



CALIFORNIA STATE SCIENCE FAIR 2012 PROJECT SUMMARY

Name(s) Connor J. Hartigan	Project Number J1213
Project Title Oo, Oo, Oo, I Wanna Be Like You	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to determine whether or not monkeys have a hand preference. I predicted that the primates in this experiment will use one particular hand more naturally than the other. Since humans and monkeys are both closely related in terms of dexterity, visual appearance and intelligence, I believe that the monkey results will be similar to that of humans. Since 85% of all humans demonstrate a right handed preference, I predict that the monkeys will also be right handed. My goal is observe 12 monkeys and tally which hand they use to perform various skills.</p> <p>Methods/Materials Materials needed include - annual pass to the zoo, digital and video camera, computer, notebook, pen, 12 monkeys (4 Capuchin, 2 Gibbon, 2 Colobus and 4 Spider), natural zoo habitat (including ropes, branches, shelves to sit on, trees, cage bars), variety of enrichment supplies (such as phone books, PVC tubes, hanging toys, paper tubes)and treats (raw vegetables, branches of leaves, shelled peanuts, monkey chow). Methods included - select species of monkey to study, observe/video each cage for 15 minutes, at the same time over 4 days, record observations, review video and tally hand preference for each skill for each monkey.</p> <p>Results According to my experiment, the primates used their right hand MORE than half of the time, over 4 observation periods. The trend was for all monkey groups to prefer their right hand 55-65% of the time.</p> <p>Conclusions/Discussion My experiment measured the number of times a non-human primate, a monkey, used its right hand compared to its left hand. I predicted that monkeys used their right hand more than their left. Specifically, I looked at which hand they used first because that was their preferred hand. The data I obtained did support my hypothesis. My research showed me that chimpanzees were 96-98% identical to humans, so I expected the monkeys and humans to be very similar. In fact, monkey DNA is more similar to human DNA than a rat is to a mouse. I discovered that 85% of the people on earth are right handed so I expected monkeys to be right handed. The data showed that monkeys prefer to use their right hand more than their left. In my study, monkeys used their right hand 55% of the time. Mathematically, this proves that my hypothesis was correct because the monkeys preferred their right hand the most.</p>	
Summary Statement My project is about non-human primate hand preference.	
Help Received Mrs. Oggiano taught me how to conduct a science fair project, My mom drove me to the zoo, proofed my report, loaned me her scrapbooking supplies and helped me assemble the board. The zookeepers provided enrichment supplies.	