

CALIFORNIA STATE SCIENCE FAIR 2014 PROJECT SUMMARY

Name(s)

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Project Number

J0417

Project Title

Does Beauty Really Lie in the "Eye of the Beholder," or Is It Just Math?

Abstract

Objectives/Goals My experiment will examine if photographs of people with facial measurements closer to the Golden Ratio will be considered "more beautiful" in the eyes of test participants than the photographs of people with facial measurements farther from the Golden Ration. This experiment will determine if specific symmetry and proportion (the math of the Golden Ratio) make one face more appealing than another. This will show if there is any correlation between the Golden Ration and beauty, or that beauty simply lies in the "eye of the beholder."

Methods/Materials

I will use photographs of ten randomly selected subjects (printed from the internet) and measure their facial features. Once all the measurements are collected, I will use a calculator to calculate and log the ratios of these features. When the ratios are computed I will then compare them to the Golden Ratio to see which come closest to the Golden Ratio. I will then rank the subjects in order of how close each is to the Golden Ration. Then I will have ten test participants order the photographs from most appealing to least appealing and record the rankings. I will then look for a correlation between the participant's "beauty" rankings and the rankings determined by the closeness to the Golden Ratio computations.

Results

Subjects with facial proportions closest to the Golden Ration were consistently considered more beautiful. **Conclusions/Discussion**

My conclusion is that symmetry and proportion (Golden Ration math) strongly affects people's perception of beauty. Facial features with Golden Ration proportions definitely seem to be more appealing.

Summary Statement

My project will examine if there is a correlation between perceived beauty and mathematical proportions (the Golden Ratio).

Help Received

Father checked my calculations and taught me how to use an excel worksheet.