CALIFORNIA STATE SCIENCE FAIR
2017 PROJECT SUMMARY

Name(s)

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Project Number

S0409

Project Title

Analyzing Human Perspective across Age Groups through Cognitive Psychology

Abstract

Objectives/Goals

To be able to understand how society will progress in the future, the biases that certain generations hold must be identified. The goal of this project is to assess bias levels across different age groups through surveys simulating scenarios that are designed to bring out implicit race or gender biases.

Methods/Materials

Assessed how bias levels vary across age groups using two different surveys created through Google Forms. One of the forms simulated different scenarios with details that would influence implicit gender and race bias, while the other was a control. Responses collected were downloaded to Microsoft Excel and then processed using a self-developed Python code through the software PyCharm. The materials needed for this experiment are a laptop with PyCharm, access to Google Forms, and Microsoft Excel.

Results

Most data exhibits the trend that as the age groups increase, so do the bias levels. The age group under the category of 10 # 15 year old children, is the least likely to let bias factors influence their decisions. In the Gender Bias categories, participants in this particular age group are 31% likely to favor males, 9% likely to disfavor males, 12% likely to favor females, and 41% percent likely to disfavor females, when compared to the 51%, 7%, 13% and 44% that the oldest age group, 51+, portrayed. For race biases, the 10-15 participants were 19% likely to favor whites, 1% likely to disfavor whites, 13% likely to favor blacks, and 16% likely to disfavor blacks, and the 51+ members were 34%, 0%, 8%, and 34% likely in having implicit bias dictate their decisions in the respective levels. Outliers were observed when taking to account the age group of 21-30 year olds, as they were shown to be the most bias in both Race and Gender.

Conclusions/Discussion

The hypothesis, #If a person is within a younger age group, then they will be less subjected or inclined to portray biases in society due to the fact that they are more of a global citizen#, was to a great extent supported by the data. The age group falling under the category of 10-15 year old children was the least subjected to allow implicit bias influence their world views. Additionally, it was observed how gender bias levels are consistent through all ages. Even though the favoring and disfavoring of whites and African Americans is still extremely high in society, it is significantly less than that shown in the gender categories.

Summary Statement

I created online surveys that simulate different situations to assess how implicit gender and race bias levels vary across age groups.

Help Received

I created the surveys and the program that analyses the responses myself. However, my science teacher, Mrs. Amacher, helped review the results.