

Hindsight Bias

Rabi Shanker Guha

Mentor: Prof. Amitabh Mukherjee

INTRODUCTION

- Hindsight bias is the tendency to associate the happening of events with more probability after they have occurred than before they had occurred.
- Qualitative errors** are those that result when the subject substitutes the correct answer for their original answer in their recall.
- Quantitative errors** result from them forgetting their original answer and recalling an answer closer to, but not equal to, the correct answer.

MOTIVATION

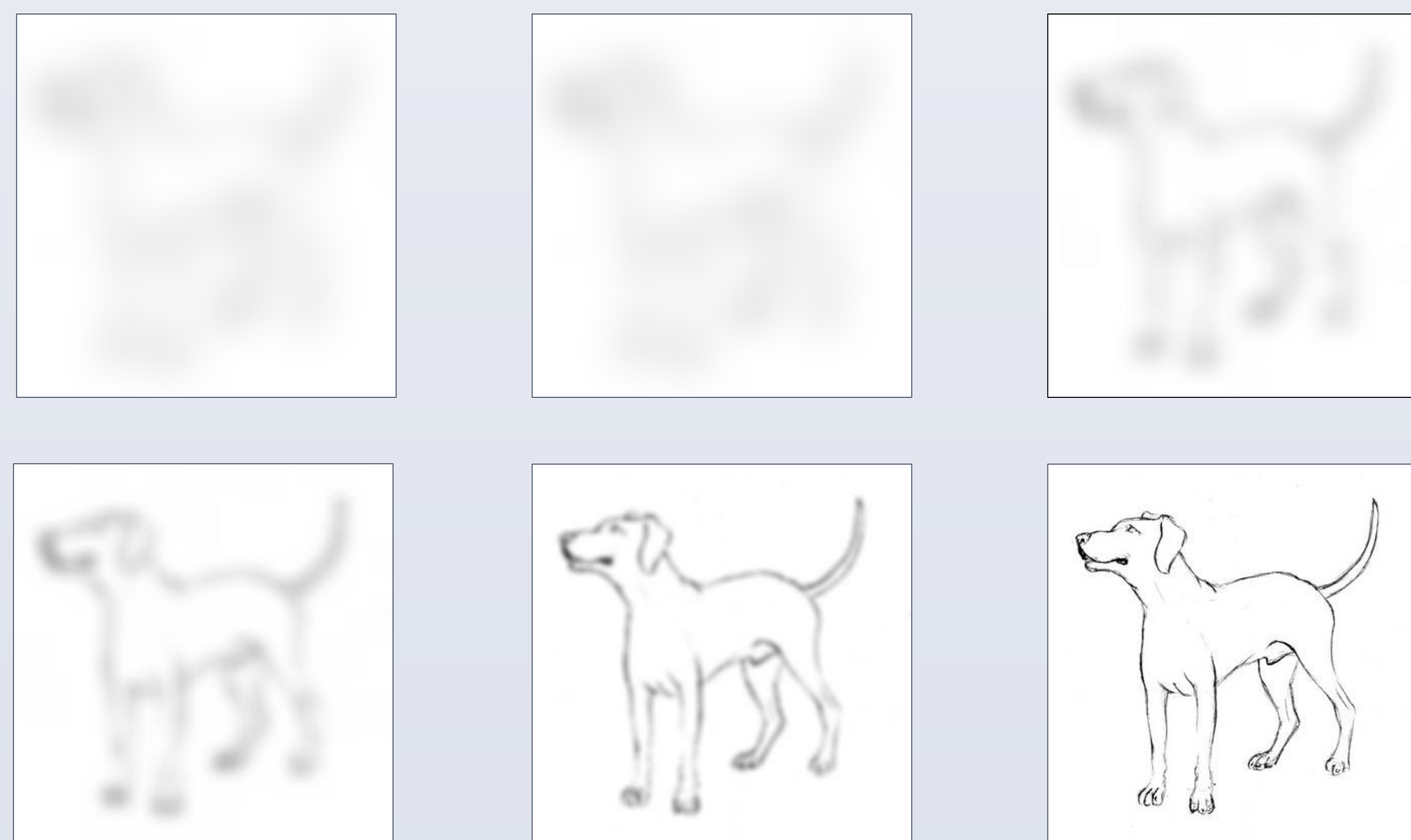
- Lifespan developmental studies can inform theory and practice in terms of how and when biases form and change.
- It may be of significance in developmental psychology like in Theory of Mind(TOM)

PREVIOUS WORK

- Hindsight Bias as a phenomenon has been studied extensively over the years.
- In the earlier seventies research in this field was primarily led by Traversky and Kahneman.
- Bernstein et al studied the effect across various age groups and showed a qualitative v/s quantitative bias between children and adults.

METHODOLOGY

- People from different age groups (9 - 22 years) were administered different hindsight tasks.
- Later only one half of them learnt the correct answer to the questions and the other half served as the control group.
- The extent to which participants recalled their original answers as being closer to the correct answers in the experimental condition than in the control condition reflects hindsight bias.
- The hindsight bias will involve the following tasks:
 - Verbal Hindsight Task
 - Visual Hindsight Task



Visual Hindsight Task

ANALYSIS

- Irrespective of age, everyone exhibits hindsight bias.
- Control Experiment confirms that the effect is caused by Hindsight Bias.
- A gradual increase in the HB index was noticed with respect to age.

REFERENCES

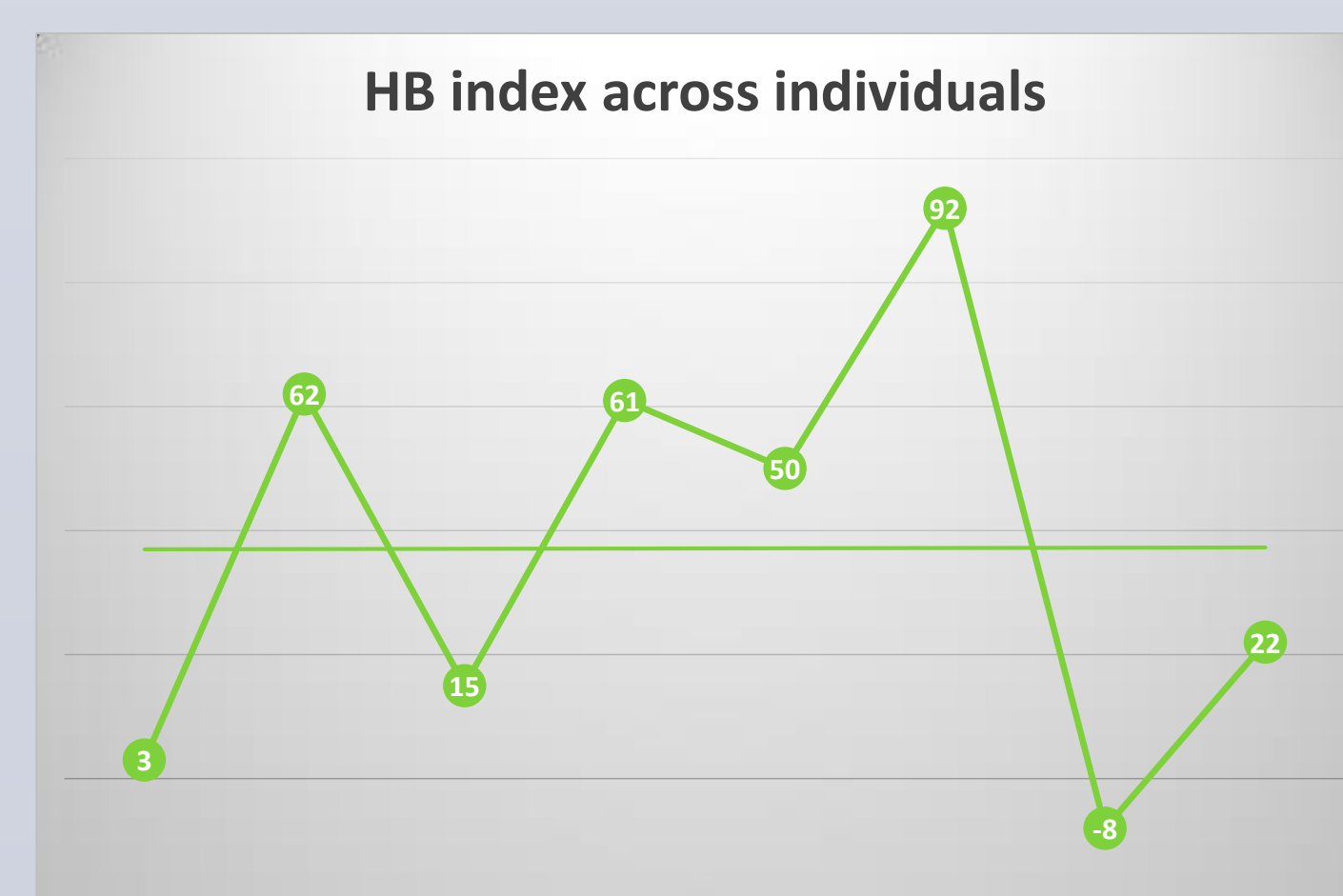
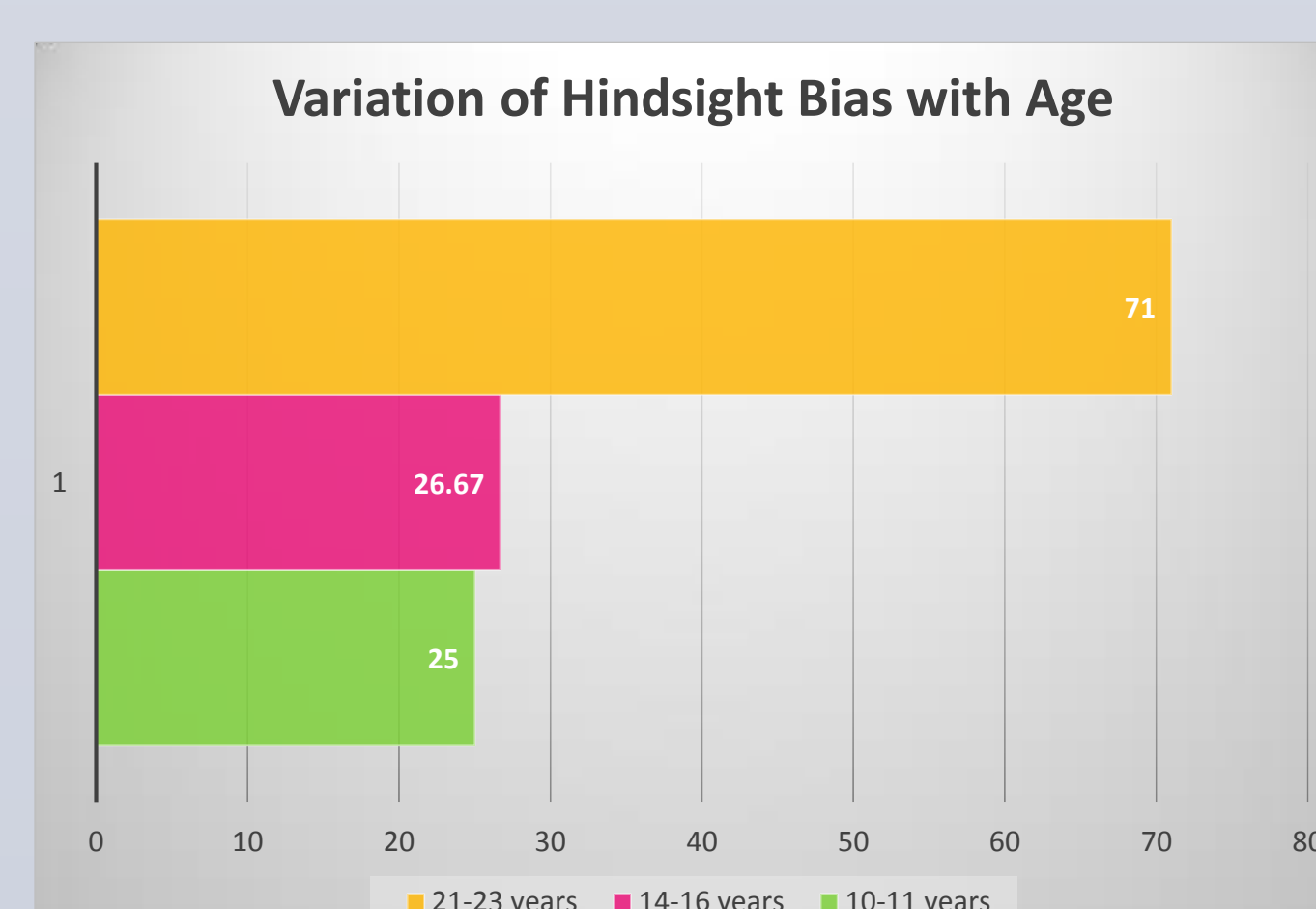
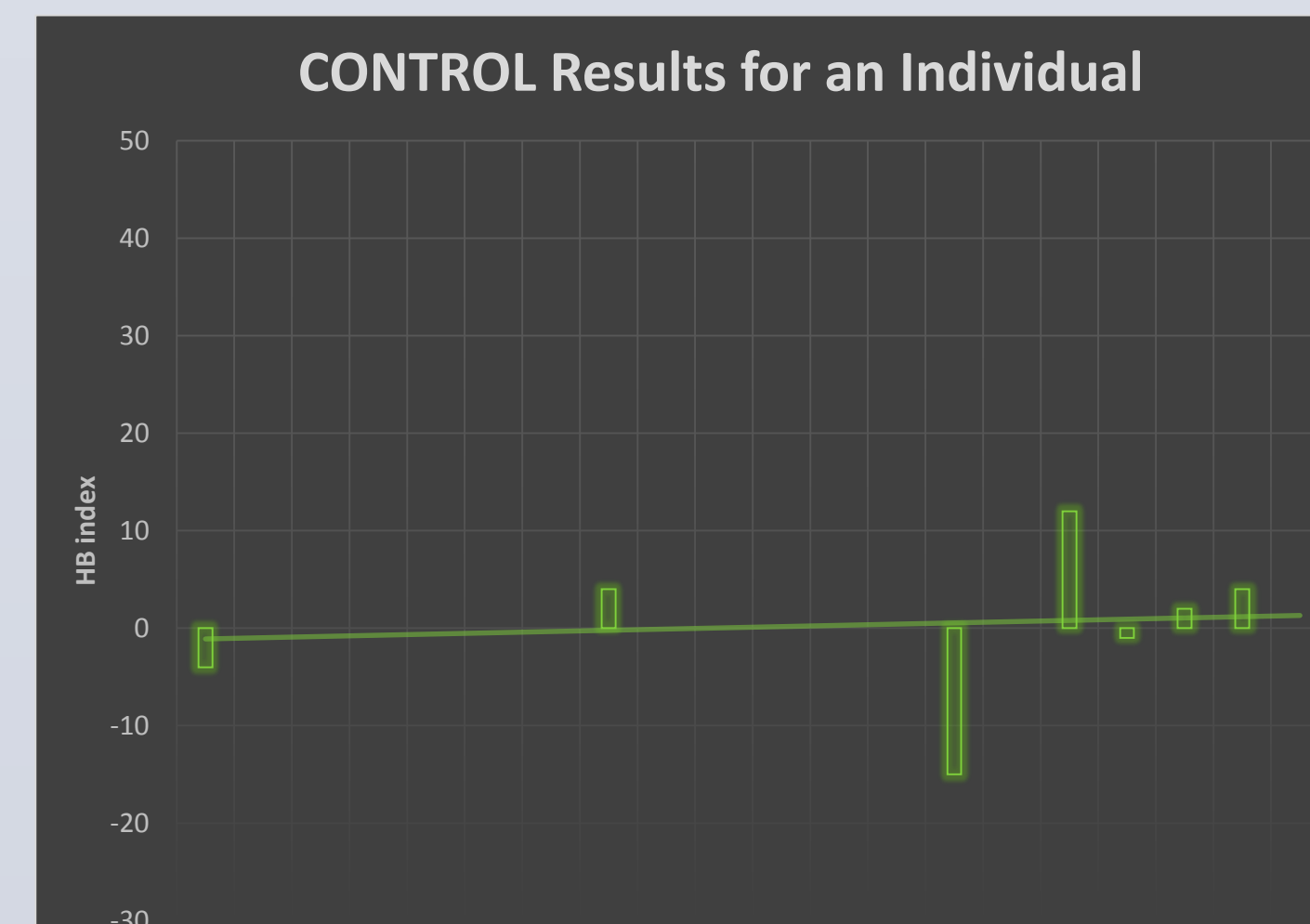
- Bernstein et al (2011) Hindsight Bias across 3 to 95 years of age
- Bernstein et al (2004) We Saw It All along: Visual Hindsight Bias in Children and Adults

RESULTS

$$\text{Hindsight Bias index (HB)} = |\text{OJ} - \text{CJ}| - |\text{RJ} - \text{OJ}|$$

where OJ = Original Judgement

RJ = Recollection Judgement and CJ = Correct Judgement



FUTURE WORK

- Study the effect of age and/or gender on the development of hindsight bias.
- Study the effect of ethnicity in the development of hindsight bias