

# CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

Name(s)

Tae Park; Gregoire Phillips; Vianey Torres

**Project Number** 

S0319

**Project Title** 

# **Body Language as a Form of Communication**

## **Objectives/Goals**

### **Abstract**

Our project was designed to test the intricate and essential importance of body language to the reflection of comprehension in human interaction. Our experiment tested a broad selection of cultures in seven different languages as well as a diverse range of ages and levels of education within American Society. Our goal was to observe a positive correlation between body language expression and results on the O.C.E. (Overall Comprehension Evaluation), revealing that body language plays a major role in the comprehension of human interaction and positive communication.

#### Methods/Materials

Due to the reliance of our experiment on the all-essential human variable, our materials were limited to notebook paper, social ingenuity, and the carefully trained eye. Prudently selecting two subjects from each of the ten cultures, we administered hidden uniform conversational pieces and observed the body language of each individual in order to accurately assess just how much these signals and responses revealed comprehension and interest in six criteria. Upon observing the body language responses of our subjects, we held these results to each individual's results on an overall comprehension evaluation administered orally following the conversation and sought correlations in results within individual cultures as well as within all subjects.

#### Results

As expected, our results confirmed our hypothesis, exemplifying that interpretation of body language exhibiting comprehension correlates with standardized evaluation of understanding. In simpler terms, the unconscious physical expressional signals of our participators paralleled their performance on the standardized evaluation of the material presented to them

#### Conclusions/Discussion

These results reflect that body language traverses cultural, linguistic, and educational boundaries in displaying comprehension. Also noteworthy were the areas of strength within each culture as well as the dominating importance of categories across all ethnicities in the interpretation of comprehension, notably the universal importance of eye contact, posture, and hand positioning. Such generality expresses the universal importance key to the confirmation of our hypothesis. Similarly, educational results reflected the same correlation, with body language consistently reflecting comprehension.

## **Summary Statement**

Our project focuses on the central role body language plays in communication and human interaction within differing ethnicities and educational and developmental stages.

### Help Received

none