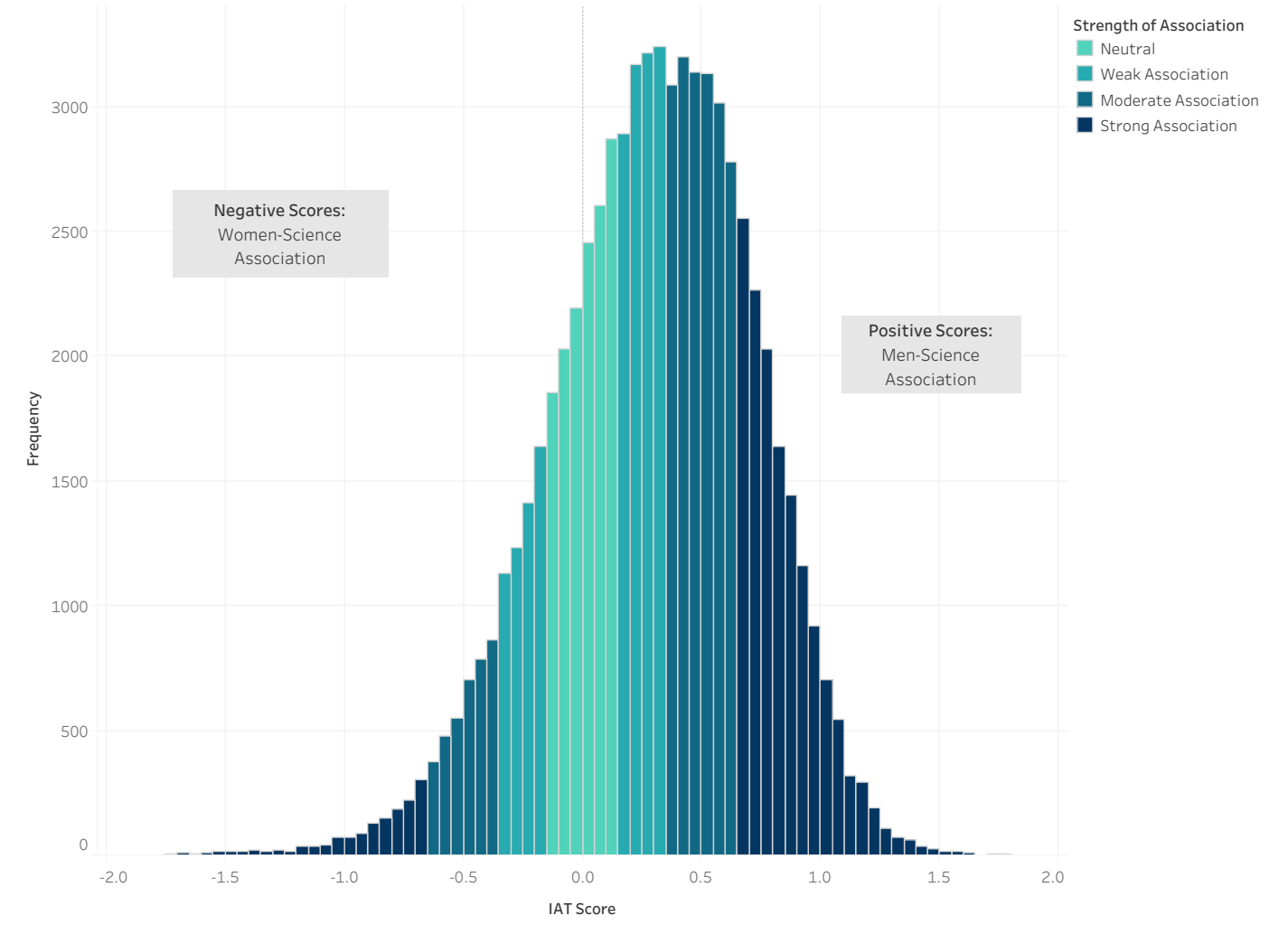
How do we think of science as it relates to Gender? An Analysis of Implicit Gender-Science Attitudes

The Implicit Association Test (IAT) was created to implicitly measure people's bias towards social groups, as it became more difficult to explicitly measure it due to social desirability bias, or the tendency to answer in a way that shows oneself in a favorable light. For this project, I analyzed data from Harvard's 2020 Gender-Science IAT to examine people's beliefs about science as it relates to gender. After taking the IAT test, participants are given a score ranging from -2 to +2, with -2 being an extremely strong association between women and science, +2 being an extremely strong association between men and science, and 0 being neutral. The strength of the associations were determined using Blanton et al. (2014) IAT score assessments. (Dataset Source: https://osf.io/9gvmw/)

The boxplots below represent a select few of the differe..



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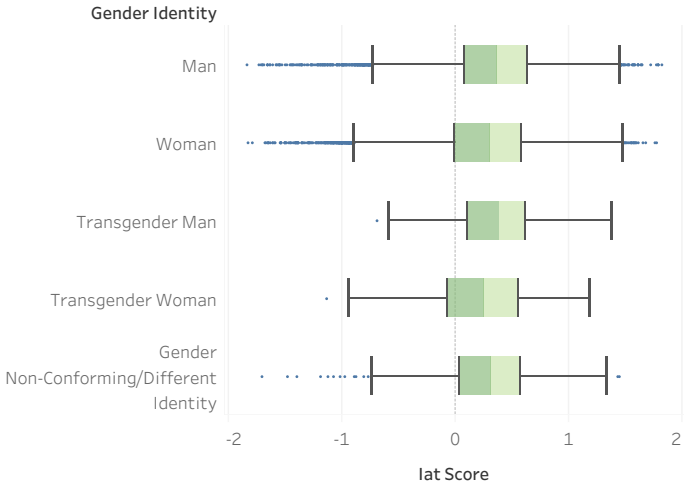
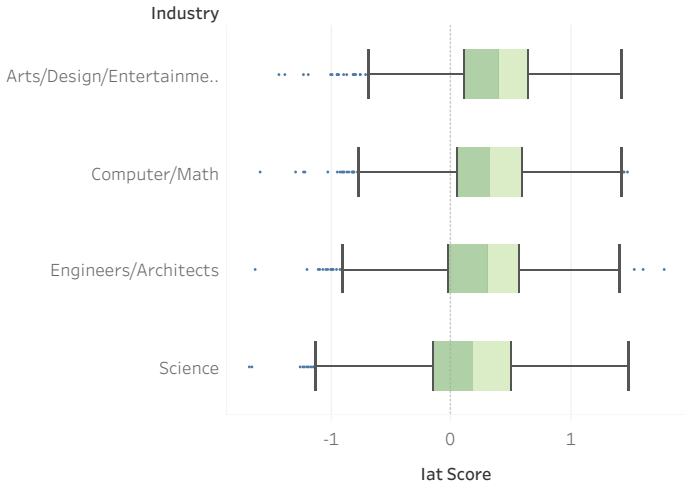
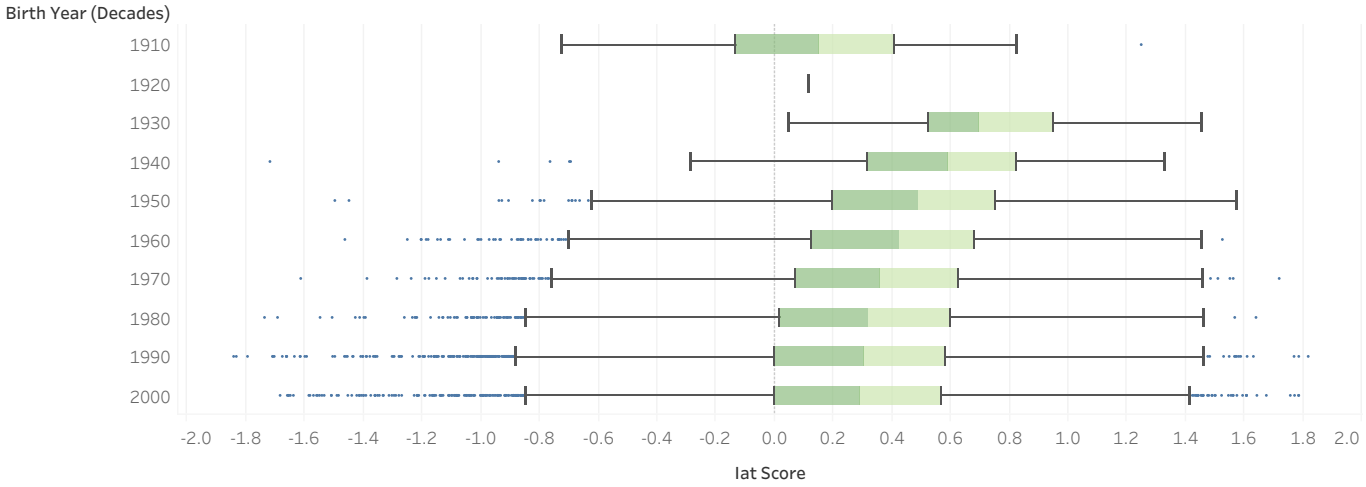
The Implicit As..	The boxplots below represent a select few of the different demographic groups who participated in this study. In the first figure, there was no significant difference in IAT scores between the gender groups, and we can see that most people share a slight to moderate association between men and science. In the second figure, we see similar results; however, it seems that people within the science field are more neutral. Excluding individuals born in the 1910s and 1920s, it appears that older people have a greater tendency to associate men with science compared to younger people in the third figure; however, a correlation analysis reveals that there is no linear (or predictive) relationship between age and gender-science associations.	Participants in this study a..







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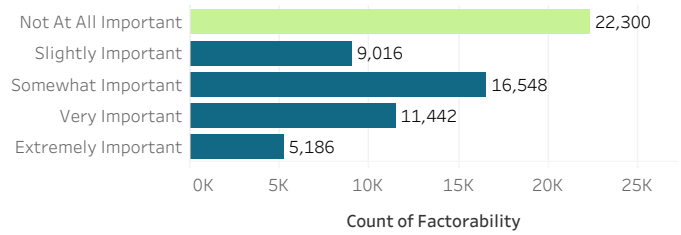
The boxplots below represent a select few of the differe..

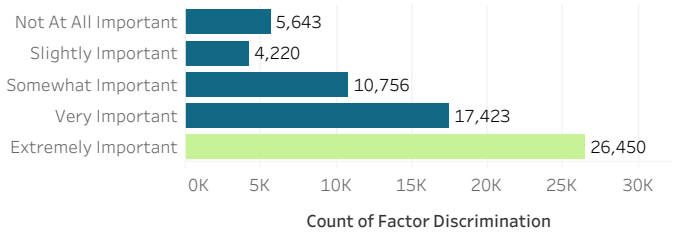
Participants in this study also took a survey. In the survey, they were asked about the gender gap in STEM and the possible reasons why it exists.

Questionaire: Women hold a smaller portion of the science and engineering faculty positions at top research universities than men do. The following factors are sometimes offfered as reasons for this difference. Please rate how important you think each factor is for explaining this difference:

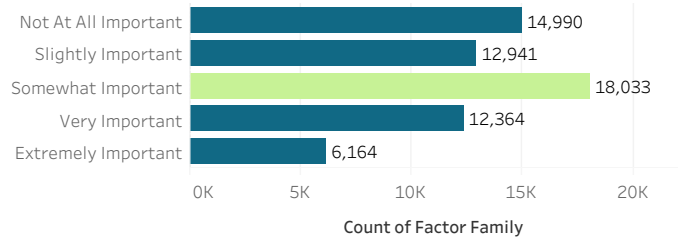
Ability



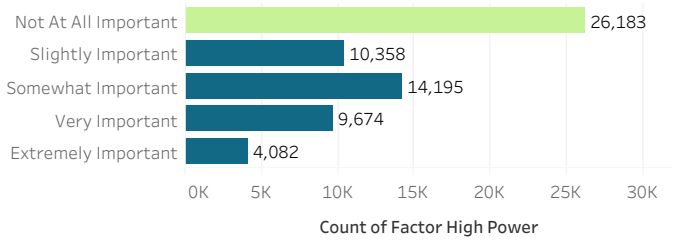
Discrimination



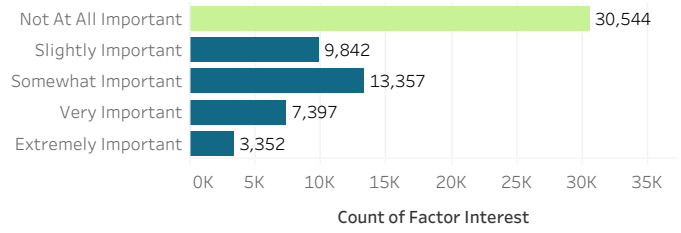
Family



Power



Interest



Encouragement