CALIFORNIA STATE SCIENCE FAIR
2006 PROJECT SUMMARY

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Project Number
S0301

Project Title
Common Sense

Abstract

Objectives/Goals
In our experiment, Common Sense, we explore the concept of sensory input loss. Our problem: When deprived of a particular sensory input (hearing/vision) is the other sense reception heightened?
Our experiment tests sensory deprivation in the short term, testing receptiveness with and with out the other sense in a matter of minutes, as explained in Methods and Materials. After some reaserch done beforehand, we formed our hypothesis: We believe that when the body is deprived of hearing or vision, in order to adapt, it will heighten the other sensory input.

Methods/Materials
Materials: * 1 eye chart; * 1 measuring tape; * 1 audio track of voiced numbers, words, and letters; * 1 audio track of noise distraction; * 1 blindfold; * 1 pair of earmuffs and earplugs; * 1 silent visual distraction movie; * 20 human subjects; * 20 result sheets.
Methods
1)Subject's hearing is tested while watching a visual distration with the audio track of numbers/letters/words. Subject must repeat what s/he hears. Score is recorded
2)Subjects vision is tested with an audio distration using eye chart and audio distration. Score is recorded
3)Both tests are repeated, substituting audio and visual distrations with earplugs and a blindfold

Results
Our data shows that the loss of one sense may improve the reception of another. The data we collected shows there may be an improvement in hearing when the sense of sight is absent. In the case of vision however, no definite relationship between loss of hearing and better vision was observed.

Conclusions/Discussion
These results partially support our previously stated hypothesis. Our hypothesis was correct in that our data shows there is an improvement in hearing when the sense of sight is absent, however does not support our predictions about loss of hearing.
Nevertheless, our experiment could have been improved in several areas. Our margin of error consisted of errors such as the lighting of the room in which we tested our subject, and the clarity of the voice on the audio track of words/numbers/letters.
Studies such as these could improve society by extending our understanding of handicapped lifestyles. Additionally, it could improve things like standardized testing conditions so that students# opportunity to channel their focus into one area and other similar situations. This information could also be usful in today's technological world when studying cell phone use while driving a car.

Summary Statement
Our project is about whether or not one's hearing enhances when vision is taken away and vice versa.

Help Received
Mr. Murbach helped us with the statistic formula, David casterson helped provide us with an eye chart