

CALIFORNIA STATE SCIENCE FAIR 2008 PROJECT SUMMARY

Name(s)

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Project Number

J1304

Project Title

Walk This Way: Is There a Correlation between Height and Stride Length?

Objectives/Goals

Abstract

This researcher was testing to see if there was a standard ratio between height and stride length. Originally it was hypothesized that the ratio for men would be 3:5 and for women 1:3

Methods/Materials

This researcher gained information from 45 different subjects. This information included age, weight, gender, height, foot type, and average length of one step. To measure foot type the subjects dampened the bottom of there foot and pressed it on paper. To measure the average stride length this reasearcher would measure the length of 10 steps and divide that by ten.

Results

The researcher was wrong in hypothesizing that the ratio would differ between men and women. In the end the the ratio differed between age groups and foot types.

Conclusions/Discussion

The standard ratio between all subjects was 1/2.75. As the age groups went to a higher age the ratio got closer to 1/3.10. Same with the foot type, the low arches had a ratio around 1/2.61 and as the arch increased so did the ratio.

Summary Statement

This project was to see if there was a common ratio between height and stride length.

Help Received

none