

Art opening minds: An experimental study of film complexity on openmindedness





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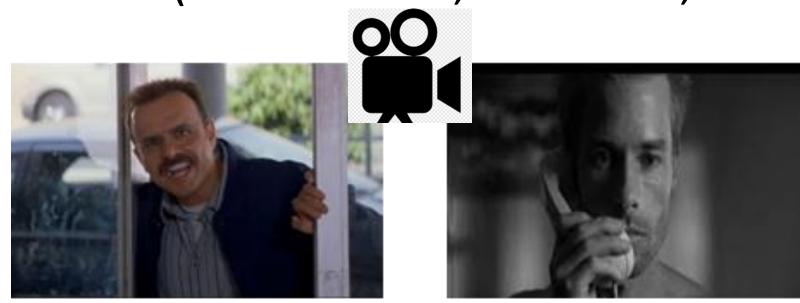


Introduction

- Aesthetic Cognitivism posits that artworks are valuable sources of understanding, for example, by "opening our minds" (Goodman, 1978; Smith, 2017).
- Empirical studies have largely focused on social-cognitive outcomes resulting from reading literature as a medium of art (e.g., Wimmer et al., 2021). These studies have produced mixed results.
- Works of art are typically seen as better when they entail higher formal complexity/defamiliarization rendering the familiar as strange or presenting remote perspectives (Shklovsky, 1917).
- The present study tested the claims of aesthetic cognitivism via film.
- **HYPOTHESIS:** Watching a film (Memento) that is high in complexity/defamiliarization (primed via a non-chronological narrative) increases characteristics of open-mindedness (*versus* a low complexity/chronological film and a no film control).

Methods

• Participants: N = 150 young adult participants, 50 in each of three conditions (79% women, 17% men, 4% other genders):





1: Non-Chronological

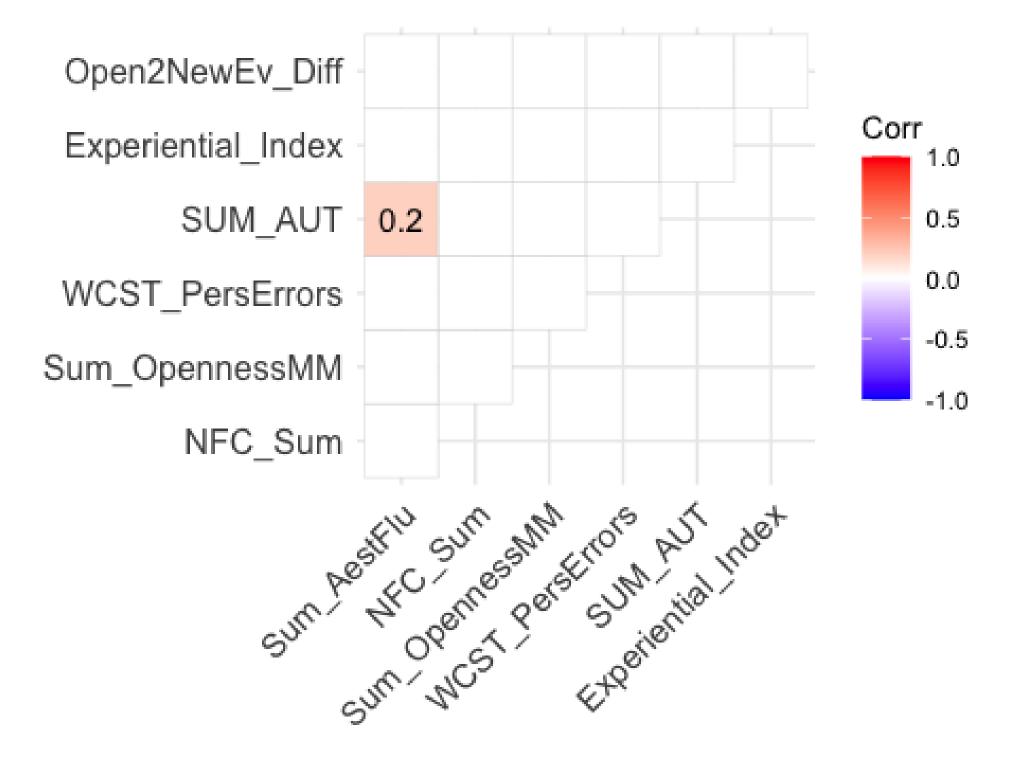
2: Chronological

3: No film control

- Outcome variables: Cognitive measures of open-mindedness:
- 1) Cognitive flexibility Wisconsin Card Sorting Task (Miyake et al., 2000);
- 2) Imaginability scene construction task (Hassabis et al., 2007);
- 3) Creativity Alternative Uses Test, creative uses for common objects (Guildford, 1967; revised George & Wiley, 2019);
- 4) Openness to new evidence interview paradigm (Galinsky & Moskowitz, 2000);
- 4) Self-transcendence rating scales adapted from Nour et al. (2016) to suit film outcomes, measures liberation from egocentricity and absorption with the film characters and story.
- Predictor variables were accounted for: trait open-mindedness, film expertise, and need for cognitive closure (Thompson, 2008; Silvia & Berg, 2011; Roets & Van Hiel, 2011).
- Participants' judgements of interest in the film and artistic merit of the film were also recorded.

Results

Correlations between open-mindedness measures



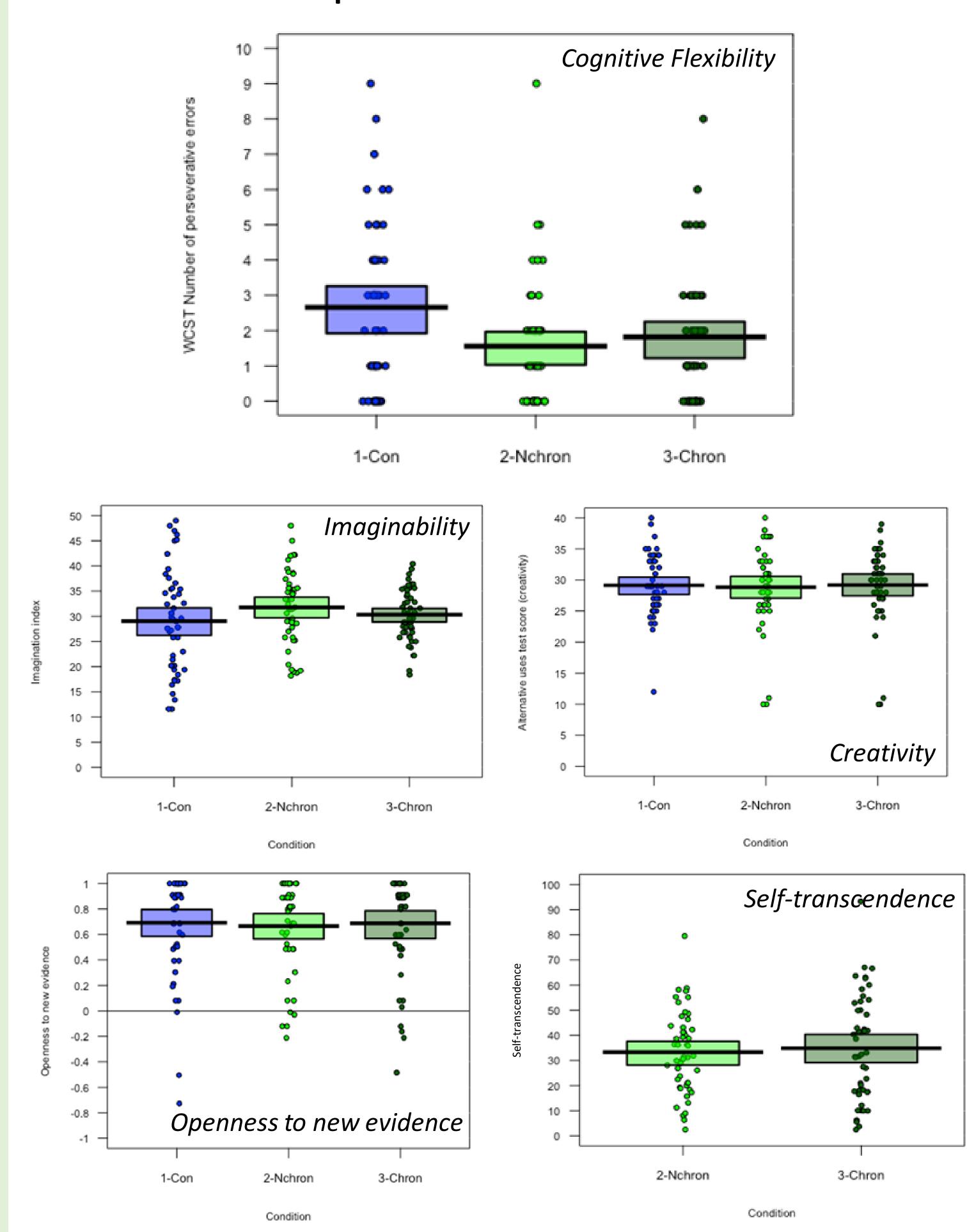
- The only measure that correlated with film expertise (i.e. aesthetic fluency) is AUT; people with greater film expertise were also more creative.
- No significant correlations between open-mindedness measures.

Results

Predictor and Film measures

- No difference between three conditions on trait openmindedness, film expertise, or need for cognitive closure;
- No difference between film types on ratings of interest;
- The non-chronological film was rated as more artistic than chronological (t(98) = 3.04, p = .003)

Condition effects on open-mindedness measures



- Significant effect of film type on cognitive flexibility (WCST) performance (Est = .97, SE = .34, p = .005), no film > film;
- No other significant between-group differences were found, either between film *vs.* no film or non-chronological *vs.* chronological, on other measures of open-mindedness

Discussion

- The lack of significant correlations *between* open-mindedness measures suggests that they are either unreliable measures or are capturing distinct aspects of open-mindedness.
- Limited evidence was found to support aesthetic cognitivism predictions on the ability of art (film) to "open our minds".
- The lack of significant effect on most open-mindedness measures may be due to features of the film used in the study (e.g., the lead character displays close-mindedness) or may call into question the effect of defamiliarization on open-mindedness.
- Future research could expand the present study using alternative films that prime defamiliarization and employ other cognitive measures of open-mindedness to determine if there is a formal complexity effect.

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