



**CALIFORNIA STATE SCIENCE FAIR
2005 PROJECT SUMMARY**

Name(s) Brynn S. Cahalan	Project Number J1705
Project Title Habit to Addiction: Can Habits Established in Childhood be Predictive of Adult Addictive Tendencies?	
<p style="text-align: center;">Abstract</p> <p>Objectives/Goals My youngest brother's persistent thumbsucking habit inspired me to investigate the objective of this study (i.e., whether a habit established in childhood (thumbsucking) can be an early indicator of an adult addictive tendency (cigarette smoking)). If a correlation can be discovered between thumbsucking and cigarette smoking, then preventative measures should be implemented. Such measures include educating known thumbsuckers about the importance of abstinence from smoking experimentation and creating better awareness of the consequences that they (as previous thumbsuckers) might face later in life.</p> <p>Methods/Materials I designed a survey that was divided into 3 categories: Childhood, Adulthood, and Personal Profile. The questions in each category asked for basic background information on the test subject and also included questions devised to detect any variables that might have affected why the subject started thumbsucking and/or smoking. I then found adult human test subjects who fulfilled eligibility requirements for the survey (test subjects had to have either thumbsucked in childhood, smoke(d) cigarettes as adults, or both) and had them complete it. I then analyzed the results and charted/graphed the variables that produced the most significant information. Conclusions were then drawn as to whether or not my hypothesis was correct.</p> <p>Results Of the completed surveys, 102 results were usable for purposes of this study. There were nearly twice as many thumbsuckers who became smokers than thumbsuckers who did not become smokers. The thumbsuckers who became smokers smoked for a longer period of years than non-thumbsuckers because they possibly had greater addictive tendencies. Thumbsuckers who became smokers also sucked their thumbs longer than thumbsuckers who did not become smokers.</p> <p>Conclusions/Discussion The hypothesis was that if adults sucked their thumbs during childhood, then the majority of them would have addictive cigarette smoking tendencies as adults. The hypothesis was accepted because there were nearly twice as many thumbsuckers who became smokers than thumbsuckers who did not become smokers. The results of this study suggest that smoking prevention efforts should particularly be directed at those who sucked their thumbs in childhood.</p>	
Summary Statement My project investigates a commonly accepted childhood behavior (thumbsucking) and identifies a correlation to a harmful adult habit (cigarette smoking), which warrants early smoking prevention tactics directed particularly at thumbsuckers.	
Help Received My brother, for inspiring the topic of my study; Ms. Nelson, for giving overall guidance as my science teacher; my parents, for their advice on design & organization of information; my test subjects, for taking the time to share their experiences by completing my survey.	