Psychology: Subject-specific guidance

See also: EE generic guide and EE teacher support material

Overview

An extended essay (EE) in psychology gives students the opportunity to:

- investigate in depth a topic of their choice within the subject
- develop their skills in research, analysis and evaluation, and communication
- increase their understanding of behaviour from a psychology perspective.

Psychology may be defined as “the study of behaviour”. The subject involves studying the behaviours of humans and non-human animals and has a range of specialist terms, methods and literature.

It is therefore essential for students undertaking an EE in psychology to:

- have a sound understanding of the subject and its methodologies
- choose a topic amenable to psychological investigation and analysis.

Students who have not studied psychology formally should not undertake the EE, unless they can demonstrate that they have sufficient knowledge and understanding of the subject.

Schools where psychology is not taught must be aware that students who submit an EE in psychology with no formal exposure to the subject may compromise their level of achievement.

Choice of topic

The topic may be an extension of an area covered on the Diploma Programme psychology course or a topic of interest outside the content covered.

When choosing their topic, students should remember that their EE must be based on secondary sources only. The collection of primary data is not permitted for the psychology EE (see Treatment of the topic).

The process of selecting a focused research question may be summarized as:

- choose a field in psychology of particular interest
- refine this choice to a specific topic
- develop a research question on this topic.

For example, a student might be interested in stress. They may then narrow this to the topic of stress within commercial aviation. Many large commercial airlines employ psychologists to investigate pilot performance and factors such as stress or emergency management. The student's research question could be: “To what extent does airline pilot stress affect airline safety standards?” (See also Examples of topics.)

Students must ensure that enough relevant and appropriate resources are available for them to conduct their research. They should investigate this at the start of their planning process.
The research question should require the construction of a systematically structured and fully supported argument in the development of an informed conclusion.

Supervisors do not necessarily require detailed knowledge of the student’s topic.

**Tricky topics**
Topics within the fields of “pop psychology” or “self-help” will not be appropriate for the EE as they are not supported by peer-reviewed research studies.

Topics that do not lend themselves well to analysis, evaluation and debate are unlikely to be the best choices for a student.

Topics such as eating disorders, dysfunctional behaviours (eg schizophrenia or depression) and forensic psychology are popular with students. However, they pose a challenge unless students focus their research question very tightly. These topics are extremely ambitious, requiring far more time and experience than students generally have at their disposal.

**Examples of topics**
These examples are just for guidance. Students must ensure their choice of topic is focused (left-hand column) rather than broad (right-hand column).

<table>
<thead>
<tr>
<th>Focused topics</th>
<th>Broad topics</th>
</tr>
</thead>
<tbody>
<tr>
<td>The relationship between bilingualism and cognitive development</td>
<td>One- or two-language households</td>
</tr>
<tr>
<td>An examination of whether and how sleep contributes to learning</td>
<td>Sleep and learning</td>
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<tr>
<td>An examination of the extent to which music therapy is effective in enhancing the communication skills of individuals diagnosed with autism</td>
<td>Music and autism</td>
</tr>
<tr>
<td>The relationship between motivation techniques and performance in long-distance running</td>
<td>Motivation and achievement in sport</td>
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</tbody>
</table>

**Treatment of the topic**

**Primary versus secondary data**
Primary data collected using the students’ own experiments, surveys, observations and case studies is inappropriate for the EE.

Instead, students must use secondary data from published sources. They should develop their argument with careful and appropriate citation of relevant concepts, theories and studies from academic psychological research journals and books.

Students should not make any assertions unsupported by evidence drawn from psychological theories or studies.
Analysis and discussion and evaluation

To develop a well-rounded understanding of their topic, students should carefully evaluate any research they cite. The essay should offer a balanced argument in response to the research question.

Students should demonstrate critical awareness and understanding of the material they use. They should analyse rather than simply describe. They need to apply what they have read to the research question rather than report the information.

One of the aims of all group 3 subjects is to enable the students to recognize that the content and methodologies of the subjects in group 3 are wide ranging and require students to critically evaluate the choices they make with regard to methodologies. An EE in psychology should demonstrate such understanding.

The Psychology guide introduces a framework for evaluation. It trains students to address cultural, ethical, gender and methodological considerations potentially affecting how a particular study or theory interprets behaviour.

Comparative analysis may also be a useful evaluative strategy.

Students should keep these considerations in mind when selecting a topic, generating a research question and developing their argument.

Ethical guidelines

The IB has published a set of ethical guidelines that apply to the psychology EE and internal assessment task.

Many topics within psychology are sensitive in nature. Students should consider carefully all possible ethical issues before they embark on their essay. Students and supervisors share the responsibility for ensuring it does not breach the guidelines.

Examples of topics, research questions and suggested approaches

Once students have identified their topic and written their research question, they can decide how to research their answer. They may find it helpful to write a statement outlining their broad approach. These examples are for guidance only.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Gender-related colour choices</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research question</td>
<td>To what extent is preferred colour choice acquired or innate in young children?</td>
</tr>
<tr>
<td>Approach</td>
<td>• Recent fashions in the colours of children’s clothing, furnishings and toys seem to have reverted from gender-neutral schemes to pink for girls and blue for boys. This provides material for investigating the question of the extent to which such choices are the result of socialization or of innate predisposition.</td>
</tr>
</tbody>
</table>
A comparison of evaluated published research findings supporting each type of explanation, having linked the studies to relevant psychological theory.

Findings and related interpretations regarding the research question from different decades and/or cultural groups could be compared and evaluative commentary provided, focusing on addressing the “To what extent” aspect of the question, culminating in an informed summary conclusion.

<table>
<thead>
<tr>
<th>Topic</th>
<th>Media influences on altruistic behaviours</th>
</tr>
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<tbody>
<tr>
<td>Research question</td>
<td>To what extent do presentations in the media affect adult choices in volunteering to work for charities?</td>
</tr>
<tr>
<td>Approach</td>
<td>• An interest in social influences on pro-social behaviours in adults could result in curiosity about the factors affecting the varying levels of adult participation in volunteer activities.</td>
</tr>
<tr>
<td></td>
<td>• Is there evidence or theory to suggest some individuals are more predisposed to pro-social behaviours than other individuals?</td>
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<tr>
<td></td>
<td>• Use theory-based research into the efficacy of health campaigns to investigate the impact of media presentations on adult volunteer rates.</td>
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<tr>
<td></td>
<td>• A balanced argument could evaluate evidence claiming support for the success of television adverts, personal presentations at meetings, newspaper articles, etc in recruiting adult volunteers for work with charities, comparing this with evidence to suggest personality type as a more dominant factor in pro-social behaviour.</td>
</tr>
<tr>
<td></td>
<td>• The question covers a broad area including possible trans-historical and cross-cultural variations, so the essay’s introduction should clearly indicate the chosen parameters.</td>
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</tbody>
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An important note on “double-dipping”

Students must ensure that their EE does not duplicate other work they are submitting for the Diploma Programme.

The EE and IA

In particular, an EE in psychology is not an extension of the internal assessment (IA) task. Students must ensure that they understand the differences between the two. Students and supervisors share the responsibility for ensuring the EE differs in intent, content, methodology and outcome from the IA.

Supervisors play an important role in guiding students on these distinctions. Students risk their diploma if academic misconduct is detected.
Interpreting the EE assessment criteria

Criterion A: Focus and method

(Strands: Topic, Research question, Methodology)

Students should state their choice of topic clearly at the start of the EE.

The research question must be:

1. expressed in question format
2. very precise
3. able to be fully addressed within the word limit.

It should be clear to the reader how the question relates to and is derived from the knowledge and understanding of the topic under consideration.

The introduction should provide the academic context and subsequent justification for the research question. The student should show how and why it is relevant for consideration in an academic context, indicating the current state of research and the discussions raised.

Although their personal interest in the topic is important, students’ personal experiences and opinions are inappropriate here. Students must explain their approach to the topic. Their explanation needs to:

• outline the remit of the essay
• indicate the psychological theories and studies they will use and how
• enable the reader to see how the focus of the essay is to be maintained.

Psychological journals and books are appropriate resources. Materials from “pop psychology” and items from the media do not offer sufficient depth and academic rigour to develop an informed and balanced argument.

Students must select appropriate resources and make explicit reference to the research question throughout the essay to score highly against this criterion.

Where a student considers neuro-cognitive processing in relation to a behaviour, the focus of their essay should be on its impact on the behaviour or experience of the individual rather than on description of biological processing, however detailed and accurate.

If the topic or research question is deemed inappropriate for the subject in which the essay is registered, no more than four marks can be awarded for this criterion. This applies to psychology essays that are based on the collection of primary data.

Criterion B: Knowledge and understanding

(Strands: Context, Subject-specific terminology and concepts)

Students can provide evidence in several ways that they clearly understand the concepts and materials they are using and are able to communicate them effectively.
• Use of an appropriate academic style throughout, with the terminology of psychological research methods accurately and confidently applied.

• Psychological terminology consistently used in a manner that indicates understanding of theories and concepts.

• Considered evaluation of evidence and findings from empirical studies and their related theories, in terms of culture, ethics, gender and methodology. This evaluation informs students' interpretation of the research question, contributing to perceptive commentary.

If the topic or research question is deemed inappropriate for the subject in which the essay is registered, no more than four marks can be awarded for this criterion. This applies to psychology essays that are based on the collection of primary data.

**Criterion C: Critical thinking**  
(Strands: Research, Analysis and Discussion and evaluation)

This criterion is looking for critical engagement with appropriate material. Students must show throughout the essay that they can analyse and evaluate the psychological theory and published research they have selected to answer the research question.

Research should be applied to effectively demonstrate the complex nature of a research question that connects with relevant areas of inquiry in the field of psychology.

Throughout, students must use psychological theory and/or studies to justify points in the construction of their argument. They need to explain the material and explicitly link it to the research question.

The research question should analyse and evaluate different perspectives or approaches to the research question.

Their analysis must include:

• the context of the study or research (eg a consideration of the nature of participants and materials used)
• an awareness of possible researcher bias and methodological biases.

It is the responsibility of the student to persuade the reader of the reasons for, and validity of, their perspective. Students should evaluate the evidence at the point at which they introduce it rather than in a separate add-on section.

As in-depth treatment is required, essays that are largely descriptive or narrative in nature will not achieve highly against this criterion.

Students are expected to draw conclusions throughout the presentation of their essay and in a summative conclusion at the end. This must be consistent with the argument and evidence presented in the body of the essay. The conclusion is not the place for new evidence. However, it should include unresolved questions that have arisen from the discussion and which could be suitable for further study.
If the topic or research question is deemed inappropriate for the subject in which the essay is registered, no more than three marks can be awarded for this criterion. This applies to psychology essays that are based on the collection of primary data.

Criterion D: Presentation
(Strands: Structure, Layout)

This criterion relates to the extent to which the essay conforms to accepted academic standards in relation to how research papers should be presented. It also relates to how well these elements support the reading, understanding and evaluation of the essay.

Students may provide a section and subsection structure to their essays, with informative headings. Subheadings should not distract from the overall structure of the essay or argument presented.

Use of charts, images and tables

Any charts, images or tables from literature sources included in the essay must be carefully selected and labelled and referenced. They should only be used if they are directly relevant to the research question, contribute towards the understanding of the argument and are of a good graphic quality.

Graphs or charts drawn from the analysed data should be selected to highlight only the most pertinent aspects related to the argument. Too many graphs, charts and tables will distract from the overall quality of the communication. Only summary data charts of information that is central to the argument of the essay should be included in the body of the essay.

Tables should enhance a written explanation but should not themselves include significant bodies of text. If they do, then these words must be included in the word count.

Students must take care in their use of appendices as examiners are not required to read them. All information with direct relevance to the analysis, discussion and evaluation of the essay must be contained in the main body of the essay.

A bibliography is an essential structural element, contributing as far as it is visually presented, to criterion D, in addition to the other presentation requirements: title page, table of contents, page numbers, and so on.

While there is no explicit penalty in criterion D for exceeding 4,000 words, students should be aware that examiners will not read beyond the 4,000-word limit, therefore affecting the application of multiple criteria. Criterion D specifically may be impacted if, in exceeding 4,000 words, one of the structural requirements of the essay (for example, the conclusion, or important illustrative material) is unassessed by the examiner because he or she is not required to read beyond 4,000 words.

Any material that is not original must be carefully acknowledged, with specific attention paid to the acknowledgement and referencing of quotes and ideas. This acknowledgment and referencing is applicable to audiovisual material, text, graphs and data published in print and electronic sources. If the referencing does not meet the minimum standard as indicated in the guide (name of author, date of
publication, title of source and page numbers, as applicable), and is not consistently applied, work will be considered as a case of possible academic misconduct. Incomplete references and those that do not meet the minimum requirements as detailed in the Effective citing and referencing document are not penalized in criterion D, but examiners are required to alert the IB to candidates who overlook these minimum requirements, for further investigation. Criterion D assesses references and bibliography purely on how they are presented (for example, consistent, laid out in an appropriate academic manner).

**Criterion E: Engagement**

(Strands: Reflections on planning and progress)

This criterion assesses the student’s engagement with their research focus and the research process. It will be applied by the examiner at the end of the assessment of the essay, and is based solely on the candidate’s reflections as detailed on the RPPF, with the supervisory comments and extended essay itself as context.

Students are expected to provide reflections on the decision-making and planning process undertaken in completing the essay. Students must demonstrate how they arrived at a topic as well as the methods and approach used. This criterion assesses the extent to which a student has evidenced the rationale for decisions made throughout the planning process and the skills and understandings developed.

For example, students may reflect on:

- the approach and strategies they chose, and their relative success
- the Approaches to learning skills they have developed and their effect on the student as a learner
- how their conceptual understandings have developed or changed as a result of their research
- challenges they faced in their research and how they overcame these
- questions that emerged as a result of their research
- what they would do differently if they were to undertake the research again.

Effective reflection highlights the journey the student has engaged in through the EE process. Students must show evidence of critical and reflective thinking that goes beyond simply describing the procedures that have been followed.

The reflections must provide the examiner with an insight into student thinking, creativity and originality within the research process. The student voice must be clearly present and demonstrate the learning that has taken place.