



**CALIFORNIA STATE SCIENCE FAIR  
2011 PROJECT SUMMARY**

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| <b>Name(s)</b><br><b>Ghazi E. Aryan</b>   | <b>Project Number</b><br><b>J0402</b> |
| <b>Project Title</b><br><b>Stop It! Determination of Distractions that Have the Most Impact on Drivers' Ability to Focus</b>  |                                       |
| <b>Abstract</b><br><b>Objectives/Goals</b><br>The purpose of my project is to determine which distractions have the most impact on drivers' ability to focus.<br><b>Methods/Materials</b><br>Ten subjects, ages 10 to 12 participated in this experiment. They were all familiar with the driving simulation game used as the basis for this project, had played it before, and knew how to play. They repeatedly executed the driving simulation while being exposed to a set of different conditions, such as background noise, in a random order.<br><br>The distractions implemented were Loud Music, Cell Phone Ringing, Talking, Screaming, and Baby Crying. They also executed a driving lap without any distractions. This #driving lap# served as the control.<br><b>Results</b><br>It was determined that their ability to focus was not affected. In fact, it was found that they performed better. This appeared to be counter intuitive to what you would expect, yet this is what the data shows.<br><b>Conclusions/Discussion</b><br>One possible explanation might be that this age group was less prone to being distracted than a different age group would be. Another might be that they focused more on the driving than the distraction in order to complete the activity quicker. This would motivate and propel them to speed to try to finish the game so as to be able to turn their attention to the source of the distraction sooner. |                                       |
| <b>Summary Statement</b><br>Determination of distractions that have the most impact on drivers' ability to focus.   |                                       |
| <b>Help Received</b><br>My father helped me double-check my board and data. He also taught me a few different methods to use in Microsoft Excel.  |                                       |