

Markscheme

May 2022

Psychology

Higher level

Paper 1

12 pages

© International Baccalaureate Organization 2022

All rights reserved. No part of this product may be reproduced in any form or by any electronic or mechanical means, including information storage and retrieval systems, without the prior written permission from the IB. Additionally, the license tied with this product prohibits use of any selected files or extracts from this product. Use by third parties, including but not limited to publishers, private teachers, tutoring or study services, preparatory schools, vendors operating curriculum mapping services or teacher resource digital platforms and app developers, whether fee-covered or not, is prohibited and is a criminal offense.

More information on how to request written permission in the form of a license can be obtained from <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

© Organisation du Baccalauréat International 2022

Tous droits réservés. Aucune partie de ce produit ne peut être reproduite sous quelque forme ni par quelque moyen que ce soit, électronique ou mécanique, y compris des systèmes de stockage et de récupération d'informations, sans l'autorisation écrite préalable de l'IB. De plus, la licence associée à ce produit interdit toute utilisation de tout fichier ou extrait sélectionné dans ce produit. L'utilisation par des tiers, y compris, sans toutefois s'y limiter, des éditeurs, des professeurs particuliers, des services de tutorat ou d'aide aux études, des établissements de préparation à l'enseignement supérieur, des fournisseurs de services de planification des programmes d'études, des gestionnaires de plateformes pédagogiques en ligne, et des développeurs d'applications, moyennant paiement ou non, est interdite et constitue une infraction pénale.

Pour plus d'informations sur la procédure à suivre pour obtenir une autorisation écrite sous la forme d'une licence, rendez-vous à l'adresse <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

© Organización del Bachillerato Internacional, 2022

Todos los derechos reservados. No se podrá reproducir ninguna parte de este producto de ninguna forma ni por ningún medio electrónico o mecánico, incluidos los sistemas de almacenamiento y recuperación de información, sin la previa autorización por escrito del IB. Además, la licencia vinculada a este producto prohíbe el uso de todo archivo o fragmento seleccionado de este producto. El uso por parte de terceros —lo que incluye, a título enunciativo, editoriales, profesores particulares, servicios de apoyo académico o ayuda para el estudio, colegios preparatorios, desarrolladores de aplicaciones y entidades que presten servicios de planificación curricular u ofrezcan recursos para docentes mediante plataformas digitales—, ya sea incluido en tasas o no, está prohibido y constituye un delito.

En este enlace encontrará más información sobre cómo solicitar una autorización por escrito en forma de licencia: <https://ibo.org/become-an-ib-school/ib-publishing/licensing/applying-for-a-license/>.

Section A markbands

Marks	Level descriptor
0	<ul style="list-style-type: none"> 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. Describe **one** effect of **one** hormone on behaviour, with reference to **one** relevant study. [9]

Refer to the paper 1 section A markbands when awarding marks.

The command term “describe” requires candidates to give a detailed account of one effect of one hormone on behaviour, with reference to one relevant study.

Any aspect of human behaviour (eg, aggression, attachment, sexual behaviour) is acceptable as long as the response focuses on how one hormone affects a particular behaviour.

Although hormones may act as neurotransmitters by activating receptor sites within the synapse, it is the origin of the chemical that classifies it as a hormone. Responses that address the effect of neurotransmitters such as dopamine, serotonin, GABA and acetylcholine on behaviour should not be awarded marks.

Relevant studies may include, but are not limited to:

- Radke *et al.*'s (2015) study investigating the effect of testosterone on women's responses to angry faces
- McGaugh and Cahill's (1995) study on the effect of adrenaline in memories linked to emotional arousal
- Newcomer *et al.*'s (1999) study on cortisol and memory
- Baumgartner *et al.*'s (2008) study on the effect of oxytocin on trust in economic behaviour.

If a candidate describes more than one effect on more than one hormone, credit should be given only to the first effect or the first hormone described.

If a candidate refers to more than one study credit should be given only to the first study.

If a candidate describes the effect of one hormone without making reference to a study, up to a maximum of [5] should be awarded.

If a candidate only describes a relevant study without describing the effect of the hormone, up to a maximum of [4] should be awarded.

Cognitive approach to understanding behaviour

2. Describe **one** ethical consideration related to **one** relevant study from the cognitive approach to understanding behaviour. **[9]**

Refer to the paper 1 section A markbands when awarding marks.

The command term “describe” requires candidates to give a detailed account of one ethical consideration related to one relevant study from the cognitive approach to understanding behaviour.

The ethical consideration described can be one that was adhered to in the study (what guidelines were or could be followed) or one that was breached (what guidelines were not followed).

Ethical considerations may include, but are not limited to:

- protection of participants
- issues of consent/assent
- debriefing
- right to withdraw from a study
- use of deception
- informed consent
- confidentiality
- anonymity.

Studies related to the cognitive approach may include, but are not limited to:

- Brewer and Treyens’ (1981) use of deception in the study of the effect of schemas on memory
- Schacter and Singer’s (1962) use of deception in the study of the two-factor theory of emotion
- Corkin *et al.* (1997) and lack of informed consent in the study of HM’s brain lesion in relation to memory
- Loftus and Palmer’s (1974) use of deception in the study of reconstructive memory
- Sharot *et al.* (2007) and protection from harm in the study of how emotion may affect memory.

If a candidate describes more than one ethical consideration credit should be given only to the first description.

If a candidate refers to more than one study, credit should be given only to the first study.

If a candidate describes one ethical consideration without making reference to a relevant study, up to a maximum of **[5]** should be awarded.

If a candidate only describes a relevant study without describing one ethical consideration, up to a maximum of **[4]** should be awarded.

Sociocultural approach to understanding behaviour

3. Describe social cognitive theory, with reference to **one** relevant study.

[9]

Refer to the paper 1 section A markbands when awarding marks.

The command term “describe” requires candidates to give a detailed account of social cognitive theory in relation to one relevant study.

The main concepts of social cognitive theory may include, but are not limited to:

- imitation (for example, of role models)
- vicarious learning
- the role of attention, retention, motivation and reproduction
- self-efficacy
- reciprocal determinism.

Relevant studies may include, but are not limited to:

- Bandura *et al.*'s (1961) study on observational learning and aggression in children
- Joy, Kimball and Zabrack's (1986) study on the impact of television on children's aggressive behaviour
- Totten's (2003) study on modelling of violent behaviour towards girlfriends
- Sprafkin *et al.*'s (1975) study on children's prosocial behaviour and television
- Fagot *et al.*'s (1992) study on parental influences on gender development.

If a candidate refers to more than one study, credit should be given only to the first study.

If a candidate describes social cognitive theory without making reference to a study, up to a maximum of [5] should be awarded.

If a candidate only describes an appropriate study without describing social cognitive theory, up to a maximum of [4] should be awarded.

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.
1–2	The response demonstrates limited relevant knowledge and understanding. Psychological terminology is used but with errors that hamper understanding.
3–4	The response demonstrates relevant knowledge and understanding but lacks detail. Psychological terminology is used but with errors that do not hamper understanding.
5–6	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.
1–2	Limited relevant psychological research is used in the response. Research selected serves to repeat points already made.
3–4	Relevant psychological research is used in support of the response, and is partly explained. Research selected partially develops the argument.
5–6	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.
1–2	There is limited critical thinking and the response is mainly descriptive. Evaluation or discussion, if present, is superficial.
3–4	The response contains critical thinking, but lacks development. Evaluation or discussion of most relevant areas is attempted but is not developed.
5–6	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 the relationship between genetics and behaviour.

[22]

Refer to the paper 1 section B assessment criteria when awarding marks.

The command term “discuss” requires candidates to offer a considered review of the relationship between genetics and behaviour.

Candidates may address one behaviour to demonstrate depth of knowledge or may address more than one behaviour to demonstrate breadth of knowledge. Both approaches are equally acceptable.

Relevant areas of the relationship between genetics and behaviour may include, but are not limited to:

- mental health
- intelligence
- aggression
- personality.

Relevant studies may include, but are not limited to:

- Bouchard *et al.*'s (1990) reports on the “Minnesota Twin Studies”
- Plomin and Petrill's (1997) research into the heritability of IQ in twin and adoption studies
- Kendler *et al.*'s (2006) twin study on genetics and depression.
- Caspi *et al.*'s (2003) study on genes and depression
- Weissman *et al.*'s (2005) longitudinal family study on depression.
- Gilbertson *et al.*'s (2002) study on PTSD in veterans.

Critical discussion may include, but is not limited to:

- methodological and ethical considerations related to research into the relationship between genetics and behaviour
- how the research findings have been interpreted and applied
- implications of the research findings
- assumptions and biases
- areas of uncertainty
- supporting and/or contradictory evidence.

5. Evaluate **one** method used to study the interaction between technology and cognitive processes.

[22]

Refer to the paper 1 section B assessment criteria when awarding marks.

The command term “evaluate” requires candidates to make an appraisal by weighing up the strengths and limitations of one method used to study the interaction between technology and cognitive processes.

Although the discussion of both strengths and limitations is required, it does not have to be evenly balanced to gain high marks.

Relevant methods may include, but are not limited to:

- experimental method
- correlational studies
- surveys.

Relevant studies may include, but are not limited to:

- Mueller and Openheimer’s (2014) experiment on the use of laptops versus paper in note-taking by college students
- Chou and Edges’s (2012) use of a survey in the study of the availability heuristic in thinking
- Rosen *et al.*’s (2013) correlational study on the influence of induced multi-tasking on cognitive processes
- Sparrow *et al.*’s (2011) experiments on transactive memory and digital amnesia.

Evaluation of the method may include, but is not limited to:

- the appropriateness of the methods for the aim
- issues of validity and reliability
- sample choice and size
- ease and cost of the procedure
- the generalizability of findings.

If a candidate evaluates more than one method, credit should be given only to the first evaluation. However, candidates may address other methods and be awarded marks for these as long as they are clearly used to evaluate the one main method addressed in the response.

If the candidate addresses only strengths or only limitations, the response should be awarded up to a maximum of **[3]** for criterion D: critical thinking. All remaining criteria should be awarded marks according to the best fit approach.

6. Discuss **one** cultural dimension of human behaviour.

[22]

Refer to the paper 1 section B assessment criteria when awarding marks.

The command term “discuss” requires candidates to offer a considered review of one cultural dimension of human behaviour.

Cultural dimensions may include, but are not limited to:

- individualism/collectivism (eg Berry and Katz, 1967; Kulkofsky *et al.*, 2011 ; Wei *et al.*, 2001)
- power/distance (eg Zhang *et al.*, 2010; Eylon and Au, 1999; Lynn *et al.*, 1993)
- long-term/short-term orientation (Confucian dynamism) (eg Chen *et al.*, 2005; Hofstede and Bond, 1988)
- masculinity/femininity (eg Vunderick and Hofstede, 1998)
- uncertainty avoidance (eg Shane, 1995).

Responses should present the core traits that define the chosen cultural dimension. For example, candidates may discuss that individualistic societies focus on uniqueness, achievement and freedom, whereas collectivistic societies focus on family, relationships and a common fate or heritage.

Candidates may address the chosen cultural dimension generally, for example, that it is the effect of a culture on the beliefs and values of a society, or in a more detailed manner with explanations based on social mobility, agricultural versus urban, democratic principles, economic stability, etc. Both approaches are equally acceptable.

Discussion may include, but is not limited to:

- methodological related to the research into cultural dimensions
- how the findings of research have been interpreted and applied
- implications of the findings
- assumptions and biases
- areas of uncertainty
- supporting and/or contradictory evidence
- alternative explanations.

If a candidate discusses more than one cultural dimension, credit should be given only to the first cultural dimension discussed.