## Lab 1

Psychology

## ASSIGN BUSTER

Lab Methods I. Participants The participants for this study were from an advanced psychology There were 36 individuals in total. Participation was voluntary with compensation coming in the form of class credit.
II. Apparatus and Materials

This investigation utilized two Mac Mini computers that were located in the same room. Each computer was connected to a different 17-inch ViewSonic LCD flat panel monitor, with their screen resolutions set to $640 \times 480$ pixels. III. Procedure

The experiment employed a within-subjects design (repeated measures), with each subject taking part in two treatment conditions that were presented in counterbalanced blocks of 30 trials. Both conditions had participants view two circles (varying from 17.84 to 61.4 pixels in diameter) on their set of monitors that were centered at $(160,240)$ pixels and $(480$, 420) pixels. The right circle is called " dynamic" while the left is " static". The initial size of the dynamic circle was randomly chosen from between $90 \%$ and $110 \%$ of the static circle. In the first condition, subjects were to use the "" keys (1 pixel adjustment), as well as the " m" and "/" keys (10 pixel adjustment) to expand the dynamic circle until it had twice the diameter of the static circle. In the second treatment, the same process occurred except that the subjects had to make the right circle cover twice the area of the left. The independent variable is the manipulation types of area and diameter, while the dependent variable is the amount of deviation of the dynamic/static circle ratio from 2: 1.

Results
Five participants were disqualified due to the failure to follow instructions, leaving a slightly reduced subject count $(N=31)$. The mean ratio of the https://assignbuster.com/lab-1/
diameter task was just under $2(M=1.889 . S D=.273)$ while the average ratio of the area task was over $3 .(\mathrm{M}=3.360, \mathrm{SD}=1.561)$. The mean deviation from a ratio of 2 was very small ( $M=.229, S D=.183$ ) for the diameter task while it was over 1.5 in the area task $(M=1.618, S D=1$. 282). A t-test was used to test the means against each other, and people were found to perform better on the Diameter task as compared to the Area task, $(\mathrm{t}(30)=5.979, \mathrm{p}=.0001)$. The outcome demonstrates that this result can be applied to the healthy population, with 99. 9999\% certainty that the change was not due to chance within the subject group.

