



Untangling Impatience: A Field Experiment Comparing Two Strategies for Reducing Financial Impatience among Stressed and Anxious Workers



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Details for interested readers

Introduction: Financial impatience (i.e., applying too high a discount rate to the value of obtaining money sooner) is a widespread human tendency (Berns, Laibson, & Loewenstein, 2007; Loewenstein & Prelec, 1992). Negative emotions like stress and anxiety intensify impatient financial decisions, leading to sadly ironic outcomes where people lack funds when funds are needed most (Agrawal et al., 2023; Lerner et al., 2015). With rising global stress levels (Gallup, 2023), curbing such impatient financial behaviors is vital.

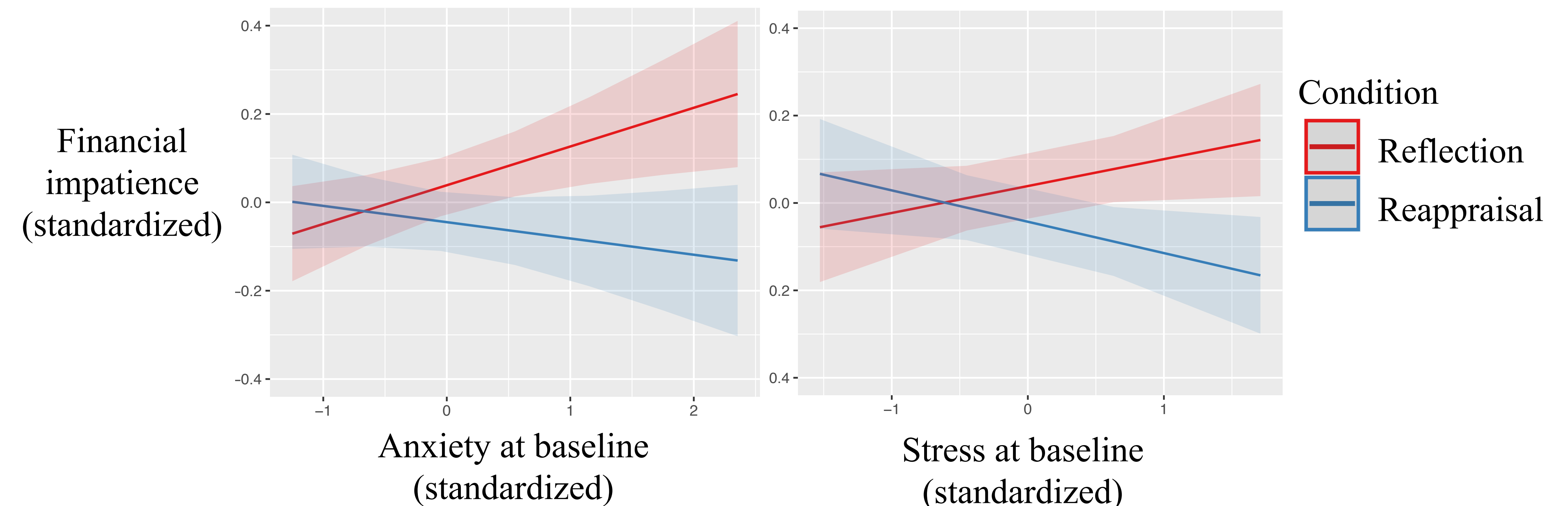
We explored two methods: reflection and reappraisal. Reflection emphasizes understanding one's feelings, thoughts, and physical reactions. It boosts emotion regulation through enhanced emotional awareness, affect labeling, and expressive writing (Boden & Thompson, 2015; Torre & Lieberman, 2018; Pennebaker & Smyth, 2016). Reappraisal involves altering perceptions of situations, like finding positive angles. It modifies emotions by changing appraisals (Gross, 2015; Ochsner & Gross, 2005).

Hypothesis: Given that reappraisal has proven superior in emotion regulation (Wang et al., 2021), we hypothesized it would be better than reflection in curbing financial impulsivity among the stressed.

Method: Partnering with a large public service providing organization, we recruited 1,744 U.S. essential workers. Participants were randomly trained online in either reappraisal or reflection techniques. Six months later, their financial choices were assessed via a lottery questionnaire, reminding them of one choice's potential real-world realization.

Which strategy lowers financial impatience, reflecting on emotions or reappraising them?

- Among individuals reporting higher (\geq median) baseline anxiety ($N = 1,052$), the reappraisal (vs. reflection) intervention led to significantly lower financial impatience ($p = .005$, $d = -.17$, 95% CI = $[-.29, -.05]$).
- Among individuals reporting higher (\geq median) baseline stress ($N = 1,547$), the reappraisal (vs. reflection) intervention led to significantly lower financial impatience ($p = .021$, $d = -.12$, 95% CI = $[-.22, -.02]$).



Which processes account for the difference?

- Reappraisal engagement, a factor score based on beliefs in the effectiveness of reappraisal and intentions to use reappraisal in the future, significantly mediated the differences in financial impatience among individuals with higher baseline anxiety (indirect effect $p = .023$, proportion = .10) and stress (indirect effect $p = .008$, proportion = .15).

Implications for theory and practice

- The findings demonstrate the efficacy of a reappraisal intervention in reducing impatience on real intertemporal choices in a field setting. They add to the small but emerging body of evidence that emotion regulation can influence decision-making (e.g., risk-taking: Heilmann et al., 2010; loss aversion: Sokol-Hessner et al., 2009; framing: Miu & Crişan, 2011; interpersonal decisions: van't Wout et al., 2010).
- The findings reveal the importance of considering both individual characteristics and cognitive processes in optimizing emotion regulation techniques for enhanced decision-making abilities.
- By conducting a field experiment among essential workers, the research reveals the potentially widespread applicability of the intervention on reducing financial impatience.