



Research Proposal: How does Observing Self-effort affect Persistence?

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Introduction

Research has shown that self-observation provides numerous benefits, from increasing one's problem solving skills (Fireman et al., 2003) to improving metaperception of one's behavior (Albright & Malloy, 1999). Nonetheless, researchers have yet to discover the mechanism behind such benefits. The current research examines one possible mechanism—the self-observation of effort exertion. We propose that when individuals observe themselves working on a past problem (as opposed to simply imagining the process of solving a past problem), subsequent performance will improve because past efforts and errors will be clearly brought to attention. That is, watching oneself exert effort on one task will remind them to expect that effort will be required for learning in the future. Thus, our main dependent variable will be persistence, as measured by the time spent on a subsequent task. While “imaginal experiences” (Maddux, 1993) has been suggested to improve one's perception of capability, the present study will determine if observing self-effort will have an influence beyond imaginings. If so, the findings will allow us to think about new interventions for improving persistence during learning.

Benefits of Self-Observation

- Increases problem solving skills (Fireman et al., 2003)
- Improves precision of behavioral metaperception (Albright & Malloy, 1999)

Hypothesis

Participants in the Self-Observation (SO) group will persist longer on the anagram task than those in the No Self-Observation (NSO) group.

Methods

Participants

- $N = 100$, recruited from Barnard Psychology Sona systems
- Demographic information will be collected: age & gender

Task 1: Sudoku

After reading a brief written instruction on solving 6x6 Sudoku puzzles, participants will be given 6 minutes to solve as many Sudoku puzzles, while being recorded on Zoom. Participants' hand movement on paper will be recorded.

2	6		5		1
		1			2
4				6	
	3				4
1			4		
3		4		2	6

<6x6 Sudoku Task>

Task 2-A: Self-Observation

Participants will watch a one minute recording of their hand solving the sudoku puzzle.

⇒ Observation of Self-effort

Task 2-B: No Self-Observation (Control)

Participants will imagine their experience in Task 1, while verbally explaining their recollection for one minute.

⇒ Imagination of Self-effort

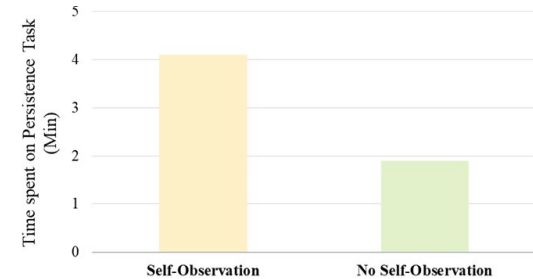
Task 3: Anagram

Participants will solve a series of anagram problems (i.e. persistence task) for as long as they choose. English words (4 or 5 letter words) will be presented and participants will reorder them into new words.

e.g. Eager → Agree | Votes → Stove | Item → Time | Idle → Deli

Expected Results

The expected effect of Self-Observation on Persistence



Discussion

The expected results will show that SO group participants will persist longer than those in the NSO group. Such finding would suggest that *self-observation of one's effort strengthens persistence*, and can do so across domains. Further research may help identify the mechanism by which self-observation enhances persistence.

References

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