# PSYCHOLOGY

## Overall grade boundaries

### Higher level

| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| **Mark range**: | 0 - 8 | 9 - 19 | 20 - 27 | 28 - 39 | 40 - 52 | 53 - 64 | 65 - 100 |

### Standard level

| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| **Mark range**: | 0 - 10 | 11 - 20 | 21 - 31 | 32 - 43 | 44 - 55 | 56 - 67 | 68 - 100 |

## Higher level internal assessment

### Component grade boundaries

| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| **Mark range**: | 0 - 2 | 3 - 5 | 6 - 8 | 9 - 11 | 12 - 15 | 16 - 18 | 19 - 25 |

## The range and suitability of the work submitted

The research topics were almost all related to cognitive psychology with social psychology probably being the second most popular. A number of candidates did provide some very up-to-date research material (to their credit). It was obvious, however, that some papers did not include enough background literature and did not use it well to justify their own research. Another problem was that the background literature was often not sufficiently explained so that it could be used to discuss results in the discussion section.

While the number of unethical experiments dropped significantly this session, there seemed to be an increase in the number of non-experimental or quasi-experimental studies submitted. Any study in which the candidate does not have full control over the independent variable as well as full control over allocation of participants to groups/conditions is not truly an experiment and does not meet the IB requirements for psychology internal assessment. The use of pre-existing conditions, such as age, gender, culture, native language or other naturally occurring differences are not suitable independent variables. Studies that are not


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experimental face the risk of being awarded no credit, thus jeopardizing the total IB psychology mark.

Most of the candidates observed ethical guidelines and included copies of informed consent and debriefing in the reports. However, there was often very little description of ethical considerations in the design section and some omitted a copy of the informed consent in the appendices. It should be noted that studies of obedience, conformity or other topics that put undue stress on the participants or put the experimenter at risk are not acceptable. Please refer to the IB psychology ethical guidelines (*Vade Mecum*, section 3.6), which should be made available to all psychology students.

The format of the report was generally well observed by most but not all. Some candidates cited references accurately while others did not seem to understand how this was done. The word limit was generally adhered to although there was the odd report that was outside the limits.

The precision with which the candidate has to present the report is very high in order to gain the top marks and so a simple design is best. In several schools candidates are performing experiments that are more complex than necessary. There only need to be two conditions of the independent variable to meet the IB requirements. Any more than this adds stress to the candidate without increasing the possibility of higher marks. In fact, it was frequently noted that internal assessments with complex designs and/or multiple variables tended to not attract high marks as the opportunity for analysis, discussion and elaboration was greatly inhibited.

## Candidate performance against each criterion

**Criterion A: Introduction**

Research questions were generally clearly stated (perhaps sometimes within an aim) but were not necessarily placed at the beginning of the introduction thereby leaving the reader guessing until the hypotheses were presented. Although this is not assessed directly in the criteria those internal assessments with a clearly defined research question and aim tended to perform better across the criteria.

Although many candidates provided background research that was clearly relevant to the research aim/question, there was a distinct lack of analysis in most cases. The background studies that the candidates identified were usually well related to the candidate's work. A number of candidates found it difficult to clearly link this previous research to an operationalized hypothesis. In other cases, the stated research did not always lead to the development of an appropriate hypothesis, i.e. stating a hypothesis that was not clearly linked to the findings of previous studies (although conducted in the same general area). The introduction often lacked reference to a theoretical framework and the background studies were often explained very superficially

In addition, candidates struggled with making sense of contradictory research findings. While often a simple way of reconciling these contradictions is to work towards identifying a non-directional hypothesis, many candidates did not recognize this.


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Experimental and null hypotheses were usually included. However many were not properly operationalized. Sometimes the aim was restated without including the independent variable (how it was to be manipulated) or how the dependent variable was to be measured. The null hypothesis was frequently constructed by stating the opposite to the research hypothesis rather than making a statement about no significant difference or the possibility of chance playing a role in the results. Another problem with hypotheses was inaccurate wording of phenomena under investigation, which should not remain at a general level (memory and similar concepts are too general to specify what will be measured).

**Criterion B: Methods: Design**

Many candidates struggled to recognize the difference between the method and the design of their study. The use of an experiment (the method) is not the same as the design (or "participant design") that it employs. Many candidates appeared to require more specific guidance in this area. In this section, the design (*e.g.*, repeated measures) needs to be justified, but the method (experiment) does not because the experimental method is dictated in the requirements. Candidates were mostly able to select an appropriate design, but many had difficulty justifying its use. When attempted this referred to commonsense explanations that were not linked to relevant methodological issues. Simply stating that repeated measures accounts for individual differences without explanation is not sufficient.

On the whole candidates did a good job at stating the independent variable and dependent variable of their experiments, but these often lacked clarity and precision. A number found it difficult to operationalize these variables.

The ethical guidelines were overall better attended to than in previous years. Most candidates demonstrated that they had obtained informed consent from participants (or parents of children), however, some did not address ethics apart from this one issue.

**Criterion C: Methods: Participants**

Some internal assessments used large samples. A number of research studies were submitted with as many as 60 participants. Such a large sample size makes the whole exercise more time consuming and is not a requirement of the internal assessment; for example, it makes calculations and statistical analysis unnecessarily difficult. It is recommended that 15 to 20 participants are sufficient for the IB psychology internal assessment.

The target population was usually only vaguely identified (and not always in relation to the actual study) and sampling techniques were often not addressed clearly. In general, candidates provided sufficient information concerning characteristics of their participants.

Many candidates inappropriately used the term 'random', stating that they had selected their sample randomly, when it was usually an opportunity sample. While it may be justified to use an opportunity sample to select participants, allocation to groups/conditions should be under the control of the candidates. Very often with an independent group design there was no mention of how the participants were allocated to each group/condition. Candidates did not



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use random allocation to conditions/groups. Teachers should highlight the importance of this in experimental design.

**Criterion D: Methods: Procedure**

There were often problems concerning description of procedure in sufficient detail to gain full marks on this criterion. Most candidates were able to present a coherent procedure section, although this was very often over-simplified. It was very common for candidates to omit quite important details needed for replication, for example, the time given to complete the experimental task.

**Criterion E: Results**

The results need to be presented in a narrative form as well as a table and graph. Some candidates seem unaware that in the description of results section they must also verbally describe the results when presenting descriptive statistics. Many candidates provided clear, concise and accurate graphs and tables of their results. Too many graphs were prepared - in most cases a simple bar graph showing the results of each of the two conditions/groups is sufficient. Quite a lot of candidates prepared graphs presenting each individual participant's results. Very often tables were not labelled fully and graphs were of a misleading scale and not labelled properly. Few candidates showed N or n figures to provide the reader with the size of the sample.

Quite often candidates calculated several measures of central tendency whether they were suitable for their study or not. Although some candidates included measures of dispersion alongside their measures of central tendency, they did not explain why they had included them or what purpose they served. Candidates should be encouraged to choose the most relevant measures and report on them fully.

Whilst the majority of the candidates were able to select appropriate descriptive and inferential statistics, some candidates did not use any inferential analysis at all while others attempted quite complex multiple variable tests. The choice of statistical test was mostly correct but not always justified. There was a substantial number of candidates using the t-test, and it was often not properly justified. Some candidates used the Chi-square test although it was not appropriate for their data and design. Some candidates reduced their data to a lower level of measurement than necessary. Candidates are encouraged to use the most powerful, robust inferential statistics that are appropriate and justified for their research. There was a failure to understand that looking up observed values and comparing them to critical values necessitated understanding whether their hypothesis was one-tailed or two tailed and also what the p value meant. Many candidates did not include the results of their inferential tests in the results section (i.e. observed and critical values) and instead just stated whether they were or were not significant. The other major difficulty that candidates had was then appropriately applying the test to accurately reject or accept the null hypothesis in line with suitable rejection criteria for their hypothesis.

A number of candidates were failing to use inferential tests, preferring to report only descriptive statistics.



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Very often statistical calculations were not shown in the appendix and so accuracy could not be verified. Raw data were often incorrectly included in the results section rather than the appendices.

**Criterion F: Discussion**

Many candidates failed to discuss their own results in this section. Although the results are stated in the results section, they should be discussed and analyzed in the discussion section.

Most candidates attempted to analyze the theoretical framework in light of their own findings, however this was rarely done in any detail. Some candidates just repeated what they had already said in the introduction and failed to address the results of their own study in the light of previous findings. The quality of the analysis of the background research in the introduction directly affects the candidate's success in discussing their results in this section. Candidates who merely describe background research in the introduction usually are unable to adequately discuss their own findings in the discussion section.

The limitations of the experiment were well documented but strengths were omitted or given very little space. Most candidates attempted to consider some modifications or ideas for further research, but these were extremely basic and usually involved getting a more representative sample. There were many cases where there had been serious design flaws that may have led to insignificant results, but these were not considered or even mentioned in the discussion.

Conclusions, when included, were generally very weak and amounted to a simple restatement of the results.

Discussion remains to be the crucial indicator of candidates' competence in theory and methodology. With high scoring candidates, the findings were comprehensively discussed on the background of relevant studies; their modifications and suggestions were based on critical reasoning of theoretical aspects of the issues under investigation. For others, speculative reasoning based on commonsense, rather than competent, evaluation often led to low marks.

**Criterion G: Presentation**

The format of the reports was often very good. The most common problem concerned referencing. Candidates did not always include, in the reference section, all the references they referred to in the introduction. There are still problems with references from the Internet. Additionally, candidates had problems with secondary references showing no understanding of this issue. The reference was quite often prepared in a non-standard (recognized by APA or BPS) format. Not all candidates provided word counts on the cover sheet.

## Recommendations for the teaching of future candidates

- Candidates need to select a mainstream research area where there is a recognized body of empirical material.



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- Candidates must manipulate one independent variable (two conditions is enough) and measure one dependent variable.
- The key study that is being partially replicated should be described in sufficient detail and also, more importantly, analyzed in some depth to allow for full discussion.
- Hypotheses should be clearly written, operationalized and justified.
- Independent and dependent variables should be operationalized.
- In the results section, graphs should be appropriately chosen and labelled fully.
- Tables should have appropriate titles and N figures should be included for clarity.
- Statistical calculations should be shown in the appendices to allow accuracy to be determined.
- Choice of statistical test needs to be fully justified and the meaning of the significance figures/p values understood.
- Discussions need to systematically follow the assessment criteria and compare results to research in the introduction together with strengths and limitations (coupled with possible modifications) and a conclusion.
- Teachers need to highlight the importance of having relevant research in the introduction, i.e. the link between the background and the development of the hypotheses.
- Candidates should demonstrate understanding of the meaning of psychological terminology they are using in their internal assessments, *e.g.,* random, critical/observed values and significance.
- Candidates need to consider the strengths and limitations of their experiment in some depth and be able to devise suitable modifications.
- Candidates need to be given the guidance to develop their own skills of analysis, so that they can analyse their study in more depth — especially in the introduction and discussion.

As stressed in previous years, the most important thing is that *all* teachers have access to the psychology *teacher support material* for internal assessment and that they give the proper information to candidates. It is important that all candidates study pages 7-11 of the *teacher support material* very carefully; everything concerning content of the report is there. Thorough attention during class to these pages will help candidates to meet IB expectations and teachers will find it easier to apply the assessment criteria properly.

Generally, teachers should arrange for candidates at this level to conduct true experiments with one variable that is easy to operationalize and manipulate. Candidates should be encouraged to do experiments based on real scientific experiments and teachers should


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discourage or prevent them from doing their own studies based on dubious background literature found on the Internet.

The standard of HL internal assessment work is improving, although the majority of work moderated represented a standard in the middle of the mark range. Theoretical elaboration of the topic should be encouraged so that an understanding of the main aspects of empirical studies can be demonstrated, i.e. relevant theory and studies, that help to illuminate the phenomena in an explicit and precise form, need to be considered before starting any empirical work. Thus, from the very start, candidates need to be aware of interconnections between the theoretical and methodological sides of the issue. Strong introductions undoubtedly help students design their study and interpret the data they obtain.

Emphasis needs to be given to disciplined reasoning of relationships between theory and methodology, especially in the discussion, which reflects candidates' knowledge and understanding in a comprehensive manner.

Candidates need clearer training in the selection and application of appropriate inferential statistical tests. They need to be able to articulate the logic behind selecting such a test and be able to apply it correctly. With adequate training in this area all candidates should find completion of the results section more fulfilling and interpretation of their results in the discussion section more straightforward.

## Standard level internal assessment

### Component grade boundaries

| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| **Mark range**: | 0 - 2 | 3 - 5 | 6 - 8 | 9 - 10 | 11 - 12 | 13 - 14 | 15 - 20 |

## The range and suitability of the work submitted

A wide range of replications or partial replications was presented and the experiments performed by candidates were generally suitable for internal assessment. However, some schools and candidates presented replications or partial replications of studies that were too complicated for students at this level; these topics provided difficulty in data collection, analysis and discussion of the results. Some other works did not meet the internal assessment requirements because they had used independent variables such as gender, age, handedness, and participation in particular classes. It is of vital importance that candidates make sure that they actually manipulate (change) the independent variable deliberately instead of just using naturally occurring phenomena.

The most popular topics came from memory or perception within cognitive psychology. A very high number of internal assessments were on the Stroop effect, followed by Loftus' experiments on memory and recall and reconstruction using videos (car accidents) and sentences (definite and indefinite articles).



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This session more candidates were considering and correctly applying ethical guidelines before conducting their study. However, there were still several cases of studies that should not have been conducted – in these studies psychological or physical harm may have been caused to the participants, or the study may have caused participants to be embarrassed about their behaviour or responses. It is the teacher's responsibility to ensure that all studies conducted by candidates strictly adhere to ethical guidelines.

## Candidate performance against each criterion

Overall internal assessments tended to be better than previous years. Candidates that decided to replicate well-known, more conventional studies tended to do better across all criteria.

**Criterion A: Introduction**

Aims were often poorly written, with many candidates simply writing: "I will replicate Loftus's study". Usually good introductions had aims that were stated by clearly indicating the independent and dependent variables.

It seems that many schools do not give clear guidance on how introductions should be written or about the purpose of an introduction. While some candidates presented the study to be replicated in a clear fashion, and related it to the aim of their study, many did not. Very often, candidates briefly outlined the original research study and did not offer any explanation of it that would allow them to justify the aim of their own study. Some candidates introduced many studies without clearly identifying the research being replicated. Other candidates unnecessarily presented research and null hypotheses at the end of their introduction.

**Criterion B: Method: Design**

Ethical issues seem to have been better dealt with this year, with the majority of candidates performing ethically appropriate studies and providing clear sample consent forms. However, many candidates still do not address relevant ethical considerations in the main body of the report.

Some candidates found difficulties in the design section, many failing to correctly identify the experimental design. Many candidates still argue that the design is an experiment. In other cases candidates identified the experimental design but failed to justify their choice. The independent and dependent variables were often not clearly stated and operationalized. The independent variable rarely included both the variable itself and the two levels/conditions of it and often the dependent variable was not expressed in quantified terms.

**Criterion C: Method: Participants**

Many failed to explain how their sample was selected and few included justification for this choice. Confusion remains on the difference between a target population and a sample.

In some cases, lack of knowledge of sampling techniques was very apparent: there were claims that random sampling was used when this clearly was not the case.



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**Criterion D: Method: Procedure**

Most procedure sections were adequately handled. Well-written procedures included clearly written standardised instructions and debriefing notes. However, some candidates provided a simple list of steps or incomplete information. For instance, some candidates omitted to present in their appendices the lists of words they had used in their replication of the Stroop effect study.

**Criterion E: Results**

Data analysis continues to be an area that tends to be poorly written and presented. Moderators have noticed several different problems this session:

- A common problem of many internal assessments is irrelevant use of descriptive statistics; many candidates are not using descriptive statistics to relate the results back to the aim.
- Candidates sometimes included in this section graphs or tables showing each individual participant's score. In some cases, they presented results reporting variables other than the independent variable (*e.g.,* gender, age).
- Measures of central tendency were more often appropriately calculated and discussed than were measures of dispersion. A significant proportion of candidates do not give measures of dispersion.
- Many candidates failed to present their graphs clearly, forgetting basics such as titles or clear labelling of axes.
- Many candidates who included graphs failed to describe them in words at all.

Overall a general weakness of most results sections was a lack of clarity and accuracy in the presentation of the results. The results were not always reported in a way that reflected the aim of the study. Many reports only briefly stated the results without any narrative description. Moreover, the figures and tables were not always clearly presented due to inexact or incomplete labelling.

**Criterion F: Discussion**

A general weakness was a lack of depth in the discussion of the results. Candidates seem to have a problem in justifying why their own particular results occurred in the way they did. In many cases candidates did not relate their findings to the original experiment presented in the introduction. Few candidates clearly compared their results to that of the original study. Some made statements such as "results were similar to those found in the original study," or that "the hypothesis was found to be true." While weaknesses were generally well covered, fewer candidates successfully identified the strengths of their study. Suggestions for future research were offered but these were often of a superficial nature.



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**Criterion G: Presentation**

The most serious problem related to this criterion is proper use of references.

References cited from Internet and secondary sources were usually incorrectly formatted. Some candidates used cited material in the body of their reports but failed to include it in their references section; others included in that section works not cited in the body of their reports. Many candidates did not use a standard format for referencing. Other aspects of criterion G tended to be appropriately followed. The word limit was usually followed. In some internal assessments information in the appendix was especially well organized.

## Recommendations for the teaching of future candidates

- Teachers should not be afraid to tell candidates that a particular idea will be too complicated for SL replication because the choice of study has an effect on the candidate's likelihood of success in many sections.

- Before candidates commence an experimental study, they need to ensure that they have correctly chosen and identified both the independent variable and dependent variable. This will eventually provide far clearer results and discussion sections. Requiring candidates to identify and operationalize their independent variable and dependent variable in early stages of the internal assessment preparation might help students identify whether their study is experimental or quasi-experimental.

- Criterion B frequently received lower marks due to failure to justify the use of a particular design. Some reports did not include parental consent when the participants were under 16 years of age

- Key areas to focus on are criteria E and F.

  Candidates should develop skills of analysing the data that is collected and interpreting results. Not only does this include how to calculate descriptive statistics but also how to interpret them. Encourage candidates to report the most appropriate measure of central tendency and dispersion and then to justify their choices. Ask them to verbally (or in written form) explain what these results mean.

- In the Discussion section candidates should:

  a) attempt to relate their findings to the original study being replicated,

  b) adopt a very structured approach to listing strengths and limitations, suggesting a modification for every limitation.



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# Higher and standard level paper one

## Component grade boundaries

**Higher level**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Mark range**: | 0 - 4 | 5 - 8 | 9 - 11 | 12 - 17 | 18 - 24 | 25 - 30 | 31 - 52 |

**Standard level**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Mark range**: | 0 - 4 | 5 - 8 | 9 - 12 | 13 - 17 | 18 - 23 | 24 - 28 | 29 - 44 |

# General comments

Candidates tended to do well in describing a theory, a study or a research method, but they did not so often produce evidence of the higher order skills of analysis and evaluation. It seemed that many candidates have learned for each perspective a set of advantages and disadvantages and rewrote them every time the command terms ‘assess’, ‘evaluate’ or ‘discuss’ appeared. This formulaic approach inevitably led to superficial answers, which were subsequently awarded rather low marks. At this level of assessment there is a reasonable expectation that candidates will be able to think through questions and rely on their own acquired understanding to answer specific questions.

# The areas of the programme and examination that appeared difficult for the candidates

Candidates were generally able to demonstrate an adequate content knowledge but were relatively less successful in demonstrating analysis, application or evaluation. Many candidates were unable to explain the meaning of ecological validity, nor could they explain how cultural or gender considerations might affect the interpretation of behaviour, particularly within the learning perspective. Confusion sometimes existed between the learning perspective and the cognitive perspective.

It made for salutary reading when several candidates, who having studied an IB course, appeared unable to present a balanced account of cultural influences or appeared unaware of other cultures.



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# The strengths and weaknesses of the candidates in the treatment of individual questions

**Section A**

**Biological perspective**

**Question 1** *Using an example from a psychological study, explain **one** ethical consideration of research related to the biological perspective.*

*[8 marks]*

The main requirement of the question was focused on ethics but this aspect was infrequently addressed. Many responses simply described a study and then added a sentence indicating that it "…was unethical" yet provided no discussion of how and why this claim could be justified. Much maligning of Sperry indicated a lack of understanding of his research; medical treatments were frequently criticised rather than an attempt made to link this work to ethical considerations. Better responses did identify and discuss ethical aspects such as the use of alternative methods of research, cost benefit analysis or attempts to minimise ethical concerns. There was considerable misuse of the word "prove" in this question when the more appropriate words "supported" or "demonstrated" would have been much better.

**Cognitive perspective**

**Question 2** *(a) Outline **one** empirical study within the cognitive perspective.*

*[4 marks]*

*(b) Describe **one** application of findings obtained from the empirical study outlined in part (a).*

*[4 marks]*

Two types of answer were common. In one case candidates provided non-cognitive studies and then discussed the findings but were unable to find applications. Alternatively candidates did manage to produce an appropriate empirical study from the cognitive perspective but then did not provide an application in part (b). Where two part questions were concerned candidates should have considered both parts before they launched themselves unhesitatingly on part (a) but subsequently regretted their precipitate action when part (b) was considered later. There were many applications available including the worlds of work, education, therapy or clinical treatments.

**Learning perspective**

**Question 3** *Explain how **one** theory from the learning perspective relates to **either** determinism **or** free will.*

*[8 marks]*

Usually candidates chose to explain how determinism is related to classical or operant conditioning. Better answers discussed environmental or soft determinism. Regrettably some candidates failed to select a theory as required by the question and simply described a study; they discussed in vague terms how the assumption that behaviour is learned can be related



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to determinism. Several candidates seemed not to have understood the concept of determinism and focused enthusiastically on the idea of determination. Just occasionally an answer argued a case for free will in the learning perspective in terms of individuals "choosing for themselves what they will learn".

**Humanistic perspective**

**Question 4** *Explain how **one** historical or cultural condition has contributed to the rise of the humanistic perspective.*

*[8 marks]*

A variety of appropriate conditions were identified, including the impact of the second World War, the influence of the zeitgeist in 1960s USA as well as the dominance of the psychodynamic and behaviourist approaches. While most candidates were able to identify these conditions they struggled to illustrate clear influential links to the rise of the humanistic perspective. The question required one condition that should have been linked explicitly to the development of this perspective. However many candidates described several in very general terms but failed to explain the process of such influence on how the humanistic perspective changed people's views.

**Section B**

**Question 5** *Discuss the effectiveness (e.g., relative strengths and limitations) of the biological perspective in explaining **one** psychological or social question.*

*[20 marks]*

Most candidates answered this question and a wide range of psychological or social questions were addressed. Better responses were those that discussed a specific question such as aggression, schizophrenia or depression. When the chosen question was vague, such as 'what causes behaviour' then the answers tended to be superficial. Weaker answers tended to produce general evaluation of the biological approach instead of an assessment of its effectiveness related to the explanation.

**Question 6** *Referring to experiments and alternative research methods (e.g., verbal protocols, interviews) assess claims that some research within the cognitive perspective lacks ecological validity.*

*[20 marks]*

There were few responses to this question. Validity as a concept in its own right was often confused with ecological validity. Few candidates defined ecological validity explicitly and several were weak on alternatives to the experiment. Weaker answers viewed ecological validity as an all or nothing attribute of a study; they frequently described studies in great detail and then a statement at the end as to its ecological validity without further elaboration of their reasons.



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**Question 7** *Explain how culture or gender considerations may affect the interpretation of behaviour from the learning perspective.*

*[20 marks]*

Although this question was quite popular it was not often answered well. Many answers were like a journalistic account of cultural relativity with no learning theory introduced. Good answers mentioned theories of learned helplessness, social learning theory or concepts of reinforcement and extinction.

Sometimes the nature/nurture issue was woven into the essay in an effective manner and related to a case study on gender identity.

**Question 8** *(a) Outline **one** theory from the humanistic perspective.*

*[6 marks]*

*(b) Discuss how the theory outlined in part (a) has been applied.*

*[14 marks]*

The quality of many responses suggested that candidates failed to read both parts of the question before beginning to write. A number outlined Maslow's theories quite well but were then unable to find a suitable application to answer the second part of the question. Those who chose Roger's for part (a) of the question were in a better position when they came to do part (b). Most realised that appropriate therapy is an application of the humanistic perspective. Applications tended to be descriptive with inadequate evaluation, little of which referred to methodology. Problems of culture, gender and ethics were seldom raised.

## Recommendations and guidance for the teaching of future candidates

A key skill that candidates need to acquire is to answer the question that is set. Examiners are not impressed by a display of knowledge, however spectacular, that does not answer the question. Both sections of parted questions should be considered carefully before embarking on an answer to any one part. When a question asks for one study or one example, candidates should not be lured into a range of studies or examples unless these are to be used explicitly as evaluative points.

A second important skill is for candidates to acquire the ability to use their knowledge and understanding to develop creative and critical thinking rather than relying on rote learning. Having candidates work together in groups and debating about different psychological issues could facilitate development of such skills.

Candidates should be able to answer questions directly and precisely by providing theoretical and empirical support.



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# Higher and standard level paper two

## Component grade boundaries

**Higher level**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Mark range**: | 0 - 4 | 5 - 9 | 10 - 12 | 13 - 17 | 18 - 23 | 24 - 28 | 29 - 40 |

**Standard level**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| **Mark range**: | 0 - 2 | 3 - 4 | 5 - 6 | 7 - 9 | 10 - 11 | 12 - 14 | 15 - 20 |

# General comments

The performance on this session's exam was rather similar to previous ones, with a few notable exceptions. Examiners tended to notice that a more limited number of questions were answered this session. Far and away the most popular options were the psychology of dysfunctional behaviour and social psychology. The recent rise in popularity of the health psychology option seems to have tailed off while psychodynamic psychology remains popular in certain areas. Lifespan, cultural and comparative (in descending order of popularity) were also answered on occasion. However it should be noted that responses to the cultural and comparative psychology options were generally superficial and anecdotal.

Performance against the markscheme produced a rather Normal distribution of marks, although positively skewed. There were some excellent responses from some candidates. In these cases the essays were highly focused, well argued, appropriately supported with psychological research, critical and well structured. Most candidates, performing around the middle of the mark range, demonstrated more limited levels of knowledge and understanding. Many essays were highly descriptive, not focused, did not provide the required depth of analysis and were characterized by superficial, general and naïve interpretations of the issues in question. It was rather disappointing that a significant number of candidates showed little evidence of understanding the course's expectations and the depth of knowledge and analysis required by the syllabus; they did not approach psychology in a scientific way.

In general, candidates' work lacked demonstration of theoretical and empirical background knowledge. There were difficulties evident in developing evaluative arguments and presenting empirical supporting evidence. Most evaluative comments were of a general nature or based on personal opinion. There was little indication of understanding that the marks awarded are mainly based on three components: the clear presentation of theories, the description and assessment of empirical evidence and the inclusion of appropriate evaluative arguments. There was also very limited consideration of cultural, methodological, gender and ethical issues, areas that evidently continue to pose difficulties for candidates.



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## The areas of the programme and examination that appeared difficult for the candidates

Surprisingly the social psychology option proved to be the most challenging for candidates. While this option is ever increasing in popularity, examiners noted a rather limited understanding of the nuances of the different topics, theories and areas within social psychology. Candidates had difficulty distinguishing collective (crowd) behaviour from the behaviour of individuals acting within a group. Many candidates confused "conformity" with "obedience" and often cited Milgram's research on obedience as an example of conformity research. Additionally, Asch's conformity studies were cited in all questions provided in the social psychology option of the exam, although these were rarely relevant. While candidates tended to have rather detailed knowledge of empirical studies within this option, they did not demonstrate understanding of the theoretical foundations and structure of the option.

The nature and structure of some questions was also problematic. Candidates had problems with "compare and contrast" questions. They got so involved in describing their chosen theories or studies that they forget to explicitly discuss similarities and differences. Questions that asked for "application" of theories or studies were also quite challenging for many. These questions are usually focused on how the findings from studies have been applied or used in a real context rather than a theoretical one. The difficulties with these types of questions strengthen the view that descriptive knowledge is well developed, but actual discussion of findings, implications, applications and evaluation are weaker.

Many candidates seem to have difficulties maintaining a focus on the question and therefore provided examples or discussions not fully relevant to the topic.

## The areas of the programme and examination in which candidates appeared well prepared

The level of knowledge differed significantly from school to school. Some candidates demonstrated high levels of understanding and analytical ability using appropriate examples, studies and terminology. There were others whose knowledge seemed to lack basic psychological concepts.

The majority of candidates demonstrated a high level of knowledge when addressing the "describe" component of questions, but fewer candidates were able to successfully handle the "evaluate" component of the questions.

## The strengths and weaknesses of the candidates in the treatment of individual questions

**Comparative psychology**

**Question 1** *Analyse the predictive accuracy of studies of non-human animals when applied to the individual behaviour of humans.*

*[20 marks]*



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This question received very superficial treatment. Most responses simply described psychological studies using animals as subjects (*e.g.*, Harlow, Skinner, Pavlov, etc.) with little knowledge of the nuances of comparative psychology demonstrated. Very weak attempts were made at addressing the issue of predictive validity.

**Question 2** *Describe and evaluate **two** research methodologies (e.g., observation, experiments) that have been used in comparative psychology.*

*[20 marks]*

Great difficulties were seen in relating the methodologies to comparative psychology. Usually general knowledge of research methods was presented, often providing examples that are not appropriate for comparative psychology. Many candidates ignored the fact that research methods should be used within comparative psychology and provided examples from other options.

**Question 3** *(a) Describe **two** empirical studies related to altruism in non-human animals.*

*[10 marks]*

*(b) Evaluate empirical studies related to altruism in non-human animals.*

*[10 marks]*

Some very good responses were provided, obviously coming from schools that teach comparative psychology.

**Cultural psychology**

**Question 4** *(a) Identify and describe **two** culturally universal behaviours.*

*[8 marks]*

*(b) Discuss how **two** culturally universal behaviours affect the interpretation of behaviour in cultural psychology.*

*[12 marks]*

This question attracted very weak responses. Most essays focused on very general behaviours that do not generally fall into cultural psychology. Some culturally universal behaviours cited included eating, sleeping, getting mad, etc. There was very little evidence that candidates who answered this question had actually been prepared for this option.

**Question 5** *Describe and evaluate applications of research findings in cultural psychology.*

*[20 marks]*

This question was rarely answered. When attempted there was little understanding of how findings from relevant research have been applied.

**Question 6** *Examine the findings of **two** empirical studies of communication from cultural psychology.*

*[20 marks]*



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Rarely answered with knowledge relevant to cultural psychology.

**The psychology of dysfunctional behaviour**

**Question 7** *Compare and contrast **two** approaches to the treatment of **one** specific type of dysfunctional behaviour.*

*[20 marks]*

This was by far the most popular question on the examination paper. Candidates easily described two approaches to treatment of a dysfunctional behaviour, but had difficulty in comparing and contrasting them. The majority of answers just described the approaches to treatment and made no comparison of the two approaches; empirical evidence and evaluation were very weak. Usually the comparison was implicit. The range of approaches was seen, however, the most popular type of dysfunctional behaviour offered was schizophrenia. Weak responses tended to focus on symptoms, types and behaviours associated with specific disorders, leading to descriptive responses, which did not fully address the question.

**Question 8** *(a) Describe **one** empirical study related to the psychology of dysfunctional behaviour.*

*[8 marks]*

*(b) Explain how cultural considerations may affect the findings of studies related to the psychology of dysfunctional behaviour.*

*[12 marks]*

Most candidates described the study of Rosenhan, Seligman, Little Albert or Little Hans in part (a) of the question. Too often the description provided just the basic information concerning the study with an overwhelming emphasis on the procedure and little description of the findings.

Responses to part (b) were usually limited, providing some description of cultural considerations without explaining their impact on the findings of studies. Often anecdotal information was provided. Most discussed cultural effects on diagnosis.

Most responses were naïve and superficial based on personal interpretation of the way cultural factors influence the understanding and explanation of dysfunctional behaviour.

**Question 9** *Examine controversies related to concepts of normality and abnormality.*

*[20 marks]*

Answers to Question 9 ranged from ramblings of a “pop psychology” nature to more academic explorations of the meaning of different criteria including cultural considerations. Many answers lacked depth and scientific evidence/basis - relying heavily on anecdotal evidence. Responses often provided long, but general and rudimentary descriptions of cultural differences in understanding of the terms “normal” and “abnormal” without developing an explicit argument about how the concepts are controversial. Unfortunately generalities based on personal understanding and experiences were too often deployed in attempting to answer this question.



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**Health psychology**

**Question 10** *Explain how cultural considerations can affect the interpretation of behaviour in health psychology.*

*[20 marks]*

Very limited knowledge of relevant material was found. Responses had very little psychological content and often the information offered seemed to be from magazine articles and common sense.

**Question 11** *Describe and evaluate empirical studies related to substance use **and** misuse.*

*[20 marks]*

Responses quite often did not include empirical studies, but rather anecdotal comments on drug addiction.

**Question 12** *Examine ways in which physical and mental health may be interrelated when coping with stress.*

*[20 marks]*

Responses tended to be anecdotal. General comments such as "everyone is stressed" and "when you are stressed out you get sick" were seen in a number of responses. Responses typically focused on aspects of stress and different general theories of stress rather than on coping with stress.

**Lifespan psychology**

**Question 13** *Discuss theories or empirical studies related to socialization throughout the lifespan.*

*[20 marks]*

Relatively few responses to this question were seen. The majority of responses took a theoretical approach and described general theories of development without much focus on socialization — a term that was usually ignored in responses.

**Question 14** *"Adolescence is probably the most controversial of all periods of human development."*

*Compare and contrast **two** theories of adolescence that address this controversy.*

*[20 marks]*

Most responses were able to describe Erikson's theory of adolescence in great detail, however description of another theory (usually Marcia, but sometimes Hall, Benedict or Anna Freud) was more limited. Relatively few essays were able to explicitly address both similarities and differences between the two selected theories. Most chose to ignore the command terms and left comparison to be implicit only.



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**Question 15** *Referring to **two** theories, discuss how human development continues throughout the lifespan.*

*[20 marks]*

Candidates accurately described two theories — usually Erikson plus one other, often Kohlberg. Description was the heart of the essays with very little discussion of continuity/change in adulthood. Thus most responses failed to address the "throughout the lifespan" aspect of the question.

**Psychodynamic psychology**

**Question 16** *Describe and evaluate **one** psychodynamic theory of the influence of childhood experience on behaviour.*

*[20 marks]*

Nearly all candidates wrote on Freud with generalizations that fixations at developmental stages affect behaviour. A few candidates preferred Erikson and Jung instead. However, the answers were very general without referring to the impact of childhood experience on human behaviour. Very few essays contained evaluative comments and there were rare answers characterized by relevant empirical evidence and argument. Where evaluation was included it was usually generalized evaluation of Freud (*e.g.*, hysterical women, case study method, lack of falsifiability, etc.) rather than evaluation of, for example, whether or not (or to what extent) childhood experience does influence behaviour.

**Question 17** *Describe and evaluate **two** research methods (e.g., case studies, experiments) that are used in psychodynamic psychology.*

*[20 marks]*

Surprisingly this was the least popular question within the option. Few candidates chose this question. Nevertheless, some very good answers were presented. In many cases candidates presented a detailed account and an informed evaluative commentary of two research methods providing clear examples of studies from psychodynamic psychology. Most responses included description and evaluation of a case study research method. The second research method chosen was more varied. The use of dream analysis and free association were often included; unfortunately many candidates discussed these two techniques within a therapeutic setting, but it was refreshing to see that some candidates did appropriately discuss these within the context of research methods (*e.g.* gathering data for generating theory).

**Question 18** *(a) Describe **one** theory related to psychodynamic psychology that includes the role of both the unconscious **and** conscious mind in human behaviour.*

*[10 marks]*

***(**b) Compare and contrast the theory presented in part (a) with another psychodynamic theory in relation to the role of both the unconscious and conscious mind in human behaviour.*

*[10 marks]*



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Not many candidates chose this rather straightforward question but those who did generally did fine. Usually more focus was given to part (a) than to part (b). The first part of question 18 was mainly based on describing Freud's theory in general with basic accounts of the roles of the conscious and unconscious. More emphasis was placed on the role of the unconscious.

In part (b) many responses compared Freud and Jung and some compared two parts of Freudian theory (*e.g.*, conscious/unconscious v Oedipal Complex). The latter approach was appropriate if candidates could discuss the role of both the conscious and unconscious in Oedipal theory, which proved difficult for most. Part (b) was rather weakly answered. Instead of presenting similarities and differences between two psychodynamic theories regarding the way they explain the role of the conscious and unconscious mind in human behaviour, candidates presented how neo-Freudians criticized Freud's theory and what new developments they introduced. Overall, general responses were provided that did not clearly address the specifics of the question.

**Social psychology**

**Question 19** *(a) Outline **one** theory of collective (e.g. crowd) behaviour.*

*[6 marks]*

*(b) Describe and evaluate **one** application of one theory of collective behaviour.*

*[14 marks]*

Question 19 seemed to create serious problems for most candidates who attempted it, since they did not know any relevant theory and application of collective behaviour; they rather described theories and applications borrowed from areas of conformity, compliance and obedience to authority. Such responses quite often confused collective behaviour with behaviour of an individual within a group and thus tried to apply their knowledge from other areas of social psychology — usually with limited success.

In part (b) it was apparent that many candidates did not understand what the term "application" meant, with many choosing to describe and evaluate a theory of collective behaviour. Some excellent responses were seen where candidates focused on applying research to crowds at sporting events or design of airplane interiors.

**Question 20** *In relation to conformity research, compare and contrast explanations of the behaviour of an individual acting in a group with that of an individual acting alone.*

*[20 marks]*

This was undoubtedly the most challenging question on paper 2 due to three reasons: misunderstanding of the distinction between conformity and obedience, failure to discuss similarities and differences, and limited knowledge of conformity research beyond Asch. There were some excellent responses that included discussion of informational and normative influence as well as research by Crutchfield, Latané and Darley, etc. However, all too often there was confusion about obedience and conformity with Milgram's obedience study cited as "conformity" research. Candidates frequently described Asch's line study in detail — but



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almost no one mentioned the study replications or the post study interview that probed for reasons why participants conformed or not.

Most responses focused only on an individual acting in a group. It appears that the question was misunderstood as many candidates discussed the behaviour of an individual acting alone, but *not* conformity when the individual is acting alone (i.e. when group is not present) and not in relation to conformity research, as the question required.

**Question 21** *(a) Define the term prejudice.*

*[2 marks]*

*(b) Describe **two** theories of the origins of prejudice.*

*[8 marks]*

*(c) Evaluate **one** theory of the origin of prejudice.*

*[10 marks]*

Question 21 was rather popular and many good responses were provided. Most candidates accurately defined prejudice in part (a). In part (b) very often responses reflected a good and accurate description of one theory accompanied with some basic knowledge of an additional theory. Most popular choices were social identity theory and inter-group conflict theory. Sometimes studies instead of theories were offered. Part (c) reflected limited but generally appropriate evaluation of one theory.

## Recommendations and guidance for the teaching of future candidates

Candidates need to be taught how important it is to **unpack the question** and to be careful to answer the question set and not lose focus whilst doing so. Teachers need to reiterate to candidates that they need to **read the question carefully** and structure their answer so that it directly answers the question. Many candidates often provide irrelevant material before getting to the "crux" of the answer.

Teachers should emphasize the **command terms**, especially "compare and contrast". Candidates tended to go into great detail describing studies or theories without explicitly addressing both similarities and differences between them. The command term "evaluate" requires candidates to highlight, for example, advantages/strengths and disadvantages/limitations of the psychological theory/study/issue, *etc*. However, many candidates tend to pay unequal attention to strengths and limitations and thus do not provide a well-balanced response to the question.

If a question requires candidates to **describe and evaluate** candidates should be mindful that equal attention should to be devoted to describing and evaluating. Many candidates tend to spend most of their answer describing the psychological concept/phenomenon and pay less attention to the evaluation component of the question. The result is an unbalanced answer.

Teachers should ensure that candidates know what the **terms likely to be used in exam questions** mean, particularly "application", "theory" and "interpretation". Practice with



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**application** of the findings of empirical studies and theories to human behaviour, current events, the physical environment, etc. The most astute discussions applied the theory or research in question to current events, government, etc. Application increases understanding and learning.

It is highly recommended for candidates to familiarize themselves from the beginning of the course with its specific **expectations, assessment criteria and depth of knowledge** required. Time must be spent on **essay writing** skills so that answers become more balanced, organized and structured.

Teachers should consider introducing more **current psychological research into their courses.** Instruction should be provided as to the **depth and breadth** required of writing in the optional areas. Knowledge of the syllabus details of each option is essential.

Terms used within the option of social psychology should be clearly defined and explained to avoid misunderstanding and inability to discriminate between terms. Candidates are expected to be able to differentiate different types of social influence; for example, obedience and conformity are two different types of social influence. Collective behaviour should not be confused with "any behaviour when in a group".

## Further comments

In general, it is very clear from the written answers that many candidates lack an understanding of what constitutes a scientific approach to psychological issues. Responses indicated that candidates were not well prepared to appropriately and fully analyze and evaluate psychological material. Cultural, gender, ethical and methodological considerations were only sometimes included in answers indicating that little emphasis is put on examining such issues. Teachers should be encouraged to communicate deeply and critically the goals and demands of the course. Candidates should have access to texts that handle psychological issues appropriately, should be trained to adopt a scientific approach and to allocate their time correctly in responding to questions.

## Higher level paper three

### Component grade boundaries

| **Grade**: | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| **Mark range**: | 0 - 2 | 3 - 5 | 6 - 8 | 9 - 11 | 12 - 14 | 15 - 17 | 18 - 30 |

## General comments

Many candidates have yet to understand that quantitative and qualitative methods are complementary to each other - each has its own advantages and disadvantages. There is no need to claim the superiority of one approach over the other since each is employed for



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different reasons. Both research strategies are needed for researchers to understand the nature of human behaviour.

Although a general improvement previously noted in candidates' performance for qualitative methods continued, there remain some areas of considerable weakness. Regrettably there were still a number of responses that showed a headlong rush to convert qualitative data into quantitative data; it was claimed that this approach would "…make the data more scientific and so it will be more valid and true". When examples of this type of erroneous thinking were converted into responses for paper three the inevitable consequence was the award of low marks.

Many candidates performed well on question 2(a) and showed an appropriate description of both types of interview.

## The areas of the programme which proved difficult for candidates

In question 1 the description and evaluation for the process of qualitative content analysis were often weak. Many candidates appeared to be unaware of the inductive aspect required for such analysis and the notion of a thematic approach was sometimes ignored. The majority of answers to part (b) of question 3 showed little understanding of the concept of generalisation when applied to qualitative research.

## The strengths and weaknesses of candidates in the treatment of individual questions

**Question 1** *Describe and evaluate the use of qualitative content analysis when applied to television advertising.*

*[10 marks]*

A considerable proportion of candidates did not know the meaning of content analysis and consequently did not know the process involved in content analysis. Several referred to market studies that used focus groups. Others mistakenly suggested counting the number of times that an image or word occurred. Confusion was also expressed when candidates produced rote learning of post-modern interview techniques by quoting body language, pauses, or laughter. The evaluation component of the question was often ignored.

**Question 2** *(a) Describe, using one example for each, what is meant by*

*(i) a conversational interview*

*(ii) a small group interview.*

*[4 marks]*

*(b) Evaluate the use of*

*(i) conversational interviews*

*(ii) small group interviews.*

*[6 marks]*

(a) The majority of candidates provided descriptions of both types of interview and although some of these were limited, most were appropriate. However many answers omitted to give



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an example for each type of interview or gave an inappropriate example such as the Oprah television show or interviews on television news. Other responses gave examples from various therapeutic interventions but failed to relate these to psychological research.

(b) Evaluation needed for the second part of the question was sometimes superficial and unbalanced. Some candidates tended to evaluate the actual therapy concerned rather than considering the strengths and limitations of interviewing. There were also several answers that used the same argument for both types of interview. They argued that data would be more forthcoming because candidates would be more at ease in a one to one context, and also that data would be more detailed because participants would be more at ease with a group rather than being alone with the interviewer.

**Question 3** *Qualitative data from self reports are obtained from ten patients who show similar dysfunctional behaviour.*

*(a) Explain how such self report data may be collected and analysed.*

*[6 marks]*

*(b) To what extent could the findings from an analysis of such data be generalised?*

*[4 marks]*

(a) Many candidates described techniques for gathering data by using methods such as diaries, interviews or questionnaires but rarely explained how the collected data were to be analysed in this specific context. In general the analytical component was addressed only briefly, usually by suggesting that content analysis could be used, yet no explanation was offered.

(b) While several candidates stated unequivocally that nothing could be generalised from such a small number of participants, others were aware that careful generalisations could be made, for example, as a potential contribution to the development of appropriate theory. Few candidates seemed to be aware that, of economic necessity, several psychological theories are built from contributions based on research conducted with small numbers.

## The type of assistance and guidance the teachers should provide for future candidates

For paper three teachers should ensure that all aspects of the syllabus are studied. Candidates will understand the qualitative approach better by participating in practical work that involves qualitative research; crucially candidates need to experience practical application. Even a brief relevant exercise can enable an understanding of decisions that must be made when engaging in qualitative research.

Candidates should be able to do more than provide descriptions of research methods. Teachers should provide their classes with periods in which qualitative methods can be discussed in depth. Each method has its own advantages and disadvantages and candidates



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should become aware of these in their learning process. This is one of the main ways in which candidates should learn to evaluate.

In discussion of qualitative research methods, candidates should seek to differentiate the terminology and approach used in experimental psychological research from that taken in qualitative psychological research. This experience will help not only in answers to paper three questions but also many of those asked in papers one and two. The evidence for this recommendation is to be found in many high quality responses seen by examiners in those other papers.



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