Presented by

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Laboratory 1 – Hicks Law

Laboratory presented to

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Results

Table 1.

Mean Reaction Time (ms) and Standard Deviation (SD) for Various Reaction Tests

	1S-2R	2S-2R	4S-4R	8S-8R
Student 1	194 (56.58)	242 (44.09)	278 (42.07)	435 (174.19)
Student 2	308 (71.61)	415 (71.61)	525 (152.09)	603 (142.95)
Student 3	258 (107.44)	291 (107.44)	366 (30.67)	429 (69.65)
Student 4	231 (36.46)	297 (66.63)	304 (34.55)	419 (78.53)
Student 5	240 (10.54)	389 (5.91)	618 (8.37)	863 (12.03)

Discussion

1. Table 1 shows the overall results of the average mean reaction times from five participants. Four separate choice reaction tests were performed, 1 SR alternative, 2 SR alternatives, 4 SR alternatives and 8 SR alternatives with their corresponding standard error. As seen in Table 1. The average reaction time increases as response alternatives increase, varying between each participant. As the response alternatives increase the variance of average reaction time increases respectively, for example Student 5 has an average reaction time of 863 ms while Student 4 average reaction time of 419 ms, which is a 400 ms difference. In regards to the standard deviation, the results are as expected, remaining consistent for each participant increasing slightly as number of selection responses increased.
2. Hicks Law explores how the number of choices will affect one's reaction time, increasing number of choice will increase reaction time logarithmically. The results presented in Table 1. directly correlate with Hicks Law, each of the five participants reaction time increased as the number of selection responses increased from one to eight. Some participant reaction times increased less drastically, this could be due to various factors

including genetics, reaction to stimulus, neuroplasticity as well as reflexes vary from person to person.