

Appendix A. Sample power calculations

In each of the experiments conducted in this thesis, sample power calculations were conducted in order to find an appropriate sample size for the particular experiment.

Sample power tests involved the use of paired-samples t test (parametric statistics). The sample power and sample sizes generated will only be an approximation, because non-parametric tests were used in the actual analyses.

Experiment 1

The sample size of 16 subjects was sufficient to show a significant difference ($p < 0.05$) between the mean values on a paired samples t test amounting to XX with a power of 0.8.

Experiment 2

The sample size of 20 subjects was sufficient to show a significant difference ($p < 0.05$) between the mean values on a paired samples t test amounting to XX with a power of 0.8.

Experiment 3

The sample size of 20 subjects was sufficient to show a significant difference ($p < 0.05$) between the mean values on a paired samples t test amounting to XX with a power of 0.8.

Experiment 4

The sample size of 16 subjects was sufficient to show a significant difference ($p < 0.05$) between the mean values on a paired samples t test amounting to XX with a power of 0.8.

Experiment 5

The sample size of 20 subjects was sufficient to show a significant difference ($p < 0.05$) between the mean values on a paired samples t test amounting to XX with a power of 0.8.

Experiment 6

The sample size of 13 subjects was sufficient to show a significant difference ($p < 0.05$) between the mean values on a paired samples t test amounting to XX with a power of 0.8.