CALIFORNIA STATE SCIENCE FAIR
2002 PROJECT SUMMARY

Name(s)

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Project Number

22019

Project Title

Can Aesthetic Preferences in Visual Art be Biological?

Abstract

Objectives/Goals

The objective is to find out if preferences in visual art have a physiological link to handedness and brain lateralization.

Methods/Materials

Procedures

1. 20 paintings picked that have a clear tendency to one side of the composition. 2. Scan or attain the images from any other source, and make the paintings all the same size on the computer. 3. Make a copy of each of the images and mirror/flip them horizontally.4. Create a web page that contains instructions for the survey and answer submission.5. For each of the 20 survey questions, include the name of the work and the artist. Also, label the images either A or B, and Number 1-20.6. Position the original image and its mirror vertically, randomly selecting witch one goes first.7. Place 5 images and their mirrors on each page, and Label all five of the survey pages.8. When the web page is complete, send the address of the site out through emails, forwards, and in person. Include the question 'Are you right or left handed?'9. To survey in person, print out the web site pages & hand the survey out. 10. When results begin to be received, sort by right or left handed survey takers. 11. Make sure to use an equal amount of left & right handed survey takers.12. Evaluate the results

Results

There was 80% accuracy predicting the average answer for the right handed surveyed. 20 out of 25 questions were predicted correctly by the premade answer key. 4 out of 5 right handers had a tendency to prefer subject matter and movement towards the right of a composition. There was 60% accuracy predicting the average answer for the left handed surveyed. 15 out of 25 questions were predicted correctly by the premade answer key. 3 out of 5 left handers had a tendency to prefer subject matter and movement towards the right of a composition.

Conclusions/Discussion

The data collected supported the hypothesis. The Survey results showed that 4 out of 5 right handed people surveyed had a tendency to prefer subject matter or movement towards the right of a composition. In contrast, 3 out of 5 left handed people surveyed had a tendency to prefer subject matter or movement geared towards the left of a composition. The results of my research supported the hypothesis. Preferences in image composition of visual art have a connection to brain lateralization and handedness

Summary Statement

Finding if there are differences between the visual preferences of left-handed people and those of right-handed people.

Help Received

Mother helped with supplies;Ms.Garcia helped proof website;Ms. Scott from UCSD COPC helped with everything relating to the actual paper work for the fair; Ms. Obrien provided her room; Brother helped type.

Preliminary