



How dissociation, suggestibility, and their interplay contribute to atypical temporal estimation errors

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Introduction

Background

Multiple studies have investigated how highly suggestible people tend to display aberrant awareness of their 'self', such as reporting their intention towards an action or a thought with a considerable temporal delay, or with a profound degree of variability (1-2). This lack of authorship has also been found in subpopulations such as within the schizophrenic community (3), as well as certain neurophysiological disorders such as functional neurological disorders (4). Two main assumptions for experiencing misstated volition are that highly suggestible individuals display reduced ability to appropriately connect their actions to the attendant consequence (5), or that a general distortion in meta-awareness causes highly suggestible individuals to access their intention to a response in a delayed

manner (6). Regardless of the cause, past research has only begun to explore to what extent different clinical subpopulations display atypical intention awareness and, therefore, looking into individuals with dissociative tendencies is a novel and valid addition to this area of study.

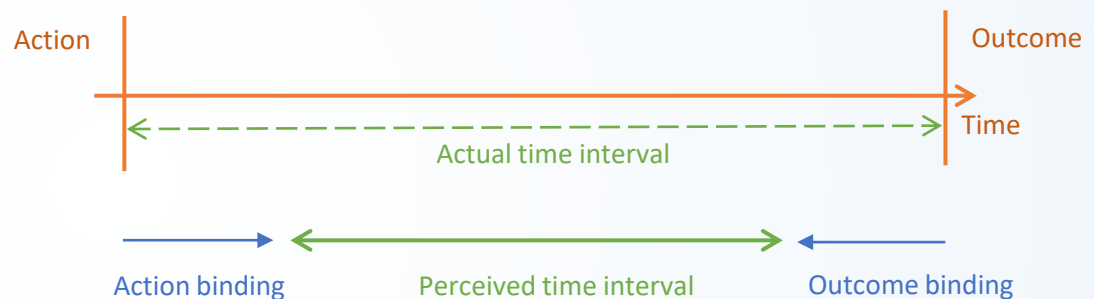
Hypothesis

1. Highly suggestible individuals and individuals who have pronounced dissociative experiences will display more delayed and varied estimation errors, relative to individuals low in either variable.
2. The interaction of these two variables in an individual will bring forth the greatest variability and/or delay in estimation errors.

Method

Participants

- Prolific database
- 200 participants, 18-45 years old
- Prescreened for suggestibility, dissociative symptoms, and both



Independent and dependent variables

Between-groups IVs	Degree of suggestibility
	Degree of dissociative symptoms
Repeated-measures IVs	Motor estimation condition
	Motor intention estimation condition
DV	Temporal estimation errors

Motor-action task

- Two conditions – motor estimation and motor intention estimation
- 6 blocks (3 blocks per condition)
- 20 trials in each block

Results

- Raw data will allow us to calculate estimation errors:

$$\text{Actual event time} - \text{estimated time} = \text{temporal estimation errors}$$
- Compute average mean and standard deviation of estimation error for each condition
- Linear correlation
- Hierarchical multiple regression

Limitations

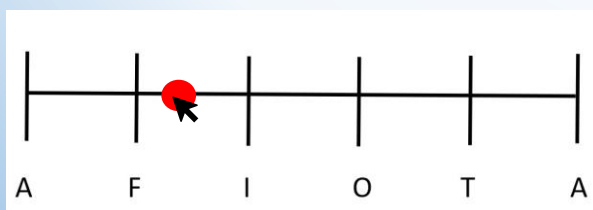
- Online study – increased participant noise/ attrition
- Novel use of an auditory Libet Clock

References

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Material

- Auditory version of the Libet clock paradigm (7)
- Estimation scale
 e.g., Participant pressed space bar close to 'F'



- Confidence judgement scale (Likert scale)

How confident are you in your answer?

Not confident at all Not very confident A little confident Very confident