



**CALIFORNIA STATE SCIENCE FAIR  
2016 PROJECT SUMMARY**

<b>Name(s)</b> <b>Anjali S. Zope</b>	<b>Project Number</b> <b>J0427</b>
<b>Project Title</b> <b>Can You Spot the Liar?</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My project is testing how good humans are at spotting a liar and the theory of whether you can spot a liar more efficiently by analyzing peoples body language and looking for physical cues. I am expanding my project to whether gender, age, or culture makes a difference in spotting a liar. I will also increase my survey sample size to 100+ people.</p> <p><b>Methods/Materials</b> Materials: Online Spot The Liar test from the New York Times</p> <p>Methods:</p> <p>First I had 30 people take the spot-the-liar test (containing videos of people). Afterwards I asked them what was their score (at spotting a liar accuracy) and how could they tell apart liars and non-liars. Their response was a list of physical cues. Then I had 18 people take another survey-- this time I showed each person videos of people and and asked them to describe how they were behaving (given the options on the physical cue list). What they did not know, however, is that some of the people were lying, while others weren't. Afterwards, I compared how the non-liars and the liars behaved, because in order for the theory to be true, liars must do more physical cues.</p> <p><b>Results</b> First survey: people are an average of 51% accurate when spotting a liar. Second survey: The liars exhibited signs of lying (the physical cues) at an average of 26% of the time, while the non-liars had an average of 21.99%.</p> <p><b>Conclusions/Discussion</b> From my results, I concluded that while liars do on an average exhibit more of the physical cues of lying (that people use to spot a liar) than non-liars, the difference between them is too small ( only 4.01%) to conclude that physical cues are a thoroughly accurate way of spotting a liar. I believe that the reason people are not very accurate at spotting a liar (51% accurate) is because they use signs of lying that non-liars also express very much. This shows that humans can't actually spot a liar that accurately using physical cues, and if they try to use them they should use further evidence to back it up.</p>	
<b>Summary Statement</b> My project tests how accurate people are at spotting a liar and if you can spot a liar more efficiently by using physical cues.	
<b>Help Received</b> None. I researched, planned, and completed the project by myself.	