

### CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s)

Brenda M. Pack

**Project Number** 

# **J0418**

#### **Project Title**

## **Can Girls Correctly Identify the Difference Between Real and Fake Smiles Better than Boys Can?**

#### **Objectives/Goals**

Abstract

The objective of this project was to determine if girls could correctly identify the difference between real and fake smiles while being shown pictures of them, better than boys could while being shown the same pictures.

#### Methods/Materials

Five people were asked to have two pictures taken of them, a real smile, and a fake smile. Then the pictures were shown to fifty different women and fifty different men all of which were between the ages of twelve to fifty six. They were then asked to fill out a questionnaire about which smile they thought was real.

#### Results

The results show that the girls could, in fact, correctly identify the difference between real and fake smiles better than boys could. The overall average of real smiles that girls got correct was 3.8 out of 5, (76%), while the boys got 2.58 out of 5 correct, (51.6%).

#### **Conclusions/Discussion**

The reason that the boys scored lower than the girls may have been due to the boys being less interested in participating in the study.

#### **Summary Statement**

This project was conducted to determine if girls can identify the subtle differences of the faces muscles used to make real and fake smiles better than a boy would be able to.

#### **Help Received**

My science teacher and my parents helped me with the writing of my lab report.