

CALIFORNIA STATE SCIENCE FAIR 2003 PROJECT SUMMARY

Name(s)

Soquel M. Schafer

Project Number

S1010

Project Title

Does Everything Go with Age? A Study Testing Tactile Sensitivity Relative to Age

Abstract

Objectives/Goals

The objective is to learn whether there is correlation between a person's age and their tactile sensitivity, using the two-point discrimination test.

Methods/Materials

Twelve subjects, from 13 to 65 years of age, were asked to identify with their eyes closed whether they felt one or two points touching their fingertip. Then the test was repeated on the back of their hand. A paper clip bent in a u-shape was used to create the sensation.

Results

Tests showed there is a difference between sensitivity of the fingertip and back of the hand. The fingertip was able to detect a narrower point separation than the back of the hand, but there is no general or common trend when comparing older subjects to younger ones. By averaging, it seems that the younger group (13-15 years old) was more sensitive than the older (42-65 years old). But, when you look at it individually, the numbers do not show correlation of age with sensitivity.

Conclusions/Discussion

I conclude that there is no trend in relation to age. My sample number (12) was too small to show true correlation. Just as your eyesite is proven to deteriorate with age, and muscle strength diminishes with age, perhaps there is a skin sensitivity peak-point correlating to age, where afterwards you go down hill. It would be important to have criteria to know what to expect at a certain age. To find this out, I would need to increase the number of participants in this study.

Summary Statement

This project tests tactile sensitivity relative to age.

Help Received

Dr.Fern Russak told me about neurological testing, and referred me to websites on the subject. My mother and Briana Burns edited my rough draft.