IB Psychology: LAQ Writing Support Brain & Behaviour 🡪 Localization

Here’s a few pointers in how to approach a Psych LAQ for this Content area.

*Possible exam questions:*

* *Outline localization of brain function, using one relevant piece of research to support your answer (SAQ)*
* *Evaluate the theory of localization of function. (LAQ)*
* ***\*Evaluate localization of brain function as an explanation of human behaviour (LAQ)***

**Quick introduction 6-7 lines**

* Define key terms; first lines of essay should reflect topic; ‘localization’
* Refer quickly to relevant background ie: Start to show knowledge by using precise vocabulary/terms/names; think of difference between mentioning ‘brain structure’ and ‘posterior hippocampus’, for example (Crit B)
* Focused thesis: guides entire essay. Each body paragraph should refer back to the thesis. Do not write ‘this essay will’.

*Possible thesis:* Various human behaviours and cognitions are partially understood through localization of function but a more complete explanation is needed.

*Sample Intro:*

Localization generally argues that behaviors, emotions and cognitions may be traceable to a precise brain areas. It is necessary to understand localization for appropriate brain mapping, particularly in brain surgery. Broca’s early work with ‘Tan’ showed elements of strict localization in that speech production could be precisely linked to the left front cortex in what is still known at ‘Broca’s Area’. However, what is clear with modern technologies is localization theory is simply not broad enough to explain how the brain compensates and adjusts to form new connections.

**BP1**

Topic sentence (TS): Early research into the theory of localization of function has some support.

Research: Paul Broca’s early findings ‘Tan’ & Broca’s Area

Key terms: name the brain area/lesion/speech production issue/case approach/strict localization etc

Aim/procedure, findings – quickly. Alternative explanation/contrary finding/limitations to explanation? What was missing from this picture of the deceased brain?

Transition statement (TrS): move your reader from paragraph to paragraph.

* *Example:* ‘Early findings on speech production do provide some evidence of precise localization of function, however it does not explain how the brain exhibits distributed function.

**BP2**

TS: Animal-based findings through memory work indicate that strict localization of function is limited in explanatory power.

Research: Lashley

Key terms:

Aim/procedure, findings – quickly!

Alternative explanation/contrary finding/limitations to explanation?

TrS:

**BP3**

TS:

Research: HM case

Key terms:

Aim/procedure, findings – quickly.

What does the case of HM suggest about the role of the hippocampus’ role in memory? Specific type of memory?

**BP4**

TS:

Research: Maguire et al (2000)

Key terms:

Aim/procedure, findings – quickly.

How does this study challenge strict localization? Relevant CT points 1-2. (For example, an MRI scan does show the extent of other connectomes that may be impacting hippocampal growth.)

**Quick conclusion**

Restate/reword (in 1-2 lines only!) where this essay has focused. Please don’t use the phrase ‘in this essay’. Try to be more elegant in your writing. You are all able to do this. ☺ What is your argument?

Importance of scanning technology to explore interrelated nature of brain – ie: Human Connectome Project

It is well established that some brain areas are localized for some functions, however …..

Closing line