

Markscheme

November 2025

Psychology

Higher level

Paper 3

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Paper 3 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 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]**

Award [1] for identification of correct research method: Natural experiment (also accept naturalistic study, naturalistic research).

Award [0] for experiment or quasi experiment.

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

The characteristic marks are specific to the research method (natural experiment) rather than the described study.

- In a natural experiment the researcher looks at the effects of a naturally occurring event or situation on the dependent variable.
- In a natural experiment the independent variable is naturally occurring.
- The researcher is not able to / does not manipulate the independent variable in order to study the effect on the dependent variable.
- The researcher has no control over the independent variable because it occurs naturally.
- Researchers make use of combined data from 'before', 'during', and/or 'after' a naturally occurring event or situation.
- Natural experiments are often used to study events or situations that would be difficult or unethical to study in a laboratory setting, such as the effects of a natural disaster.
- Because behaviour in a natural experiment takes part during a naturally occurring event or situation, it is more likely to reflect real life / have very high ecological validity.
- There is no control over the environment and other extraneous variables occurring as part of the naturally occurring event or situation. Therefore, researchers may not be able to accurately assess the effects of the independent variable.
- It is very difficult to replicate a natural experiment because the naturally occurring circumstances are very specific to those being looked at in the original study.

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

Award [1] for naming the correct sampling method: Volunteer sampling (also accept Self-selection sampling and Self-selected sampling).

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

Award [0] for description of the sample rather than the sampling method.

- Uses people who volunteer / choose to / are willing to take part in a study.
- A volunteer sample is a non-probability sampling technique, which means that participants are not chosen randomly from a target population.
- Common ways that participants are recruited is through posters or flyers placed in a relevant location and advertisements on social media or in a newspaper.
- Because the participants have chosen to be involved in the research, they will usually be more motivated and co-operative / less likely to withdraw.
- Participants volunteered so there is no issue of consent. However, a reward for participating may be more likely and so researchers need to take care that there is no possibility of coercion.
- Self-selection bias / volunteer bias occurs when people voluntarily choose to participate; for example, the people who choose to volunteer may be more personally interested in the research.
- Volunteer sampling can lead to a biased sample that may only represent part of the population; for example, those who are available to volunteer.

- (c) Suggest **one** alternative **or one** additional research method that could be used to investigate the aim of the original study, giving **one** reason for your choice. **[3]**

Award [1] for naming an alternative or additional research method and up to [2] for reason with rationale.

The candidate may choose to write about an alternative or an additional method. Either approach to answering the question is acceptable. The rationale may differ depending on which is chosen.

If more than one method is suggested, only the first method can be considered for credit.

Suitable alternative or additional research methods and reasons (with rationale) could be, but are not limited to:

Structured interviews

- A structured interview would allow researchers to collect quantitative data directly from the participants. This could be used to compare with the data already collected from the original study.
- The structured interview as an additional research method would allow triangulation and could help to compensate for the limitations of the natural experiment – such as issues around a lack of control of extraneous variables.

Surveys

- A survey with closed questions could collect quantitative data on participants' experiences of the lockdowns and any changes in their behaviour around physical activities and recreational screen time. This could function as an additional method and provide method triangulation.
- Data from a large-scale survey could add data to the investigation. This would allow for statistical comparisons (between countries for example).
- Surveys generally allow researchers to collect a large amount of data in a relatively short period and they are less expensive than qualitative methods.
- With a survey it is easy to collect and analyse data from a large number of participants. This makes it more possible that the findings can be generalized to a target population.

Correlational research

- In correlational studies, a researcher looks for existing relationships between naturally occurring variables. Researchers can then look at how strong or weak the relationship is between the variables.
- Correlational research can be used to understand the relationships between a lot of different variables. In the original study, researchers looked at two conditions of the IV and two different dependent variables (the amount of time spent doing physical activities and the amount of recreational screen time). If they carried out correlational research, it could be used to look for any potential relationship between these variables that were not seen in the original study.
- They could also look at the strength of any relationships they found.

2. Describe the ethical considerations that were applied in the study and explain if further ethical considerations could be applied. [6]

Describe the ethical considerations that were applied in the study: Award [1] per relevant point made, up to a maximum of [3].

The description of each point must include a detailed account.

If a candidate names relevant ethical considerations without also accurately describing them, a maximum of [1] should be awarded.

- **Informed consent:** The participants were fully informed about the aims of the study. They also signed a consent form which shows that they were willing to take part in the research.
- **Parental consent:** The researchers also needed to receive consent from a parent because the participants were children and adolescents (they were aged 10-15 years old).
- **Deception:** The participants were given full information about the aims of the study and were therefore NOT deceived. The researchers also had no reason to use deception.
- **Confidentiality:** Participants were given information about how their data would be protected. This involves all of their personal information and statistical data being kept in secure storage. Researchers will also provide clarity for participants regarding how and when their data will be destroyed.
- **Anonymity:** Participants were also told that their identities would be kept anonymous in the report. This means that nobody can identify them because they are not mentioned by name and no other identifying information is published.

Explain if further ethical considerations could be applied: Award [1] per relevant point made, up to a maximum of [3].

The explanation of each point must include reasons and/or causes.

If a candidate names relevant ethical considerations without also accurately explaining them, a maximum of [1] should be awarded.

- **Debriefing:** The participants should be debriefed after they have completed the study and the researchers should explain how the results will be used and answer any questions the participants may have. Contact information could be provided so that participants could contact the researchers if they have any questions/concerns.
- **Right to withdraw:** The participants should be informed about their right to leave the study and/or withdraw their data at any time. The participants could be given access to the researcher's conclusions before the final report is published to ensure that they are clear about what is being said and that they still agree to their results being used.
- **Protection from harm:** The researchers must be attentive to personal and sensitive issues. Participants are being asked to provide data for the months immediately before and during the COVID-19 lockdowns. It may have been distressing for some participants to think about this time period. Researchers need to remind participants of their right to withdraw and potentially provide support if necessary/appropriate. The participants are aged between 10 and 15 years of age and should be treated in an age-appropriate manner and not as adults. This may mean that extra care and guidance need to be provided.

3. Discuss the possibility of generalizing the findings of the study. [9]

Refer to the paper 3 markbands when awarding marks.

Marks should be awarded according to the descriptors in the markbands.

The command term “discuss” requires candidates to offer a considered and balanced review of the possibility of generalizing the findings of the study.

Generalization means drawing inferences from the results of a study and applying them to something outside of the study

The discussion of the possibility of generalizing the findings of the study could include but is not limited to:

- The sampling method in this study was a volunteer sample. This means that it is a non-probability sample and is unlikely to result in the selection of a sample that is statistically representative of the population.
 - The fact that it was a volunteer sample means it could also result in selection bias as there may be an unknown factor affecting whether or not people volunteer. Therefore, it is not considered statistically representative of the larger target population.
 - The sample was quite large as it involved almost two thousand participants with an even number of males and females. The more participants, the greater the chance that differences between participants will be balanced out, and therefore there is a greater possibility of generalization.
 - The sample was only from one European country. This limits the ability to generalize the findings to other countries – this is especially the case with countries that are culturally very different.
 - The participants came from many different areas within the European country (158 different cities and towns). This does provide a good level of representation of the 10- to 15-year-olds within this country.
 - The aim was to see if the COVID-19 lockdowns had an effect on the amount of time that children and adolescents spent on physical activities and recreational screen time. The participants were aged between 10 and 15 years of age. The findings cannot be said to represent younger children or older adolescents (16+ years old).
 - The COVID-19 lockdowns in different countries varied in the timing, length and severity. The findings of this study are specific to the pattern of lockdowns in this country and this limits the ability to generalize the findings to other countries.
 - The research method was a natural experiment which has a number of strengths including participants behaviour being more natural. This in turn means higher ecological validity and a reduced effect of demand characteristics. These strengths result in a greater ability to generalize the findings to other situations or settings.
 - The data being collected is about areas where some participants may be sensitive to judgement from others. This means that there is a risk of demand characteristics and social desirability bias affecting their data (for example in the under-stating of screen use and over-stating of exercise levels).
 - The COVID-19 lockdowns were an unusual event in global history and the findings from this study are unlikely to be generalizable to any other situations or settings.
 - If replications of this study arrived at the same conclusion, the potential for generalization is enhanced – although replication would be very difficult in this instance.
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