

Ex 2:

a) (i) @ validity: still valid as long as the data of his study are uncorrelated to the ones of the study, that suggests the involvement of the hippocampus: he could take a closer look at any part of the brain (chosen before evaluating the t-tests of his study), as long as above condition holds. (*)

@ decreasing Type II error β (conditional ~~property~~ probability of not rejecting null hypothesis, if alternate hypothesis is true):

In general will not decrease: There could e.g. be an even bigger effect outside of the hippocampus, even if there is also an effect in the hippocampus (between the groups in the test)

(in general)

(ii) @ validity: not valid, since we preselect for areas with strong effects (between the groups in the test). Or more general, we make our choice of pixels to consider after evaluating (some of) the results of our study, i.e. dependent of them.