CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

Name(s)

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Project Number

J1710

Project Title

Gender Differences in Perceiving Facial Emotions

Abstract

Objectives/Goals
Are females and males equally accurate in identifying emotions portrayed through facial expressions?

Methods/Materials
Materials and Subjects
#Twenty-two male and twenty-two female test subjects, ages 12 to 14
#Six pictures of facial expressions
#Rating sheets
#Data chart (answers from each Rating Sheet were summarized on them for analysis)
#Test Instructions
#A website was constructed by my consultant that automated the collection of responses, using the same materials as the paper and pencil procedures (see http://www.drhal.com/alyssa).

Procedure
Each subject first read the Test Instructions, which described the study and obtain informed consent. They were shown a series of 10 pictures, and used the Rating Sheet to record which emotion each picture portrayed. Finally, they filled out the bottom of the Rating Sheet, listing personal information.

The online test followed the same steps, using the same instructions, pictures, and a similar rating sheet.

Results
The mean number of correct ratings by boys, and by girls, are shown in Figure 1. Girls outscored the boys, with averages of 8.36 and 7.59. A t-test for independent samples showed this difference was unlikely to be due to chance alone ($t(42) = 2.102$, $p < .05$). Error bars in Figure 1 show the expected range of scores, for each gender, with samples as the large as mine.

Conclusions/Discussion
Young females were more accurate than young males in distinguishing which emotion was presented in facial pictures. This has been found in a number of studies with adults but is not well established with younger people (McClure, 2000; Rahman, Wilson, and Abrahams, 2004). Teenage boys and girls in my study were usually correct in recognizing emotional expressions, but girls were better (that is, had a higher percent of correct ratings).

Summary Statement

In my project I studied the gender difference in accurately identifying facial expressions.

Help Received

Dr.Kopeikin helped analize data; Teacher helped improve project