



**CALIFORNIA SCIENCE & ENGINEERING FAIR  
2018 PROJECT SUMMARY**

<b>Name(s)</b> <b>Simona E. Michaelson</b>	<b>Project Number</b> <b>J0415</b>
<b>Project Title</b> <b>Effects of Visual Stimuli on O.C.D.</b>	
<p style="text-align: center;"><b>Abstract</b></p> <p><b>Objectives/Goals</b> My objective for this experiment was to examine whether or not organized imagery can help reduce or prevent a panic attack.</p> <p><b>Methods/Materials</b> 12 organized pictures, 12 disorganized pictures, pre experiment survey, post experiment survey. 45 participants were separated into 3 groups (organized, disorganized, control). Participants in the organized and disorganized group completed half the survey, took the experiment (looked at pictures pertaining to their group), and then completed survey. Those in the control group took the entire survey at once.</p> <p><b>Results</b> According to my data, the participants in the organized group had the lowest stress levels, those in the disorganized group had the highest stress levels, and those in the control group had neutral stress levels. This data leads me to believe that organized imagery can help prevent/reduce a panic attack.</p> <p><b>Conclusions/Discussion</b> The aim of this experiment was to see whether there is any correlation between organized imagery and the calming of a panic attack. After completing my entire experiment and comparing my data I have concluded that organized imagery does in fact lower stress levels. My data has also proven that disorganized imagery boosts stress levels. According to my research, the reason for these happenings are that when the brain feels threatened and the fight or flight response is activated. The disorganized imagery is what is threatening the brain. Contrary to the disorganized images, organized imagery calms the brain because it distracts the brain from the stressor.</p>	
<b>Summary Statement</b> My project monitored how the stress levels in an adolescent brain react to organized or disorganized visual stimuli.	
<b>Help Received</b> I had help from a therapist, Deeann Peterson, who explained to me different ways students may react upon viewing the images. She explained how some may feel uncomfortable but no serious damage would be inflicted.	