Art opening minds: An experimental study of film complexity on open-mindedness
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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 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 (Hassabas et al.,2007);
  3) Creativity - Alternative Uses Test, creative uses for common objects (Guildford, 1967; revised George & Willy, 2019);
  4) Openness to new evidence - interview paradigm (Galinsky & Moskowitz, 2000);

• 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

Predictor and Film measures

• No difference between three conditions on trait open-mindedness, 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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