

Aging and Self-Stereotyping Effects on Face-Name Memory

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Introduction

Face Name Associative Memory

- High everyday salience, but challenging for adults of all ages and specifically for older adults Fraas et al., 2002; Hosey et al., 2009

Self-Stereotyping Effects

- Age stereotypes in general and beliefs about aging and memory in particular are predominantly negative Chasteen et al., 2011; Hess, 2006
- Self-stereotyping occurs when stereotypes become self-relevant and consequently influence behavior (e.g., memory performance) Levy, 2009; O'Brien & Hummert, 2006

Role of Self-Relevance

- Feedback affects memory, and younger adults (YA) have greater gains than older adults (OA) West, et al., 2001
- Memory self-efficacy (MSE), confidence in one's memory ability, is correlated to performance cross-sectionally and over time Beaudoin & Desrichard, 2011; Valentijn et al., 2006
 - Greater feedback gains for OA with higher than lower MSE West, et al., 2009
- Self-beliefs may moderate self-stereotyping effects Hess et al., 2003; Kornadt & Rothermund, 2012; Weiss & Lang, 2012

Research Aims and Hypotheses

Aim 1. Examine change in name memory over five occasions in response to false, age-salient performance feedback (positive, negative, control) in YA and OA

- For YA: initial increase in negative and sustained increase in positive condition
- For OA: sustained increase in positive condition

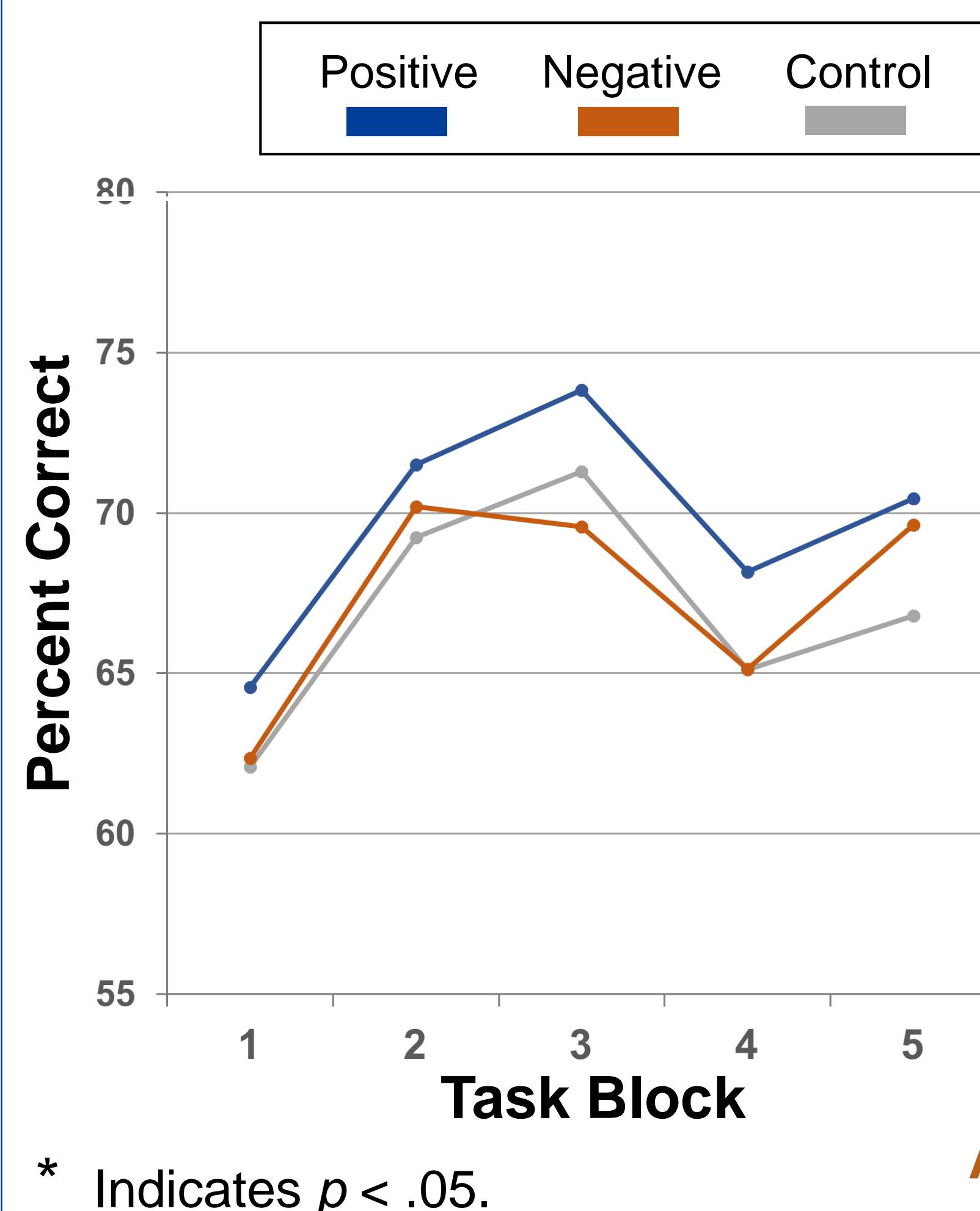
Aim 2. Examine change in self-beliefs, specifically MSE, as function of feedback

- For OA (not YA), expect increase in positive and decrease in negative condition

Aim 3. Examine relationship between Δ MSE and name memory

- For YA and OA: Moderate positive correlation Δ MSE and name memory (YA & OA)

Aim 1. Similar trend for the effect of feedback on memory over time for YA and OA



A. Memory over Time

Similar effects of feedback on memory over time for YA and OA

- Both YA and OA improved memory performance over time
- Quadratic and cubic trends

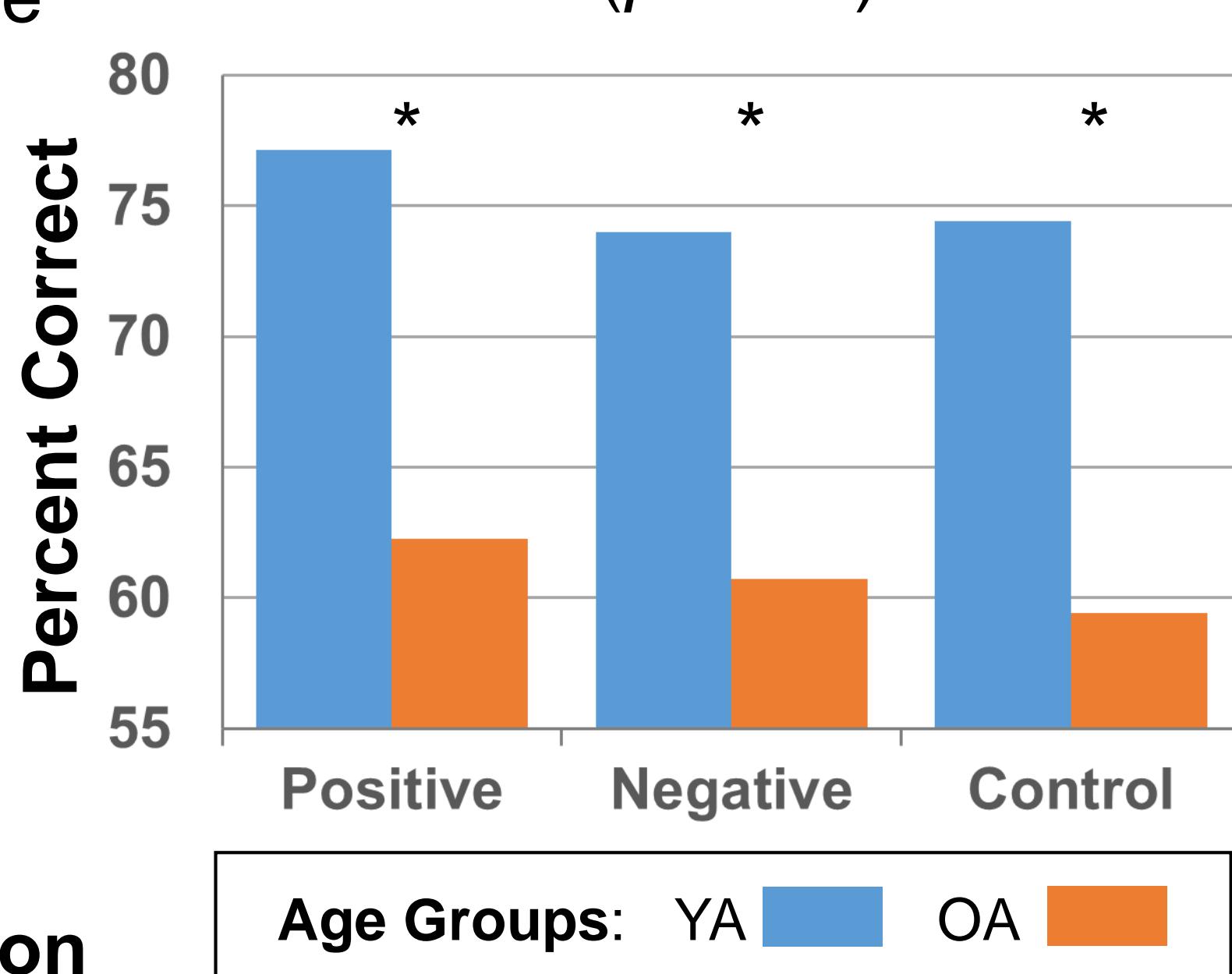
B. Memory Type and Aging

Age by test type interaction

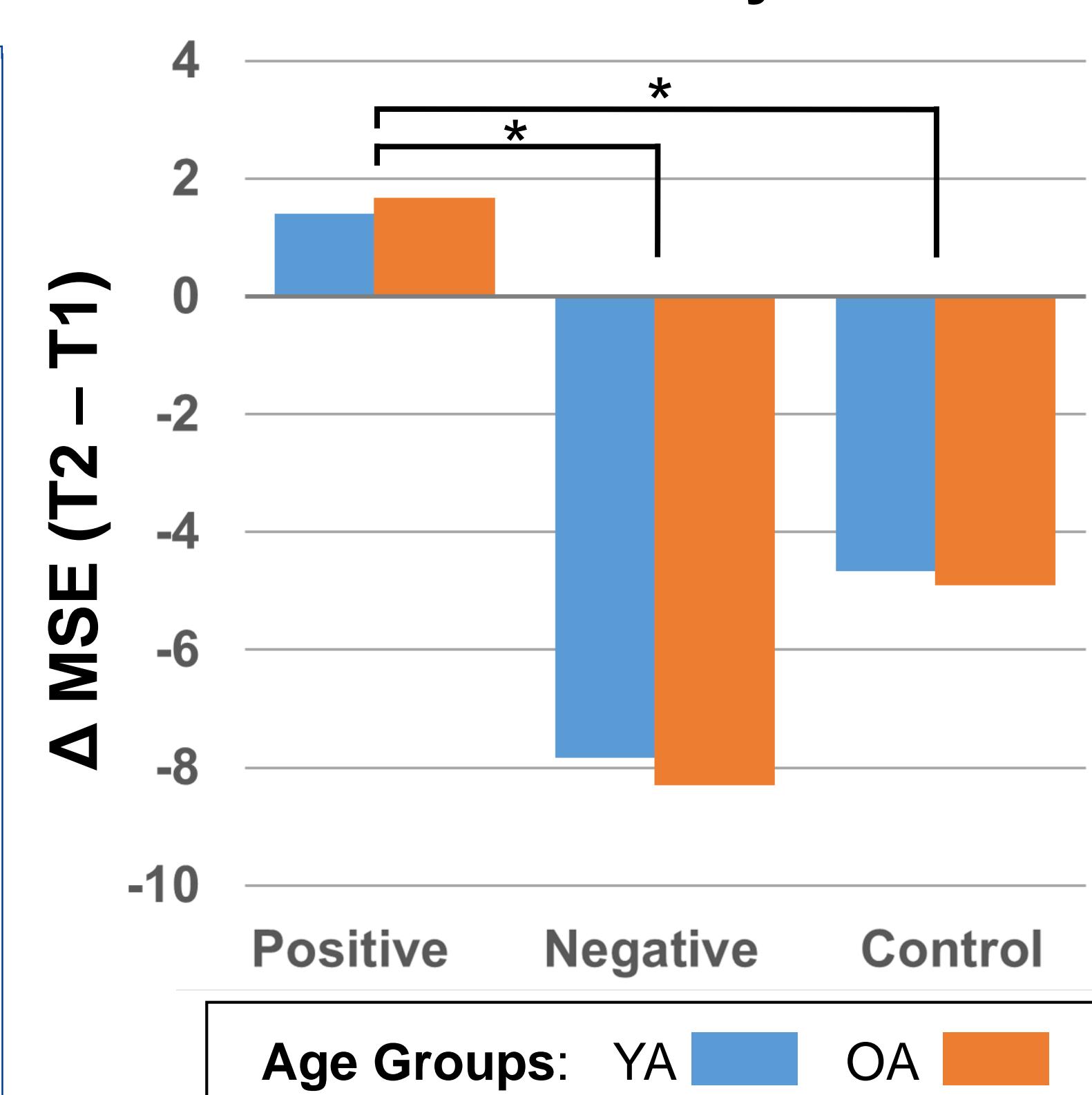
- Name recognition OA = YA
- Name recall OA < YA

C. Memory and Feedback

- Trend towards greater performance in positive condition, compared to negative and control, in YA and OA ($p < .10$)



Aim 2. Δ MSE by feedback condition



- Increase in MSE for positive condition
- Decrease in MSE for negative and control conditions
- No age difference in this trend

Aim 3. Δ MSE by feedback condition

- Higher Δ MSE \rightarrow greater total correct recall trials following feedback in OA
 - $r = .23, p < .05$
- MSE change not related to memory performance in YA, $p > .10$

Methods

Participants

- $N = 178$ healthy, well-educated community-dwelling Caucasian adults
 - 95 YA ($M = 19.20, SD = 1.28$ yrs., 72.6% female)
 - 83 OA ($M = 73.83, SD = 3.92$ yrs., 72.3% female)
- Randomly assigned to feedback condition

Face Name Memory Task

- High-frequency first names SSA, 2012
- Young and old male & female neutrally-expressive faces Ebner et al., 2010
- Blocks same gender, different ages
- Counter-balanced recall and recognition

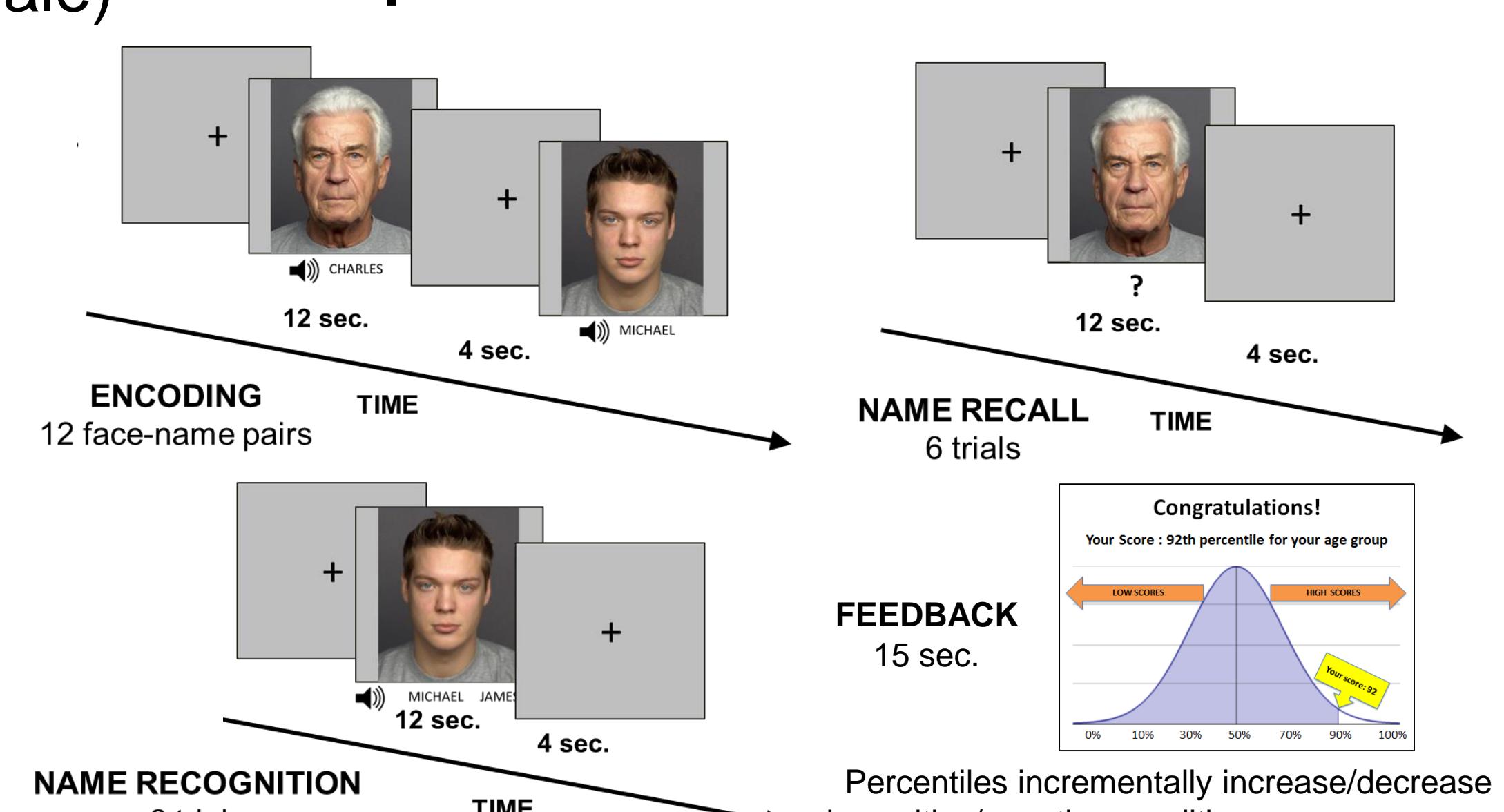
Beliefs Measures

- Memory self-efficacy West et al., 2003
- Subjective age identity Kastenbaum et al., 1972

Overview of Session



Example Block with Positive Feedback



Discussion

- Positive and negative feedback may initially motivate younger and older adults
 - Disengagement after sustained valence of feedback or task fatigue
 - Difficulty of face sets differed by gender and order of test type
- Highlights significant role of self-beliefs, specifically memory self-efficacy
 - Predictor of memory performance
 - Potential moderator of self-stereotyping effects
 - Explanatory mechanism for resilience to negative self-stereotyping

Next Steps

- Evaluate visual scanning to show motivational and attentional influences as a function of false, age-salient performance feedback