

Arm length and height investigation-science

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Arm Length and Height Investigation By: Teresa Gebhardt Our Hypothesis is that, there is a linear correlation between arm length and height. We believe from observing our fellow students in class that taller people have longer arms. We tested this hypothesis by measuring the 24 students arm length compared to their height. Testing this hypothesis is important so that we can solve our theory that taller people have longer arms. The control was one single student who measured the majority of the other students.

Shoes were removed to ensure accuracy and we made everyone stand straight against the wall, when being measured to prevent imprecise measurements. We used a meter stick to measure arm length and measuring tape to measure height. We converted the inches from the measuring tape to meters so we had an exact unit. We measured from the tip of your longest finger to under the left arm's armpit. Our sample size was 24 American students from the ages of 18- 21.

The replicate measures we used were measuring the arm length and height of the same subject (student) three times. We then took the average of those three answers, which were sufficiently similar. Our assumptions are that the wall is straight, the floor is leveled, and that we perfected the way to measure. We found that the taller you are the longer your arms are. The average length of my classes' arm length is 1.64M and the average height of my class is .7 M.

The data collected shows that arm length increases as height increases. We used a table with 5 columns labeled: Subject, Trial #, height, arm length, average. Our limitations are that we only tested 24 students. The majority were Americans but of different races. We tested boys and girls. We only

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tested students of the ages between 18-21. My suggestion for doing this experiment again would be to separate males from females to see if sex is a determinant.