



**CALIFORNIA STATE SCIENCE FAIR
2014 PROJECT SUMMARY**

Name(s) Jonah A. Buessing	Project Number J0402
Project Title Does Playing Video Games Affect Heart Rate and Focus?	
Objectives/Goals The purpose of my experiment is to see if video games have an effect on heart rate and the ability to focus. My hypothesis is that playing video games causes stress and decreases focus. I will test the heart rate and focus of three groups; fourth graders, seventh graders, and adults, before and after playing a video game.	
Abstract	
Methods/Materials Take subject's heart rate using a heart rate monitor to get a baseline heart rate. Give each subject a focus test to get their baseline focus ability. Gave each person an iPad with a car racing video game (app). Play for 10 minutes timed. After playing the game, retake heart rate was taken . Retest focus level. Record all results. Materials: 1-video game, 1-heart rate monitor, 1-iPad or iPhone (used to play video game), 2-focus tests, 1-headphone.	
Results On average the heart rate of fourth graders was + 7.04% after playing the video game. On average the heart rate of seventh graders was + 8.38% after playing the video game. On average the heart rate the adults was + 5.70% after playing the video game. 4th Graders had a higher focus after playing the video games. The average focus before playing the video game was 62.5%. The average focus, after playing video games was 82.5%. The 7th Graders also had a higher focus after playing the video game. The average focus before playing the video game was 48.33%. The average focus after playing video games was 75%. The adults had a higher focus after playing the video game. The average focus before playing the video game was 71.67%. The average focus after playing video games was 81.25%.	
Conclusions/Discussion I found that playing video games increases both heart rate and focus. The 7th Graders also had a higher focus accuracy after playing the video game. The average focus accuracy before playing the video game was 48.33%. The average focus accuracy, after playing video games was 75%. The adults, too, had a higher focus accuracy after playing the video game. The average focus accuracy before playing the video game was 71.67%. The average focus accuracy, after playing video games was 81.25%.	
Summary Statement My project was to see if video games impact focus and heart rate and to see if my parents and other adults were correct about whether playing video games was bad for you.	
Help Received Mom drove me to the subjects houses	