CALIFORNIA STATE SCIENCE FAIR
2015 PROJECT SUMMARY

Name(s)	Project Number
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Project Title

The Art of Praise

Abstract

Objectives/Goals

This project is concerned with the question of how to effectively praise students for good performance to make them better motivated, more confident, and more inclined to tackle challenges.

Methods/Materials

A series of experiments with a group of 60 subjects ranging from grade 6 to grade 10 was conducted on a one-to-one basis. Subjects were randomly assigned to three groups corresponding to neutral feedback, process praise, and person praise. The experiments were composed of a math problem-solving, puzzle-solving, recess (free choice), and self-attributions for failures period.

Results

With math problem-solving tasks, 96% of the process praise subjects preferred more difficult tasks upon successful completion of a task. In contrast, the person praise group had 39% and the group in neutral feedback had 46%. Similar results were found with puzzle-solving tasks: 92% for the process praise group, 33% for the person praise group, and 36% for the group in neutral feedback. For other dependent measures, the percentage of subjects who initially had difficulty in completing certain tasks but nonetheless kept trying was 62% for the process praise group, 10% for the person praise group, and 19% for the group in neutral feedback. At the end of the experiment, 75% of the process praise subjects had a growth mindset in relation to attributions for failures, 28% for person praise group, and 38% for the group in neutral feedback. The results are robust with respect to variations in task type and grade level. A particular unique finding revealed that post-success preference for harder tasks is uniformly stronger with math problems than with puzzles across all grade levels. This is a strong indication of the pursuit for a learning goal, because math problems offer better opportunities for increased learning than puzzles.

Conclusions/Discussion

Subjects having preferences for more difficult tasks post success concentrated on the process of their work and opportunities for learning provided by more difficult tasks. That is, subjects with such preferences pursue learning goals instead of performance goals. As a result, this project shows that process praise is most effective, which is robust across grade levels and task types.

Summary Statement

My findings offer a support for the beliefs held by educators that praise for effort makes kids better motivated, more confident, and more inclined to tackle challenges.

Help Received