding used in their responses and the research used to support that knowledge and understanding.

The areas of critical thinking are:

- research design and methodologies
- triangulation
- assumptions and biases
- contradictory evidence or alternative theories or explanations
- areas of uncertainty

These areas are not hierarchical and not all areas will be relevant in a response. In addition, students could demonstrate a very limited critique of methodologies, for example, and a well-developed evaluation of areas of uncertainty in the same response. As a result, a holistic judgement of their achievement in this criterion should be made when awarding marks.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	There is limited critical thinking and the response is mainly descriptive. Evaluation or discussion, if present, is superficial.
3 to 4	The response contains critical thinking, but lacks development. Evaluation or discussion of most relevant areas is attempted but is not developed.
5 to 6	The response consistently demonstrates well developed critical thinking. Evaluation and/or discussion of relevant areas is consistently well developed.

E — Clarity and organisation

This criterion credits students for presenting their response in a clear and organized manner. A good response would require no re-reading to understand the points made or the train of thought underpinning the argument.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	The answer demonstrates some organization and clarity, but this is not sustained throughout the response.
2	The answer demonstrates organization and clarity throughout the response.

Section B

4. Discuss ethical considerations linked to genetic research into human behaviour. [22]

The command term “discuss” requires candidates to offer a considered and balanced review of ethical issues linked to genetics in human behaviour.

Possible ethical considerations could be but are not limited to:

- possible misuse of genetic data
- anonymity and confidentiality
- informed consent and right to withdraw data
- ownership of genetic data

Possible research studies linked to ethical research may include, but are not limited to:

- Bouchard (1990), “Minnesota Twin Study”
- Plomin and Petrill’s (1997) study on IQ
- Caspi *et al.*, (2003) on genes and depression.

Areas of possible discussion could be, but are not limited to:

- how the research studies included in the response have been conducted in terms of ethical issues such as informed consent, confidentiality, psychological harm, right to withdraw and deception
- how the findings of research have been interpreted and applied, including the possible abuse of findings
- whether genetic research is ever ethically neutral
- implications of the findings for individuals and groups of individuals
- genetic predisposition does not necessarily mean that an individual will develop a disease or a disorder

Candidates may discuss a relatively small number of ethical considerations in greater depth or a greater number in less depth, thereby demonstrating a breadth of understanding. Both approaches are equally acceptable.

Responses referring to research conducted on animals as long as they are linked to human behaviour are acceptable.

5. Discuss how the use of digital technology affects **one** cognitive process. **[22]**

The command term “discuss” requires candidates to offer a considered and balanced review of how the use of digital technology affects one cognitive process.

A link should be made between how the use of digital technology may affect a specific cognitive process with reference to research studies and theories.

Candidates may address the question by giving examples of the controversy on the use of digital technology, for example by referring to “the myth of multitasking”, and its possible influence on cognitive processes in general as long as the main focus is on how the use of digital technology affects one cognitive process.

Research studies relevant to answering this question could be, but are not limited to:

- Sparrow, Liu and Wegner (2011) “Google effects on memory: Cognitive consequences of having information at our fingertips”
- Kaspersky Lab's international survey (2015) indicating a possible link between having data available at the click of a button and a failure to commit that data to memory. Kaspersky lab has termed this phenomenon Digital Amnesia, *ie* the experience of forgetting information that you trust a digital device to store and remember for you.
- Wood *et al.*, (2011) study on the impact of four digitally-based multi-tasking activities on memory and learning compared to control groups using a sample of college students
- Roediger and Karpicke (2006) on the role of testing to improve learning and memory as part of the argument demonstrating that rehearsal and revision strengthen a memory

If responses discuss more than one cognitive process in relation to the use of digital technology, credit should be given only to the first cognitive process.

6. Discuss how stereotypes may arise and affect human behaviour.

[22]

The command term “discuss” requires candidates to offer a considered and balanced review of how stereotypes may arise and affect human behaviour.

A link should be made between how a stereotype may arise and affect human behaviour with reference to research studies and theories.

Candidates may address the question by first explaining how stereotypes arise and focus on the effect of stereotypes on behaviour. Although the response needs to include reference to both the rise and the effect of stereotypes on behaviour, a balanced approach is not necessary.

Explanations for how stereotypes may arise include, but are not limited to:

- stereotypes arise and are learned in a social and cultural setting (Princeton Trilogy)
- stereotypes may be shared by social groups as social representations
- stereotypes may arise as part of social categorization (social identity theory)

Effects may include, but are not limited to:

- stereotypes may be internalized as templates and affect individual behaviour *eg* in relation to intellectual performance (stereotype threat), Steele and Aronson’s study (1995)
 - stereotypes may lead to prejudice and discrimination against individuals as demonstrated in studies such as Gibbins (1969), Buckhout (1974), Duncan (1976)
 - stereotypes often lead to selective attention and information processing so that the stereotype is confirmed (confirmation bias)
 - misdiagnosis in mental health due to gender and cultural bias (Zhang, 1998)
-

Psychology
Standard level
Paper 2

SPECIMEN PAPER

1 hour

Instructions to candidates

- Do not open this examination paper until instructed to do so.
- Answer one question.
- The maximum mark for this examination paper is **[22 marks]**.

Answer **one** question.

Marks will be awarded for demonstration of knowledge and understanding (which requires the use of relevant psychological research), evidence of critical thinking (for example, application, analysis, synthesis, evaluation), and organization of answers.

Abnormal psychology

1. Discuss the role of culture in diagnosis.
2. Discuss **one or more** etiologies of **one** disorder.
3. Discuss the use of **one or more** biological treatments for **one** psychological disorder.

Developmental psychology

4. Discuss the influence of poverty/socioeconomic status on cognitive development.
5. Discuss the role of attachment on development.
6. To what extent do biological factors influence cognitive development?

Health psychology

7. Discuss the influence of health beliefs on health-related behaviour.
8. With the use of suitable examples, discuss prevalence rates of **one or more health problems** and associated health risks.
9. Discuss the effectiveness of **one or more** health promotion programmes.

Psychology of human relationships

10. To what extent do sociocultural factors explain why relationships change or end?
 11. Discuss **one or more** studies related to prejudice and/or discrimination.
 12. Evaluate **one** theory or study related to prosocial behaviour.
-

Psychology
Higher level
Paper 2

SPECIMEN PAPER

2 hours

Instructions to candidates

- Do not open this examination paper until instructed to do so.
- Answer two questions, each from a different option. Each question is worth **[22 marks]**.
- The maximum mark for this examination paper is **[44 marks]**.

Answer **two** questions, each from a different option.

Marks will be awarded for demonstration of knowledge and understanding (which requires the use of relevant psychological research), evidence of critical thinking (for example, application, analysis, synthesis, evaluation), and organization of answers.

Abnormal psychology

1. Discuss the role of culture in diagnosis.
2. Discuss **one or more** etiologies of **one** disorder.
3. Discuss the use of **one or more** biological treatments for **one** psychological disorder.

Developmental psychology

4. Discuss the influence of poverty/socioeconomic status on cognitive development.
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Health psychology

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Psychology of human relationships

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 12. Evaluate **one** theory or study related to prosocial behaviour.
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Markscheme

Specimen

Psychology

Higher level and standard level

Paper 2

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Paper 2 assessment criteria

Criterion A — Focus on the question

[2]

To understand the requirements of the question students must identify the problem or issue being raised by the question. Students may simply identify the problem by restating the question or breaking down the question. Students who go beyond this by **explaining** the problem are showing that they understand the issues or problems.

Marks Level descriptor

- 0** Does not reach the standard described by the descriptors below.
- 1** Identifies the problem/issue raised in the question.
- 2** Explains the problem/issue raised in the question.

Criterion B — Knowledge and understanding

[6]

This criterion rewards students for demonstrating their knowledge and understanding of specific areas of psychology. It is important to credit **relevant** knowledge and understanding that is **targeted** at addressing the question and explained in sufficient detail.

Marks Level descriptor

- 0** Does not reach the standard described by the descriptors below.
- 1 to 2** The response demonstrates limited relevant knowledge and understanding. Psychological terminology is used but with errors that hamper understanding.
- 3 to 4** The response demonstrates relevant knowledge and understanding but lacks detail. Psychological terminology is used but with errors that do not hamper understanding.
- 5 to 6** The response demonstrates relevant, detailed knowledge and understanding. Psychological terminology is used appropriately.

Criterion C — Use of research to support answer**[6]**

Psychology is evidence based so it is expected that students will use their knowledge of research to support their argument. There is no prescription as to which or how many pieces of research are appropriate for their response. As such it becomes important that the research selected is **relevant** and useful in **supporting** the response. One piece of research that makes the points relevant to the answer is better than several pieces that repeat the same point over and over.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	Limited relevant psychological research is used in the response. Research selected serves to repeat points already made.
3 to 4	Relevant psychological research is used in support of the response and is partly explained. Research selected partially develops the argument.
5 to 6	Relevant psychological research is used in support of the response and is thoroughly explained. Research selected is effectively used to develop the argument.

Criterion D — Critical thinking

[6]

This criterion credits students who demonstrate an inquiring and reflective attitude to their understanding of psychology. There are a number of areas where students may demonstrate critical thinking about the knowledge and understanding used in their responses and the research used to support that knowledge and understanding. The areas of critical thinking are:

- research design and methodologies
- triangulation
- assumptions and biases
- contradictory evidence or alternative theories or explanations
- areas of uncertainty.

These areas are not hierarchical and not all areas will be relevant in a response. In addition, students could demonstrate a very limited critique of methodologies, for example, and a well-developed evaluation of areas of uncertainty in the same response. As a result a holistic judgement of their achievement in this criterion should be made when awarding marks.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1 to 2	There is limited critical thinking and the response is mainly descriptive. Evaluation or discussion, if present, is superficial.
3 to 4	The response contains critical thinking, but lacks development. Evaluation or discussion of most relevant areas is attempted but is not developed.
5 to 6	The response consistently demonstrates well-developed critical thinking. Evaluation or discussion of relevant areas is consistently well developed.

Criterion E — Clarity and organization

[2]

This criterion credits students for presenting their response in a clear and organized manner. A good response would require no re-reading to understand the points made or the train of thought underpinning the argument.

Marks	Level descriptor
0	Does not reach the standard described by the descriptors below.
1	The answer demonstrates some organization and clarity, but this is not sustained throughout the response.
2	The answer demonstrates organization and clarity throughout the response.

Abnormal psychology

1. Discuss the role of culture in diagnosis.

Refer to the Paper 2 Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate theories and/or studies.

Diagnosis refers to the identification of the nature of a disorder by examination of the symptoms. Diagnosis may be affected by one of several cultural considerations.

Discussions may include the following factors related to culture and diagnosis, but are not limited to:

- prevalence rates for various disorders within and between cultures
- under-detection of symptoms due to culture blindness and culture bias
- different classification systems (DSM, ICD, CCMD) used in different cultures
- somatic vs affective displays of disorders – different manifestation of symptoms in different cultures
- cultural knowledge and sensitivity of the clinician
- emic and etic approaches in diagnosing disorders
- the extent to which cultural factors contribute to an understanding of the diagnostic process
- culture bound syndromes.

Studies referencing the role of culture may include, but are not limited to:

- Bhugra *et al* (1997) study on how a group of Punjabi women in London described their symptoms
- Kirmeyer and Young (1998) on culture and somatization
- Kleinman (1984) on displays of symptoms of depression in China and the West.

Candidates may discuss one cultural factor in order to demonstrate depth of knowledge, or a greater number of cultural factors in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Also, candidates may discuss the role of culture in diagnosis of one specific disorder or choose to discuss the role of culture in general.

2. Discuss **one or more** etiologies of **one** disorder.

Refer to the Psychology Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Conclusions should be presented clearly and supported by appropriate theories and/or studies.

Candidates should address one disorder only from the categories presented in the psychology guide and discuss the etiology or etiologies to that disorder throughout the response. Etiology refers to the cause(s) or origins of one disorder.

Although etiologies in principle are useful in terms of understanding the possible cause of a disorder, it is not as easy to establish etiology of a psychological as a somatic disorder. This is partly because participants in studies may not all have the same type or severity of the disorder – or they may suffer from more than one disorder at the same time. This creates a problem with construct validity in the studies – the variables being studied have not been carefully and consistently defined.

Examples of how candidates may show evidence of discussion could include, but are not limited to:

- strengths and limitations of explanations offered for the disorder
- a comparison between an etiology and an alternative one
- questioning cause and effect
- prevalence rates of the disorder according to the selected etiology or etiologies
- strengths and limitations of research methods used in studying the prevalence of the chosen disorder
- a discussion of the possible interaction between biological, cognitive and sociocultural factors and the issue of multi-causality with reference to specific theories and studies
- address the issue of universality versus cultural differences in explanations of the disorder
- applicability: does the explanation help psychologists understand the disorder as it appears in everyday life and does it help psychologists to develop effective treatments.

If more than one etiology is evaluated, these could come from the same approach (for example, two from the biological approach) or from different approaches.

If a candidate discusses etiologies of more than one disorder, credit should be given only to the first disorder.

3. Discuss the use of **one or more** biological treatment(s) for **one** psychological disorder.

Refer to the Psychology Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Conclusions should be presented clearly and supported by appropriate theories and/or studies.

Biological approaches to treatment could include, but are not limited to:

- drug therapy
- electroconvulsive therapy (ECT)
- psychosurgery
- brain stimulation.

Responses should provide an accurate and well-organized description of one or more examples of a biological approach (biomedical) to treatment of the chosen disorder.

Examples of how candidates may show evidence of discussion could include, but are not limited to:

- the effectiveness of the chosen treatment(s)
- the assumptions about etiology upon which the biological approach to treatment is based with regard to the chosen disorder
- culture, gender, ethical, or practical considerations related to the use of biological treatment of one disorder.

Responses should be focused on biomedical approaches to treatment of one specific disorder in order to demonstrate detailed knowledge and understanding relevant to the question. However the response may also refer to alternative approaches to treatment in order to demonstrate some relevant differences between approaches to treatment and highlight specific aspects of the biological approach to treatment which are not present or different in other approaches. Also, it is acceptable to make reference to the potential benefit of using an eclectic approach that combines a biomedical approach to treatment of one disorder with a treatment that is not biomedical.

If a candidate discusses the use of biomedical approaches to treatment for more than one disorder, credit should be given only to the part of the response relevant to the first disorder discussed.

Developmental psychology

4. Discuss the influence of poverty/socioeconomic status on cognitive development.

Refer to the Psychology Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Conclusions should be presented clearly and supported by appropriate theories and/or studies.

Candidates may address the influence of poverty/socioeconomic status by referring to specific social and environmental variables known to affect cognitive development such as living in polluted areas, nutrition and quality of parenting.

Research studies may include, but are not limited to:

- Farah *et al* (2008) longitudinal study on the correlation between environmental stimulation and parental nurturance on cognitive development
- Bhoomika *et al* (2008) research on the effect of malnutrition on cognitive performance in Indian children
- Wertheimer (2003) research on the correlation between academic achievement and living in poor families
- Schoon (2002) longitudinal study investigating the long-term effect of poverty on academic achievement and attainment in adult life.

Discussion may include, but is not limited to:

- methodological and cultural consideration, *eg* difficulties establishing cause-effect relationships between variables
- the extent to which detrimental effects of poverty on cognitive development are reversible
- how protective factors may reduce the impact of poverty or socioeconomic status
- biological, cognitive, or other sociocultural factors in relation to the effects of poverty/socioeconomic status on cognitive development.

Candidates may discuss one or a small number of potential effects of poverty/socioeconomic status in order to demonstrate depth of knowledge or may discuss a larger number of potential effects of poverty/socioeconomic status in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

5. Discuss the role of attachment on development.

Refer to the Paper 2 Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate theories or studies.

Responses might discuss the role of attachment on the developing child and/or the role of childhood attachment patterns on relationships, for example friendships or romantic relationships. Both approaches are equally acceptable.

Responses might focus on attachment theory and related research investigating the possibility of continuity between attachment styles in childhood and later development, examining the evidence.

Relevant theories and studies may include, but are not limited to:

- Bowlby (1951) theory of attachment
- Ainsworth (1970) research paradigm “the strange situation”
- Hazan and Shaver (1987) on continuity of attachment styles into adult romantic love relationships
- Hammond and Fletcher (1991) on attachment styles and relationship satisfaction in close relationships.

Responses referring to research with animals, such as Harlow’s experiments with rhesus monkeys, are relevant but must be linked to attachment in human children and its role on later development.

6. To what extent do biological factors influence cognitive development?

Refer to the Psychology Marking Rubric when awarding marks.

The command term “to what extent” requires candidates to consider the merits or otherwise of biological factors influencing cognitive development. Conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Candidates may discuss, but such discussion is not limited to:

- brain development and neuroplasticity
- synaptic growth and brain chemistry
- brain changes during childhood and adolescence.

Relevant theories or studies may include but are not limited to:

- Chugani (1999) study with PET scans investigating glucose metabolism in newborn human babies to see when brain areas mature
- Chugani et al (2001) study on institutionalized Romanian children indicating correlation between deficits in cognitive task dependent on the prefrontal cortex
- Goldman-Rakic (1987) animal study on development of cortical circuitry and cognitive function
- Giedd (2004) longitudinal study using MRI scans investigating brain maturation in healthy children.

Candidates could choose to provide a general response to which biological factors influence cognitive development or they could provide a response discussing the extent to which biological factors influence one specific element of cognitive development.

Candidates may examine one biological factor in order to demonstrate depth of knowledge, or may examine a number of biological factors in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

It is appropriate and useful for candidates to address cognitive and/or sociocultural factors in order to respond to the command term “to what extent”.

Responses referring to research with animals are relevant but must be linked to the effect of a biological factor on human children and its relation to cognitive development.

Health psychology

7. Discuss the influence of health beliefs on health-related behaviour.

Refer to the Paper 2 Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Conclusions should be presented clearly and supported by appropriate theories and studies.

Candidates may examine the influence of health beliefs in relation to specific health beliefs (for example stress, addiction, obesity, chronic pain or sexual health) or health beliefs in general. Both approaches are equally acceptable.

Candidates may examine the positive influences of health beliefs (for example, optimistic attributional style) as well as negative factors (for example, pessimistic attributional style).

Theories and models related to health beliefs may include, but are not limited to:

- Attributional/explanatory style (Kamen and Seligman, 1987)
- Optimism bias/unrealistic optimism (Weinstein, 1987)
- False hope syndrome (Polivy, 2001)
- The health belief model (Becker *et al.*, 1977)
- Self-efficacy beliefs (Bandura).

Studies related to health beliefs and health related behaviour may include, but are not limited to:

- Weinberger *et al* (1981) on health beliefs and smoking behaviour
- Wang and Coups (2010) survey investigating causal beliefs about obesity and associated health behaviours
- Colemann and Testa (2008) qualitative interviews on relation between beliefs and risky sexual behaviour
- Alipour *et al* (2012) on the intermediary role of self-efficacy beliefs on stress and influence on health-related quality of life in people suffering from diabetes type 2
- Klein and Helweg-Larsen, (2002) meta-analysis of perceived control and the optimistic bias.

Candidates may examine a small number of health beliefs in order to demonstrate depth of knowledge or may examine a larger number of health beliefs in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

8. With the use of suitable examples, discuss prevalence rates of **one or more** health problems and associated health risks.

Refer to the Paper 2 Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Conclusions should be presented clearly and supported by appropriate theories and studies related to prevalence rates of health problems and associated health risks.

The chosen health problem(s) should be taken from the guide, *ie* stress, addiction, obesity, chronic pain and sexual health.

Approaches to how candidates could discuss prevalence rates of the chosen health problem(s) may include, but are not limited to:

- lifestyle and health beliefs
- sociocultural context
- social and cultural norms
- availability of health institutions
- socioeconomic status
- gender and age differences.

Candidates may discuss prevalence rates of one health problem in order to demonstrate depth of knowledge, or may discuss a larger number of health problems in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Examples of studies investigating prevalence of specific health problems could be but are not limited to:

- Gang *et al* (2012) prevalence and correlates of tobacco smoking, awareness of hazards, and quitting behaviour in India
- Ogden *et al* (2010) survey on the correlation between obesity and socioeconomic status in adults
- Barbeau *et al* (2004) investigation of relationship between race/ethnicity, gender and socioeconomic status on smoking
- Sullivan *et al* (2009) comparison of prevalence rates of HIV in various countries.

9. Discuss the effectiveness of **one or more** health promotion programmes.

Refer to the Psychology Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses relevant for the effectiveness of one or more health promotion programme. Conclusions should be presented clearly and supported by appropriate theories or studies.

There is no explicit reference to a specific area of health promotion within health psychology in the question so candidates may choose any relevant area studied within health psychology.

It is appropriate within this question for candidates to address models and theories of health promotion such as the health belief model, stages of change model, theory of reasoned action, self-efficacy beliefs *etc*, as a part of their discussion of a health promotion programme.

Relevant health promotion strategies may include, but are not limited to:

- The Victoria (Australia) campaign, “Go for your life” promoting healthy eating and exercise in schools (2004)
- The Florida (US) campaign, “TRUTH” an anti-smoking campaign arranged by and aimed at adolescents (1998–1999)
- The Canadian community-based peer intervention programme to prevent pregnant mothers from drinking alcohol (Carr, 1994)
- Social Cognitive Theory (for example, the Sabido method to encourage safe sex practices)
- Project SMART (US), promoting positive health decisions in middle school-aged children.

Discussion may include, but is not limited to:

- cultural and ethical considerations in programme implementation
- conditions under which the programme may be employed and may be successful
- empirical evidence of programme success or failure
- methodological concerns in measuring outcomes of the programme.

Candidates may evaluate one health promotion programme in order to demonstrate depth of knowledge, or may evaluate the effectiveness of more than one health promotion programme in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Psychology of human relationships

10. To what extent do sociocultural factors explain why relationships change or end?

Refer to the Psychology Marking Rubric when awarding marks.

The command term “to what extent” requires candidates to consider the contributions and merits of sociocultural factors in explaining why relationships change or end. Conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Responses may include (but are not limited to) these sociocultural factors explaining why relationships change or end:

- age difference between partners
- parenting issues
- financial issues
- socioeconomic and educational status
- increase in the level of general dissatisfaction and frustration with the relationship
- cultural norms.

Theories explaining why relationships change or end could include, but are not limited to:

- social exchange theory
- equity theory
- patterns of accommodation
- attachment styles
- fatal attraction theory.

Studies could include, but are not limited to:

- Flora and Seagrin (2003), on the role of perception of the relationship
- Duck *et al* (1988), on the role of age differences in couples
- Duck (1992), on the role of socioeconomic differences in couples
- Matsumoto (2004), on the reason for US divorce rates
- Levine (1995), on the correlation of the disappearance of love and the dissolution of marriage.

Candidates may discuss a smaller number of factors in order to demonstrate depth of knowledge, or may discuss a larger number of theories and/or studies in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

It is appropriate and useful for candidates to address cognitive and/or biological factors in order to respond to the command term “to what extent”.

11. Discuss one or more studies related to prejudice and/or discrimination.

Refer to the Paper 2 Marking Rubric when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review that includes a range of arguments, factors or hypotheses relevant for the study or studies related to prejudice and or discrimination.

Candidates may discuss studies that attempt to explain prejudice, discrimination, or both. Also, candidates may discuss studies focusing on:

- the origins of prejudice and/or discrimination
- development of prejudice and/or discrimination
- the effects of prejudice and/or discrimination
- assessing the effectiveness of efforts to reduce prejudice and/or discrimination.

Candidates may discuss studies from the biological, cognitive, or sociocultural levels of analysis, or studies that look at a combination of the three.

Relevant studies include, but are not limited to:

- Nosek, Banaji and Greenwald (2007), on implicit cognition and schema processing in relation to prejudice
- Harris and Fiske (2005), on the possible biological factors involved in prejudice and discrimination against the outgroup
- Darley and Gross (1983), on the possible role of social cognition in estimations of another person's success
- Fein and Spencer (1997), on prejudice as self-image maintenance
- Sherif (1961), The Robbers Cave study investigating “realistic conflict theory”
- Tajfel (1970), experiments on intergroup discrimination based on the “minimal group paradigm”.

Candidates may discuss one study in order to demonstrate depth of knowledge, or a greater number of studies in order to demonstrate breadth of knowledge. Both approaches are equally acceptable.

12. Evaluate **one** theory or study related to prosocial behaviour.

Refer to the Psychology Marking Rubric when awarding marks.

The command term “evaluate” requires the candidate to make an evaluation of one theory or study regarding pro-social behaviour by weighing up the strengths and limitations of the selected theory or study. Although a discussion of both strengths and limits is required, it does not have to be evenly balanced to gain high marks.

Relevant theories may include, but are not limited to:

- Social exchange theory
- Arousal-cost-reward Model
- Social identity theory
- Social responsibility norm
- The reciprocity principle
- Social cognitive theory
- Empathy-altruism theory.

Relevant studies may include, but are not limited to:

- Piliavin *et al* (1969), field experiment on factors involved in helping behaviour
- Whiting and Whiting (1979), comparison of prosocial behaviour in six cultures as a result of child-rearing practices
- Batson *et al* (1981), experiment on participants' motivation to help if they could escape based on the empathy-altruism theory
- Latane and Darley (1968), on bystanderism
- Oliner and Oliner (1998), on dispositional factors and personal norms in prosocial behaviour in relation to rescuing Jews during the Second World War
- Miller *et al* (1990), on the influence of cultural norms and moral values on perceptions of social responsibility
- Bartlett and DeSteno (2006), gratitude mediation of prosocial behaviour
- Gentile *et al* (2009), on the effects of prosocial video games on prosocial behaviours.

Evaluation of the selected theory or study may include, but is not limited to:

- cultural or gender considerations
 - empirical findings
 - conditions under which the findings may be applied
 - comparison to other explanations
 - methodological and ethical considerations.
-

**Psychology
Higher level
Paper 3**

SPECIMEN PAPER

1 hour

Instructions to candidates

- Do not turn over this examination paper until instructed to do so.
- Read the passage carefully and then answer all the questions.
- The maximum mark for this examination paper is **[24 marks]**.

The stimulus material below is based on a study on the influences on young people's use of drugs.

The aim of this study was to investigate processes involved in drug-related decision-making in an adolescent sample. According to the researchers, the identification of important factors in decisions to use drugs could potentially help to develop and inform new approaches to prevention and education.

5 A purposive sample was recruited through advertising in youth clubs, nightclubs, shelters and schools. The sample was multi-ethnic and consisted of 30 participants (age range 16 to 21) including both males and females. Most of the participants lived with their parents, some were homeless and some lived with friends.

10 Before the semi-structured interview, the participants signed an informed consent where they also gave consent to videotape the interviews for later transcription and inductive content analysis of the qualitative data. They were also assured anonymity. The interview guide prepared by the researchers included topics such as drug use of friends, personal drug use experience, and reasons for using as well as not using drugs.

15 The results showed that reasons for using drugs ranged from the desire to relax and decrease inhibition to increase energy, relieve boredom and depressive thoughts, and increase motivation to get things done. Some participants reported that media coverage of specific drugs influenced their decision of whether or not to use drugs. For example, news stories about ecstasy-related deaths had made them decide that the benefits of using that drug were not worth the risk of negative effects. The data also suggested that the decision to use drugs was rather through
20 personal choice than social pressure.

The researchers concluded that prevention strategies should take into account that decision-making in drug use is complex and therefore multiple influences should be addressed in the design of future prevention programmes. They also recommend that further research is needed to decide on the relative importance of the different factors that influence different
25 people's choice of drugs.

Answer **all** of the following three questions, referring to the stimulus material in your answers. Marks will be awarded for demonstration of knowledge and understanding of research methodology.

1. (a) Identify the research method used and outline **two** characteristics of the method. [3]
(b) Describe the sampling method used in the study. [3]
(c) Suggest an alternative or additional research method giving **one** reason for your choice. [3]
 2. Describe the ethical considerations in reporting the results and explain additional ethical considerations that could be taken into account when applying the findings of the study. [6]
 3. Discuss the possibility of generalizing the findings of the study. [9]
-

Markscheme

Specimen

Psychology

Higher level

Paper 3

This markscheme is **confidential** and for the exclusive use of examiners in this examination session.

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Paper 3 markbands

Marks	Level descriptor
0	The answer does not reach a standard described by the descriptors below.
1–3	<ul style="list-style-type: none">• The question is misunderstood and the central issue is not identified correctly, resulting in a mostly irrelevant argument.• The response contains mostly inaccurate references to the approaches to research or these are irrelevant to the question.• The reference to the stimulus material relies heavily on direct quotations from the text.
4–6	<ul style="list-style-type: none">• The question is understood, but only partially answered resulting in an argument of limited scope.• The response contains mostly accurate references to approaches to research which are linked explicitly to the question.• The response makes appropriate but limited use of the stimulus material.
7–9	<ul style="list-style-type: none">• The question is understood and answered in a focused and effective manner with an accurate argument that addresses the requirements of the question.• The response contains accurate references to approaches to research with regard to the question, describing their strengths and limitations.• The response makes effective use of the stimulus material.

1. (a) Identify the research method used and outline **two** characteristics of the method. [3]

- semi-structured interviews

Answers related to characteristics of the method may include two of the following characteristics: ([1] per relevant point. Maximum of [2])

- Interview guide with topics to explore: specific topics or themes were decided before the interview and noted in the interview guide so that the researcher is certain that these will be dealt with.
- Open-ended and closed questions: open ended questions allow the respondent to elaborate, for example, on reasons for taking drugs that may come up during the interview. Closed questions invite brief and precise answers that must be dealt with in the study. There is no possibility of elaboration.
- Informal and conversational in nature: the face-to-face situation and the open-ended questions could resemble a normal conversation. Semi-structured interviews facilitate a rapport between the interviewer and the respondent, useful in this study with a socially sensitive topic on how adolescents made decisions about taking drugs.

(b) Describe the sampling method used in the study. [3]

- purposive sampling [1]

Description of the sampling method may include two of the following characteristics: ([1] per relevant point. Maximum of [2])

- Participants are chosen because they possess characteristics salient to the research study. In the study the characteristic needed was some experience with taking drugs.
- Recruited through advertising, places where participants with the selected criteria can be found (for example, in schools or dance halls in the study).
- May include snowballing.

(c) Suggest an alternative or additional research method giving **one** reason for your choice. [3]

[1] for naming an additional/alternative method

[2] for reason with rationale

- **Focus group interviews:** A focus group interview with 6–7 people could be used as an alternative method to collect data before a further exploration of the topic, for example with semi-structured interviews.
 - a group of people with the relevant characteristics
 - the facilitator interacts with the participants
- **A quantitative survey:**
 - questions designed to elicit the required data
 - can be quantified to make comparisons
 - larger samples size.

Any other suitable method stated with reasons.

2. Describe the ethical considerations in reporting the results and explain additional ethical considerations that could be taken into account when applying the findings of the study.

[6]

Ethical considerations when reporting the findings:

- Researchers should inform participants about the findings of the study and how they intend to use the results. They should explicitly state that they are planning to use the results of the study to design prevention programs. For example, adolescents have revealed that they use drugs like ecstasy, which can have fatal consequences. Knowing this might prevent them from taking the drug and would be information essential to designing future programs.
- Parental consent is not mentioned in the stimulus material. Since some of the participants are minors it would be ethically correct to include parental consent if the results of the study are to be applied in the design of future prevention programmes. The researchers should request permission from an ethical committee before the study begins. The ethical committee should also give permission to apply the results.
- Anonymity should be guaranteed especially given the sensitive nature of the subject matter.
- It is important that the researchers do not exploit or harm the participants, especially those who may be vulnerable like the homeless adolescents in the sample. Therefore, it could be an important ethical consideration before applying the results to provide some support to the most vulnerable participants. Researchers should be conscious about legal issues surrounding the use minors or vulnerable people in this type of research. Any reasonable alternative point/s with explanation.
- Participants should be debriefed. This is especially important given the sensitive nature of the questioning and subject matter.
- The study needs to be cleared by an ethic committee prior to ensure all appropriate measures are put in place before the start of the investigation.

Any other relevant point.

[1 mark] per relevant point made with a maximum of [3 marks].

Ethical considerations that could be taken into account when applying the findings of the study: ([1] per relevant point, max [2] marks).

- Consideration of the scope and extent of the generalisability of the study to other contexts is important as these findings could be limited to a specific context resulting in inappropriate information in a generalised health campaign or prevention strategy.
- Awareness of researchers' own biases and expectations (reflexivity) which could skew the findings and influence the relevance of the findings for health campaigns.
- Replication of the findings by an independent researcher to test the reliability. If the results cannot be replicated the use of the findings in a health campaign could be at best pointless and at worst harmful.

Any other relevant point.

[1 mark] per relevant point made with a maximum of [3 marks].

3. Discuss the possibility of generalizing the findings of the study.

[9]

Refer to the paper 3 markbands when awarding marks.

The command term “discuss” requires candidates to offer a considered and balanced review of the possibility of generalizing the findings of the study in the stimulus material. Conclusions should be presented clearly and supported by appropriate knowledge of generalization in qualitative research as the study in the stimulus material is qualitative.

The aim of the study was to find factors that influenced decision making in relation to drug use and the inductive content analysis revealed a number of factors such as “desire to relax”, “decrease inhibition”, “increase energy” or “increase motivation and get things done”.

Candidates could argue that generalization in this study could be a possibility depending on the richness of the collected data but that generalization overall could only happen to some extent. Possible parts of an argument could include but are not limited to:

- Generalization in qualitative research is not based on statistical representation as in quantitative research. The study in the stimulus question is based on a rather small purposive sample, that is the participants are selected based on the salient characteristics of having experience with drug use. If the data is sufficiently rich and perhaps corroborated by other similar studies it may be possible to generalize the findings to similar populations. However, as the participants came from very different backgrounds and the only thing they had in common was that they used drugs (the selection criteria) it is perhaps not a possibility after all.
- If theoretical concepts are developed based on the study these could be used to develop further theory. It seems that this could be a possibility in this study because the findings that “social pressure” is not the main factor in the decision to use drugs may be contrary to traditional theory related to drug use.
- The inductive content analysis revealed a number of factors such as “desire to relax”, “decrease inhibition”, “increase energy” or “increase motivation and get things done”. The findings also indicated that media messages played a role and that drug use was decided rather by personal choice than social pressure. The researchers argue that future research should take into account the relative importance of each factor found in this study using a quantitative approach to research. This indicates that the various factors identified in this study could be transferred to another study and form the basis of a quantitative study, for example a survey.

Candidates may, in their discussion of generalization of findings from this qualitative research, briefly refer to statistical generalization (quantitative research) as part of their argument. This should be given credit as long as the main focus is on generalization from this qualitative research study.

Marks should be awarded according to the descriptors in the mark bands. Each level of the mark band corresponds to a range of marks to differentiate candidates' performance. A best-fit approach is used to ascertain which particular mark to use from the possible range for each level descriptor.
