IA CHECKLIST – Discussion Section

This section is worth....

- 6 marks out of 20 for SL
- 8 marks out of 28 for HL

**GENERAL**

- Label the section appropriately.
  - For HL, the heading is: “G. Discussion”
  - For SL, the heading is: “F. Discussion”
- Length: 5-7 Paragraphs and approximately 450 words

**PARAGRAPH 1**

- Restate the most important results: the descriptive and inferential statistics
- Highlight anything significant or unusual
- Highlight any useful interrelationship or interaction between the measure of central tendency (like the mean) and the measure of dispersion (like the standard deviation) and describe what this shows in relation to the aim

**PARAGRAPH 2-3**

- Compare and/or contrast results to ALL background studies cited in the introduction AND the study being partially being replicated.
- Offer explanations as to why the results of may have been different/similar.
- Offer some insights into how your research was different – such as the design, procedures, participants or materials.
- Connect the research to any key aspects of the **underlying theory** that you may have mentioned in your introduction. Did the research support or refute that theory and why?
- Do NOT include any new studies or works

**PARAGRAPHS 4-5**

- Analyze and/or evaluate methodology (design and procedures).
- Include **THREE limitations**.
- The limitations should not be limitations that could apply to nearly every IA study (such as noisy classrooms, too few participants) but should related to the
  - specific **research design**
  - the specific **procedures**
  - the way **results** were/were not analyzed
  - the **materials/resources** used
  - specific characteristics of the **participants**
  - the particular way that the participants may have **perceived** or reacted to the procedures or resources (if relevant)
- Put significant focus on the potential **VALIDITY** issues (internal validity in particular). Were you testing or measuring what you thought you were testing or measuring?
- Include three viable and reasonable **modifications** which could have/should be made to improve the validity of study if it were to be carried out again. Do NOT say that you need to have a larger sample or that you would need to do it again. This is not a valid criticism as it is always true!
- The modifications you suggest **MUST** address the specific limitations you mention earlier in the discussion section
- DO NOT discuss the sample **SIZE**

**PARAGRAPHS 6-7**

- Indicate the key implication or value of your study.
- Make suggestions for “further research” (NOTE: this is **NOT** the same discussion as the one improvements or modifications you just wrote about above).
- Indicate the way that additional research on the topic area could be carried out to increase or broaden the understanding of the specific hypothesis, topic, or underlying theory. What areas of further study would be necessary or useful?
  - For example: comment upon the type of sample population you might try to use, such as repeating the Loftus and Palmer study with people who have experience in driving.
  - For example: comment upon any additional questions that were raised in this research that you would want to do further research on and why this additional research would be important to underlying theories or psychological understanding
- **DO NOT** discuss the sample **SIZE** (yes...I know I said this before...)
Some potential phrases/wording for the discussion section:

- It can be seen that the results of the current study provide support/partially support/do not support the findings of...
- Compared with the data from the original study....The results in the current study which supported the original study were...the results which did not support the original study were...This would indicate/imply/suggest.....
- The limitations of this study were....
- An independent measures design was used and a limitation of this is the impact of individual differences in ability (i.e. recall). For example, it is possible that one group may have been better at recall then the other. This would have impacted results by...A modification could have been to....conduct a pre-test of word recall using words not used in the study and allocated participants to the two groups on the basis of this.
- This study had a low amount of ecological validity because....attempts to replicate the findings in other situations have been largely unsuccessful...This means that the result of the study may not be generalizable beyond this situation.
- This experiment could be modified by...
- An idea for further research is to...
- The findings have/can be applied to.... The implications of these findings are....
- In conclusion....the results WERE/WERE NOT statistically significant at the .05 level....therefore, the null hypothesis was ACCEPTED/REJECTED and the experimental hypothesis was ACCEPTED / REJECTED

Common weaknesses/problems in writing this section:

- Results are not discussed in relation to the study being replicated. You should compare your results to those of the study being replicated and attempt to explain WHY you got similar or different results. Especially consider any differences in standard deviation or range.
- Overstatement of conclusion. Think carefully about to whom your findings can be generalized to, and how strong (or weak) your findings are. Don’t exaggerate the statement of conclusion!
- Limitations are generic. Your discussion of limits must be specific to the study you reported on. If your limits are presented in a vague or general way that could be applied to ANY study then they are probably not useful. If you can, discuss how YOUR study addressed limitations of the study being replicated.
- Limitations are not addressed in suggestions for future research

Key terms to use and show understanding of in this section:

- Validity – Term which refers to whether a study measures what is was meant to measure
- Internal Validity – The extent to which all variables, except, the one being deliberately manipulated by the researcher, was controlled through the way the study was set up.
- External Validity – The extent to which the findings of the study can be generalized to others.
- Ecological Validity – How true to life the study is – the extent to which the study can be generalized to real life situations.
- Reliability: The extent to which the same or highly similar results will be found if the study were to be repeated.
IMPORTANT: When you finish writing this section, **assess your performance by circling the number which most accurately describes/represents your work in this section.**

### Discussion

<table>
<thead>
<tr>
<th>Marks</th>
<th>Level descriptor</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>There is no discussion section, or the discussion of the results is irrelevant to the hypotheses.</td>
</tr>
<tr>
<td>1–2</td>
<td>Discussion of the results is very superficial. The findings of the student’s experimental study are not compared to those of the study being replicated. Limitations of the design and procedure are not accurately identified. No modifications are suggested and there is no conclusion.</td>
</tr>
<tr>
<td>3–5</td>
<td>Discussion of the results is not well developed or is incomplete (for example, discussion of either the descriptive or inferential statistics is missing). The findings of the student’s experimental study are mentioned with reference to relevant background studies and/or theories. Some relevant limitations of the design and procedure have been identified, but a rigorous analysis of method is not achieved. Some modifications are suggested. The conclusion is appropriate.</td>
</tr>
<tr>
<td>6–8</td>
<td>Discussion of results is well developed and complete (for example, descriptive and inferential statistics are discussed). The findings of the student’s experimental study are discussed with reference to relevant background studies and/or theories. Limitations of the design and procedure are highly relevant and have been rigorously analysed. Modifications are suggested and ideas for further research are mentioned. The conclusion is appropriate.</td>
</tr>
</tbody>
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