

CALIFORNIA STATE SCIENCE FAIR 2015 PROJECT SUMMARY

Name(s)

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Project Number

J0424

Project Title

Be Sun Smart

Objectives/Goals Abstract

The purpose of this study is to determine the impact of education on the attitude towards sunscreen. Exploring this topic is extremely important because wearing sunscreen and being protected from the sun regularly is not a subject that comes to mind for the average person. However, it is important to question whether people are aware of the suna##s harmful effects. Perhaps, educating people about the sun's harmful impact and sunscreen's benefits can affect their use of sunscreen.

Methods/Materials

In this project, regular 5th, 6th, and 7th graders are surveyed about their use of sunscreen and attitudes towards it. Then, they are educated about the sun. They watch three videos that pertain to the sun's harmful damages. In these videos, three different techniques are used to emphasize the importance of sunscreen. The subjects also perform a hands on experiment utilizing UV beads to determine whether or not their particular sunscreen brand protects them sufficiently from harmful UV Rays. A second survey is taken to measure their attitudes and behavior after education. Another group of 5th, 6th, 7th graders also take surveys, but do not get education.

Results

The manipulated and control subjects gave an average score of 6.45 and 6.32 on a scale of 1 to 10, respectively. However, after the manipulated subjects learned more about the usefulness of sunscreen, there was a small increase in their perception of importance of sunscreen, 7.29 vs. 6.45 (after vs before). For control subjects, their perception of the usefulness of sunscreen slightly declined, 6.06 vs 6.32 (after vs before). Interestingly, the younger group composed of fifth-graders thought that sunscreen was more important than their older schoolmates.

Conclusions/Discussion

Based on my results, there was a small positive impact on the knowledge about sunscreen, about the harmful effects of the sun and the usefulness of sunscreen. However, in practice, education did not translate into wearing sunscreen more often. On average, the manipulated subjects wore sunscreen 2.83 days, compared to the controlled subjects that wore sunscreen for 2.97 days. Therefore, while education has affected attitudes towards sunscreen, people are not wearing it. As for the video that was chosen as the most affecting towards decisions was "Melanoma Will Kill You". 67% subjects this video as the most impactful. Proving that with dramatic education some attitudes can be changed.

Summary Statement

This project determines the impact of education on attitudes towards sunscreen.

Help Received

Teachers gave me time with their students