PSYCHOLOGY

Overall grade boundaries

Higher level							
Grade:	1	2	3	4	5	6	7
Mark range:	0-9	10-20	21-30	31-42	43-54	55-66	67-100
Standard leve	1						
Grade:	1	2	3	4	5	6	7
Mark range:	0-11	12-22	23-32	33-45	46-56	57-69	70-100

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

There were a number of topics that were investigated across the sample IAs sent in for moderation. The majority of these fell into the cognitive psychology area. While most were highly suitable and met the HL IA requirements, there were an alarming number of samples that were either non-experimental in nature or were ethically dubious. Teachers and candidates are reminded that every IA must have one independent variable, which the candidate manipulates or changes for each of the two conditions/groups in the experiment. Naturally occurring differences, such as gender or native language, cannot be manipulated and should not be used as the independent variable for IB psychology HL IA. As in past years, it must be stated that teachers are ultimately responsible for the selection of appropriate topics by each candidate. Topics that are ethically dubious must not be undertaken. These include replications of Asch's conformity studies. If there is any question whether or not a topic is appropriate, then candidates would be wise to choose another topic.

Candidate performance against each criterion

A - Introduction

Most candidates were able to cite studies that were at least somewhat relevant to their topic and supported their aim. There was more difficulty evident in the analysis of these studies and making them directly relevant to the current study. Mere description of relevant background studies does not meet the assessment descriptors for high marks on this criterion.

B - Method: Design

This criterion was generally well handled. Candidates should make note of ethical considerations that were taken into account during their study. Additionally, the design of the experiment must be justified, *i.e.* why a repeated measures design was used rather than some other design such as

independent samples. The use of an experiment as a method does not need to be justified, but rather the design of this experiment. There was some lack of clarity in identifying the independent variable as well. Generally, the independent variable in a study could be considered a single concept or phenomena for which there are two levels or conditions. For example, in the classic Stroop Effect, the colour of the words presented to participants is manipulated. The independent variable is the colour of the words presented. There are two conditions of the independent variable: Matching word and colour of word (*e.g.* "red" printed in red ink) and conflicting word and colour of word (*e.g.* "red" printed in blue ink). Many candidates oversimplified their identification of the independent variable by stating, "the IV is the two lists".

C – Method: Participants

Well handled. Candidates should be sure to identify the target population and relevant characteristics. It should be noted that while using an opportunity/convenience sample, candidates should make every attempt to randomly allocate the participants to the two conditions/groups in the study. Many candidates did not address allocation methods at all in their study and it would be good practice to do so in this section.

D – Method: Procedure

Usually well done. This section should be thorough. It may be recommended to have a person who is unaware of the study to read this section and describe to the experimenter what went on. This is a way to double check that the procedure is sufficiently detailed to allow the study to be replicated.

E – Results

Inferential statistics are required in the Higher Level psychology IA. Descriptive statistics are also required. Some candidates included inferential but not descriptive stats. This section should include the results reported in narrative form (*i.e.*, written out in paragraphs) and graphical form. Most often a simple two-bar graph is all that is needed for graphical presentation of the results. Further graphs quite often detract from the results, as the candidates do not generally use them effectively in their discussion of the findings. Raw data must not be included in this section but assigned to an appendix.

F – Discussion

While many candidates are able to identify weaknesses, relatively few included discussion of the strengths of their study. Background research should be cited in order to help discuss the findings and elaborate on the current study. Mere repetition of material from the introduction does not adequately satisfy the requirements of this section.

G – **Presentation**

Most IAs were within the word limit. A consistent, recognized format for references must be followed. The guide indicates that a references section is needed rather than a bibliography. Therefore, references to statistical or research methods textbooks is unnecessary. Candidates should focus on appropriate references of the studies cited, this includes secondary reference format.

Recommendations for the teaching of future candidates

Teachers must be aware of their responsibility for guidance of candidates through the entire internal assessment process. This includes full disclosure and distribution of all of the published guidance from IB, including the assessment criteria.

Ethical concerns have cropped up again in many centres. Teachers are reminded of their responsibility in approving studies to be undertaken. If teachers need support on this, they should contact other IB psychology teachers via the Online Curriculum Centre. Each year there are several discussions on internal assessment. Teachers should use this valuable resource.

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

There were many first class reports and although the majority of these relied heavily on classic research there were several that based their design on classic experiments but substituted a slightly different approach to the original. This was far better than the few that tried to be original in concept but failed to understand the basic guidelines that should govern an experiment in psychology. There were fewer unethical practices but those that did involve unethical methods scored an extremely low mark. There was also an occasional incident where plagiarism was evident. Even though this may be unintentional on the part of the candidate, teachers will doubtless realise that the IBO must necessarily take firm action to penalise such practice. Teachers and candidates are urged not to become involved in this practice and to acknowledge all source material by naming the original authors both in the appendix section and the appropriate section in the body of the report.

Candidate performance against each criterion

A – Introduction

Abstracts present difficulty for candidates, mainly because of the concise wording that is required and the need to present a comprehensive account of the research that follows. The aim of the research should be stated at the very beginning and it should be crystal clear. The abstract should be the last piece of writing that is done for the report and like all of the remainder of the report it should be written in the past tense. It should relate what has been done rather than what is being done or what will be done. When tenses are mixed up in a report it gives the distinct impression that the candidate has tried to follow a number of discrete steps that do not necessarily make a coherent whole.

The function of the background or introductory study was not always recognised for the central part that it should play in the report. At standard level there is no need to attempt entirely original work, and no need to attempt work that appears to have no previous related research. There is every good reason to avoid both of these approaches; a replication or partial replication of a simple experiment is what is required.

C – Method: Participants

Several reports omitted any reference to the sampling method chosen or description of relevant characteristics of the participants. Both of these are key omissions that result in low marks for this criterion. Unless this material is included there is no way in which the experiment can be replicated. It is worth reminding candidates that they relied on clear description in order to replicate the experiment they chose for their IA.

E – Results

Where the method section was sometimes weak the results section was often strong. However there were examples where access to a statistical software package did not always assist understanding. Candidates need to be clear when they make claims about their findings: the calculations they use do not always justify the outcome that they claimed. Experienced examiners are used to summarising raw

data and predicting the descriptive statistics that may emerge. They are not impressed by reports that present an array of unnecessary tables or graphs simply because the software can provide it. This should be avoided.

F – Discussion

The discussion section remains a daunting area for some candidates, not least because they have not chosen their background study with sufficient care. Failure to have done so means that insufficient meaningful discussion can occur. Candidates need to know the implications of their findings and to discuss these against the findings of the original research. This is how psychology and other sciences make progress. Often it is the small incremental steps that can eventually come together and lead to an invaluable insight to help people understand something more of the human condition.

Higher level paper one

Component grade boundaries

Higher level							
Grade:	1	2	3	4	5	6	7
Mark range:	0-4	5-9	10-13	14-19	20-25	26-31	32-52
Standard level							
Grade:	1	2	3	4	5	6	7
Mark range:	0-5	6-10	11-13	14-19	20-24	25-30	31-44

General comments

Section A questions appeared to present marginally greater difficulty for candidates compared to section B questions. Quite a few candidates, when they did know the topic areas in section A tended to spend far more time than can be justified by the mark allocation. The questions in Section A are intended to produce shorter answers and examiners make allowance for the relative brevity of responses when awarding marks.

There is every good reason why teachers should spend more time in preparing their students to familiarise themselves with key terms used in the psychology examination, including terms such as 'contribution', 'empirical study', 'assumption', or 'key concept'. This type of vocabulary has been used fairly constantly in examination questions, but there are still occasions when candidates fail to do themselves justice because they interpret these terms in a manner other than that used in the *psychology guide*.

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

Although the syllabus does not cover all of the psychology that could come under the heading of 'cognitive', alternatives should be chosen with great care. It is wise to avoid choosing studies that are difficult to justify as 'cognitive'. For example studies that are primarily dependent upon biological mechanisms for their investigations had best be avoided unless the candidates are very adept at making a cognitive justification.

The term 'assumption' is probably best interpreted as a belief. Once candidates have grasped this concept they should be able to think of a number of assumptions or beliefs that are related to the learning perspective. For example there is a relevant belief that while some types of learning may be enhanced by reinforcement there are others that do not necessarily rely upon reinforcement. Some candidates found the combination of the learning perspective and assumptions difficult to address.

Similarly the request to identify a historical or cultural condition to help explain the rise of the humanistic perspective caused difficulties for some. For others, the very reason for the creation of the humanistic movement in psychology was to ensure that psychology was provided with an alternative to the positivistic approach adopted by other perspectives.

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

It was encouraging to note the ways in which the biological perspective questions gave rise to good quality answers in both sections of the paper. Candidates demonstrated that they had a good grasp of many of the concepts that they employed, particularly in the application of the experimental method, although other methods were also occasionally justified as scientific. Several interesting examples of concepts were identified and their contributions were discussed in an informed manner. Answers to the learning perspective question in section B also showed some impressive insights into the concept of free will as it might be related to learning. It was evident that candidates knew more about determinism than free will but this knowledge was used to good effect by considering the continuum of these two phenomena over a range of human behaviours.

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

Section A:

Biological perspective

1. Identify and explain one contribution of the biological perspective to the *[8 marks]* scientific study of behaviour.

Cognitive perspective

- 2. (a) Briefly describe the method used in one empirical study from the [4 marks] cognitive perspective.
 - (b) Outline one ethical strength and one ethical limitation of the method [4 marks] described in part (a).

Learning Perspective

3. (a) Identify one assumption from the learning perspective.	[2 marks]
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(b) Explain how one assumption from the learning perspective is illustrated [6 marks] by one theory or study.

Humanistic Perspective (HL only)

4. Explain the influence of one historical or cultural condition on the rise of the [8 marks] humanistic perspective.

Some candidates found it difficult to address two or three aspects that might be contained in a single question. For example question 2 of section A required a brief description of the method used in one empirical study from the cognitive perspective. In this case although the candidate should certainly have chosen a study that was demonstrably cognitive, the focus should have been on the method used. A description of the method was needed for part (a) and an outline of an ethical strength and limitation was wanted for part (b). Successful candidates knew when to limit their answers to the question as set. No discussion was needed to gain full marks to answers in this case. A succinct answer was preferred.

Section B:

- 5. Identify one key concept from the biological perspective and discuss its [20 marks] contribution to the understanding of behaviour.
- 6. (a) Outline one theoretical explanation of behaviour from the cognitive [6 marks] perspective.
 - (b) Discuss strengths and limitations of the theoretical explanation of [14 marks] behaviour outlined in part (a).
- 7. Examine the extent to which the concept of free will relates to the learning *[20 marks]* perspective.

HL only

8. Explain the extent to which human behaviour is self-directed, according to [20 marks] the humanistic perspective.

In question 6, where an explanation of behaviour from the cognitive perspective was expected there were occasional answers that simply did not comply with any reasonable interpretation of that perspective. If answers focused on psychological topics such as attention, perception, memory or dissonance, at least they were relevant. Provided that these were put into a theoretical context they scored marks. Once this same explanation was evaluated then marks started to accumulate, but the wording of the question did imply that a reasonable balance of strengths and limitations should have been provided.

The final question, on the extent to which human behaviour is self-directed according to the humanistic perspective, generated a variable quality of answers. Some were of an impressive standard but others showed little understanding of what was required in relation to the command term 'to what extent...' Candidates were expected to show the limitations of the theories or studies that they had selected, but this key part of the answer was not always addressed.

Recommendations and guidance for the teaching of future candidates

It would be of substantial benefit to many candidates if they understood and implemented fundamental practices for success in examinations. They should answer the question that is set, take note of the command term that is provided in practically all questions, look at the allocation of marks for each part of the question and spend time and effort commensurate to that mark allocation. In particular this technique means knowing when to stop writing for individual questions or parts of questions. This skill takes practice and discipline, but it pays dividends in the end.

Higher and standard level paper two

Higher level							
Grade:	1	2	3	4	5	6	7
Mark range:	0-4	5-9	10-12	13-18	19-23	24-29	30-40
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

Component grade boundaries

General comments

Due to the relatively small candidature of the November examination session, there were a limited number of options represented in candidate responses. Commentary in this report is therefore limited to the options that garnered responses.

The quality of scripts varied greatly from those explicitly focusing on the set questions, offering well informed, in-depth knowledge and understanding of psychological theory and research, to those responses offering no more than a few relevant facts. In many cases responses provided evidence of considerable descriptive knowledge of the required topic but failed to make the material appropriate and relevant for the specific question set. In most of these cases the responses did not demonstrate the higher order skills (clear, detailed analysis and appropriate evaluation). Candidates are reminded that all questions set in Paper 2 require presentation of both descriptive knowledge and higher order skills of analysis and evaluation. Attempts to provide descriptive responses at full length tend to result in achieving marks in the lower to middle range.

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

In this examination session, although many candidates produced work of a reasonable standard there were fewer responses achieving the highest standards seen in previous sessions. Candidates achieving basic passing grades frequently appeared to have reasonable knowledge of the required topic area but seemed unable to make this material relevant to the specific question under consideration.

Unfortunately, misinterpretation of phrases or terms used in the psychology syllabus (*e.g.*, methodologies, ethical and methodological considerations, models/theories of behavior, approaches to treatment, *etc.*) characterized the work of a large number of candidates. Also, many responses reflected an inability to identify, describe and/or explain important terms from research methods. The

use of the terms "experiment" and "experimenter" was extremely problematic in many responses. Too often the term "experiment" was used to refer to any kind of research and the term "experimenter" for any person carrying out a study. Also, very few candidates demonstrated clear understanding of the concepts of reliability and validity. Far too many candidates used these two terms interchangeably and readily assumed that if the findings of a particular study were not reliable then they were automatically not valid as well.

In general questions from the social psychology option generated responses that were not handled well in this examination session. Many candidates were unable to discriminate between the concepts of conformity and obedience. These topics within social psychology posed problems as many candidates treated them as synonymous rather than distinct categories of social influence. Also, the topic of collective behaviour was often incorrectly identified and explained.

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

A majority of candidates are following the rubric of the examination by answering the requested number of questions.

The majority of the responses demonstrated at least some descriptive knowledge accompanied by a limited understanding of the optional areas. There were only a few cases of anecdotal responses – it seems that candidates correctly chose to answer the question from the option they had studied in class.

Many candidates were able to cite appropriate psychological research within their response.

Most candidates budgeted their time well. There were only a few cases in which it appeared that the candidate ran out of time.

Many of the responses to questions in the psychology of dysfunctional behaviour and psychodynamic psychology options made reference to relevant methodological and cross-cultural issues.

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

The Psychology of Dysfunctional Behaviour

7. Discuss gender considerations related to the psychology of dysfunctional behaviour.

Very few candidates responded to this question at HL or SL. However, when this question was attempted it seemed that it tended to attract the attention of unprepared candidates who provided a vague, general outline of gender differences in human behaviour. Most responses lacked specific knowledge of the option. Some responses to this question correctly addressed issues such as gender role differences, gender differences in the prevalence of certain disorders and culture-related explanations.

8. (a) Outline *one* dysfunctional behaviour.

(b) Compare *two* models or theories explaining the dysfunctional behaviour described in part (a).

This was a very popular question within the option. The most popular dysfunctional behaviours outlined in part (a) were schizophrenia, depression and phobias. Most candidates were able to describe the symptoms of the chosen disorder and a few stronger responses also mentioned diagnostic criteria of the chosen dysfunctional behaviour. Some candidates spent an inordinate amount of time on part (a) and therefore were short of time in responding to the second part of the question that carried more marks. Part (b) was slightly more problematic for most candidates since it required an

analysis of two models explaining the dysfunctional behaviour described in part (a). In some cases candidates did not focus directly on the dysfunctional behaviour described in part (a). Some other responses focused on treatment or therapy rather than theories explaining the behaviour. Most of the responses provided comparison that was implicit rather than explicit. Such responses tended to attract lower marks, as they were overly descriptive accounts of the two models rather than explorations of the similarities or differences between them.

9. (a) Describe *two* approaches to treatment for *one* dysfunctional behaviour. (b) Evaluate *one* of the approaches to treatment described in part (a).

This was also a rather popular question. Once again, the most popular dysfunctional behaviour was schizophrenia, with depression and anxiety disorders also getting some attention. Many candidates included a summary of the dysfunctional behaviour. Although a brief summary was somewhat useful, this was not required in the question and some candidates spent too much time on the description of the dysfunctional behaviour at the detriment of evaluation later in their responses. Some responses provided a detailed and accurate description of one approach to treatment and a rough draft of the second approach and thus lacked balance. In some cases responses to part (b) failed to address the question set and instead provided a detailed comparison of the two approaches to treatment instead of clearly focusing on and evaluating just one approach. Candidates should be reminded that careful reading and unpacking of the question is the key to a strong response offering appropriate in-depth knowledge and analysis.

Health Psychology

12. (a) Explain *two* physiological aspects of stress.

(b) Evaluate *one* way of coping with the physiological aspects of stress that you have explained in part (a).

Responses to this question were rather well handled. However, most responses focused more extensively on the negative impact rather than beneficial physiological aspects.

Lifespan Psychology

13. "Contemporary lifespan research has challenged the supposed irreversibility of early experiences." Examine the ongoing impact of early emotional development with reference to research from lifespan psychology.

This question posed several challenges. Firstly, candidates had to understand what is meant by "early emotional development". Most commonly, candidates discussed theories of attachment, which was appropriate to the question. Some attempted to discuss Piaget's theory of cognitive development, which did not suit the question. Secondly, candidates were required to address the "ongoing impact" as identified in the question and also in the quotation. Many candidates found it quite challenging to refer to research from the field that discussed the long term or ongoing impact of the topics they had addressed. In some cases candidates referred to animal studies which made it quite challenging as these were generally not followed up upon.

14. Examine how <u>either</u> cultural or gender considerations may affect the interpretation of research into adolescence.

Most candidates chose to write about cultural considerations in relation to adolescence. The focus was generally on cultural differences in the concept of adolescence, its presence and its socially constructed nature. While most candidates who responded to this question were able to address some relevant cultural differences, very few went on to discuss how these differences might affect the interpretation of research. For example, few candidates were able to discuss Erikson's identity vs. role confusion stage within a collectivistic culture as opposed to the individualistic cultures in which the theory was developed.

15. With reference to psychological research, describe and evaluate methodologies used in lifespan psychology.

Responses to this question were quite strong as candidates appropriately discussed the use of experimental and non-experimental, longitudinal, cross-sectional, and sequential methods.

However, candidates on SL seemed to have more difficulty with this question. Although there was evidence of detailed descriptive knowledge of some relevant methodologies used in lifespan psychology there seemed to be a lack of understanding of qualitative methods evident in the evaluative comments provided within the answer.

Psychodynamic Psychology

16. Compare *two* neo-Freudian theories in relation to the influence of childhood experience on human behaviour.

Most candidates were able to identify two neo-Freudian theorists. However, some problems arose as the discussion of these theorists' work did not focus on their theories in relation to the influence of childhood development on human behaviour. Additionally, relatively few candidates explicitly compared the two theories. Many responses offered extremely lengthy descriptions of two theories. While this demonstrated detailed descriptive knowledge of the theories, such responses did not directly address the demands of the question.

17. (a) Describe *two* research methodologies that are used in psychodynamic psychology. (b) Evaluate *one* of the methodologies described in part (a).

This was the most popular question within the option. Research methodologies are used to gather data from participants (human or non-human) that can then be used in developing, refining or refuting psychological theories. In psychology, discussion of research methodologies centres on the use of quantitative and/or qualitative methods to gather data experimentally and/or non-experimentally. In the case of psychodynamic psychology there is a very important distinction that needs to be made between research methodology and therapeutic procedures used to approach the unconscious. The most prevalent research methodology preferred by many psychodynamic psychologists is a case study method. Procedures such as hypnosis, dream analysis, and projective testing are usually used within a therapeutic context to uncover the unconscious mind and help remedy dysfunction; however, a claim can be made that these procedures are also used in research methodology if they are used within a case study methodology and the information gathered from these procedures is used in psychological theory development. Relatively few responses to this question were able to adequately discuss these procedures within a research context. The most popular topics were hypnosis and dream analysis, however they were almost always discussed in a therapeutic context rather than a research context and thus earned relatively few marks. In some cases, the responses to part (b) were slightly better as they were able to evaluate the use of these therapeutic procedures within a research context. Issues such as reliability and researcher bias were highlighted well.

18. Examine ways in which *two* psychodynamic theories explain the development of personality.

Candidates had little trouble identifying two psychodynamic theories. However, some candidates did not do well on this question because they did not focus on the demands of the question – namely, the development of personality. Many candidates gave overly or wholly descriptive accounts of Freudian theory with other theories of Horney, Adler, Erikson and Jung also being mentioned.

Social Psychology

19. (a) Describe *one* empirical study of conformity.

(b) Explain how both ethical and methodological considerations may affect the interpretation of behaviour in research related to conformity.

This was the most popular question within the social psychology option at HL. The vast majority of candidates appropriately identified the classic study on estimating line lengths by Asch as an empirical study of conformity. Many responses included a long, detailed account of the procedure of the study but failed to identify/explain the aim, findings or conclusion or did this in a very basic manner. There were a relatively large number of candidates that attempted to cite studies that were not designed to investigate conformity. The most popular inaccurate responses included studies of obedience to authority by Milgram or Haney, Banks & Zimbardo's prison simulation study that investigated the influence of an assigned social role on individual behaviour.

20. Compare and contrast *two* theories of prejudice.

Responses to this question were descriptive in nature, rather than comparative.

21. (a) Describe *one* theory explaining collective behaviour (e.g. crowds). (b) With reference to research findings, evaluate an application of the theory described in part (a).

Relatively few candidates attempted this question. The responses were rather rudimentary providing no more than a few relevant facts. Some candidates appropriately discussed deindividuation in part (a), but then struggled to focus on the application of this theory and evaluate it. Some responses demonstrated very limited understanding of "collective behaviour" and interpreted this to mean 'any topic within social psychology'.

Recommendations and guidance for the teaching of future candidates

- Candidates should fully understand the instructions for answering questions on paper 2 prior to entering the exam session. Candidates are required to answer one question for SL and two questions with each being from a different option for HL. Some HL candidates answered multiple questions within the same option and in rare cases attempted to answer all questions on the exam.
- For many candidates description continues to be easier than analysis and evaluation. Many responses reflect that candidates have done a good job in memorizing relevant information but they are not confident enough to critically discuss this information. Candidates should be firmly guided during the delivery of the course in order to master the skills of analysis and evaluation of psychological research and theory:

1. How to present psychological research.

Quite often candidates gave very detailed descriptions of research studies in their responses. The problem was that these descriptions were often too long and general. Unfortunately, the extra information provided didn't usually help to answer the question. For the vast majority of questions a detailed, non-selective description of all aspects of the study (especially the procedural details) is not necessary. Candidates should be guided in their analysis of psychological theory and research. This will help them understand how to include the most relevant aspects from psychological studies and theories in order to clearly answer the specific question set.

2. Relevant evaluation.

Teachers should prepare candidates for appropriate evaluation of psychological theory and research. It is recommended that candidates get the necessary experience in tailoring their evaluative comments to respond to the question as set. Rather than just stating any consideration that may be relevant to a particular study, candidates should discuss how these considerations may make us re-evaluate the findings from the study, how they limit the application of the findings, how they may have benefited the researchers and made their theory stronger. Also, the evaluation posed by most candidates only

discusses the negative aspects of a study or theory. It is important for them to also understand that positive points can be discussed in providing a balanced evaluation.

- Candidates must learn to read questions thoroughly, chose the most appropriate question and answer it directly and fully. Omission of part of the question or lack of understanding of command terms has serious consequences when the response is assessed.
- The approach to answering comparison questions should be practised with clear and explicit identification of both similarities and differences.
- Topics 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 influences in social psychology (*e.g.*, conformity and obedience are two different types of social influence; collective behaviour should not be confused with group behaviour)
- There is a general need for increased detail when discussing relevant methodological terms. Although research methodology is not specifically assessed in Paper 2, knowledge of research methodology enables candidates to successfully evaluate research studies encountered in the options.

Higher level paper three

Component grade boundaries

Grade:	1	2	3	4	5	6	7
Mark range:	0-3	4-6	7-10	11-13	14-15	16-18	19-30

General comments

The quality of answers varied considerably, both between and within schools. In those schools where candidates had been prepared by engaging in practical qualitative research there was evidence to suggest that such preparation paid dividends. Reliance on reading or talking about research is not a satisfactory substitute for actually doing it. This is particularly the case in research matters such as content analysis where unless candidates actually do an analysis they will not fully appreciate the reasons for using this method as a valuable means of psychological investigation.

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

Candidates were generally not very familiar with sampling techniques and the ways in which each technique can have an effect upon the application of findings to a population. Convenience sampling is usually considered to be amongst the least satisfactory of samples since the parent population from which the sample is taken is unknown. This means that it is difficult to make valid claims about the application of findings to a particular population. Candidates should also know more about random sampling and precisely what is involved in taking true random samples. Once this information is known candidates will understand better why the use of random sampling is not always viable in research studies.

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

Despite other points made in this report there is no doubt that a greater proportion of candidates is becoming familiar with many of the core elements of the syllabus for paper 3. This is evident in the understanding displayed about Likert scales, participant observation and email interviews. This understanding acknowledges that each and every research method is a compromise and that the selection of a method for a particular piece of research carries with it its own difficulties and advantages. The concept of balance between the downside and upside of each method is equally applicable to the choice of quantitative methods; this aspect of research methodology could be a profitable source of evaluative comment.

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

It was good to see that candidates knew of the advantages and disadvantages of Likert scales although few were aware of the dangers of converting the feelings that people have to a quantitative measure. Candidates were asked to outline an example for a large scale survey related to psychology; the popularity of an abnormal behaviour such as schizophrenia for this choice was a little alarming since it would have made the subsequent construction of the survey rather difficult, including the sampling technique itself. This is not to say that the task would have been impossible but it might have been easier for candidates to have chosen a more suitable subject for investigation.

There is also a misunderstanding of the term 'participant observer'. It means more than the researcher simply being present at the scene to be observed. The researcher becomes one of the participants who are being observed. This can be a difficult and even dangerous way of conducting research, not least in the manner of recording events and collecting data.

Email interviews are likely to increase in usage despite the difficulties that they present. Most candidates were aware that the physical absence of the interviewee that occurs in the traditional face-to-face interview would prevent the use of body language as a means of communication. Occasionally this factor appeared to slip the minds of some candidates who still referred the advantages of body language in the email research. While there is a gradual increase in candidate understanding of what is involved in content analysis, and there are greater numbers who refer to coding raw data or identifying themes from the data, there are still many who do not appear to have performed a content analysis themselves.

Recommendations and guidance for the teaching of future candidates

It is strongly recommended that wherever possible candidates should, as an essential part of their preparation, participate in practical work involving qualitative research. They should attempt different types of sampling, conduct an interview, transcribe the resultant audio recording, perform a content analysis or try a verbal protocol. The understanding that follows is likely to be out of all proportion to a similar amount of time spent in reading about these actions.