



CALIFORNIA STATE SCIENCE FAIR 2016 PROJECT SUMMARY

Name(s) Rufina Joung; Simran Sandhu	Project Number S0412
Project Title A Study of the Impact of Race on Facial Recognition of Asian Ethnicities	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals The objective of this study is to determine if being socially and culturally exposed to a certain race will allow a student to more easily identify an ethnicity within that race.</p> <p>Methods/Materials A total of 10 classes (246 students) were surveyed. In each class, a slideshow of 15 people of five different mongoloid ethnicities (Korean, Chinese, Vietnamese, Japanese, and Filipino), was shown to the students; there were three photos representing each ethnicity. Students selected for the experiment viewed each photo for 10 seconds and identified which ethnicity they thought the person belonged to. The race of each student subject was also recorded (Mongoloid, Negroid, Caucasian).</p> <p>Results Results of the survey were organized so that the percent accuracy (correctness) of identification of each ethnicity by each race was shown.</p> <p>Using proportions from the organizations of the results mentioned above, statistical analysis was conducted on the data. Two distinct tests were conducted: Two Proportion Z-Interval Test, and Two Proportion Z-Test.</p> <p>The analysis revealed that from this sample, students belonging to the Mongoloid race may be predicted to more accurately identify people of certain ethnicities within the Mongoloid race. However, there is not enough evidence to show that this will always occur for each of the five ethnicities discussed, and there was insufficient evidence to determine a difference between Caucasians and Negroids in the identification of any of the five Asian ethnicities.</p> <p>Conclusions/Discussion Statistical analysis revealed that students of the Mongoloid race had higher ethnic identification rates than the Caucasian and Negroid students in the identification of select Mongoloid ethnicities. This leads us to believe that to some degree, social and cultural exposure to a certain race may allow students to more accurately identify various ethnicities within the race.</p>	
Summary Statement We conducted a study which highlighted social and cultural importance in the identification of various Asian ethnicities.	
Help Received We conducted and designed our survey ourselves; however, Mr. Shaun Harris aided us in deciding on the most appropriate statistical tests for our data.	