



**CALIFORNIA STATE SCIENCE FAIR
2007 PROJECT SUMMARY**

Name(s) Angelica S. Villegas	Project Number J0323
Project Title What Is the Physical Proximity of Discomfort in Humans with a Non-Touch Approach?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My objective was to find the point of discomfort in human adolescents.</p> <p>Methods/Materials The materials I used were 50 human adolescents, one 150 centimeter measuring tape, and myself. I randomly tested 50 human adolescents for their proximity of discomfort. To do this, I asked them if they would participate in an experiment; if they agreed, I would begin by asking them their age, sex, ethnicity, relation to myself, and their feeling towards me and the mood towards the day. I would then proceed to laying out a 150 centimeter measuring tape between us. Then, I'd have them stand at the 150 centimeter mark, while I would stand at the 0 centimeter mark. After that, I'd ask them to tell me at which point they felt uncomfortable, or the need to step back. I'd then advance 10 centimeters until they told me they felt uncomfortable or the need to step back (or if they visibly stepped back), asking them each time after every advance.</p> <p>Results In my results, I found out that White people are most comfortable at a greater distance (24.5 cm.), while Chinese people are most comfortable in a closer distance (10 cm.); females were more comfortable at a closer distance (19.96 cm.) than males (20.96 cm.); good friends were most comfortable in a closer distance (11.5 cm.) than strangers (24.29 cm.) were; people who have a good mood /relationship were more comfortable in a closer distance (16.1 cm.) than those who had a bad relationship/mood (46.75 centimeters).</p> <p>Conclusions/Discussion My results supported my hypothesis and gave me a good idea of what distances human adolescents considered uncomfortable. Information in my projects expands what Edward T. Hall had originally uncovered on the topic called 'Proxemics.'</p>	
Summary Statement My project is about finding the proximity of discomfort in human adolescents with a non-touch approach.	
Help Received Mother bought materials and helped punch the hole for the ribbon on my display board; Test subjects helped by participating,	