



# CALIFORNIA STATE SCIENCE FAIR 2010 PROJECT SUMMARY

<b>Name(s)</b> <b>Zehra Naseer</b>	<b>Project Number</b> <b>J0319</b>
<b>Project Title</b> <b>Effects of Sleep on School Performance</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> The primary objective of the project was to evaluate the effects of sleep on the performance of 6th grade students from 5 different schools in the Chino Valley Unified District</p> <p><b>Methods/Materials</b> The project was designed to be a multicenter, two arm, non- randomized, uncontrolled, blinded, convenience sample behavioral science study. The project was started with a comprehensive research. Based on the research a seven (7) question survey was developed. Students were explained the purpose of the research, and all survey questions were reviewed with the students. The students were asked to share the survey with their guardians and seek their permission. Data from the surveys that were returned was entered in the Microsoft Excel Sheet 2007 (Microsoft Corporation). The data from the surveys was entered sequentially in the rows (S1 #. S300; S = Student) and responses to the seven questions from each survey were entered in the columns created for each question in Data Entry sheet. The database also had multiple Analysis Sheets. Each Analysis Sheet obtained the data from the Data Entry sheet. For primary analysis the data automatically calculated students in group A that earned honor roll in the appropriate cell by using the "COUNTIF" command of the Microsoft Excel. Similar data for Group B and secondary analysis was calculated and populated using the same command.</p> <p><b>Results</b> The overall participation of the students in the survey was 29%. Mean age of the students was 11.25 years. There was no difference in ages of the students across schools or genders. Girls participation was higher than boys by 14%. Sixty percent of the students indicated that they sleep for 8 hours or more. Responses from students with Honor Roll was 2.33 times more than their peers without honor roll. Primary analysis of the data confirmed the Alternate Hypothesis and showed that students who sleep 8 or more hours secure 9% more Honor Rolls compared to their peers who sleep for less than 8 hours. The data failed to show any relationship of performance to either 1) Breakfast eating habits, 2) Reading habits, 3) Playing activities at home, or 4) Study help at home.</p> <p><b>Conclusions/Discussion</b> The primary analysis satisfied the Alternate Hypothesis and showed that students that sleep for 8 or more hours had better performance in the schools.</p>	
<b>Summary Statement</b> To Evaluate Effects of Sleep on School Performance in 6th Grade Students of CVUSD	
<b>Help Received</b> Parents helped to secure the screen on the board.. Vice principal and class teacher helped with project in selection from 3 choices that I presented.	