The Eyes Have It

By Natalie Kiefer

How does lying affect the eyes?

Materials

- Quarter sheets of paper with six numbers and a horizontal line for a name at the top
- A printed spreadsheet with the columns labeled “up, down, left, right, dilation, constriction, other” and the rows numbered 1-6
- 2 clipboards
- 2 pencils
- 6 questions
- 25 interviewees

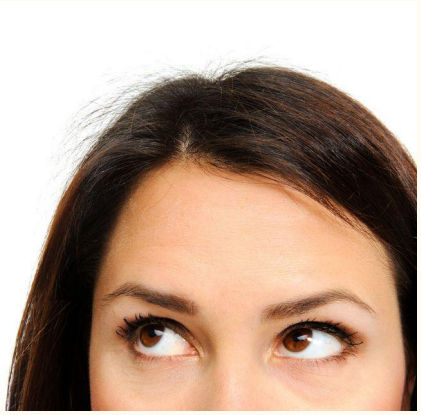
Procedure

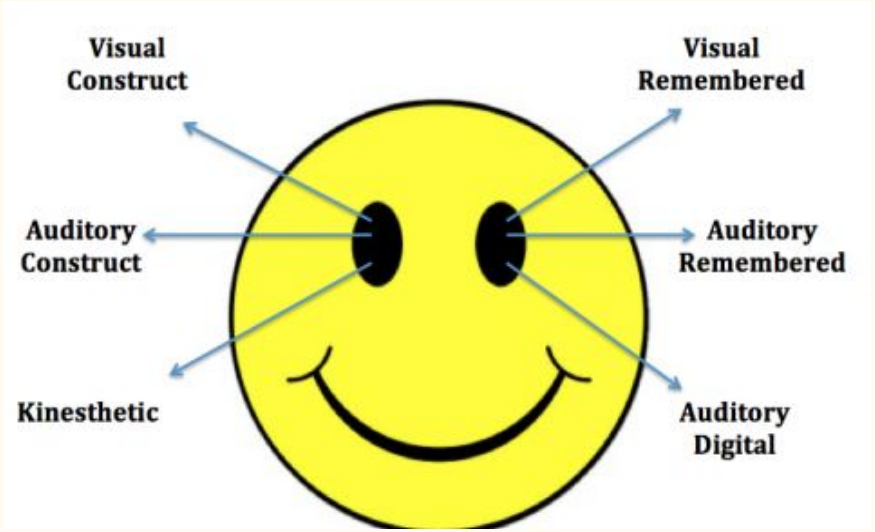
1. I prepared six questions to ask my interviewees.

2. One at a time, a subject was given a clipboard with the quarter sheet, instructed to circle three numbers, and tell a lie when answering those questions.

3. As subjects answered the questions, I observed the movement and dilation of their eyes and made notes on my spreadsheet.

4. Repeat with remaining subjects.





Hypothesis

If a person tells a lie, then their eyes will look up and to the left, or they will dilate.

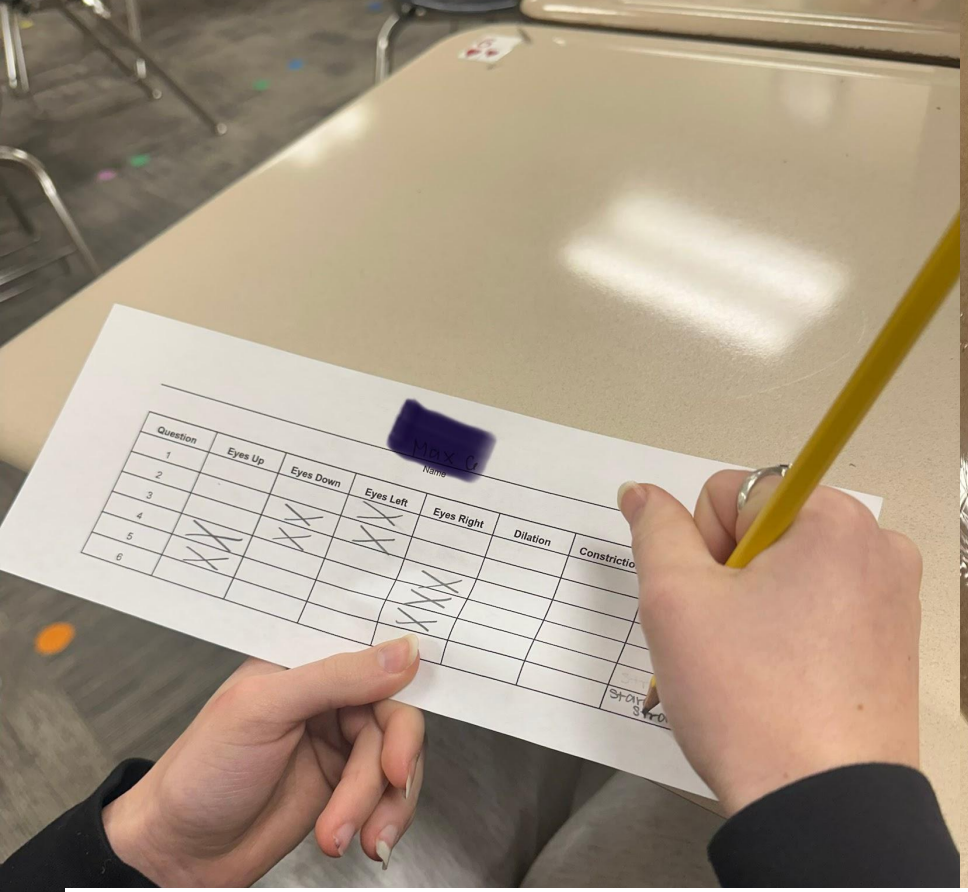
Hypothesis support

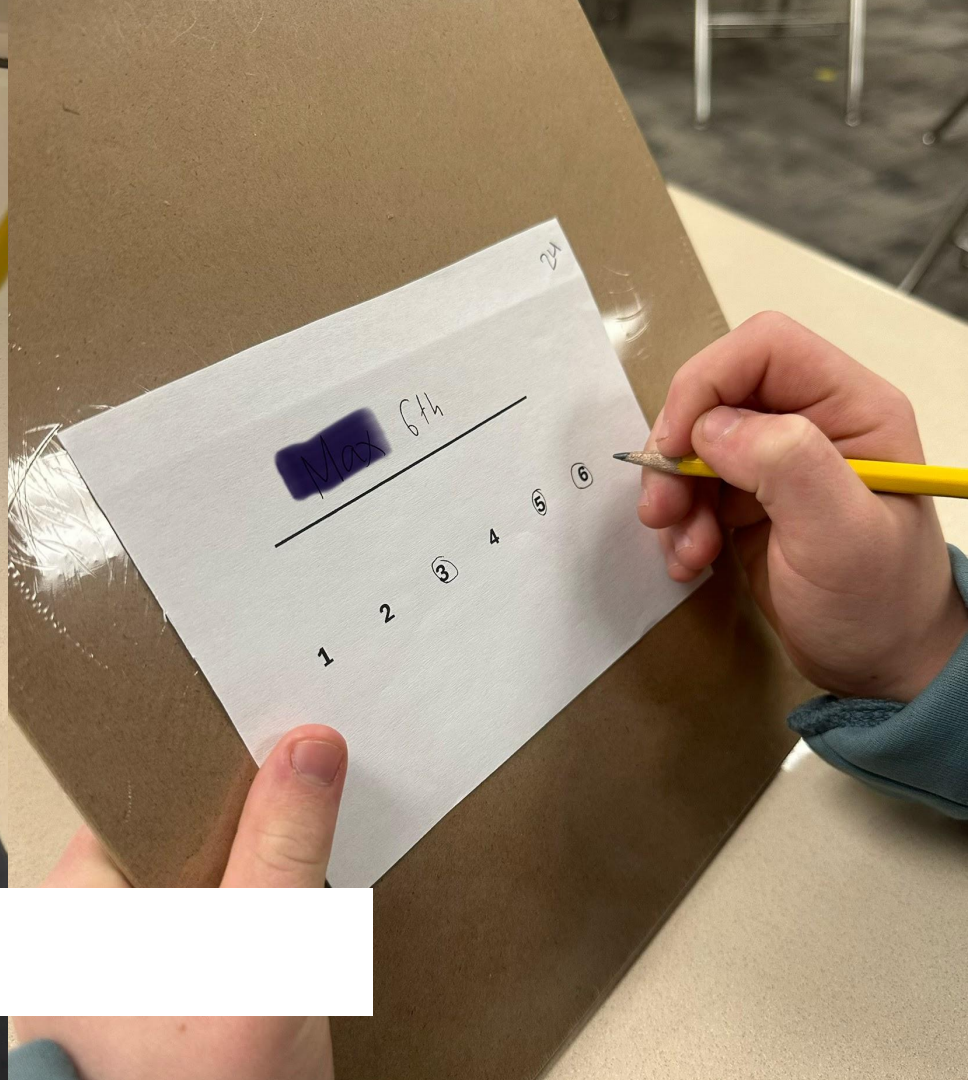
I think this is what's going to happen because...

Research shows that when a person pulls something from their memory, their eyes will look up and to the right. On the contrary, a person constructing a thought will look up and to the left. A truth would be pulled from memory, while a lie would be constructed in the mind. In addition, pupil dilation indicates a high cognitive load (the amount of effort the brain is using to process something), which would be needed when constructing a lie.

Variables that may affect the outcome...

- Independent Variable:
  - The fact that they are lying
- Dependent Variables:
  - What their eyes will do
  - How they will react (their eyes)
- Controlled Variables:
  - How many questions
  - Who I test





The experiment

Results

My results were inconclusive. Only 12% of people showed any eye indication.

Conclusion

How does lying affect the eyes? The answer is it does not. When a person tells a lie, their eyes could do any number of things. I thought their eyes would look up and to the left or dilate, but my results show that a person's eyes will not do anything specific when telling a lie. My results contradict my hypothesis because they show that when a person tells a lie, their eyes will not do any one predicted thing. I would improve my experiment by testing more people to have a more accurate set of results. I would also record the people while asking them the questions, so I could more carefully examine eye movement, and make sure I saw what they did correctly.