

## IAT 432 – Assignment 3: Controlled Study (10%)

Team Member Names \_\_\_\_\_

Team # \_\_\_\_\_ Grade \_\_\_\_\_

The marking for this exercise centres on meeting the requirements of “How to Structure Reports on Controlled Observations”. Basically, in composing a mark, we as reviewers look for the following . . .

**Introduction:** Poor Satisfactory Good Excellent

What is the basic social and conceptual problem(s) being tested?

Why is it important to society and what we know?

Is there any basic literature as a foundation to which the reader might be referred for background in depth?

Are there *key* prior studies that guide this present work?

Is an elaboration of an established theory being tested here? What one?

**Description (10%):** Poor Satisfactory Good Excellent

Are all of the basic study elements included in the description?

The study must be replicable and you need to provide the recipe for this. Note especially part 2.4.

Also describe any major problems (commonly, inability to get a true random sample so that the results generalize). Any others?

**Results (20%)** Poor Satisfactory Good Excellent

The key to this part is explaining your findings clearly and with just enough statistics and figures to make your case. Do not present the same data in multiple ways unless it allows new elements to enter your explanation. Be sparing but sufficient in your illustrations. Assume that readers understand the rudiments of statistical significance and the drawbacks of the statistical tests used, i.e. you need not explain t-tests, significance levels, save when the NULL hypothesis is accepted – that is, the cut-off criteria of  $p < .05$  fails. If the result is  $p < .10$  or better, one can discuss a *possible* trend in results were the sample larger or control conditions better.

**Discussion (15%)** Poor Satisfactory Good Excellent

Connect your findings to other studies of keyboard efficiencies. What about training needs?

Dvorak and other variations usually (a) have a needed training period that is (b) somewhat difficult because the ingrained QWERTY motor memory has to be overcome. Despite what may be positive evidence favouring alternative layouts, discuss the limitations of really having these come to wide acceptance, commercially. History should be a guide: we have still the 1870s keyboard layout of mechanical typewriters.

**Conclusions (15%)** Poor Satisfactory Good Excellent

What do you find: do you accept within the limitations of your study the working hypotheses you stated at the onset? Why or why not?

Is the NULL apparent? Why?

Is the theory inadequate; does the research have control and sample faults?

**Next Steps (10%)**

Poor

Satisfactory

Good

Excellent

The future of this research: What should be future research steps to improve the practical and theoretical strength of your study?

Should there be additional test conditions, larger and more diverse test samples?

Based on this experience, what would you do to refine the study for a later, second attempt? Why?

**Writing Quality (15%)**

Poor

Satisfactory

Good

Excellent

Is the document written at a high quality level as expected at the 4<sup>th</sup> year university level?

Are there excess spelling or grammar mistakes?

Is the writing interesting and engaging?

Are your description and conclusions clear and succinct?

Note: You will receive a recommendation of Poor, Satisfactory, Good, or Excellent on the above aspects. This is meant to provide an overall impression of each section of your document but does not map directly to a final grade. E.g., just because you get all "Good" ratings does not mean you automatically get a 'B'. The evaluator will base your final grade on the overall quality of your submission, taking into account all of the above listed sections where some may be emphasized more than others.