

CALIFORNIA STATE SCIENCE FAIR 2007 PROJECT SUMMARY

Name(s)

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Project Number

J0321

Project Title

Aaaah! I'm Frustrated: Does Gender Affect Behavioral Responses to Frustration?

Objectives/Goals

Abstract

How does gender affect behavioral responses to frustration? My objective is to record subjects' responses to a frustrating task and analyze gender differences. Backed by current and past research, I believe that gender will affect the subjects' behavioral responses to frustration.

Methods/Materials

A box was created with a grid of nails on the front, 12 nails being electromagnets. The electromagnets were wired into circuits with switches and batteries. A wood and cardboard shield hid the wiring. An image of the grid was made, and 20 subjects, 10 males and 10 females, in the 8th grade, were asked to attach paperclips according to the diagram. Every 10 seconds over a period of three minutes, the electricity was turned off, causing the paperclips to fall. Subjects' responses were videotaped. Responses were separated into seven categories. The sum total of responses in each category for each gender was found and compared, as well as each category's percent frequency, or percent total of responses in that category.

Results

On average, boys showed more responses to frustration in three of the seven categories. They were more negative, focused, and much more aggressive. Girls showed more responses in one category: searching for clarification. Boys and girls had the same or close numbers of average responses in the other three categories (New Methodology, Confusion, and Positive Responses), although the percent frequencies in these categories did differ with gender. Girls most frequently showed new methodology as a response to frustration, whereas boys most frequently showed anger/aggression/accusation.

Conclusions/Discussion

My hypothesis was correct. There are significant gender differences in behavioral frustration responses, both in average number of responses and percent frequency of responses. Knowing the differences in boys' and girls' responses and which responses each gender tends to show most frequently can help teachers and parents detect, prevent, and control students' frustration.

Summary Statement

This project explored genders' effects on behavorial responses to frustration in adolescents.

Help Received

My father taught me how to wire a circuit.