Internal Assessment

Student Workbook

Name_____

July, 2018 Edition

The Internal Assessment (IA) is an 1800-2200-word report on a psychology experiment you have conducted with a group of classmates

7.1a Choosing a Study

For instructions on accessing academic databases to find published research, see the "Research with academic databases" section of the Resources page on the Writing Lab website: www.tinyurl.com/LamarWritingLab

7.1b Background Research

You need to explain how the study you are replicating is based on a theory or model. You should be able to find this information in the introduction of the original article from the study you are replicating.

Theory or Model_____

Summary of Theory/Model: Key Points *Write in note form.[1] Include how your study is related to this model or theory.*

Tips:
 	
- As of May 2021, an "effect" such as Mozart effect, Stroop effect, misinformation effect is no longer considered an appropriate background theory or model, and so need to be explained by a theory or model.
- When there are a number of relevant theories to apply, choose the one you think best explains the results of the original study
  - ex. Mueller and Openheimer: the encoding hypothesis, the levels of processing model, disfluency theory, etc.
  - enumerate theories as a group and then each separately choose best theory in individual writing phase
- Link between model and theory and your own study is key. Relating your study to the original study you replicate is not enough; you need to link your study to the theory or model it's based on.

Tip: *A psychological theory or model attempts to describe or explain a phenomenon, so if you are struggling with what to write, you should first try to figure out what the phenomenon you're investigating is, and then figure out how the theory or model relates to it.*

[1] Writing your notes in abbreviated form will help you avoid plagiarism issues in your final report.

7.1c Aims and Variables

Our Study

Aim:

*Aim is NOT simply to replicate the original study!
Aim is driven by a theory to explain a given observation. They are direct and concise:
"To investigate the effect of [IV on DV."
Don't include a prediction in your Aim; save that for the hypothesis.

How or why is this aim relevant?

While replication alone is not a justification of relevance, one dimension you can start by considering is the relevance of reproducibility to psychological research, specifically psychological research on the model or theory your study is based on. Why is it worth reproducing conditions and gathering new data to revise or confirm our understanding of your study's specific aim.

*Don't use a generic statement such as "knowing how memory works" rather than linking your explanation clearly to your own investigation.

Independent Variable

IB's subject reports from recent examination rounds STRONGLY encourage groups to design their studies with only and exactly TWO CONDITIONS: experimental and control. So your independent variable should have one level to it.
The IV should be something the student-researchers control the manipulation of, and NOT something the participants choose. For example, Mueller and Oppenheimer study let participants choose how they took notes. Do not let participants choose for your IA because the student-researchers need to be the ones manipulating the IV.

Dependent Variable

What your study measures

Operational Definition of IV

Precisely how the manipulation of the independent variable will proceed.

Operational Definition of DV

Precisely how the measure of the dependent variable (resulting outcomes) will proceed and the data recorded.

7.1d Hypotheses

Research Hypothesis (H_1)

Statement that clearly and succinctly predicts a statistically significant effect of the IV on the DV.

Directional hypotheses predict the kind of statistically significant effect the IV will have on the DV.

Non-Directional hypotheses predict that there will be a statistically significant difference between the DV data for control and experimental groups.

Null Hypothesis (H_0)

States that the hypothesis is not the case (predicted statistical significance is absent/rejected).

7.1e Design

Our Design

Experimental design refers to the way the researcher assigns participants to different conditions and groups.

Ex: independent groups, repeated measures, matched pairs, counterbalancing

Explanation of why we chose this design[2]__

Tip:

Make sure you're not just describing the design but explaining it.

This includes going beyond discussing why a design was used - for example, to avoid order effects - to explaining its relevance to your actual investigation.

[2] A good explanation should include stating the specific extraneous variable/s that the design controls for (e.g. participant variability, order effects, participant expectancy effects, etc.)

7.1f Sampling and Participants

IB subject report guidance:

A common issue in IAs is stating that occurrences like “conducting our experiment in a busy corridor” or “the internet failing to work” were limitations of the sampling procedure. IB says, “These are errors in planning or conducting the experiment, not limitations.”
Have a robust plan for recruiting participants and securing your sample.
That plan should include securing an appropriate environment or facility in which to conduct the experiment. IB says it’s a concerning issue that many experiments “seemed to have taken place in noisy corridors or in the corner of the dining room or library.”

Do NOT conduct a quasi-experimental investigation that compares age, culture, gender, etc., as Independent Variables.

IB May 2022 subject report:
“There was some confusion between opportunity and volunteer sampling, and random allocation to conditions was sometimes mistaken for random sampling.”

- Imbalances among your sample according to numbers, gender, or age are not limitations to your study. If there is a random allocation to conditions, the groups should not be balanced.

“If possible **10 participants should be in each condition (repeated measures) or group (independent samples)**.”

7.2c Materials

Required Materials

- We need the following[3]:

Required Material	Group Member(s) Responsibility
• Informed consent form	
• Standardized instructions	
• Raw data collection table	

Explanation of one material

IB November 2021 subject report:
"Materials were often described, but not explained. If a word list is used, it is important to explain why these words were chosen. If a video was used, what considerations were made when choosing the video?"
Make sure to explain why you chose the material relevant to the investigation.

IB May 2022 subject report:
"It is recommended to organize the informed consent form and the debriefing sheet as separate ethical considerations, and not confuse them with the necessary materials to conduct the experiment, such as the word list, video shown, or pictures that were used."

- *Tip: You have to explain at least one thing about a material you created. If possible, explain how you created a material to control for one or more extraneous variables. Ideally, this will be a material unique to your study.*

[3] Exclude things like pens, chairs, etc.

ONCE THE DATA HAS BEEN GENERATED THE COLLABORATION IS COMPLETE.
GROUP WORK MUST STOP HERE.
GROUP MEMBERS SHOULD NOT EVEN DISCUSS THE RESULTS WITH EACH OTHER.

PROCEED INDIVIDUALLY TO CALCULATING STATISTICS AND DRAFTING YOUR REPORT.

7.3a Descriptive Statistics

CALCULATIONS		Condition 2:
Central tende (mean, median o		
Dispersion (range, stand tl ra		

Statis ngs S	- Notes
Summ now we measu r DV *(brief, e.g ences)*	
Summa sults	
Interpretation bas hypothesis[4]	

[4] Do not accept or reject your hypotheses yet – that is after inferential statistics. Here give an indication of what your results might suggest (see example).

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