Spreading our stories: Others' personal narratives change our own
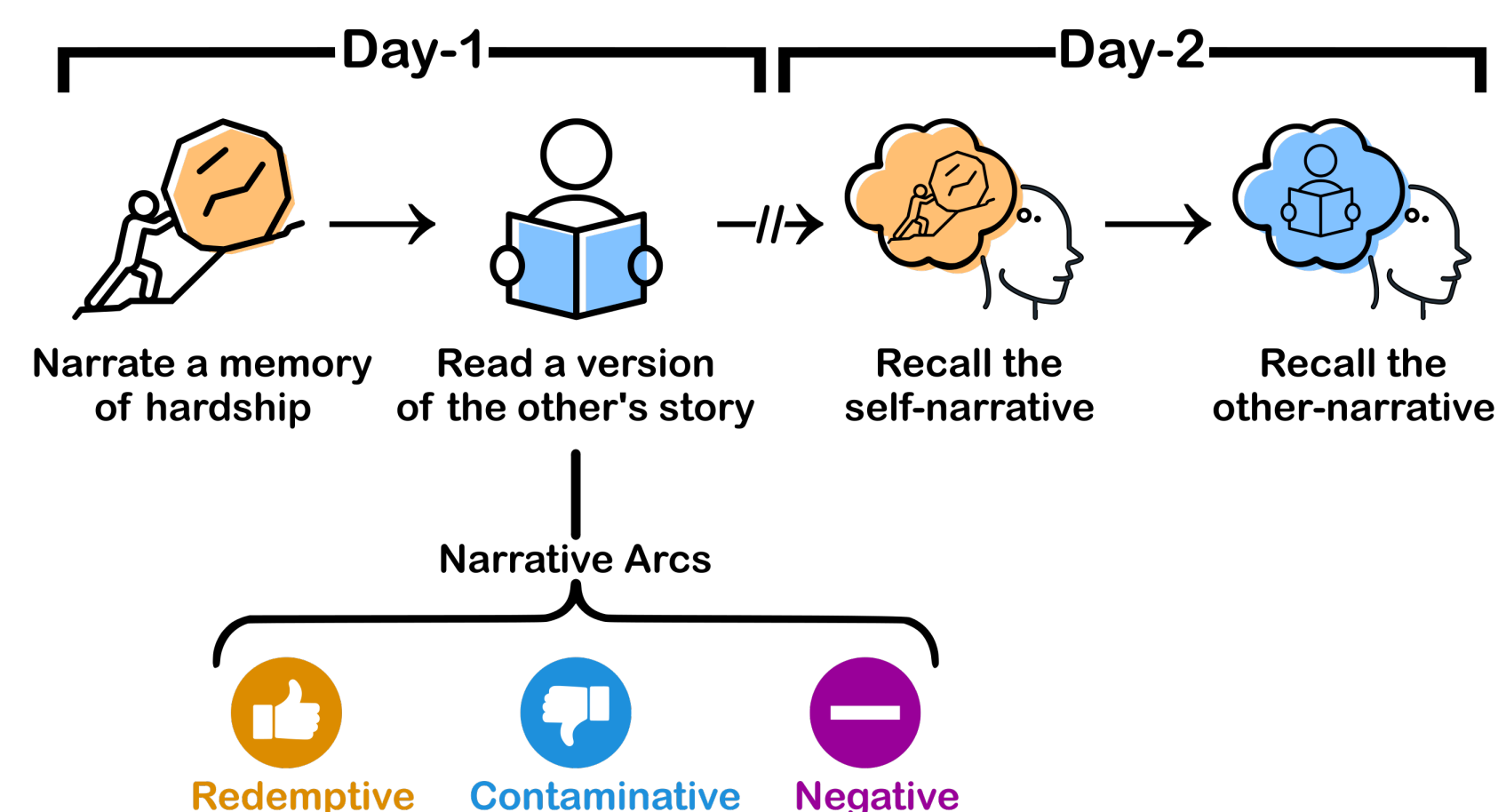
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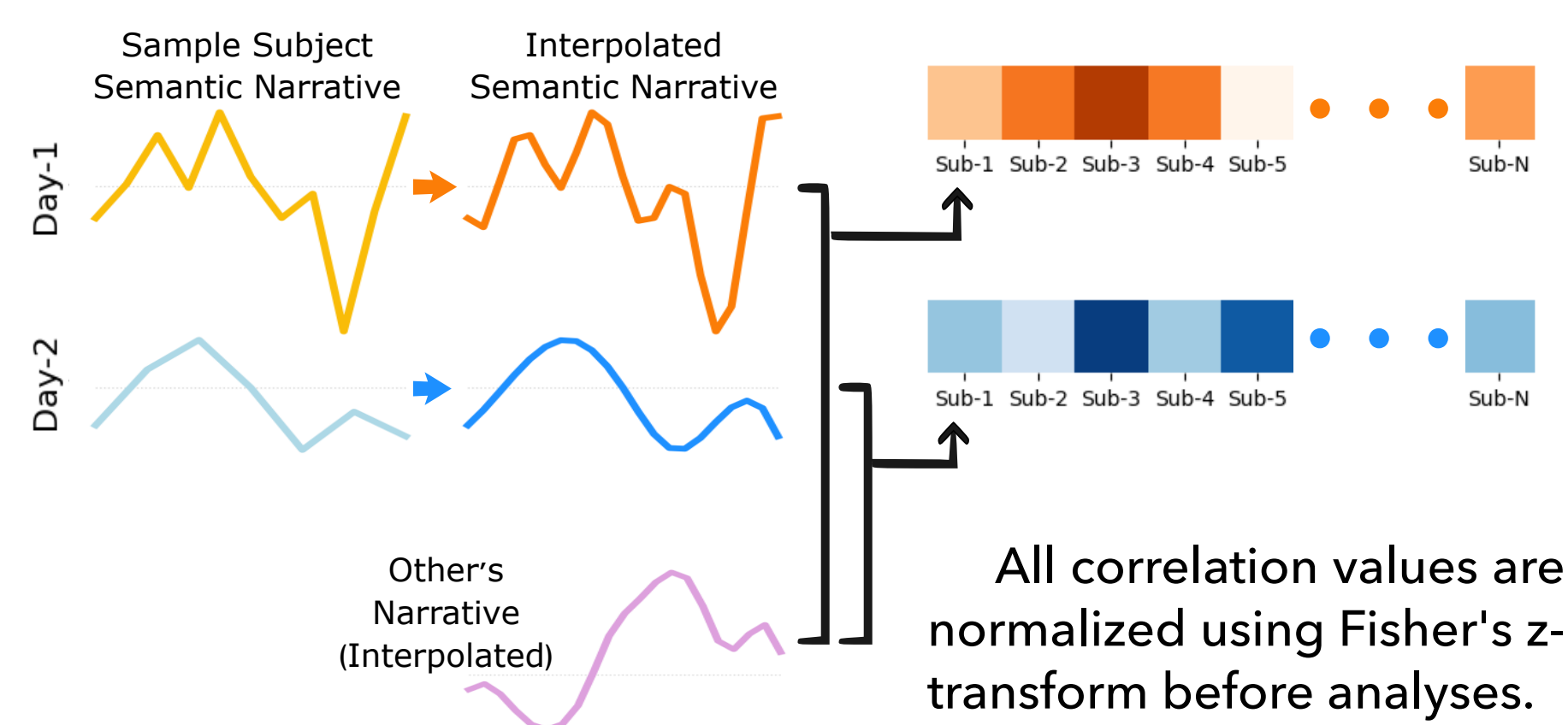[1] Department of Psychology, Columbia University

Introduction

Stories are a prominent form of human expression. How stories are shared and received includes perceptions of the communicator, listener, and the story itself. We propose that encoding others' stories changes how we communicate our own. Moreover, the interplay between the traits and the initial structure of our narratives may exhibit changes in our personal narratives; e.g. emotional tones or arc.

Methods

Day-1 — Narrate a memory of hardship → Read a version of the other's story

Day-2 — Recall the self-narrative → Recall the other-narrative

Narrative Arcs

Redemptive   Contaminative   Negative

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.

Sample Subject Semantic Narrative → Interpolated Semantic Narrative

Day-1
Day-2
Other's Narrative (Interpolated)

Sub-1 Sub-2 Sub-3 Sub-4 Sub-5 ... Sub-N

All correlation values are normalized using Fisher's z-transform before analyses.

Results

We find that different parts of the narration have different effects on the participants' recalled narratives:
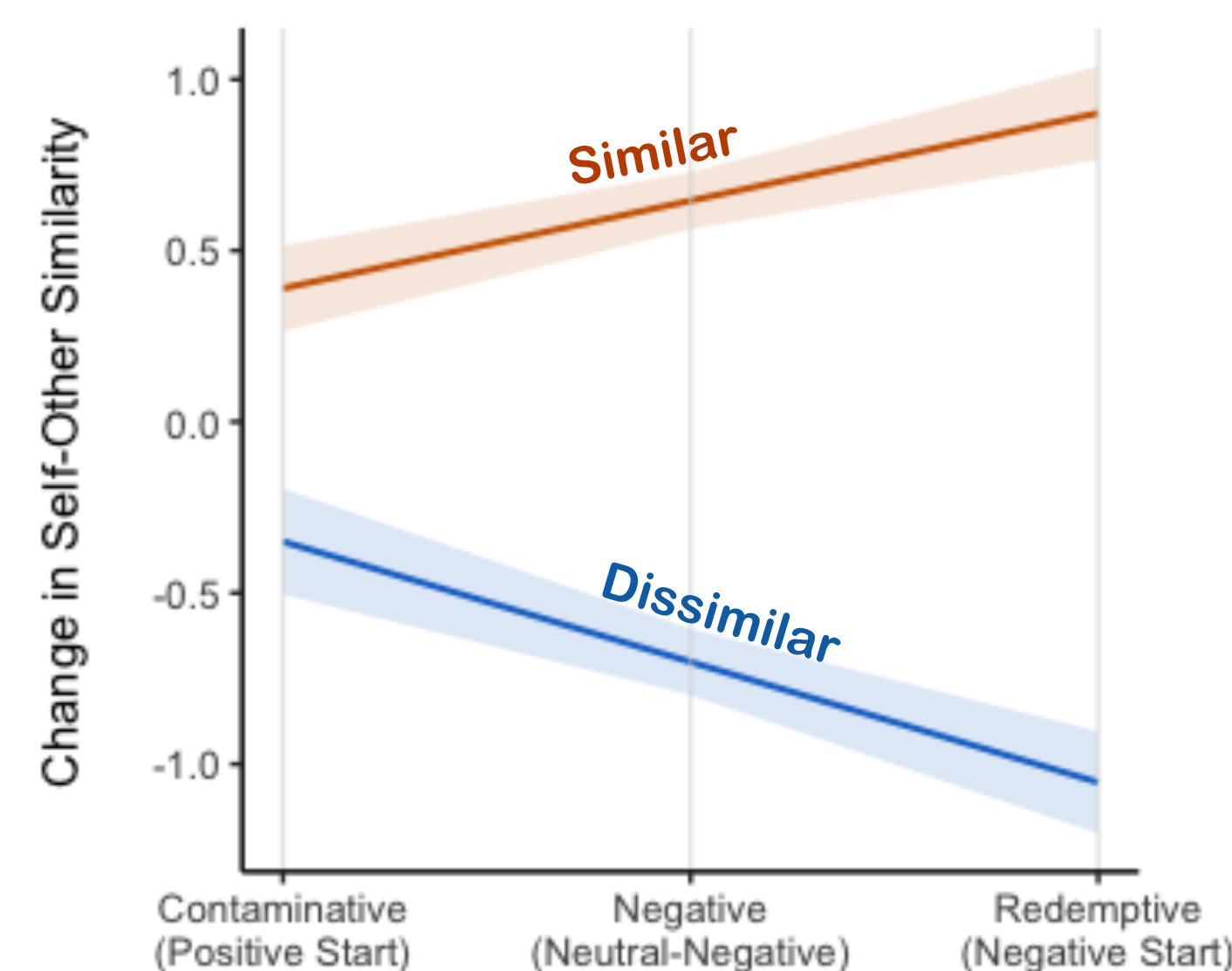
The beginning of the story showed greater variance in change for more negative tones, such that similar self-narratives became even more similar and dissimilar ones got more different ($F_{1,2}=29.7$, $p<.001$).

Narrative endings for self-recalled events were exaggerated based on the similarity in emotional tones with the other's narrative ending ($F_{1,2}=11.3$, $p<0.001$).
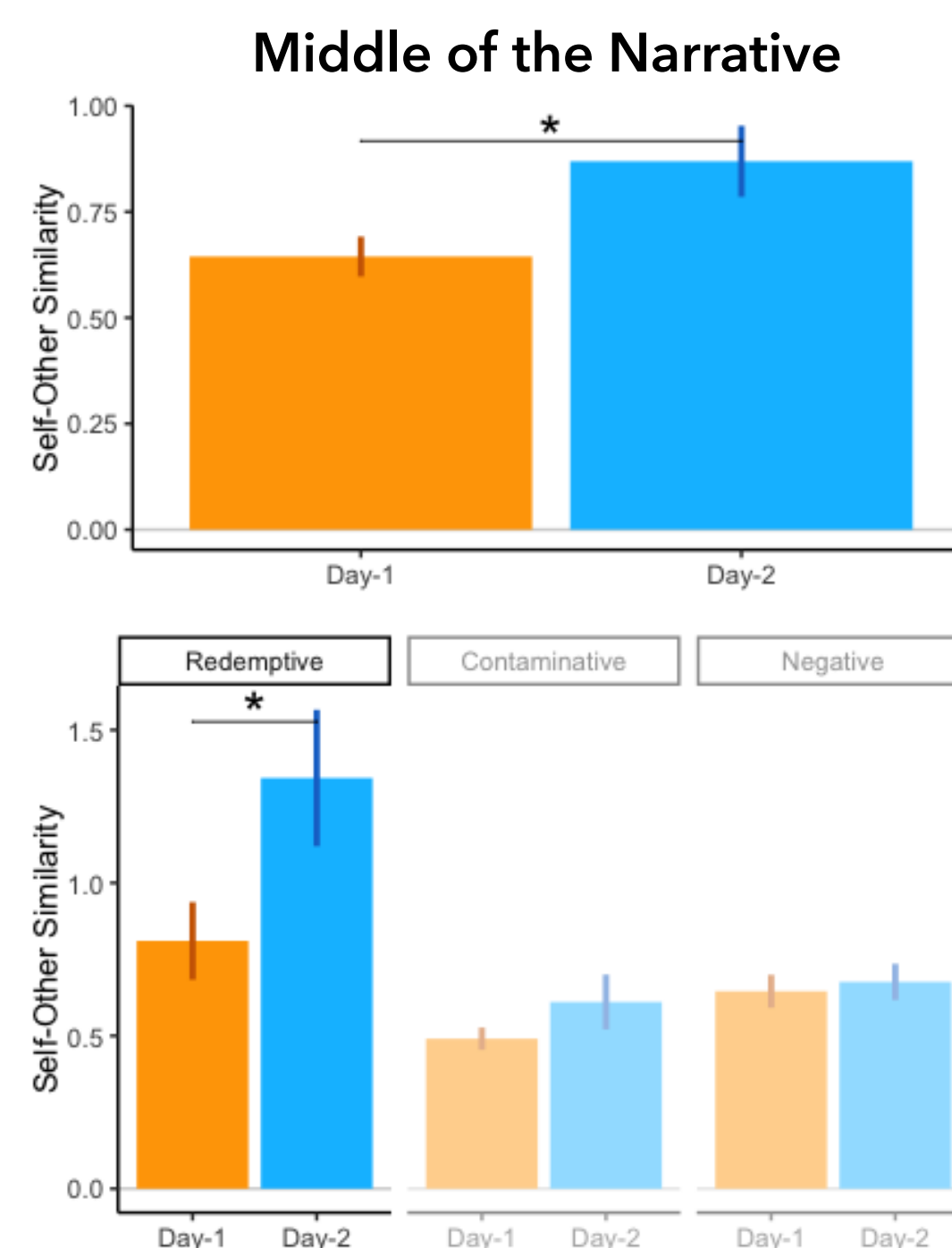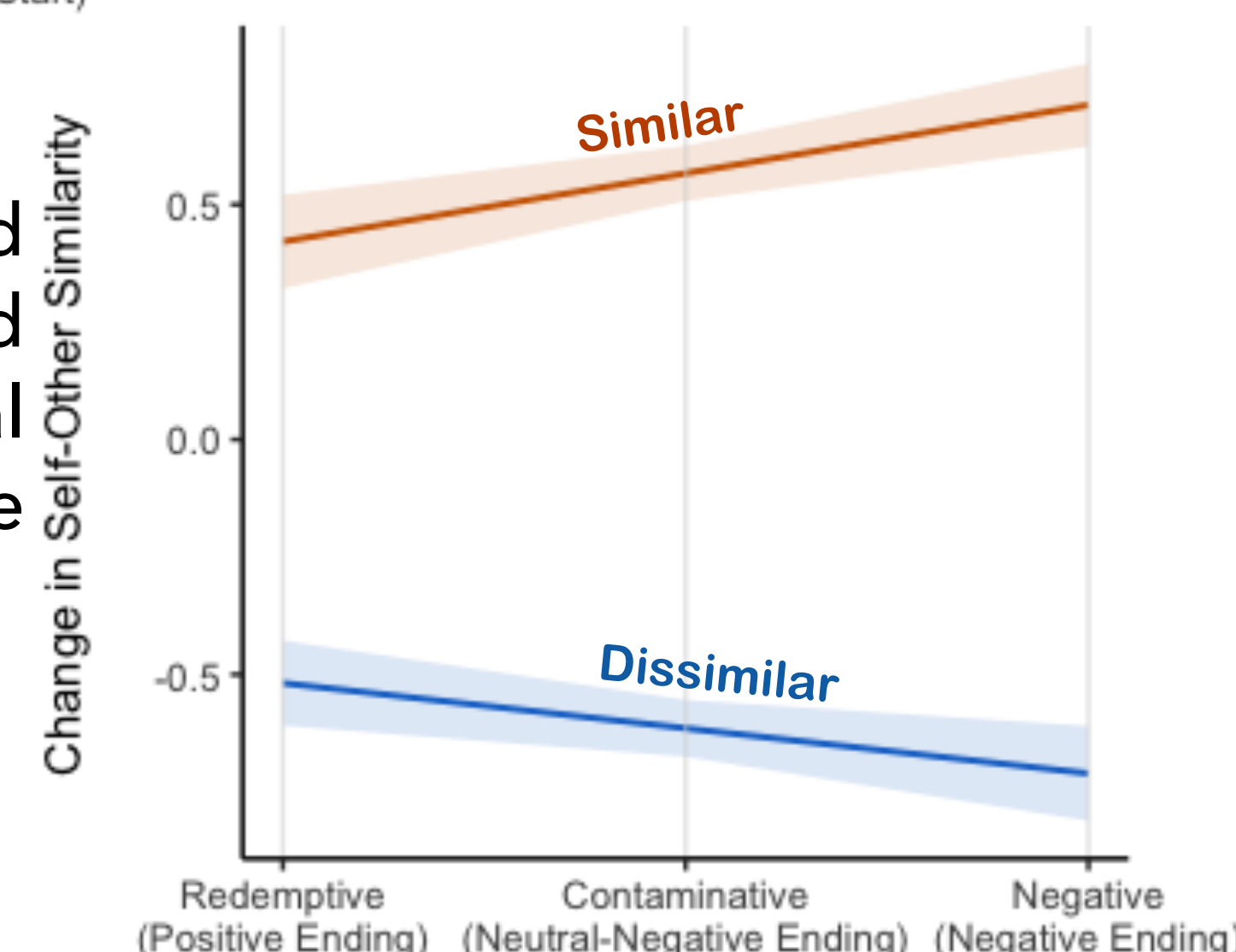
On average, all participants change the middle of the story to be similar to the other's narrative ($\beta_{ME}=.114$, $CI_{95\%}=[.026–.202]$).

This effect is driven by the participants shown Redemptive story ($\beta_{ME}=.076$, $CI_{95\%}=[.013–.139]$). Significant effects were not found in other groups

Summary

▸ On average, individuals tend to change the structure of their narrative if they are exposed to affectively arousing tones within a story.

▸ Negative beginnings and endings tend to show greater change than more positive beginnings or ends

▸ Such changes follow the extent of similarity, or a difference, exaggerating the similarity or difference of the self-narrative from the other's story.

▸ During transitions (middle), participants tend to make their own narratives more similar to the other, regardless of the dissimilarity.

▸ Redemptive stories may be more 'sticky' because of the negative-to-positive transitions: participants show greater shift in Redemptive condition than for other narrative arcs.

References