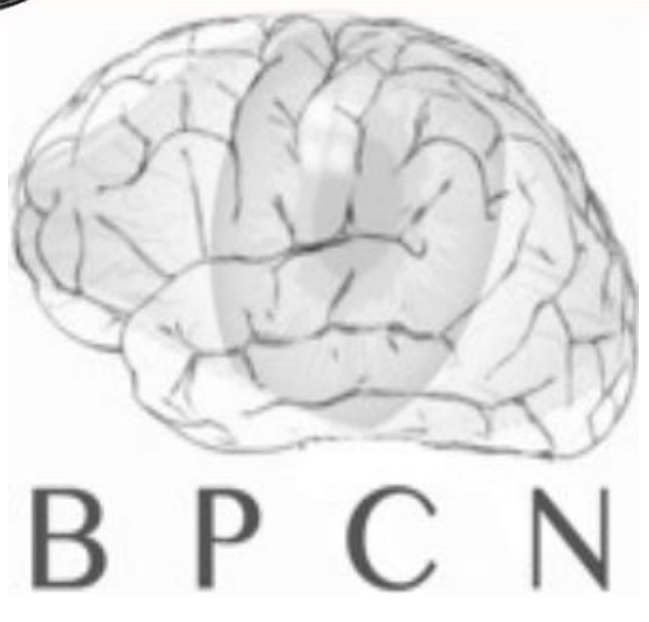
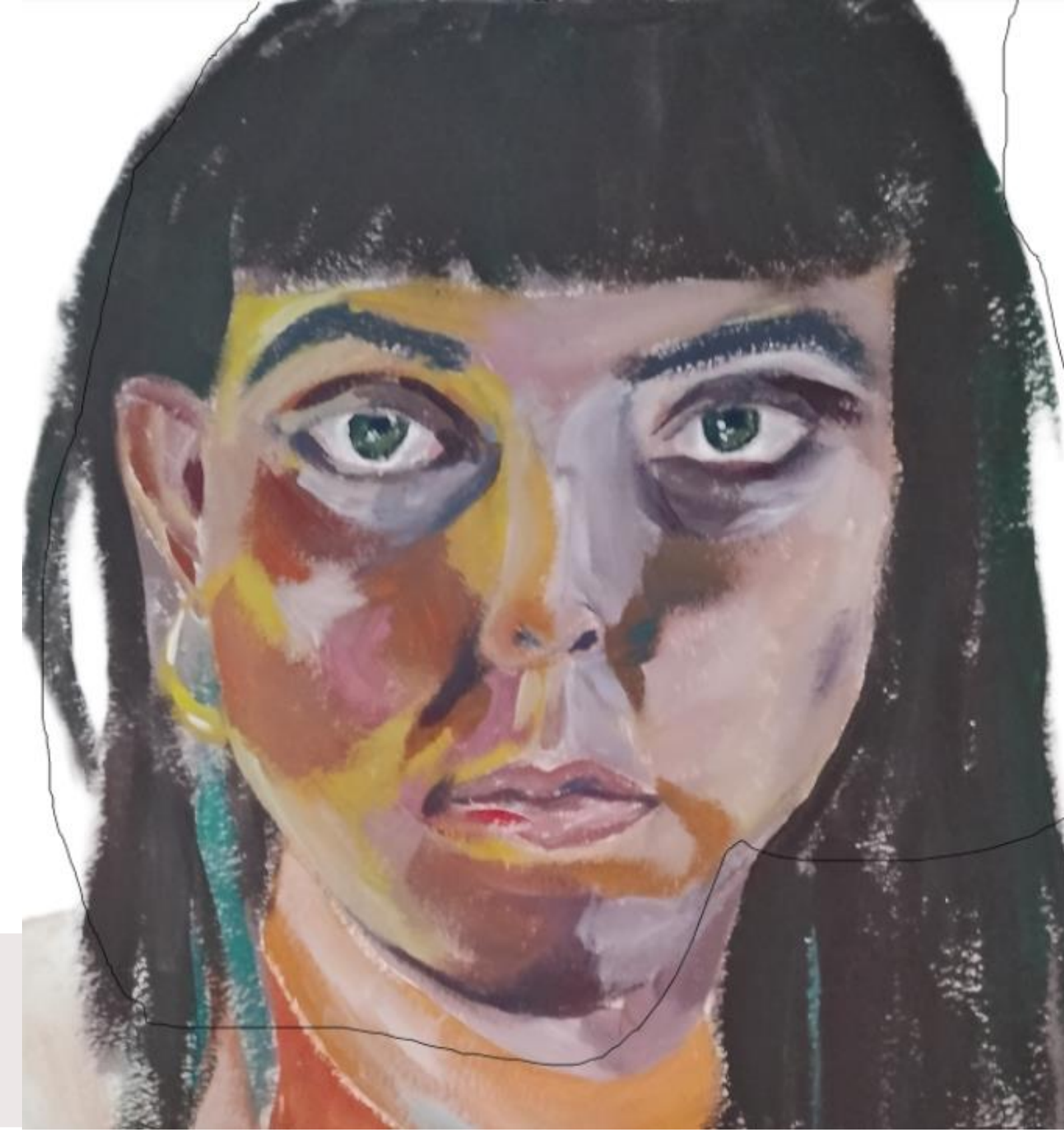




The Artist's Eye: Does Drawing Faces Enhance Face Perception Abilities?

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1. Introduction

Face perception relies on feature analysis and holistic integration. To explore the **trainability** of these mechanisms, this study investigates **portrait artists**:

- They spend extensive time analyzing facial structures, proportions and configurations.
- Prior research was limited to recognition memory, neglecting perceptual and configural aspects. → Do Portrait Artists have advantages in face perception?

H1: Portrait artists exhibit lower error scores on the CFPT than non-artists for both upright and inverted faces, indicating superior face discrimination.
H2: Portrait artists differ from non-artists in their Whole-Part-Effect.

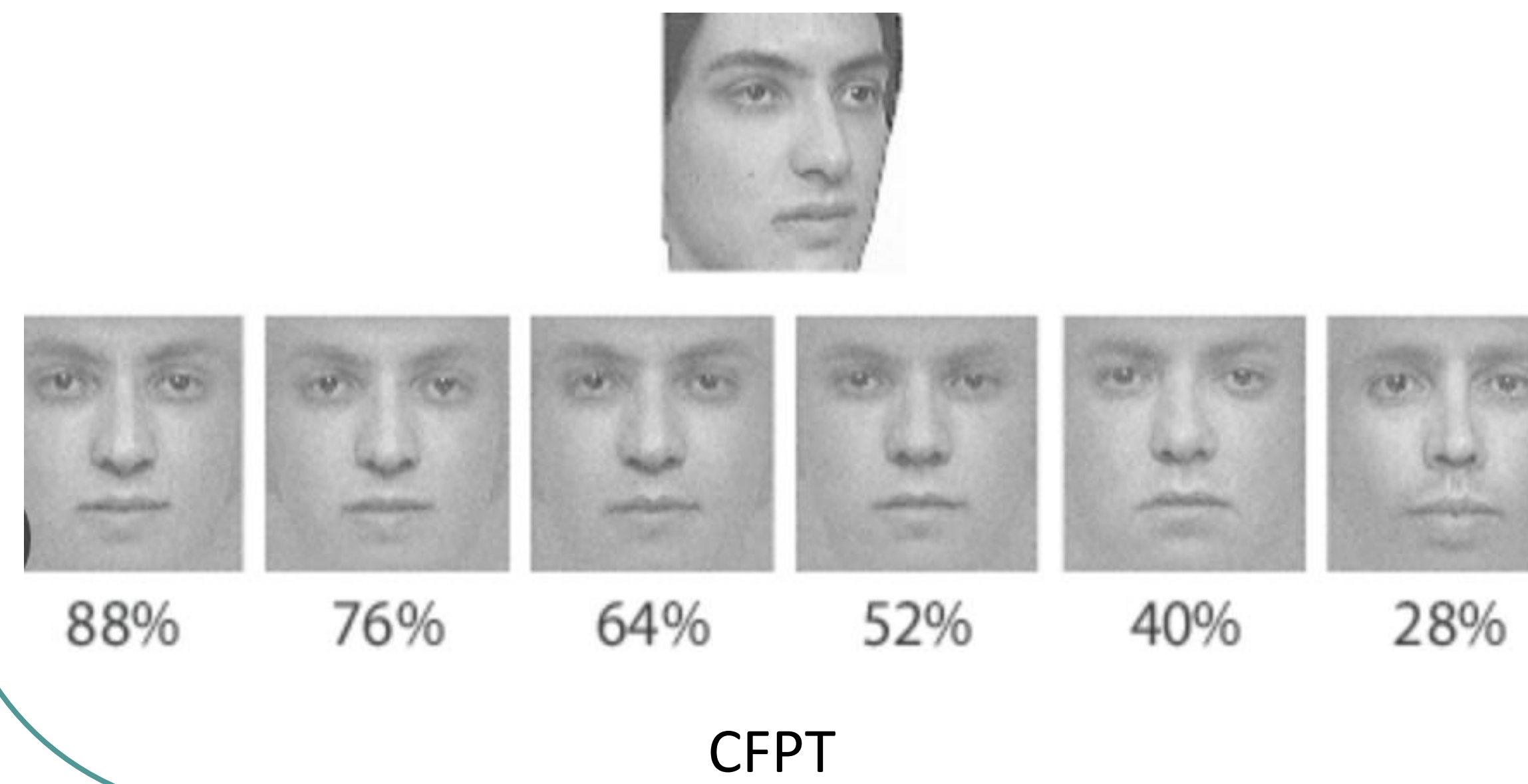
2. Methods

Design & Sample

- Mixed design with 2 independent groups ($N = 14$ per group):
- Artists (>2 faces per month for 2 years) vs. Non-artists (<2 faces per month)

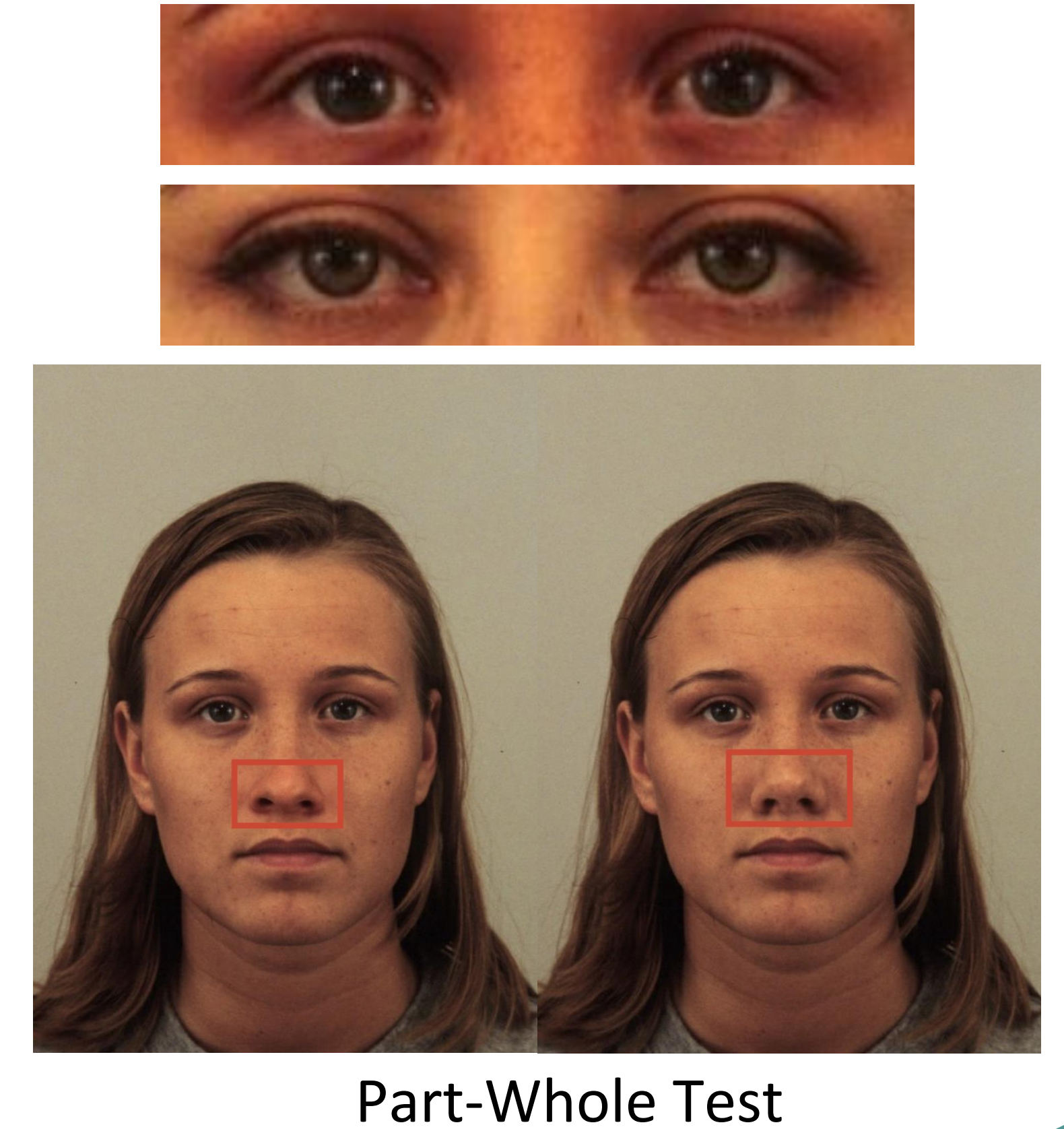
Analysis

Mixed-design ANOVAs; between-subjects factor: group; within-subjects factor: condition

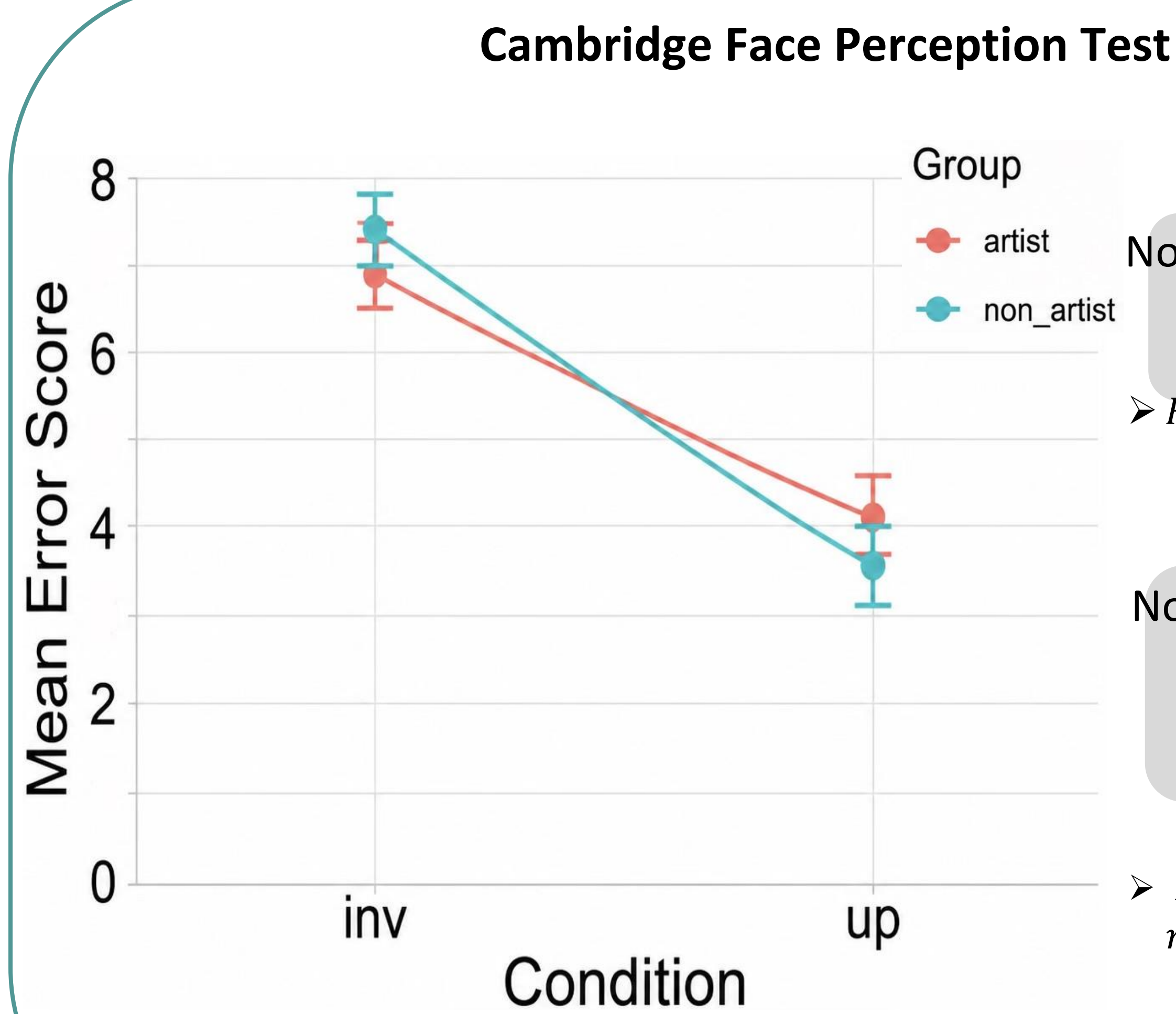


Tasks & Stimuli

- Cambridge Face Perception Test (CFPT): upright and inverted faces
- Part-Whole Test: isolated features vs. complete faces
- Face stimuli sourced from the CFPT and KDEF database



3. Results



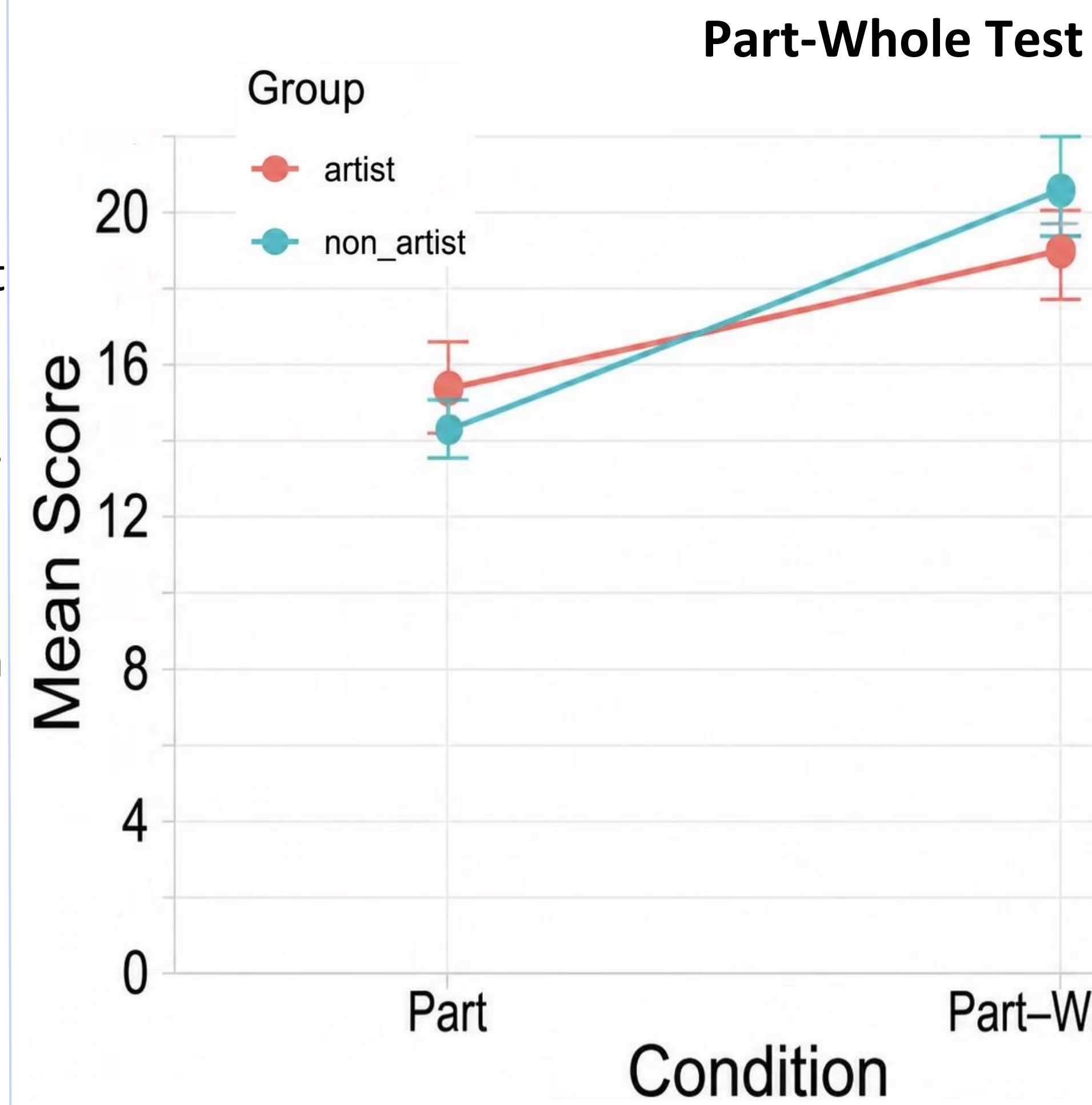
No significant main effect of artistic expertise.

➤ $F(1,26) = 0.055, p = .817, \eta_p^2 = .002$

No significant interaction between artistic expertise and face orientation.

➤ $F(1,26) = 1.24, p = .275, \eta_p^2 = .05$

Replication of well-established face perception effects (Part-Whole-Effect, Inversion-Effect) → confirmation of the validity of the applied paradigms



No significant main effect of artistic expertise.

➤ $F(1,26) = 0.064, p = .803, \eta_p^2 = .002$

No significant interaction between artistic expertise and condition.

➤ $F(1,26) = 2.30, p = .142, \eta_p^2 = .08$

4. Discussion

Main findings

- No evidence that portrait artists outperform non-artists in face perception tasks
- Part-Whole-Effect and Inversion-Effect were successfully replicated

Limitations

- Small sample size → limited statistical power (risk of Type II error)
- Self-report & self-defined criteria for artists → potentially high within-group heterogeneity in drawing styles and skill levels
- Uncontrolled visual expertise in control group (e.g. photography, gaming) may have reduced group differences
- Short exposure duration in the Part-Whole-Test may have favored rapid automated holistic processing

Future directions

- ✓ Larger, higher-powered samples
- ✓ Objective measures of artistic expertise
- ✓ Better screening of control participants for visual expertise
- ✓ Longitudinal drawing interventions to investigate causal effects

