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## Introduction

### Background

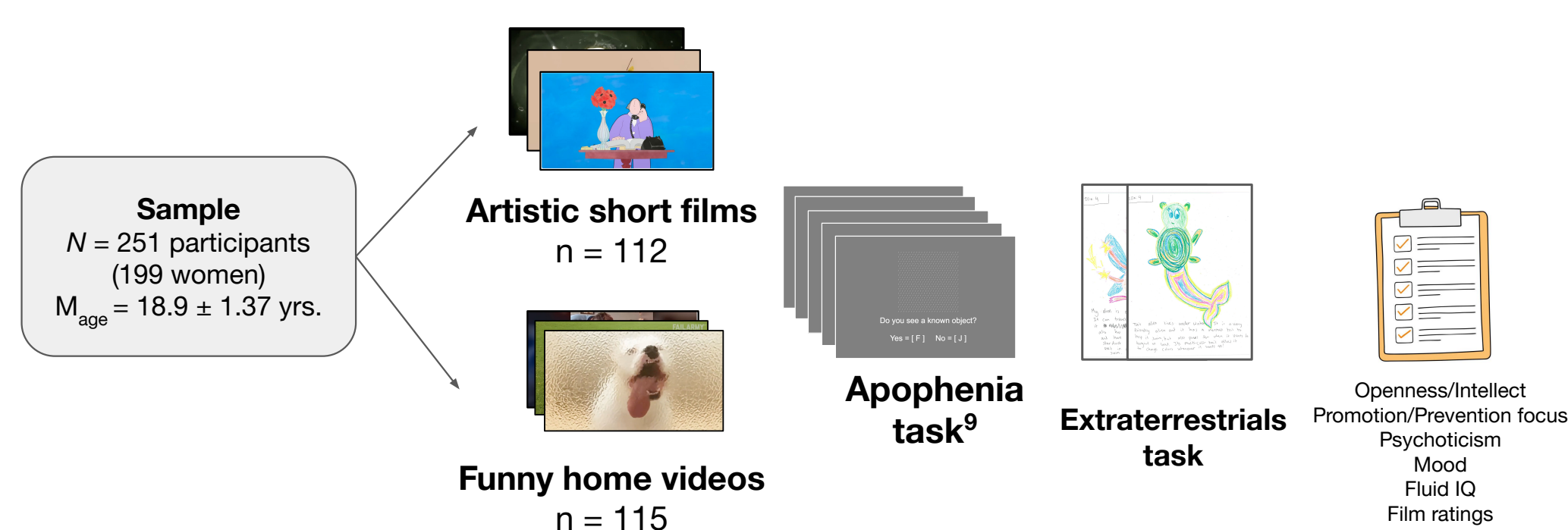
- Apophenia is the tendency to perceive meaning in ambiguity, like seeing a face in the clouds<sup>1</sup>, and is an outcome of the trait positive schizotypy
- Apophenia correlates positively with divergent thinking<sup>2-4</sup>, but it is not known if priming apophenia enhances divergent thinking
- One potential method to prime apophenia is with experimental art films, which promote feelings of meaning<sup>5</sup> and overinclusive thinking<sup>6</sup> (constructs related to apophenia)
- Coupling between schizotypal experiences and self-rated creativity is stronger for people who exhibit a promotion focus style of motivation<sup>7,8</sup>, suggesting an apophenia induction may interact with a promotion focus to further enhance divergent thinking

### Pre-registered Hypotheses

1. Viewing art films (vs. funny control videos) will increase divergent thinking, and this effect will be mediated by changes in apophenia.
2. The effect of art films on divergent thinking will increase at high levels of promotion focus

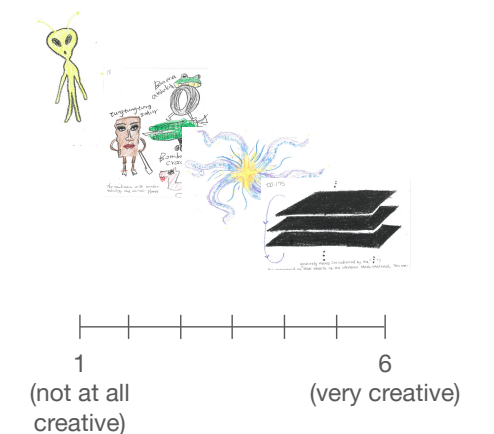
## Method

### Experimental Procedure



### Assessing divergent thinking

- 504 alien drawings scored by 3 raters for creative originality (1-6 scale)
- Intraclass correlation (ICC) of 0.81 was achieved, indicating good inter-rater reliability
- Scores averaged across raters then across drawings to obtain participant-wise originality



### Data Analysis

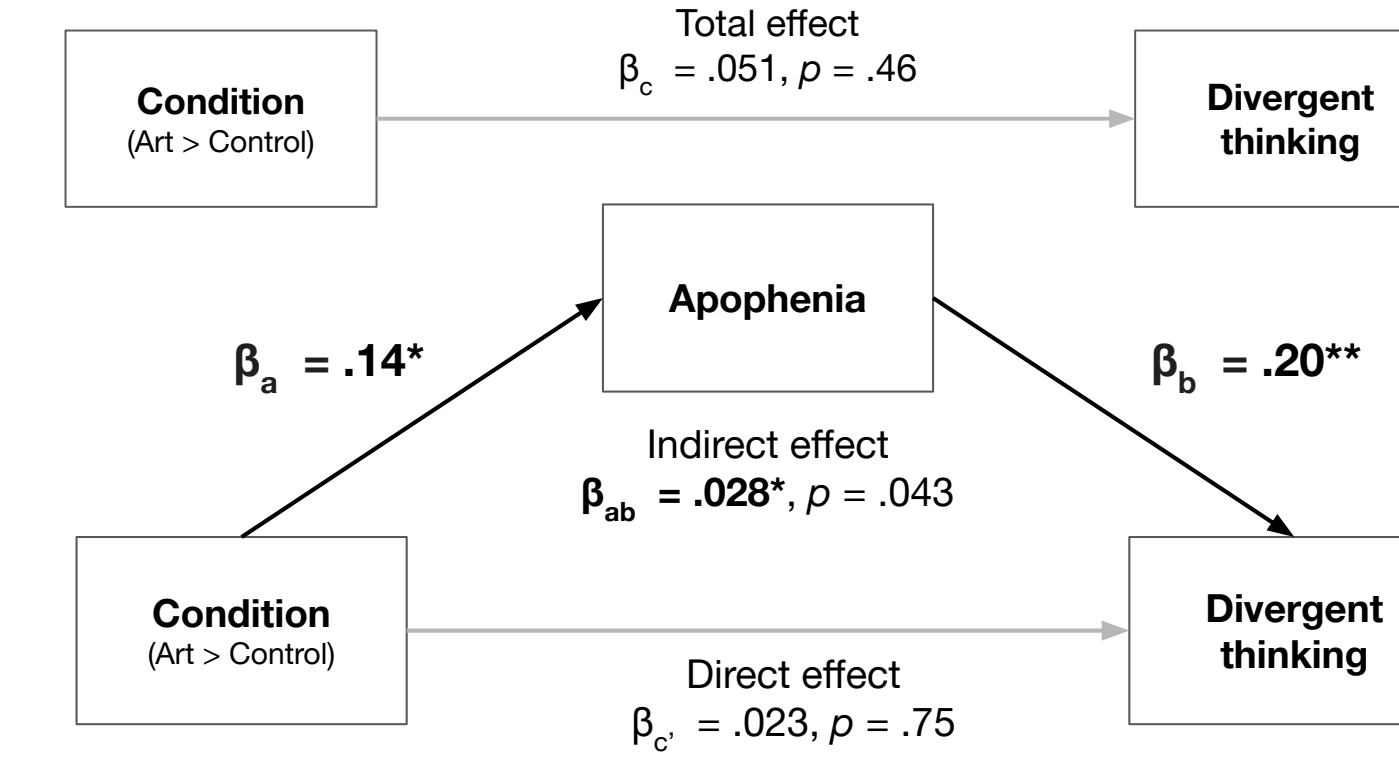
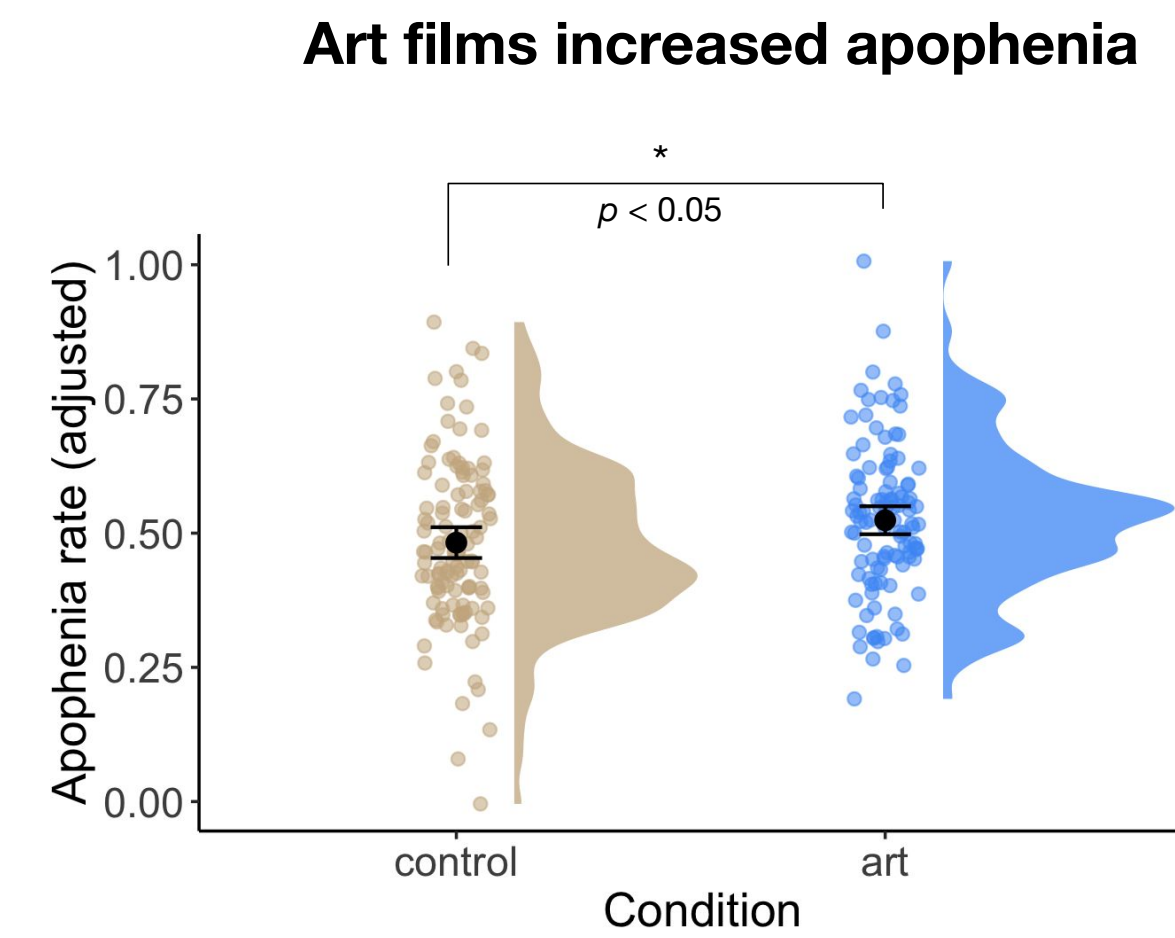
- 24 participants excluded for failing covert (n = 18) or overt (n = 4) compliance checks, or for low response rates on the apophenia task (n = 2)
- Multiple regression models with covariates: fluid IQ, sex, and positive-activating mood
- Mediation analysis: Used `lavaan` and `semboottools` R packages to estimate standardized indirect effect, bootstrapped 95% CI (5000 resamples), and *p*-value

### References

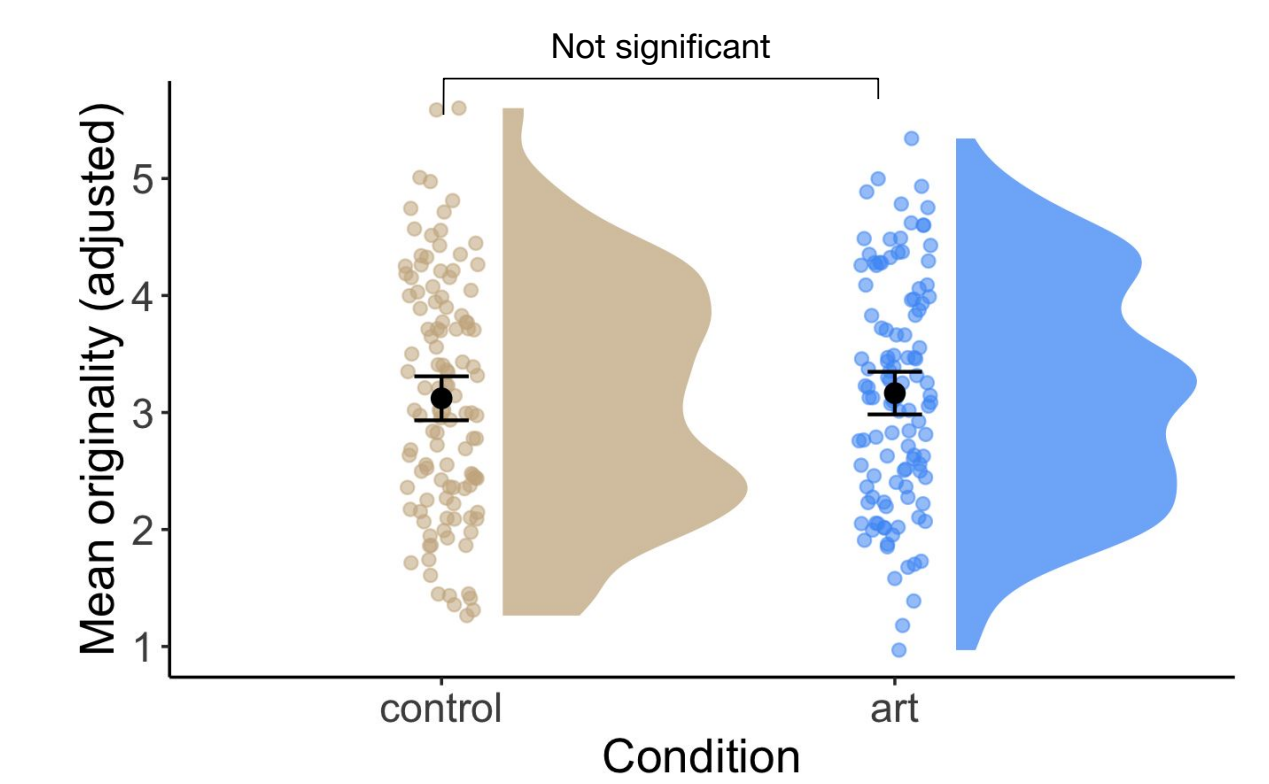
1. Blain et al., (2020), *Journal of Abnormal Psychology*.
2. Diana et al. (2021), *Psychology of Aesthetics, Creativity, and the Arts*.
3. Bellemare-Pepin et al. (2022), *Science*.
4. Koutstaal (2024), *Psychology of Aesthetics, Creativity, and the Arts*.
5. Gross et al., (2022), *Creativity Research Journal*
6. Gross and Schooler (2026), *Psychology of Aesthetics, Creativity, and the Arts*.
7. Wang et al. (2024), *Psychology Research and Behavior Management*.
8. Ortega et al. (2026, April 25), *California Well-being Conference (CaWBC)*.
9. Olman et al. (2019), *PLOS ONE*.

## Results

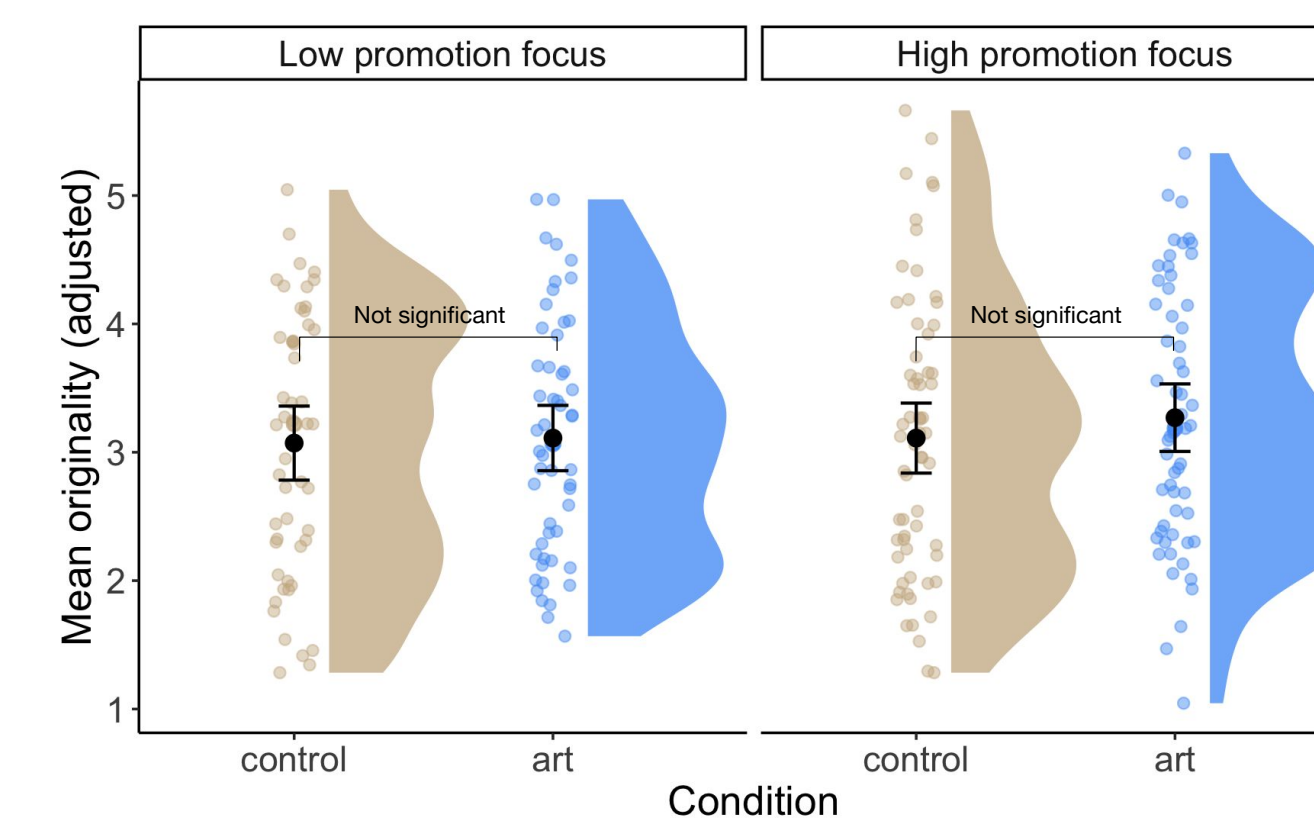
### Art films indirectly support divergent thinking by increasing apophenia



### Art films failed to directly enhance divergent thinking



### Promotion focus did not moderate the (null) impact of art

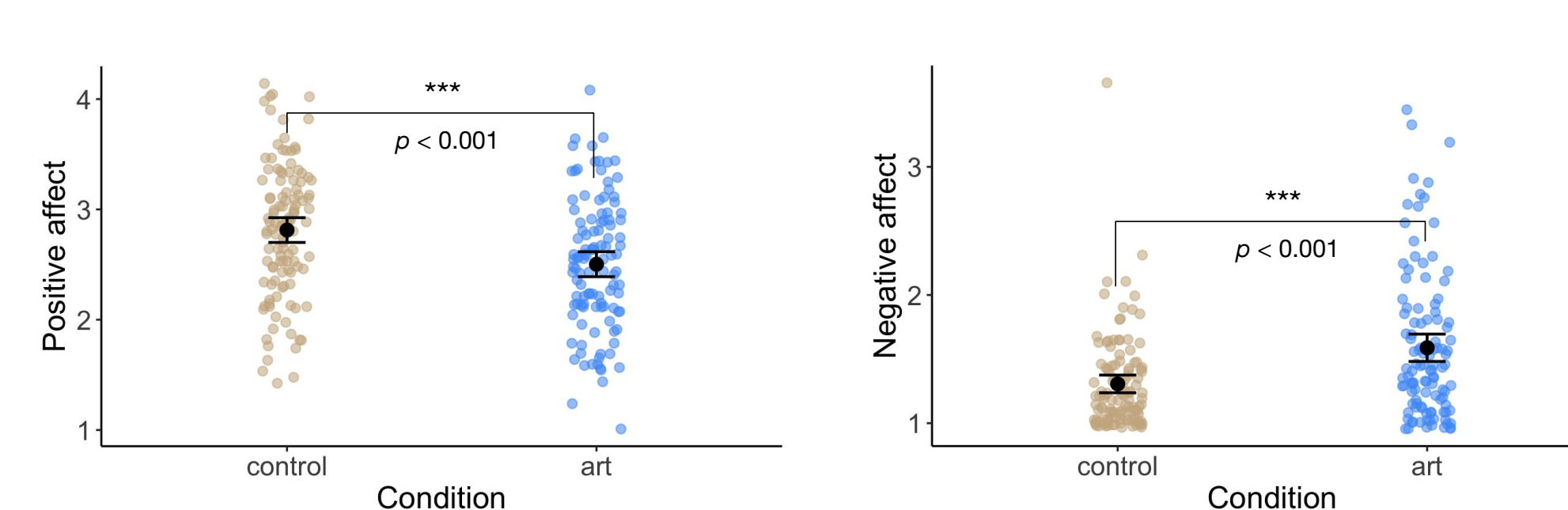


	$\beta$	Estimate	SE	t	p
Intercept		2.35	1.03	2.29	.023*
Condition <sup>a</sup>	-.30	-0.61	1.41	-0.43	.665
Promotion focus	.05	0.16	0.34	0.48	.631
Condition x Promotion focus	.36	0.24	0.47	0.51	.610
Intelligence	.07	0.03	0.03	1.09	.275
Positive and activating mood	.04	0.05	0.09	0.51	.613
Sex <sup>b</sup>	-.01	-0.02	0.18	-0.13	.900

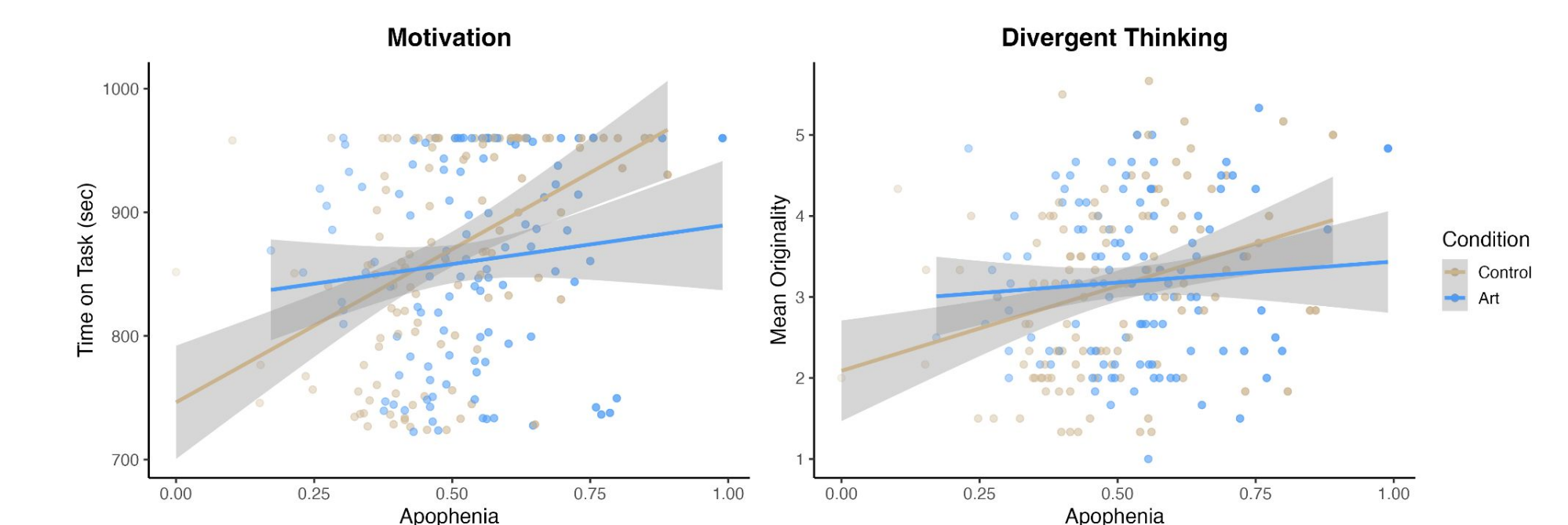
Note. *N* = 227. \**p* < .05. \*\**p* < .01. \*\*\**p* < .001.  
<sup>a</sup>Control = 0, Art = 1.  
<sup>b</sup>Male = 0, Female = 1.

### Exploratory findings

#### Art films are less enjoyable than funny home videos



#### Art disrupts apophenia's correlation with motivation and divergent thinking



## Summary

- Experimental art films lower our threshold for seeing meaning in ambiguity
- Art did not directly boost creativity, but it boosted a process linked with creativity
- The art films were emotionally distressing which may have neutralized the benefits of apophenia
- Apophenia might help creativity by raising motivation, but further investigation is needed
- Trait regulatory focus did not modulate the impact of art

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