

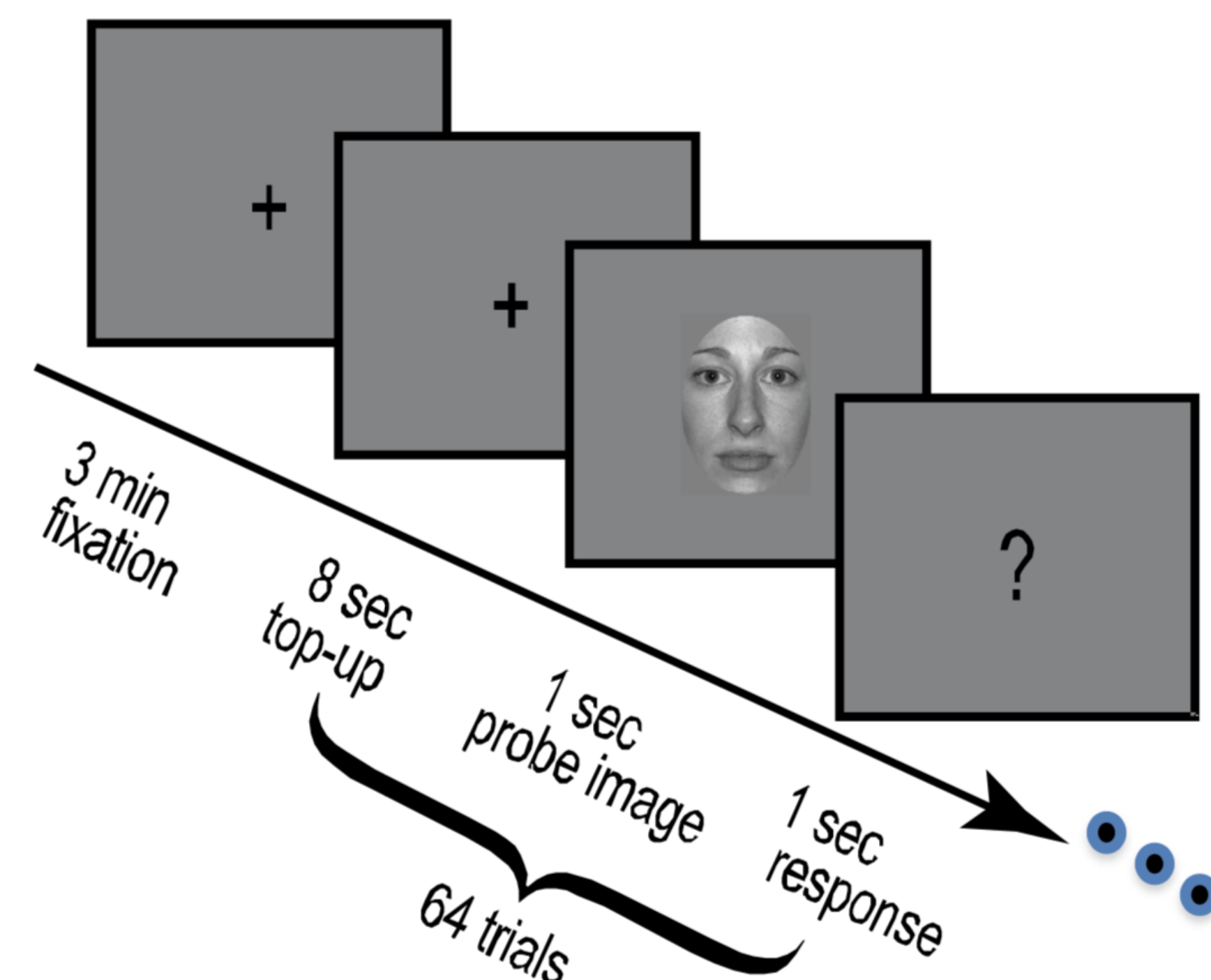
INTRODUCTION:

We gain essential information for social interactions from the faces we perceive daily. An important feature displayed by a face is emotion, which can influence our perception of a situation and guide our behaviors in social settings. Importantly, our perception of emotion can be influenced by innate biases.

Past studies have found attractive faces to be viewed as more sociable, altruistic, and intelligent than unattractive faces (Griffin & Langlois, 2006). Here we investigate if face attractiveness biases the perception of emotion. We hypothesized that faces judged more attractive would be perceived as conveying more positive emotion, viewed as happier, than faces judged less attractive.

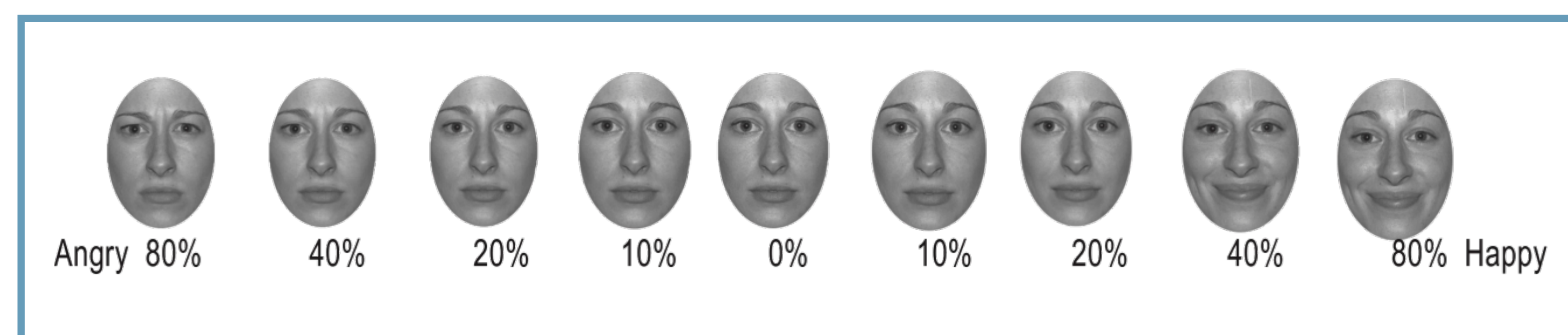
Hypothesis: The face rated most attractive will be judged happier, have a lower PSE, compared to the face rated least attractive, indicating that it takes less happiness for an attractive face to be judged neutral.

METHODS:



Participants viewed 8 unique face identities (4 male/4 female), each morphed along an emotional continuum (80, 40, 20, 10% happy; the complementary angry, and neutral). Each face morph was presented (1sec) and participants judged if the face appeared happy or angry, across 64 trials. After rating the emotional valence of all face morphs, participants judged the attractiveness of the neutral face for each unique identity (1: very unattractive; 7: very attractive).

Visual Stimuli:



RESULTS:

Across participants, we calculated mean ratings of attractiveness for each face identity and determined the male and female faces judged most and least attractive overall. We then calculated the point of subjective equality (PSE), the face judged happy or angry equally often, separately for the most and least attractive female and male faces. The PSE was calculated by fitting group data for judgments of a given face with a cumulative normal. To estimate variance in our sample, we subdivided participants, balancing gender ratios as best as possible, based on experimental conditions they participated in after the baseline conditions considered for this analysis.

Most Attractive Female Face



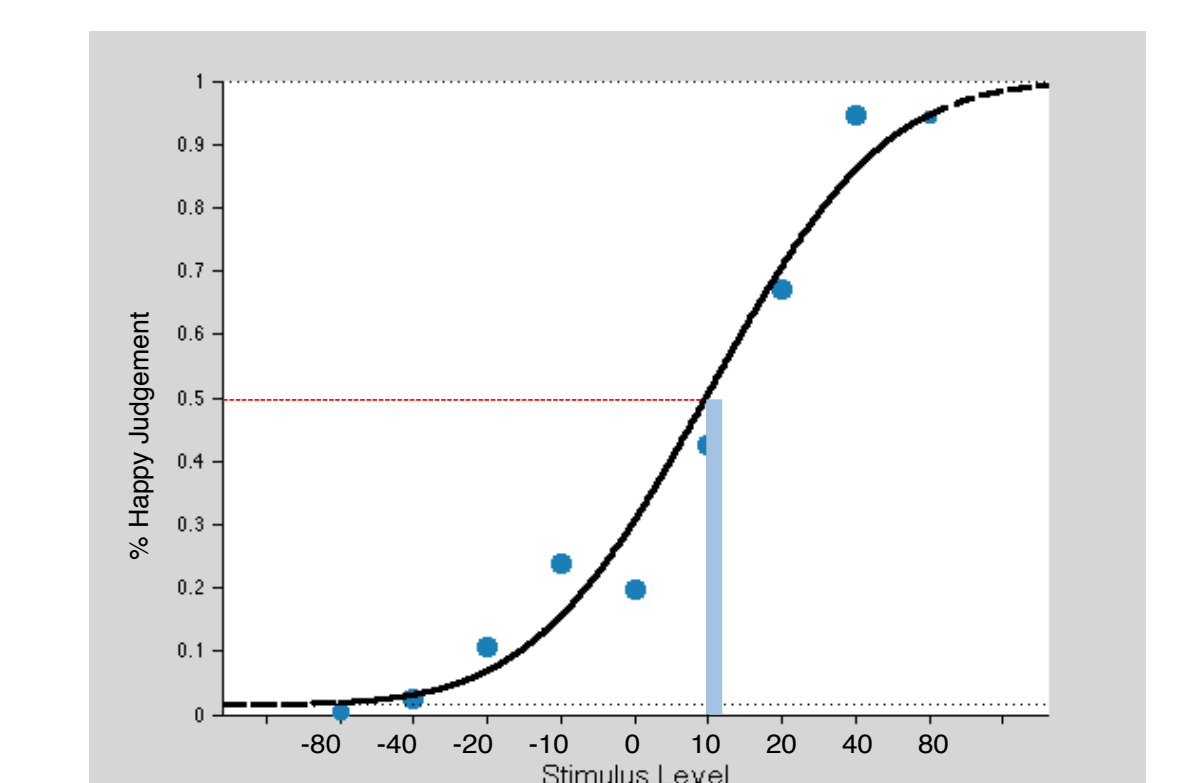
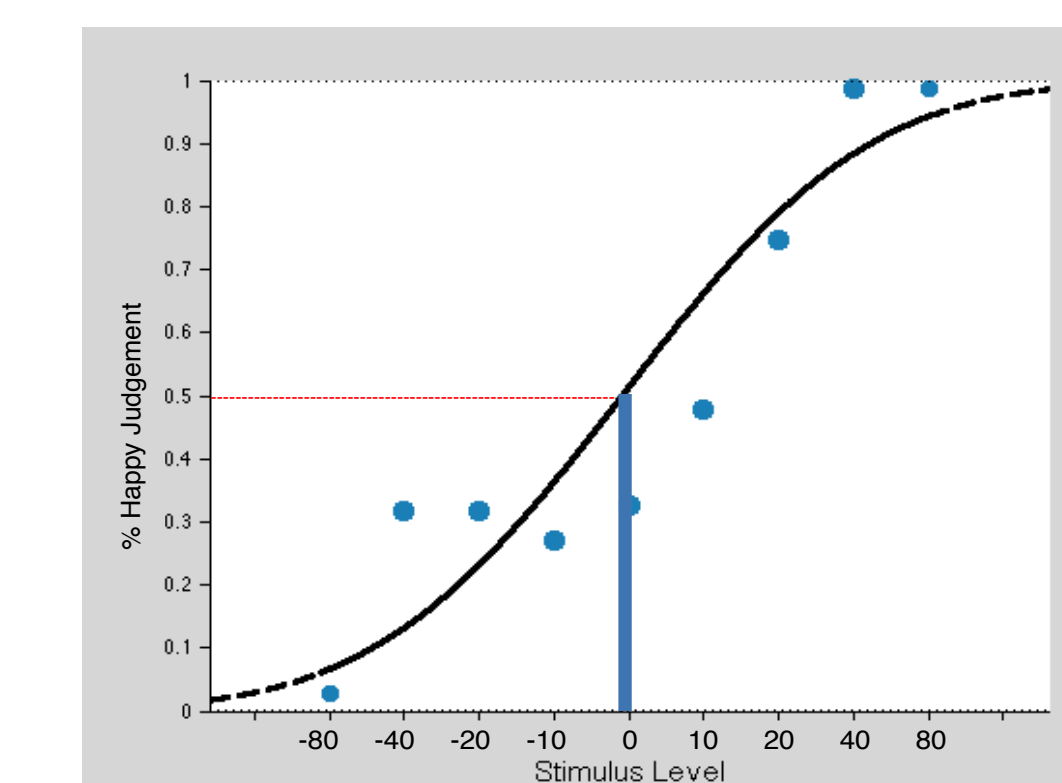
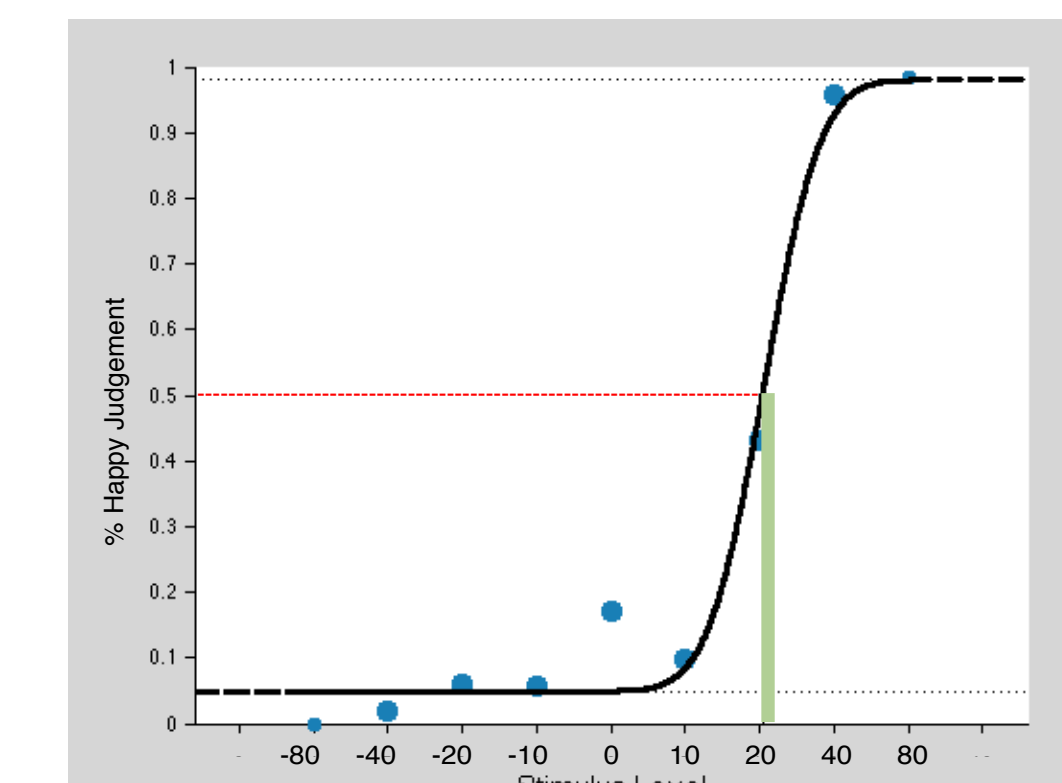
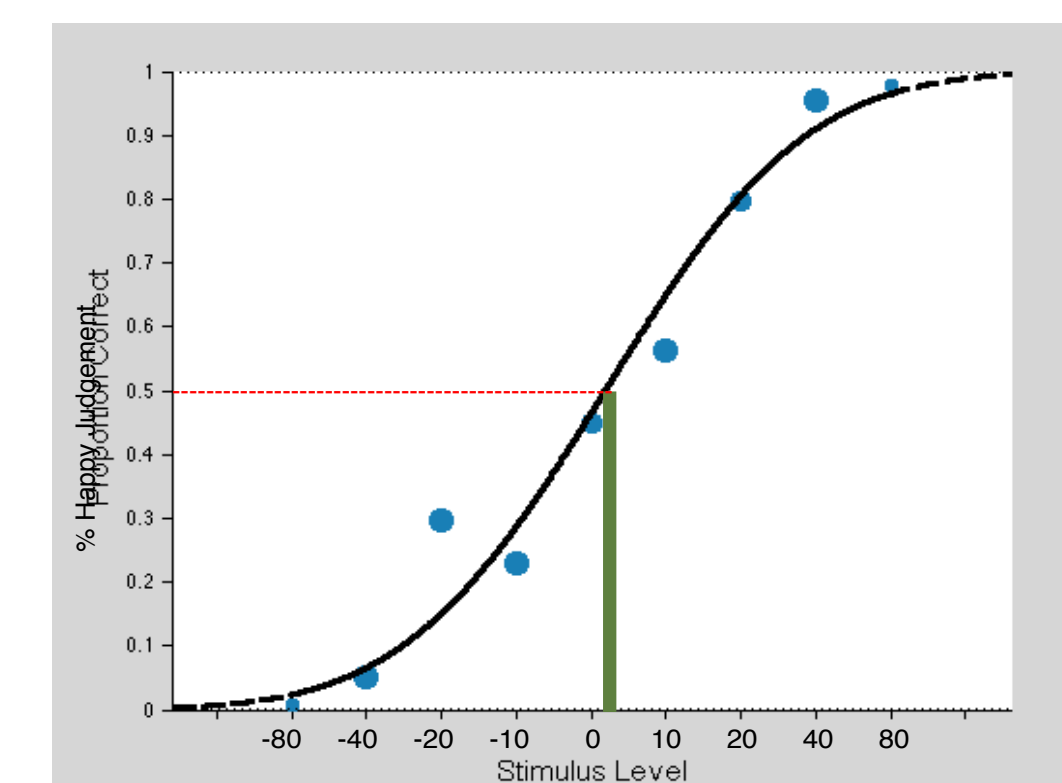
Least Attractive Female Face



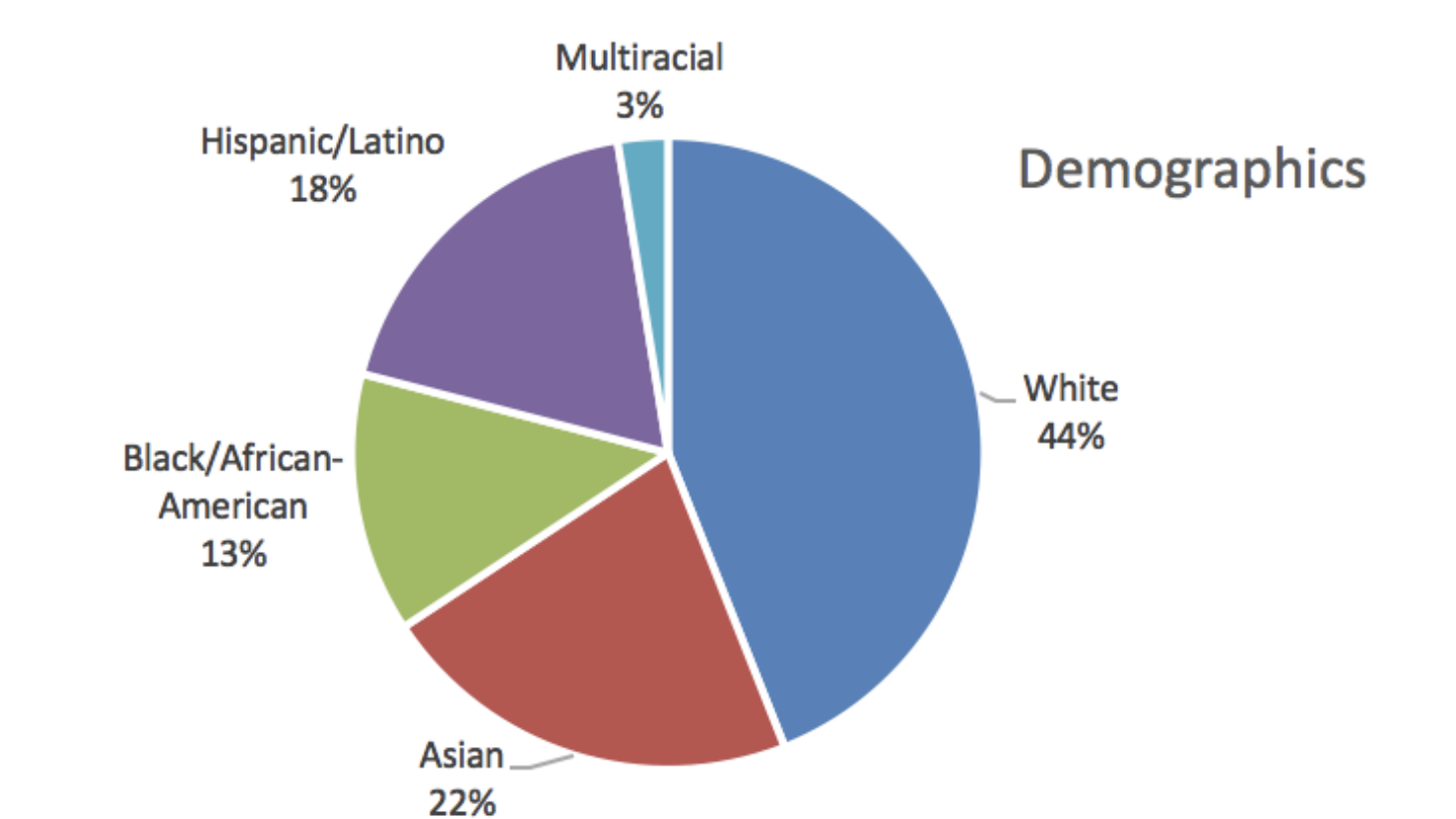
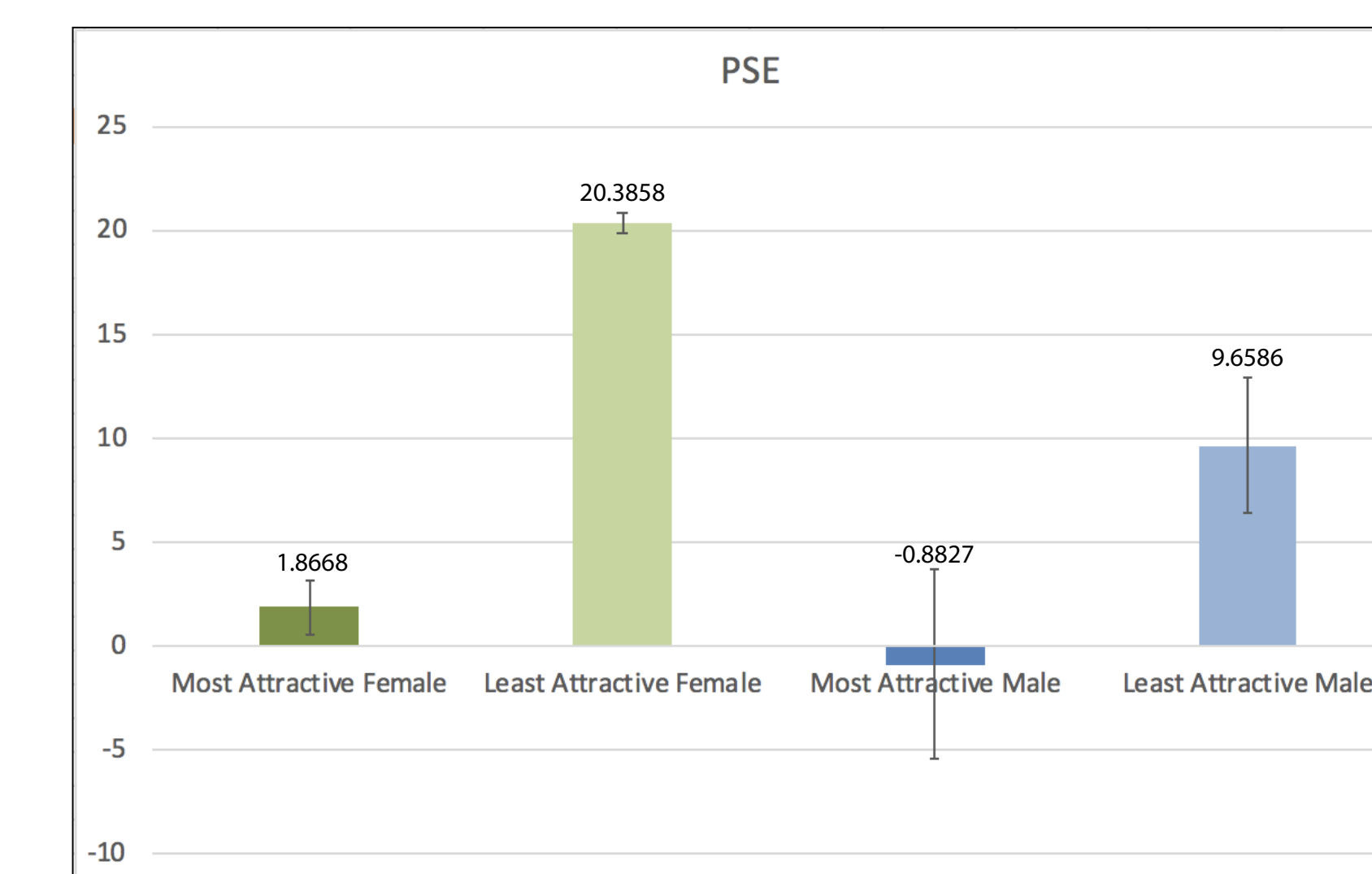
Most Attractive Male Face



Least Attractive Male Face



	N =	Most Attractive Female PSE	Rating	Least Attractive Female PSE	Rating	Most Attractive Male PSE	Rating	Least Attractive Male PSE	Rating
All	441 (19% male)	1.87	4.87	20.39	3.43	-0.88	3.89	9.67	3.38
Condition 1	77 (20% male)	-0.37	5.06	21.08	3.29	13.73	3.77	10.98	3.37
Condition 2	91 (23% male)	4.55	4.97	21.58	3.56	14.52	3.65	18.48	3.27
Condition 3	89 (25% male)	4.47	5.22	21.35	3.50	12.40	4.19	18.01	3.66
Condition 4	85 (18% male)	-1.95	4.57	19.05	3.55	-6.84	4.03	2.95	3.14
Condition 5	93 (13% male)	1.56	4.69	19.99	3.31	-2.98	3.86	4.84	3.47



CONCLUSION:

The most attractive face, female or male, showed a lower PSE compared to the less attractive face. This suggests that more attractive faces need to convey less happiness to be judged as happy, revealing a bias to see more attractive faces as more positive, emotionally. This trend was stronger for female compared to male faces, which showed larger PSE differences between the most and least attractive face. Further research is needed to consider how face ethnicity influences attractiveness biases.

Sample References:

Griffin, A.M., & Langlois, J.H. (2006). Stereotype Directionality and Attractiveness Stereotyping: Is Beauty Good or is Ugly Bad? *Social Cognition*, 24(2), 187-206.

Harris, D.A., Hayes-Skelton, S.A., & Ciaramitaro, V.M. (2016). What's in a Face? How Face Gender and Current Affect Influence Perceived Emotion. *Frontiers in Psychology*, 7:1468.