Name(s)

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Project Number

J0517

Project Title

Dominant vs. Recessive Traits: Which One Dominates?

Abstract

Objectives/Goals
The objective of this study was to determine if dominant traits are more commonly expressed than recessive,and if so by how much.

Methods/Materials
I started this project by selecting 4 traits that could be used in this experiment. Next I created a test form that could be easily understood and explained. Then I went to my school and other places to find people willing to take part in this experiment. After 100 successful tests I collected my data and analyzed it.

Results
In only half (2 out of 4) of the traits tested the dominant was more commonly expressed. Therefore the results show that 30 participants had widow's peak (dominant trait) and 70 had a straight hairline (recessive trait). 29 participants had dimples (dominant trait) while 71 participants had no dimples (recessive trait). 60 participants had detached earlobes (dominant trait) and 40 participants had attached earlobes (recessive trait). Finally 85 participants had a smooth chin (dominant trait) and only 15 participants had a cleft chin (recessive trait).

Conclusions/Discussion
After all the data was collected and analyzed I came to the conclusion that dominant traits having a statistical advantage over recessive traits doesn't guarantee that the dominant form would be more commonly expressed than its recessive counterpart. Studies like this can inform people that are recessive can still be common and affect many people.

Summary Statement

I wanted to see if the statistical advantage dominant traits had over recessive traits automaticlly made dominant traits more commonly expressed.

Help Received

I created the test forms and collected the data myself, my teacher helped me gather information around this project.