PSYCHOLOGY

Overall grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 7	8 - 17	18 - 27	28 - 38	39 - 52	53 - 63	64 - 100

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 8	9 - 19	20 - 30	31 - 42	43 - 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

Once again this session's most popular topics for HL IA came from the general field of cognitive psychology. This was both expected and usually highly appropriate for experimental investigation within the IB psychology guidelines. The most successful projects kept their research design simple, with one clearly manipulated independent variable and one appropriate measured dependent variable. Some candidates still attempted to conduct complex projects with multiple hypotheses and conditions. While these may be interesting topics, they generally detract from performance because of a lack of focus and problems staying within the word count limits.

One study that proved to be problematic in many cases was the serial-position effect. Some candidates found it challenging to manipulate an independent variable in order to provide two conditions. This led their design to be a survey, investigating which words in the list were remembered more frequently, with no basis for comparison or other condition. Appropriate IVs could have investigated the effect of interference, the length of the word lists, types of words, time delay, etc. In all cases there must be two conditions which could be investigated using a repeated measures or independent samples. Simply giving one list to participants and

then seeing the position of the words they remembered does not meet the experimental guidelines of the IB psychology course. Word lists that have been demarcated as beginning and end beforehand, also do not meet the requirement of an experiment due to lack of actual manipulation in the design.

Candidate performance against each criterion

Criterion A - Introduction:

While many candidates are providing some theoretical background or previous studies relevant to the hypothesis, there were still frequent problems with analysis and discussion of these studies/theories. Long summaries of procedural aspects are usually unnecessary, as the introduction should help set the stage for the prediction being made in the hypothesis. Each study should include some comment about its relevance that helps to frame the study being conducted. In all cases an appropriately operationalized hypothesis is required, along with a null hypothesis. These help to set the stage for the entire methods section as well as the results section.

Criterion B - Design:

The use of an experimental method does not need to be justified as this is a basic requirement of all candidates and no decision needs to be made on this by the candidates. Instead, candidates should make a decision upon and justify the use of a particular participant design (i.e., repeated measures, independent samples, etc.). The awareness of ethical considerations has improved and is better documented than in years past.

Criterion C - Participants:

Many candidates did not properly identify a target population from which the sample was drawn. This target population can be very narrowly defined as this relates to the underlying concepts of significance and generalization of the findings. While the use of random selection cannot always be ensured, random allocation should nearly always be a characteristic of the design. If candidates are unable to randomly allocate participants to either condition (or the order of the conditions in a repeated measures design) then there is a chance that the study is not truly experimental. Random allocation could come at the group level (e.g., by classes) if logistical constraints prevent individual random allocation. This is usually is documented and justified in the best examples.

Criterion D - Procedure:

No outstanding problems were seen with the procedure section. Candidates should be reminded that one blank example of each of the instruments/materials used should be included and its use referenced in the procedure section.

Criterion E - Results:

All HL psychology projects must make use of inferential statistics. The concepts of significance and generalization are important learning outcomes at HL. The use of a range of

descriptive statistics is also required. Many candidates are failing to discuss the results of descriptive stats tests. Note that the results from each gender group within the participants are usually not appropriate to report, as this does not make an experimental distinction. All raw data tables should go in the appendix.

Criterion F - Discussion:

There was a range of performance in the discussion section. Many of the projects provided quite superficial discussion sections that did not necessarily address the design strengths and weaknesses. While many report that small sample size may have been an issue, there were usually other issues that could have led to better developed discussion. The assessment criteria also require discussion of appropriate strengths of the study, and this was not always included.

Criterion G - Presentation:

Presentation requirements were generally well demonstrated. Problems with staying within the word limits were seen on many studies with complex designs.

Recommendations for the teaching of future candidates

It is highly recommended that candidates and teachers follow the IB psychology guide's recommendations and requirements. This is especially true with respect to the choice of inferential statistical tests. The tests listed in the guide can be applied to nearly every appropriate experimental design at this level. The use of alternative tests, however powerful, do not necessarily help to teach and assess the lessons on the concepts of significance and generalization that is sought at the IB psychology level.

Although the scope of the assessment criteria may be rather narrow, they require that the candidates be instructed in experimental research and data analysis. It is very clear to examiners when a candidate has not been fully instructed in this area. While they may be able to include the required elements, lack of knowledge becomes very apparent in the introduction, results and discussion sections.

Careful and appropriate use of terms plays a role in the success or failure of candidates with respect to the assessment criteria. Terms such as 'correlation', 'relationship between', 'prove' and 'random' are often used inaccurately or imprecisely.

Finally, the best recommendation that can be made is to keep the experimental design simple. The purpose of the project is to learn basic experimental methodology. This is usually the first time the candidate has approached this type of project. Keeping the study simple and clearly manipulating just one IV and measuring just one DV allows candidates the most opportunity to demonstrate a solid understanding of experimental research design.

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

In general, this year's reports seemed to be of higher quality than previous years.

The majority of candidates succeeded to reach at least the minimum level of criteria expressed in IBO guidelines. However, the candidates showed a relatively large scale of variety in meeting these criteria. The most difficult part seemed to be the design section (proper expression of research design and definition of variables) and data analysis.

Most of the reports submitted were replicating studies in the domain of cognitive and learning psychology; the topics were in general well selected with certain exceptions which offered non-experimental studies or ethically questionable studies.

Examiners were delighted to report about the high standard of quality of work performed by many candidates from some centres. These reports were presented clearly and written with care. It was also encouraging to note that the majority of candidates are now discussing how they are applying ethical guidelines to different aspects of their research study (discussing considerations related to certain issues prior to conducting the research, while conducting the study and when reporting the findings).

Although most work submitted by candidates was suitable, there were still some reports of replications of Asch's studies of conformity and replications of the bystander effect which had questionable ethics. In addition there were still a few reports of studies that used solely gender comparisons for reporting the data. Some candidates chose unnecessarily difficult experiments to replicate or added extra IVs, making their work more difficult and less focused, which invariably led to lower marks.

Candidates from a few centres expressed a deliberate effort not to use any original scientific study as their replication, but instead used their own design of an "experiment". At this level, such an effort should be discouraged, since it seldom leads to successful results.

Candidate performance against each criterion

Overall, candidates had good general understanding of the experimental method. However, some candidates had problems in clearly formulating the aim of their research. Also, one of the most frequent problems that examiners noticed was related to the problems that many candidates had in clearly explaining the original research in the Introduction and then subsequently comparing the original study and their own study in the Discussion.

Criterion A: Introduction

Some candidates were not able to clearly state their aim in terms of the IV and DV and instead simply stated that their aim is to replicate a previous study.

Most candidates did well identifying and describing the findings of the study being replicated, but very few papers clearly explained all relevant aspects of the original study (aim, type of design used, target population and sampling method, procedure, results obtained and conclusions reached).

Occasionally examiners noticed that some students were attempting to write a review of literature and failed to identify and explain in detail the exact study to be replicated.

Criterion B: Design

Most candidates were able to identify their IV & DV but many could not operationalize them. Candidates especially had problems with operationalizing their IV – many candidates identified the materials that they produced or used as their independent variable (e.g. a list of words, questions stated in the questionnaire, juices of different colour). Although candidates had less problems with identifying the DV a frequent problem was that the dependent variable was not expressed in quantified terms.

Candidates from several schools described their design as a laboratory study (often calling it "experimental") rather than discussing the specific experimental design (independent samples, repeated measures or less frequently matched pairs design).Also, many candidates identified the experimental design but failed to justify their choice.
The majority of candidates gave some reference to ethical guidelines being followed; if this was not presented in the design section it was usually found in some other sections of the report (usually the procedure) or within the appendices e.g. presentation of the consent form letter or debriefing. Candidates should not include signed copies of consent forms in their report, as this breaches participant confidentiality.

Criterion C: Participants

In many cases the target population was not completely described or relevant information was omitted (e.g. number of participants or age of participants). Several examiners noticed that there was a lack of knowledge about sampling methods and its justification.

Weaker candidates provided muddled descriptions of sampling method that confused opportunity and random sampling.

Criterion D: Procedure

The procedures varied in standard from excellent to poor. Too many candidates are spending time discussing their production of materials and preparation for the experiment, and then rushing through the procedures that they followed with their participants, therefore leading to a lack of replicability.

Criterion E: Results

This was overall the most poorly done section. Although candidates usually presented many graphs and tables the presentation of data often did not reflect the aim of the study. In many cases examiners reported that a large number of candidates presented graphing of raw data.

In general examiners tended to agree that the presentation of descriptive statistics lacked clarity and reflected a lack of understanding of the purpose of statistical analysis of raw data. For example, when presenting descriptive statistics many candidates omitted any type of measurement of dispersion while including all three measurements of central tendency.

Criterion F: Discussion

The majority of candidates made some attempt to make links back to the study that was being replicated but in most cases, this was more limited than it should have been. Too often candidates simply stated that the results of the original study and of the replicated study were the same without any proper comparison. Most candidates were able to correctly identify several weaknesses and suggest modifications, some to a high standard. Far fewer candidates however were able to suggest strengths. Conclusions were generally rather clear and related to the aim of the study.

Criterion G: Presentation

Most reports were well presented and within the word limit. On some occasions reports did not meet format requirements by not including a Reference section or Appendices.

In addition, candidates should be clearly instructed to only list works cited in the body of the report. Some candidates had a long bibliography without any citation in their papers.

References cited from Internet and secondary sources were often incorrectly formatted.

Recommendations for the teaching of future candidates

- Candidates should have the opportunity to develop the skills needed in the production of the Internal Assessment by doing more than this one project. It is recommended to make many types of exercises related to especially the difficult parts of this project. These exercises could include practice in writing introductions and aims, reinterpretation of findings of published studies, data analysis, analysis of strengths and weaknesses of published studies, etc.

- Care should be taken during the design phase to generate data that lend themselves to descriptive statistics, rather than frequencies or percentages. Candidates should also be reminded to keep the study at a basic level. If chosen original studies are of a complex nature students can conduct a partial replication of the original study with one independent variable.

- The items/questions/video (instrument) used to obtain responses from participants should closely approximate the one used by the researchers whose study is being replicated. These should not be arbitrarily devised by the candidates.

- Since most candidates undertake the research in groups of 3-4, how tasks and responsibilities for conducting the experiment are divided must be explained either in the procedure or the appendix.

- In the participant consent letter and briefing information the actual nature of the experiment should not be divulged, e.g. “this is an experiment in STM recall.” Some specific explanation on how psychologists study memory functions is necessary. Especially in the debriefing more details as to the exact nature of the study should be provided.

- Candidates should avoid labelling the experimental and control groups as “A” and “B” as this may cause some confusion in the analysis and discussion section.

- Candidates should develop skills of analysing the raw data and interpreting findings. Not only does this include how to calculate descriptive statistics but also how to make use of this analysis. For example, candidates should be able to discuss what it means if the calculated means of the two conditions are different, yet the modes are similar, or if the means are similar but the standard deviation of each condition is different. Finally, that marks earned for the Results can be maximized with graphs that reflect the aim rather than raw data.

- Teachers should review the guide to make sure they understand the differences between SL and HL IA requirements. Many students presented a research and null hypothesis, and some carried out inferential stats. As these tasks are not required examiners cannot credit them when assessing the overall report.

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 - 13	14 - 19	20 - 24	25 - 30	31 - 52

Standard level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 4	5 - 8	9 - 13	14 - 18	19 - 23	24 - 28	29 - 44

General comments

Most candidates were well prepared to manage their time between questions; there were only a few candidates who had clearly not left enough time to complete their response.

Candidates generally demonstrated adequate content knowledge but had difficulty giving answers focused on the question asked. Moreover, questions that specified *one* often drew more than one, resulting in little or no depth for any *one*.

Skill in essay writing was sometimes lacking with some candidates unable to structure their ideas clearly and develop their ideas in a sound argument that would do justice to their knowledge of the perspectives.

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

Candidates were generally familiar with syllabus requirements, particularly content areas. Overall knowledge of perspectives was satisfactory with the majority of candidates able to identify appropriate concepts and theoretical explanations and provide relevant research examples. However, this knowledge was often applied descriptively rather than analytically. Moreover, depth of knowledge was lacking as candidates tended to skim a broad range of concepts and studies to the neglect of in-depth analysis for the question.

Candidates showed fairly good command of psychological terminology and were most secure in their understanding of the learning and biological perspectives.

The areas of the programme and examination which appeared difficult for the candidates

It seemed that the most difficult areas for the candidates were associated mostly with skills rather than the syllabus. Candidates had difficulties answering precisely what the question is asking, either being too descriptive and focusing on one topic or not being able to support their arguments through relevant theoretical and empirical evidence. Quite often there was little evidence of the ability to apply appropriate information from the perspectives to the demands of the question as set. Too many candidates wandered off topic to demonstrate their knowledge in areas related to the question. Many candidates' responses were reflecting clear guidance on specific type of questions rather than understanding of the question and a conscious effort to respond.

Another main difficulty was in the understanding of either the terms of the syllabus, or of the command terms. A common example of lack of understanding of a syllabus term was the requirement to explain a *contribution to the study of behaviour* from the humanistic perspective. Candidates generally performed poorly on this question, as many understood it to mean application of theory. A particular example of insufficient command term understanding was evident in questions where the candidates had to *compare and contrast*; this often produced a focus only on differences and not similarities. Also, the command term *account for* may have presented difficulties.

In terms of syllabus, it looked as if most difficulties were associated with the cognitive perspective and the area of research methods. This made question 5 particularly challenging; it was clear that candidates did not tend to have a solid grasp of the ethical issues associated with psychological research in general, as well as having a much poorer grasp of the cognitive perspective compared to that of other perspectives.

As this paper had an emphasis on research methods, it highlighted the limited knowledge that many candidates have regarding the various research methods. An example of this is question 3 where candidates gave a narrative of a study rather than focusing on teasing out the actual aspects that relate to the methodology. Confusion between experimental, correlational and observational research methods was also very apparent in number of responses. Finally, many candidates did not demonstrate a strong understanding of the notion of ecological validity.

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

Section A

Biological Perspective

Question 1: Candidates were often able to identify a historical or cultural condition but had difficulty relating precisely how this event gave rise to the biological perspective. Most candidates focused on the influence of Darwin or the increasing use of new technology with a number tracing ideas of dualism and materialism particularly from Descartes. Some candidates however, described the history of the perspective or a specific research study rather than a cultural or historical condition.

Cognitive Perspective

Question 2: The question was variously interpreted as meaning a general explanation of behaviour from the cognitive perspective or in reference to a particular theory from the perspective. Those that chose a particular theory mostly discussed the Atkinson and Shiffrin model of memory; both the account of the model and a limitation were generally well handled. The strongest answers addressed the weaknesses of the computer analogy but these were also some of the weakest responses. However, many candidates were unable to focus on a specific cognitive explanation and answers remained at a superficial general level. For instance, candidates would state that the perspective is reductionist but were unable to make a clear reason or further explanation for that limitation. It also seemed difficult for many candidates to differentiate between a cognitive explanation of behaviour and a cognitive behaviour. Hence, the limitation the candidates tried to account for was in fact a limitation of a particular cognitive ability like inadequacies of eyewitness memory rather than a limitation of an explanation of behaviour from the cognitive perspective.

Learning Perspective

Question 3: Few candidates understood that the question was asking for an outline of the research method. Most candidates described in detail a relevant study such as Pavlov's,

Bandura's, Skinner's or Watson's with no identification of the methodological features. Candidates who outlined the research method rarely applied the method features to the study itself. Candidates who identified *observation* as the method were almost always unable to identify key features with many suggesting that the researcher "simply watches" or "doesn't have to do anything". At times, methodology was confused with conditioning.

Humanistic Perspective

Question 4: The idea of contribution to the study of behaviour was generally not well understood. Those who did understand it usually did very well, clearly explaining such contributions as a new emphasis on qualitative methods, ideographic approaches to personality, and a focus on the whole person. Many responses provided only a description of humanistic theory, such as Maslow's Hierarchy of needs, without being able to highlight how this made a contribution to the study of behaviour. Weaker answers interpreted contribution to mean application, often describing humanistic therapy.

Section B

Biological Perspective

Question 5: Many candidates chose this question and looked at experiments or case studies. Candidates tended to either do very well on this question or very poorly. The best answers clearly exemplified the method in well chosen studies from the biological perspective and evaluated its use in that context. Weaker answers evaluated findings of a specific study rather than examining strengths and weaknesses of a research method or evaluated a research method without linking it to biological studies. A number of candidates inaccurately cited surgical procedures as research methods and appeared to have difficulty distinguishing between psychosurgery as part of an experiment and psychosurgery as a treatment.

Cognitive Perspective

Question 6: Very few candidates chose this question. There were a very few excellent responses, which demonstrated a close knowledge of ethical issues and recognised guidelines, and which related these productively to well chosen studies from the cognitive perspective. The majority, however, tended to be insubstantial, with lack of familiarity with cognitive research, and only general knowledge of ethical concerns.

Learning Perspective

Question 7: Many candidates selected this question, with the majority choosing to compare the learning and biological perspectives. Most candidates were able to explain one or two assumptions of each perspective and discuss some differences between them but failed to address similarities. Many successful responses compared the learning and biological perspectives and were able to identify similarity as well as difference in the deterministic aspects of their assumptions. Weaker responses were mostly descriptive or confused learning perspective with traditional behaviourism. Too often, candidates erroneously cited "tabula rasa" as an assumption of the learning perspective as a whole.

Humanistic Perspective

Question 8: A few candidates addressed the question as set, considering both free will and determinism in relation to humanistic theories, and coming to a well considered response to the command “to what extent”. Most responses supplied extensive accounts of humanistic theories, but made only superficial reference to free will and determinism; often these key terms were not defined or explained. The weakest responses addressed the assumption of free will, without considering the relevance of determinism, indicating a lack of understanding of the theories. For example, there was limited understanding of the role of conditions of worth in Rogers' Self theory, or of the role of environmental conditions in achievement of elements of Maslow's Hierarchy of Needs. A number of candidates who selected this question did not address theory within the perspective but inaccurately chose to address approaches to therapy.

Recommendations and guidance for the teaching of future candidates

Candidates should practice identifying command terms and what they require. They need to be better prepared to apply their knowledge in various contexts rather than simply reproduce memorised studies and theories with little consideration given to what the question actually requires. Planning activities to get students in groups to state briefly what the examiner is requiring on past questions would be beneficial.

Candidates should be able to answer questions directly and precisely providing theoretical and empirical support. They need practice with writing essays, with constructing well-organized answers. Asking them to present a plan would help them to take the habit of making one. Such obligation would encourage them to organize their ideas before answering questions.

Candidates should practice developing coherent and logical arguments. Having candidates working together in groups, debating about different psychological topics could facilitate the development of critical analysis and evaluation skills.

Teaching should address the precise aims, techniques and uses for research methods. Differences between the various methods should be clearly identified, and appropriate examples known from each perspective. Research methods should be an integral part of the study of each perspective.

Higher and standard level paper two

Component grade boundaries

Higher level

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 3	4 - 7	8 - 11	12 - 16	17 - 22	23 - 27	28 - 40

Standard level

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

The areas of the program which proved difficult for candidates

Most popular options in paper 2 were *dysfunctional behaviour, psychodynamic psychology* and *social psychology*. There seemed to be a slight drop in the number of candidates answering *lifespan* and *health psychology* options. While the full range of marks were awarded across the options and candidates, there were still large numbers of candidates producing scripts based on generalized or anecdotal knowledge. Candidates should be reminded that empirical and theoretical support is required in all responses. There were many candidates who demonstrated detailed content knowledge of the options. While this is generally good, many candidates struggled to be selective with this knowledge and use it to answer the questions as they are written. It is very uncommon for candidates to be required to provide all procedural aspects of a study or complete details of an entire theory. Instead they should be trained to select which parts of the studies and theories help to demonstrate understanding of what each question is asking.

Misinterpretation of words and terms used in the question was reflected in answers of many candidates. These are highlighted in the following sections of this report, however the term *application* is one that proved to be very difficult for many candidates. As mentioned above, candidates may have detailed knowledge of specific theories or studies, but they do not always demonstrate an understanding of the following: why these studies or theories are important; how they have been used; or what are the implications of their findings. These three aspects play a much more important role in the success against the assessment criteria than does the ability to recount what was done in the studies, how they were carried out, or the complete description of an entire theory.

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

The responses focused more on the description of the concepts rather than the evaluative aspect of the question. Most of the students focused on providing in-depth knowledge of the concept and therefore lost focus in addressing the relevant aspect of the question for e.g. assessing or evaluating or comparing and contrasting the concept/s or topics.

Many mid-range marks were awarded, as some of the questions were quite difficult during this session, particularly questions 7 and 8 in the psychology of dysfunctional behaviour option and questions 20 and 21 in social psychology. In question 20 candidates had trouble evaluating the application of research findings, most evaluated empirical studies rather than the success or otherwise of the application of their findings.

Candidates usually did a good job of describing theories or research studies. When answering the psychodynamic psychology questions, candidates seemed comfortable with Freud and his theories but less confident when describing and evaluating other theorists.

Questions 14, 18 & 20 all contained the word *application*. Many candidates had a problem with this term and interpreted it in a very vague way such as "information useful for understanding human behaviour" which usually produced responses focused on theory and research.

More detailed and specific comments about each option in general and every question follow in the next section.

Comparative psychology

Very few candidates answered questions from this Option. It was apparent that most of those who did attempt these questions had not prepared for Comparative Psychology. General knowledge from other areas of psychology, personal experience or from television documentaries was quite often used in responses to these questions. Teachers are recommended to discourage candidates from answering questions from Options for which they have not prepared during their IB psychology course.

1. There were very few responses to this question. Most responses did not include relevant psychological knowledge from comparative psychology.

2. Describe and evaluate **two** research methods (*e.g.* experiment, observation) used in investigations of non-human animal behaviour. *[20 marks]*

Responses were not always centred on research methods relevant to comparative psychology with most containing isolated, valid and very general comments on experiments and observations. Some candidates attempted to use knowledge from animal studies in behaviourism or evolutionary psychology. While some of these did earn credit, it was challenging to draw relevant links to the study of non-human animal behaviour within the context of comparative psychology.

3. Very superficial and common sense responses were usually given. While many areas of human behaviour are paralleled in non-human animal behaviour, those candidates who had not prepared for this question were not well equipped to provide a response that was supported by relevant psychological knowledge.

Cultural psychology

The cultural psychology option attracted very few responses in general. It appears as though relatively few centres prepared candidates in this option, however a number of candidates still chose to respond to these questions. Teachers are highly recommended to discourage candidates from answering questions from options for which they have not prepared. Answering questions from other options severely disadvantages the candidate.

4. Very superficial and common sense responses were usually given in response to this question. Usually candidates did not completely grasp the term "cultural dimensions" and just

described anecdotal information about different cultures. The most common appropriate cultural dimensions addressed were individualism/collectivism or masculinity/femininity. Classic studies by Hofstede and the Chinese Cultural Connection, among others, would have been appropriate in response to this question.

5. The first part of the question was usually answered in a rather limited manner. Many candidates found it difficult to provide an example of a relevant study of communication within the field of cultural psychology. There was an over-emphasis on description of findings. Very rarely candidates described the aim, type of method, procedure of the study.

Part b) was usually answered in a commonsense manner without relevant empirical or theoretical support from cultural psychology.

6. Some candidates made an attempt to answer this question but usually the responses lacked knowledge of ethnocentricity from within a cultural psychology perspective. Anecdotal definitions and explanations were common and many candidates tried to use their own personal understanding of ethnicity or discrimination; this demonstrated a lack of preparation for this option. On several occasions the responses provided an over-emphasis on the biases of diagnosis of dysfunctional behaviour -- as if the candidates were trying to adapt their knowledge of the psychology of dysfunctional behaviour option to this question.

The psychology of dysfunctional behaviour

This option was far and away the most popular. This follows the historical trend and came as no surprise to examiners. The full range of marks was awarded on each of these questions with some excellent responses, but also many that did not earn high marks. Unlike the first two options, it was apparent that most candidates who answered these questions had studied the option. There was some lack of precision in understanding and use of terminology and some unsuccessfully tried to integrate content more suitable to paper 1 than to this option.

7. This was the least popular of the questions from this option and it proved to be quite challenging for some candidates. Weaker responses tended provide limited and superficial accounts of gender considerations related to interpretation of dysfunctional behaviour. Another approach was to provide limited and superficial responses that focused on bias and subjectivity rather than gender considerations. While some candidates were able to include some relevant gender considerations, many did not make the link to how these issues might affect how dysfunctional behaviour is interpreted.

8. The wording of this question proved to be challenging, as there is a wide range of concepts that could be made relevant to this question. The guide refers to the concepts of normality and abnormality. Candidates choosing these concepts tended to do very well, however many other concepts were successfully addressed in response to this question. The question asks for a 'concept' so whatever topics are chosen, they should be treated as such. The best essays identified their concepts and then proceed to explain what these concepts are and what they mean. For example, the concept of *etiology* could be discussed along with how it relates to dysfunctional behaviour and to evaluate it.

Some very good responses were offered providing examples of two concepts, with clear description and discussion accompanied with plenty of research support and thorough evaluation. Often concepts related to the learning/cognitive perspective's explanation of dysfunctional behaviour were chosen: conditioned emotional response, cognitive distortions, learned helplessness.

Weaker responses were often characterized by candidates taking 2 models/perspectives as concepts related to dysfunctional behaviour without a clear understanding of their conceptual nature. Many were very detailed general descriptions accompanied with some attempt to evaluate although not very well developed.

9. Some good structured responses were offered that presented clear arguments supported with relevant empirical research. Evaluation tended to be well balanced - both positive and negative aspects were addressed. Cultural and gender issues were discussed in many responses, especially those earning high marks.

The average responses tended to provide simplistic accounts in which there was some identification of problems of diagnosis but without much detail or empirical support. Alternatively description of diagnosis was well handled but was accompanied by evaluative commentary that was not as well developed. Rather simplistic comments were at a rudimentary level to just highlight that diagnosis is difficult and cultural considerations can affect the process. Many essays did not address issues of validity or reliability. Even when problems such as issues related to the concept of abnormality were addressed the information provided tended to be mostly descriptive rather than presenting a discussion.

Sometimes responses focused on diagnosis of specific disorders (e.g. schizophrenia) rather than providing a general response. While this approach could be successful, many candidates focused too much on the specific disorder rather than the concept of diagnosis. Also, there was an over-emphasis on negative aspects of diagnosis.

Weaker responses tended to give long and detailed descriptions of DSM IV and ICD 10 with little or no discussion provided. Many low scoring responses reflected that the question was not understood. Most commonly candidates did not always demonstrate understanding of the term ‘diagnosis’ and instead confused it with etiology or explanations. In these cases candidates concentrated on explanations of dysfunctional disorders from different perspectives with only implicit or accidental mention of a few problems with diagnosis.

Health psychology

There seemed to be fewer candidates answering questions from this option than in past exam sessions. It was evident that most candidates answering questions from this option had prepared for it; there were many others who seemed unprepared to answer the questions from a health psychology point of view. Anecdotal responses were seen frequently in questions from this option.

10. Often informed description was offered accompanied with clear evaluation somewhat lopsided as its emphasis was on negative aspects. Evaluation should also include positive aspects of the strategies included in response to this question to earn highest marks.

Many weak, descriptive and general responses mentioned exercise and seeking a supportive group as coping strategies. General knowledge is presented with very limited and general evaluation.

Sometimes candidates did not address the presented question but rather present a prepared response to a general question on stress that did not always include coping strategies. In these responses general and vague accounts were provided with very general and common sense responses.

11. Not many candidates made an attempt to answer this question. The most frequently occurring problem was that the candidates neglected the first part of the question (examine two research studies) and provided vague accounts on the inter-relationship between physical and mental health.

12. Rather good and detailed responses provided for this question. The content of the essays usually included a good description of two research studies and the methods applied and provided evaluation that contained the usual (general) strengths and limitations. Some weaker responses tried to bring general knowledge of research methods to this question without much understanding of their use unique to this field of psychology.

Lifespan psychology

The number of candidates answering questions in this option seemed to decrease from previous sessions. There were some outstanding responses to questions from this option, however many candidates did not adequately distinguish between attachment and separation.

13. Only a few candidates made an attempt to answer this question. Usually the responses contained general information about the consequences of separation. Some reference to empirical studies was given but in a very general way. Usually no discussion was present. In many cases responses to this question gave evidence of solid understanding of attachment but with less well developed knowledge about separation.

14. Only a few candidates made an attempt to answer this question. Usually knowledge presented was very superficial and of marginal relevance for the question (and option sometimes – e.g. describing and evaluating Freud's stages of development)

15. Relatively few candidates responded to this question, however those who did were able to provide adequate knowledge of research methods relevant to lifespan psychology. Some struggled to draw a link between methodological problems or issues and how they might play a role in research in this field.

Psychodynamic psychology

There seemed to be a slight resurgence in the number of candidates answering questions from this option. As usual, most candidates demonstrated detailed knowledge of Freudian theory. Object relations theorists were also rather well addressed, although not nearly to the same level as Freud. While detailed knowledge of relevant theories was often demonstrated,

candidates need to be selective about the content to use it to effectively address the demands of the question.

16. This was the most popular question for the Psychodynamic option – usually Freud's theory was compared to Jung's or Erikson's theory (some very informed responses chose Adler and Horney). In order to earn highest marks both similarities and differences must be addressed; therefore choice of theorists played a role in the success of responses to this question.

17. Usually responses were of average quality. Case study of Little Hans was usually cited but not well described. Much of the evaluations were directed towards Freud's theory in general rather than the study itself.

18. In the best responses there was a clear identification of a relevant application (usually the chosen application was therapy) of psychodynamic psychology. Competent description was usually accompanied by some limited discussion. In weaker responses the question was not clearly addressed or its requirements were misunderstood. Portions of Freud's psychodynamic theory have been discussed without reference to a relevant application. Many candidates did not demonstrate understanding of what it means to *apply* findings or theories rather than to *describe* findings or theories.

Social psychology

This option was probably the most difficult for the greatest number of candidates. The main problem was in the precise use and understanding of terminology. While candidates were very well versed in the topics of conformity and obedience, many did not demonstrate understanding of the terms used in these questions. Most often candidates tried to fit their knowledge of classic studies by Milgram, Asch and Zimbardo into these questions, usually with very little success.

19. This was a challenging question as it focuses on independent behaviour, or why people do not conform. Instead of focusing on this, candidates often wrote more about conformity or obedience rather than behaviour that was independent of social influence. Asch's line estimation studies were often cited and while the higher scoring responses explored the reasons why some people did not conform or what variables played a role in the rate of people acting independently, the weaker responses focused on descriptive aspects of the procedure and findings.

20. This is another application question that caused some difficulties as candidates were well prepared to discuss theories and studies, but less well prepared to discuss how these have been applied to other situations or behaviours. There were some excellent responses addressing application to crowd control at sporting events, redesign of aircraft to increase safety in emergency situations, and reduction of prejudice and discrimination. Weaker responses again focused on the studies or theories without much indication how these inform us in other situations.

21. There seemed to be a very low level of understanding of what the term 'collective behaviour' means. Rather than focusing on the behaviour of a group as a whole, most

candidates interpreted this as the basic definition of social psychology – an individual's behaviour being influenced by a group in social settings. Again, many weaker responses chose to write about conformity and obedience rather than collective behaviour. A few responses did discuss crowd or mob behaviour, however the discussion of similarities and differences between two different theories was difficult for many.

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

Candidates would benefit from a clearer understanding of the terms mentioned in the syllabus, such as *independent behaviour, collective behaviour, diagnosis* and *concepts*. It is recommended that candidates be able to adequately define and provide examples for all content areas they prepare for the exam.

While general understanding of the command terms has been improving, there is room for further improvement in understanding and communication. Candidates are becoming more adept at providing some evaluative commentary, but they do not always link this evaluation back to the demands of the questions. Additionally, it was apparent that most candidates only provided 'negative' evaluation – that is to point out the problems with a study, theory or concept rather than to also offer some strengths or unique contributions. Doing so would provide a more well balanced appraisal and evaluation. *Compare and contrast* essays also require both similarities and differences. While the differences are much easier for candidates to identify, they often do not address the similarities as well.

In a two-part question candidates should be advised to label the relevant sections in the margin. Also allocate time in each section according to the marks noted next to each question.

Candidates should focus more on the important implications, applications and discussion of psychological content, rather than just memorizing the details of what happened or an explanation of the theory or concept. Very few questions will ever ask 'tell me everything you know about ____", yet this is the type of essay that is seen far too often. This approach does not usually lead to high marks, as the questions will usually require candidates to be selective about the knowledge they share. The abilities to filter content and provide focused responses are characteristic of responses earning highest marks.

Higher level paper three

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0 - 2	3 - 5	6 - 7	8 - 10	11 - 14	15 - 17	18 - 30

Areas of the programme which proved difficult for candidates

The quality of answers varied considerably, notably between schools, indicating that some candidates had been prepared much more thoroughly than others. Many candidates found that the application of methods was difficult. Although they were often able to provide comprehensive definitions and explanations of the methods being questioned, there were times when many candidates were unable to put such methods into context and apply them appropriately. Depth of knowledge about content analysis was often disappointingly low and grasp of terminology used in methodology sometimes stretched credulity.

Levels of knowledge understanding and skill demonstrated

Understanding of differences between structured and unstructured types of interview was generally well understood but there were several responses that indicated a superficial knowledge in this context. The use of triangulation was known but claims for its credibility often produced weak discussion and few candidates appeared to appreciate that every method used in psychology has its own strengths and weaknesses, not least in the use of triangulation. Qualitative content analysis appears to be a difficult area for candidates to understand and examiners remarked that this may be due to lack of opportunities provided for candidates to do practical work in this area of their syllabus.

Strengths and weaknesses of candidates in the treatment of individual questions

Question 1: A large proportion of candidates provided a description of the types of triangulation that are listed in the IB psychology guide but did not show how these methods influenced credibility of qualitative research. There was a tendency to describe triangulation methods but to offer little or no discussion. It was rare to find negative evaluation of triangulation. It is almost as though triangulation is regarded in such a positive light that it can do no wrong in the eyes of research methodology. Each and every research method used in psychology has a down side. A fundamental part of discussion is to identify and present balanced arguments that reveal these tensions. While some research studies that employ triangulation certainly do contribute to credibility, its use in other research studies serves to produce a level of increased complexity that obscures the interpretation of findings. Using Occam's razor and constraining the research approach to a single appropriate method may often be the best approach.

Question 2: The level of understanding produced by groups of candidates from different schools was very marked. Questions on qualitative content analysis have been set in previous examinations for Paper Three and its application to various media is somewhat similar. In the context of this question, which required an explanation of how to apply the techniques of qualitative content analysis to printed material, many candidates showed no knowledge of content analysis and consequently could not demonstrate any knowledge of qualitative content analysis. Other candidates couched their answers in terms of quantitative analysis – a very different approach than that adopted by qualitative research where the focus is on the identification, analysis and interpretation of themes.

Several candidates identified coding as a relevant technique but stopped their answers at this point, and although these answers scored slightly higher than those which focussed erroneously on a quantitative approach, there was much that was omitted. Coding is an initial step on the way to analysing data to achieve higher order themes. The ways in which data is presented and analysed in the process leading to higher order perceptions is where researcher influence plays a pivotal role. It was very evident that in those schools where qualitative content analysis has been applied by candidates that this question posed nothing like the difficulty for candidates who had no such experience.

Question 3: Candidates were asked to contrast structured and unstructured types of interview. Many of the responses were descriptive which gave the impression that as long as two descriptions were provided it could be left to the examiner to make out what contrast was intended. This type of answer gained very few marks no matter how well informed it was in terms of the two approaches to interviews. Other candidates, despite the clear wording of the question, thought that they may as well consider similarities between structured and unstructured interviews. Such response gained no credit. Yet other candidates, doubtless well schooled in traditional and post-modern methods, decided that they would insert irrelevant paragraphs that were devoted to such matters.

Most candidates showed some knowledge of pre-set questions used by structured interviews in contrast to the flexibility of unstructured interviews and were aware of the greater costs usually involved in using the latter. Very few however mentioned that the latter also yield more thematic responses that in turn helps to generate better informed findings.

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

It is clear that those candidates who are able to apply research method examples drawn from empirical psychological studies are at a distinct advantage in contrast to their less informed peers. Teachers should teach students how to apply techniques of research methods. This skill not only brings benefits in answering Paper Three questions but also for Papers One and Two. Understanding the advantages and disadvantages of research methods tends to permeate discussion of psychological studies.

Teachers should avoid teaching quantitative and qualitative content analysis as one and the same thing, particularly for a paper that is focused on **Qualitative** Methods. Nor should students be encouraged to believe that qualitative research is done on order that its data may be changed to a quantitative form that will be more amenable to statistical tests and therefore the findings will be regarded as more scientific. There is a curious lack of logic in this process that most scientists may see as ironic. Both quantitative and qualitative approaches are required in psychological research. Each has its own good and bad points but their contribution to our understanding of psychological phenomena, either singly or in combination, is well beyond serious dispute.