



# Spreading our stories: Others' personal narratives change our own

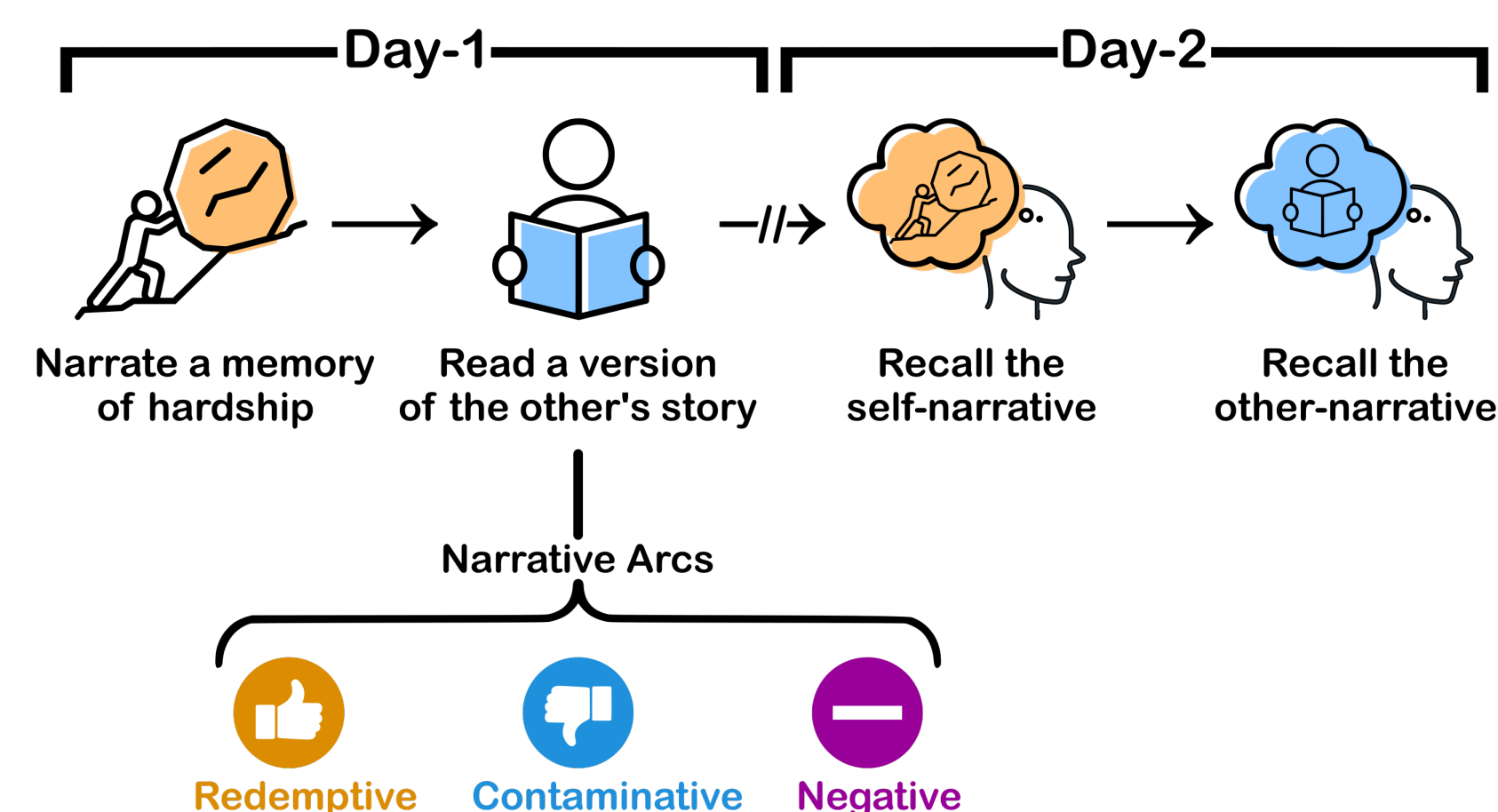
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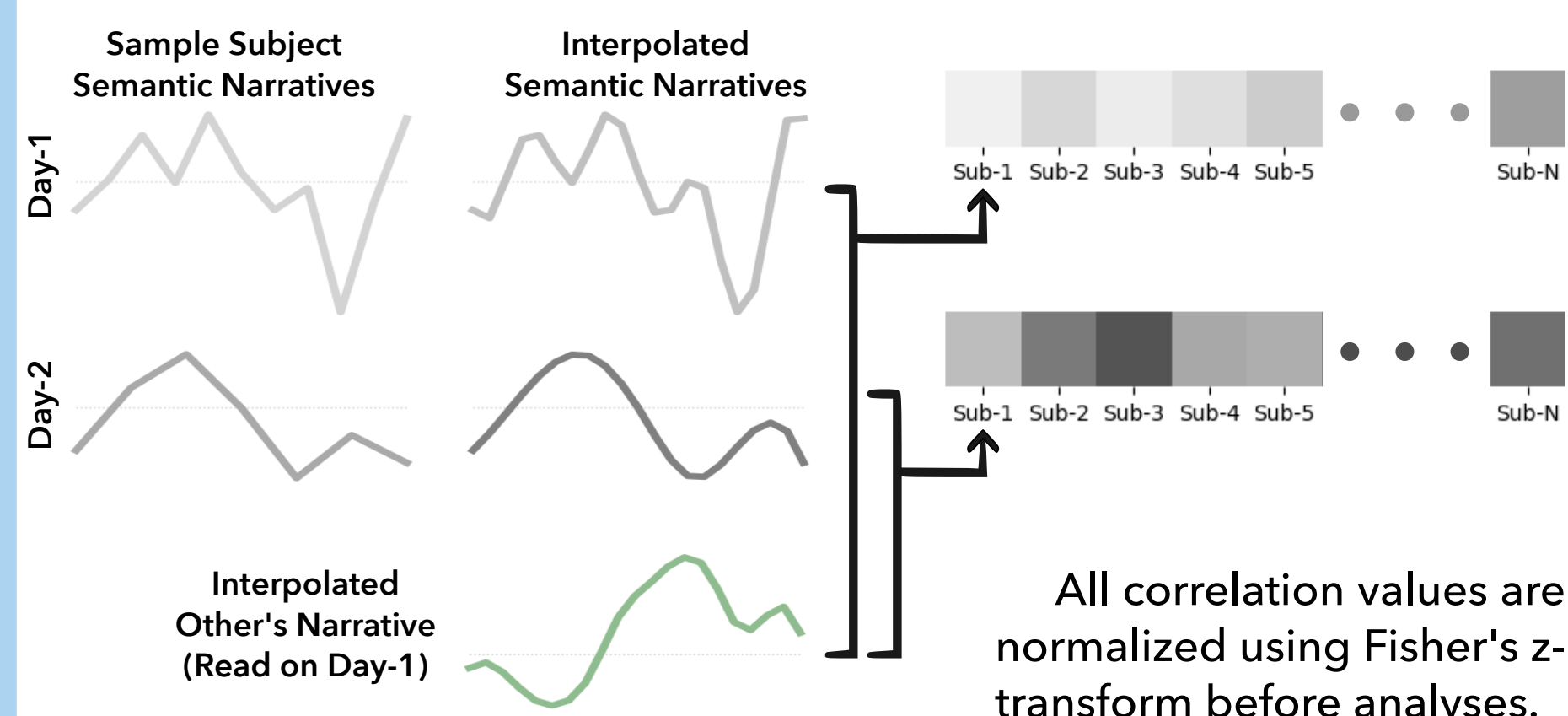
## Introduction

Stories are a prominent form of human expression. How stories are shared or received include perceptions of the communicator<sup>1</sup>, listener<sup>2</sup>, and the story itself<sup>3,4</sup>. Here, we find that encoding others' stories changes how we communicate our own<sup>5</sup>. Furthermore, different structures of others' narrative interact with the affect of our own personal stories, exhibiting changes across the emotional tones and arcs differently in how the personal narrative begins, is expressed in the middle, and ends.

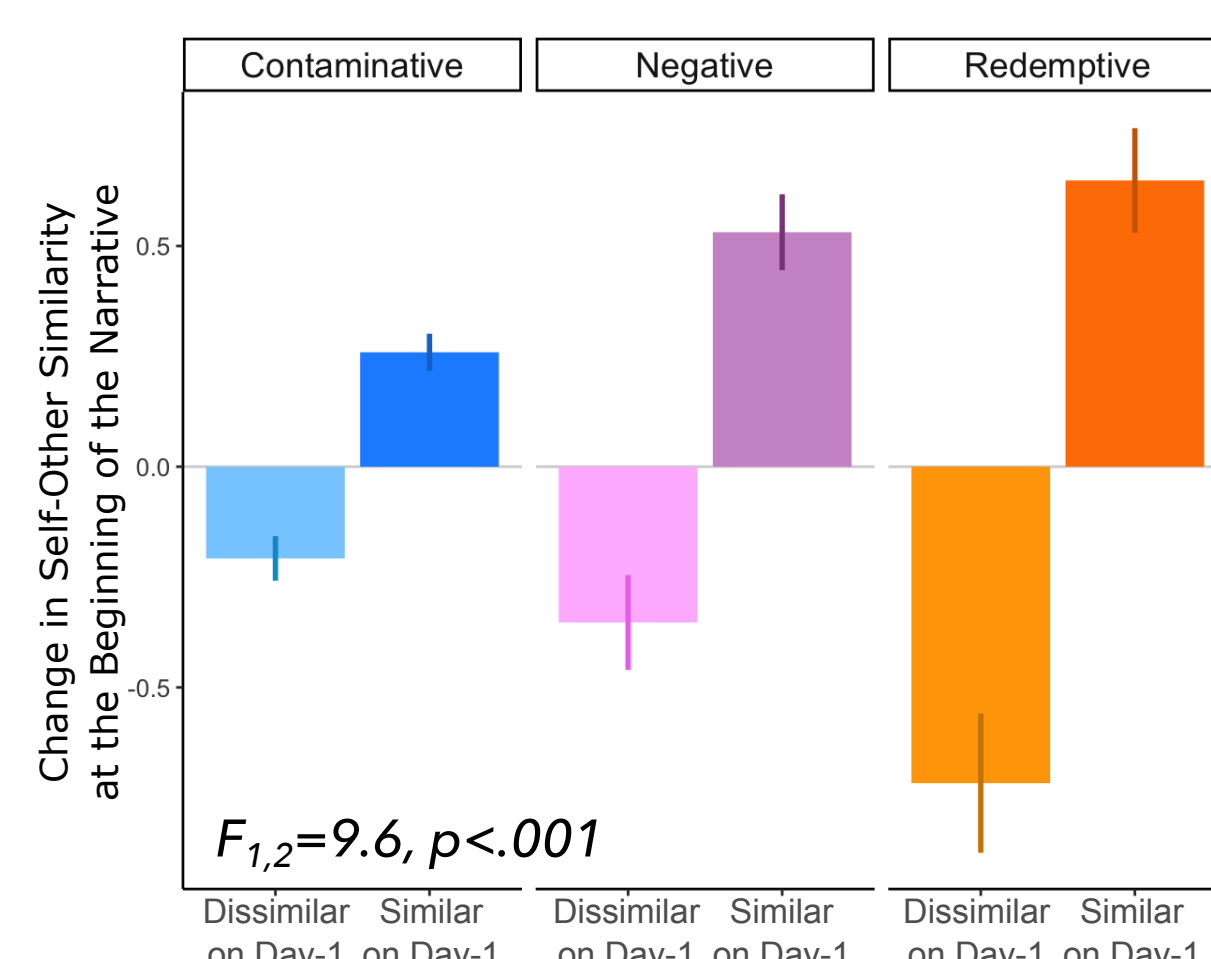
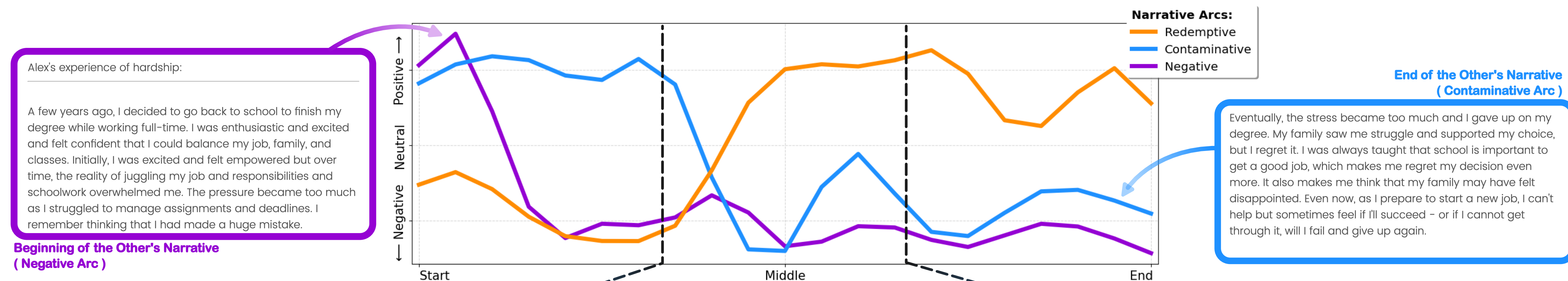
## Methods



We used NLTK to extract sentence-wise semantics from the participants' narratives and obtained the Spearman correlation of these pairs of semantic vectors with the Other's story.

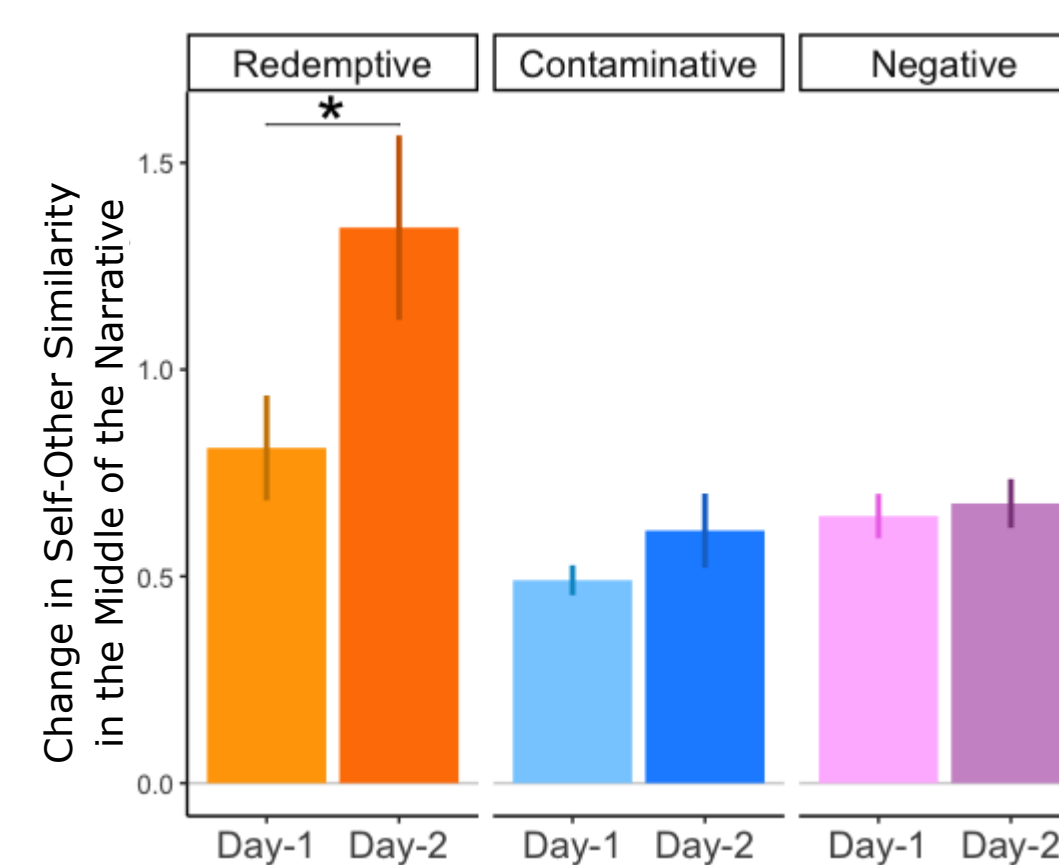


## Results



The beginning of the story showed greater variance in change for more negative tones (Redem>Neg>Contam), such that similar self-narratives became even more similar and dissimilarity also increased ( $F_{1,2}=9.6, p<.001$ ).

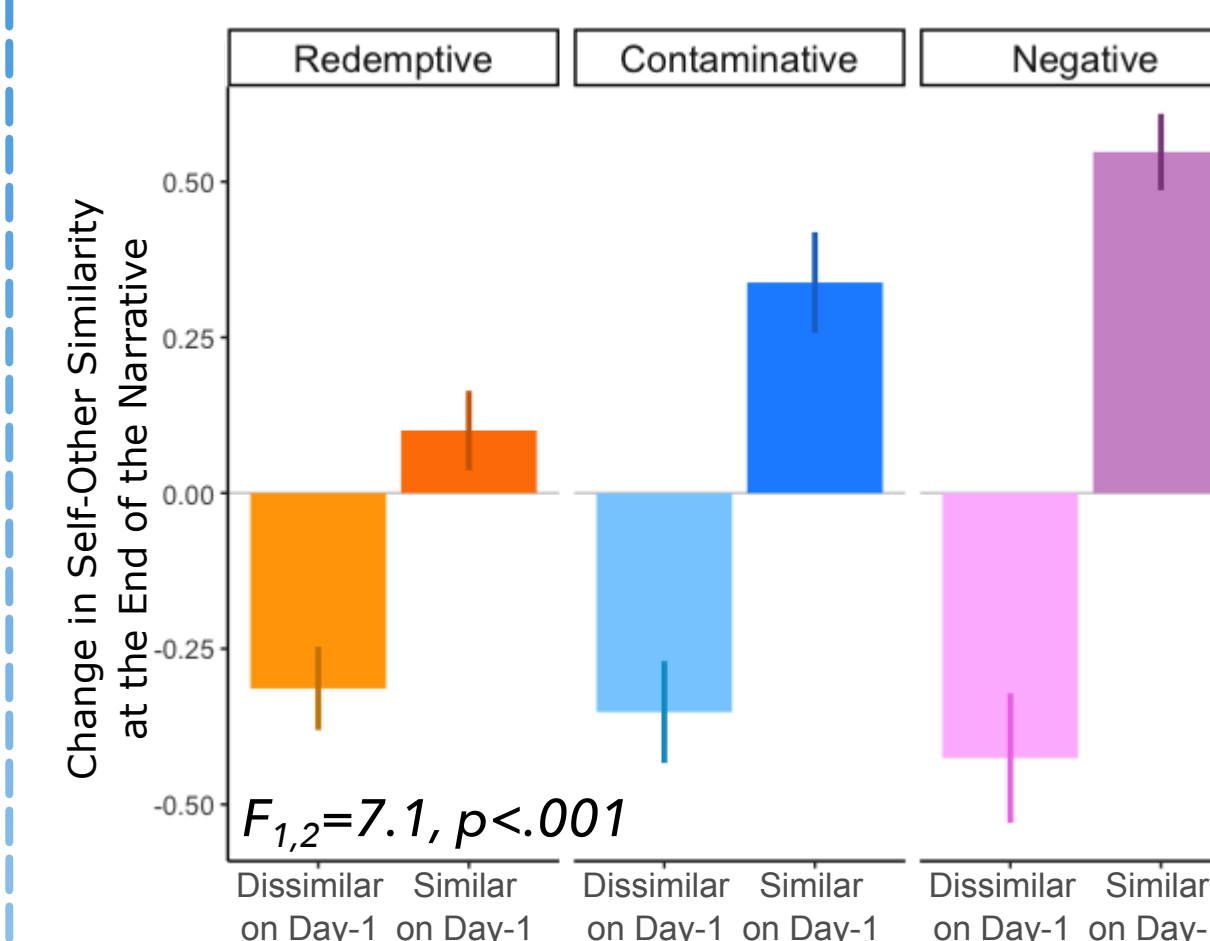
On average, all participants change the middle of the story to be similar to the other's narrative ( $\beta_{ME}=.22, CI_{95\%}=[.097 - .342]$ ).



This effect is driven by the participants shown Redemptive version of the story ( $\beta_{ME}=.076, CI_{95\%}=[.013 - .139]$ ).

Significant effects were not found for other groups.

Participants' own narratives became more similar to the Other's endings ( $F_{1,2}=3.9, p=.027$ ) on Day-2.



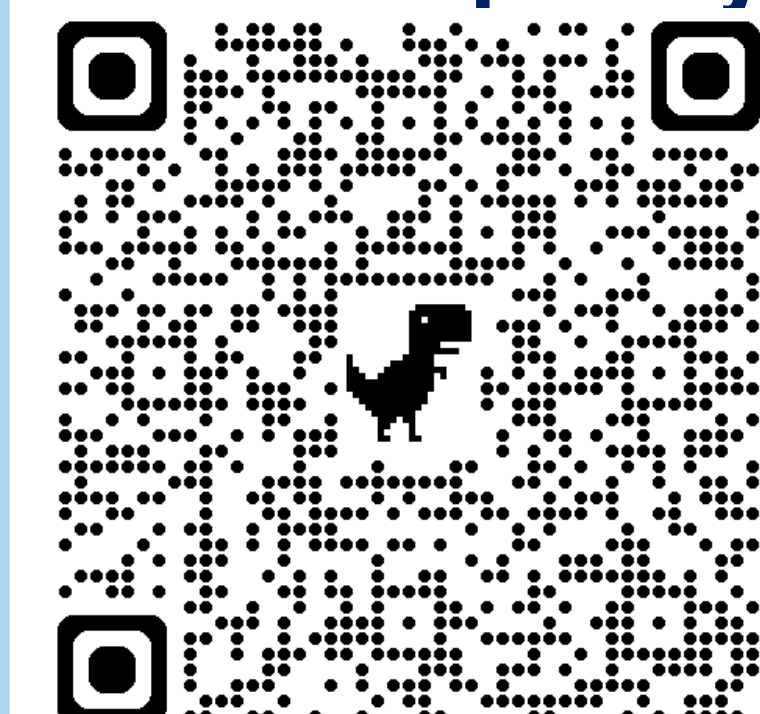
This effect was exaggerated by the negativity of other's narrated endings ( $F_{1,2}=7.1, p=.0008$ ).

## References

- <sup>1</sup> Zadbood et al., 2022 (eLife); DOI:10.7554/eLife.79045
- <sup>2</sup> Meyer, Zhao, & Tamir, 2019 (Journal of Experimental Psychology) DOI:10.1037/xge0000565
- <sup>3</sup> McAdams & Jones, 2017 (Academic Press) DOI:10.1016/B978-0-12-803015-8.00001-2
- <sup>4</sup> Speer, et al., 2021 (Nature Communications) DOI: 10.1038/s41467-021-26906-4
- <sup>5</sup> Fivush, Habermas, & Reese, 2019 (Qualitative Psychology) DOI: 10.1037/qap0000150

## Relevant Information

### Materials repository



We have made a *Project GitHub repository* (left) containing our materials, designs and the current version of the *conference poster* (right).

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### Electronic Poster:

