

CALIFORNIA STATE SCIENCE FAIR 2006 PROJECT SUMMARY

Name(s)

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Project Number

J1705

Project Title

Does the Potential of a Reward Affect a Student's Motivation for Success?

Objectives/Goals

Abstract

The purpose of my project was to determine if the potential of a reward affected a females, between the ages of six and fifteen, motivation to perform a task faster. I thought the group of females between six and nine with prior knowledge of a reward would perform the task the fastest.

Methods/Materials

I first gathered forty girls between the ages six to fifteen. I then told each girl wich group they were in(A, the group with prior knowledge, or group B, the group without any knowledge of a reward.) If the child was in group A, I told them that they would recieve a reward if they completed the task under one minute. I then had each child match the five word cards with the five picture cards, and I recorded their data according to age and group. Afer all fourty girls finished the task, I gave everyone a Hershey Kiss.

Results

The data was inconclusive. Group A from each age group completed the task faster by 33.3%. However, there was no significant difference between the two age groups, six to nine and ten to fifteen. Group A from ages six to nine performed the task at an average of 9.31 seconds, and the group A from ages ten to fifteen finished the task at an average of 9.63 seconds. That's only about a thirty miliseconds difference. Group B from the age group six to nine performed the task at an average of 12.68 seconds, and the same group from the age group ten to fifteen finished the task at an average of 11.6 seconds. The difference is only one second.

Conclusions/Discussion

My hypothesis was only partially supported. It was supported by the fact that group A finished the task the fastest, and that females are more motivated ba a potential of a reward. My hypothesis was not supported by the fact that the two age groups had no signicant difference in the time it took the girls to complete the task. If I were to repeat this experiment, I would make the task harder and narrow the age range so my project would be more controlled.

Summary Statement

My project is about females performing a task faster using intrinsic motivation verses prior knowledge of a reward.

Help Received

Lana Write allowed me to use her dance studio to test subjects; Parents helped proof read