The role of episodic detail in altruistic intentions

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Background

- Recent work has shown that imagining oneself helping a person in need increases one’s reported willingness to help that person compared to thinking conceptually of ways to help.
- Participants’ ratings of willingness to help correlate with their own ratings of detail in their imagined events, but it is not clear whether detail plays a causal role here, nor whether imagining another person helping would produce the same effect.
- Detail and self-referential processing may be acting together to create a more durable memory of the imagined event, one that is more easily retrieved and thus more likely to influence one’s decision about whether or not to help someone.
- Individuals who have had the hippocampus on one side of the brain removed as part of surgery for epilepsy (anterior temporal lobectomy; ATL) have very sparsely detailed memories, and research in other patient populations suggests that they will also be unable to imagine future events in detail.

Hypotheses

- If detail plays a causal role in effect of imagination on willingness to help, then patients who have undergone ATL surgery should show a diminished effect compared to healthy control participants.
- If self-referential processing is an important factor in this effect, then imagining another person helping should lead to a smaller effect.

Pilot Experiment

Method

Forty-three healthy young adults were shown 30 short stories of persons in situations of need and, on a within-participant basis, they pseudo-randomly either imagined themselves helping the person in the story; imagined another person helping; or solved math problems (as a baseline condition). Next, they made ratings for each story, including how willing they were to help the person in each one. Finally, participants completed the Toronto Empathy Questionnaire (TEQ) as a measure of trait empathy.

Results

Imagining oneself helping led to significantly greater willingness to help compared to the baseline condition (see Fig. 1), replicating Gaesser & Schacter’s original study. There was a trend towards imagining oneself leading to greater willingness to help compared to imagining another person helping.

A hierarchical regression model, with each imagined event as its own data point (N=1,229), showed that subjective ratings of the detail significantly predicted willingness to help on a trial-by-trial basis (see Fig. 2) even when controlling for trait empathy (TEQ score).

Fig. 1: Mean willingness to help, by task

Fig. 2: Detail predicts willingness to help

Next Steps

- We are currently piloting a similar paradigm using an adapted version of the Autobiographical Interview (AI) protocol for assessing the amount of episodic (event-specific) and semantic (general-knowledge-based) detail content in imagined events.
- We are planning on using AI methods with ATL patients because previous experience has made it clear that these individuals do not reliably rate the level of detail in their own episodic memories the way healthy control participants do.
- Using AI methods will also shed light on whether or not the effect of imagination on willingness to help is more closely related to how detailed participants perceive their imagined events to be compared to more objective measures of detail.

References