

CALIFORNIA STATE SCIENCE FAIR 2004 PROJECT SUMMARY

Name(s)

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Project Number

J0309

Project Title

Men or Women: Who Remembers Better?

Objectives/Goals Abstract

It is hypothesized that women between the ages of 20-40 will remember the best because they have the most priorities and responsibilities to attend to.

Research has shown that women would remember the best since they produce a female hormone called estrogen which promotes cell growth in the temporal lobe and promotes memory. Therefore, women would remember the best. Also short-term memory also know as the active system which only lets people remember usually 9 things for up to 20 seconds.

Methods/Materials

Materials: 2 Poster Boards, Scissors, Magazine/Computer, Glue, Paper for Survey, Pen/Pencil, Stopwatch, and Willing Participants (at least three of each age group for each gender)

Methods: 1) Cut various types of pictures (such as cars, fruit, planes, plants, people, etc#) from magazines or print out pictures from computers. Also use the computer to print out different numbers that are different in size. 2) Glue the pictures on one poster board and the numbers on the other poster board. 3) Find willing participants for the project. 4) Tell them to look at the poster board for 45 seconds and afterward give them a paper and a pen/pencil. Tell them to write what they remember. Remember they only get 2 minutes and 30 seconds to write the things down. 5) Tabulate the scores onto a chart or a table for analysis.

Results

The women aged 36-40 scored the best. The women did the best as predicted and showed that all the research and predictions were correct. The best scores for the men were the men aged from 46-50. Although the men came close the women won the right to say women are better, in memory. Also shown in the results were, boys from the ages of 10#15 did the worst out of the men age groups and women aged from 56#over did the worst out of all the women age groups.

Conclusions/Discussion

The results supported my hypothesis because the highest ranked age group for the most correct answers was women at the ages of 36-40. They remembered at an average of 12 items for each test while everyone got a little lower.

Also shown in the test results boys at the ages of 10#15 scored the least and women at the ages 56#over scored the least. This shows that young and old people can have the same memory. It also shows that memory can increase and decrease over a lifetime.

Summary Statement

What is the effect of age and gender on short-term memory?

Help Received

My mom taught me how to do some of the computer formatting. My dad took me all over so we could complete the tests. My sister was my timekeeper to make sure that each participant completed the testing within the allotted times.