Investigation of the impact of relational framing on self-determination toward a distress tolerance task

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Introduction

Behaviors could be framed in various ways. Noteworthy, they could be related to desired consequences through conditional framing (e.g., « If I practice yoga regularly, then I'll be in good shape ») or related to meaningful values through hierarchical framing (e.g., « Practicing yoga is a way of acting with openness ») [1-4]. It is assumed that hierarchical framing would induce a higher quality motivation than conditional framing, and therefore promote behavioral commitment.

To date, only one study has tested this assumption [5]. It has shown that, compared to participants who followed conditional instructions (i.e., focus on the results), those who followed hierarchical (i.e., focus on the process) or a mixed of conditional and hierarchical instructions (i.e., focus on both) had better performance in a distress tolerance task, emotional experience, and task evaluation. However, it did not assess motivation's quality directly, through variables like self-determination [6-7].

The current study has two aims: 1) to replicate those findings [5] and 2) extend them by evaluating the impact of instruction framing on self-determination indicators.

Methods & Results

Participants: 167 participants (Age: M = 23.3, SD = 3.7; 54.49% of women) took part in this online study.

Procedure:

Pre-test:

- Emotional experience (Mood Reactivity Scale and PANAS).
- Side distress tolerance task (a difficult anagram task).

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Experimental phase:

- Target distress tolerance task (PASAT-C) with instructions using {Hierarchical; Conditional; Mixed} framing, depending on experimental condition.

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Post-test:

- Conscious conditional and hierarchical goal framing.
- Emotional experience (similar to pre-test).
- Side distress tolerance task (similar to pre-test).
- General self-efficacy (GSE).
- Willingness to complete similar tasks.
- Task evaluation (comfort, positivity, perceived success and easiness)
- Self-determination indicators (IMI: interest, tension, effort, perceived competence, choice, and utility toward the target task)

Open science: The material, data and analyses of this study are available on OSF, via the following QR-Code. The article will be linked to this page as soon as it is published.

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Manipulation check: Results revealed the negative impact of the target distress task on emotional experience ($W < 7500$, $p \leq .001$, $r_{rb} > .30$). However, it revealed no significant impact of instructions framing on participants conscious goal framing ($\chi^2 < 4.70$, $p > .09$).

Evaluation of the impact of instructions framing on variables of the replicated study [5]: Results revealed no significant impact of instructions framing on performance in the side and target distress tolerance task, emotional experience, and and task evaluation ($\chi^2 < 4.60$, $p > .1$).

Evaluation of the impact of instructions framing on self-determination indicators :

Results revealed a significant impact of instructions framing on three of seven self-determination indicators ($\chi^2 > 6.8$, $p < .05$; see Figure 1).

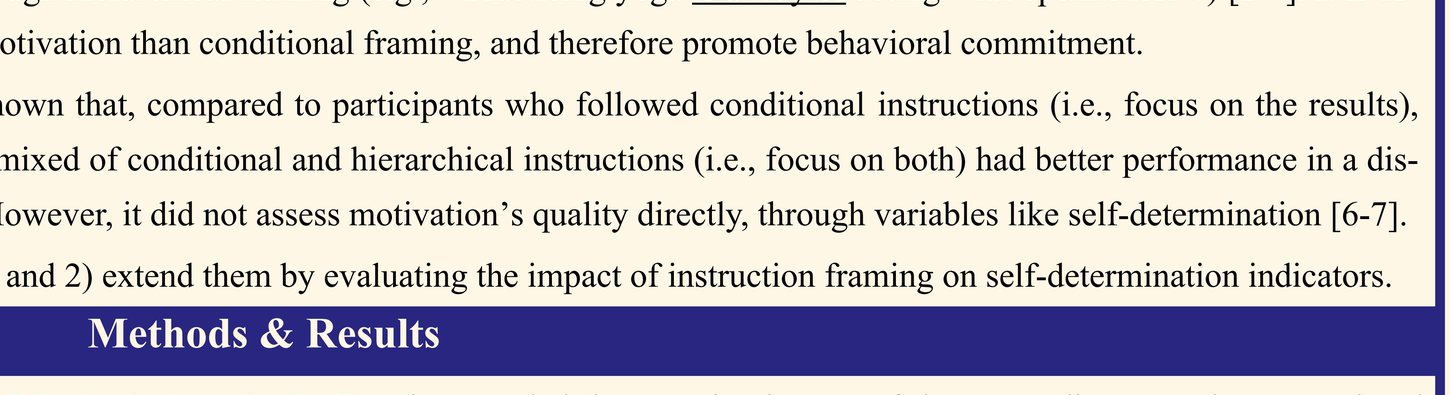

Figure 1. Effects of instructions on self-determination indicators. *Legends.* *p < .01 ; ** p < .05.

Evaluation of the interactive effects of instructions framing and participants goal framing:

Among others, results revealed that the impact of instructions framing on outcomes depends on participants conscious goal framing (see Figure 2 and 3 for examples).

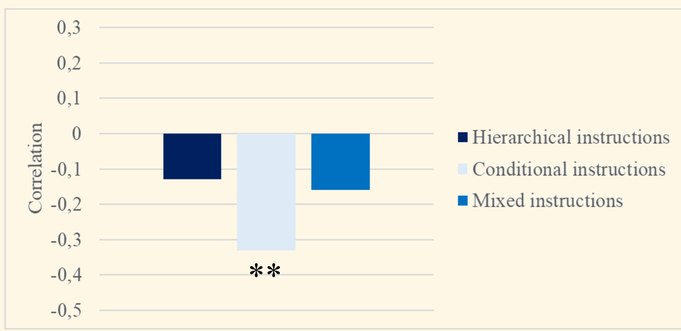

Figure 2. Correlations between hierarchical goal framing and score in the target task, in each conditions. *Legends.* ** p < .05.

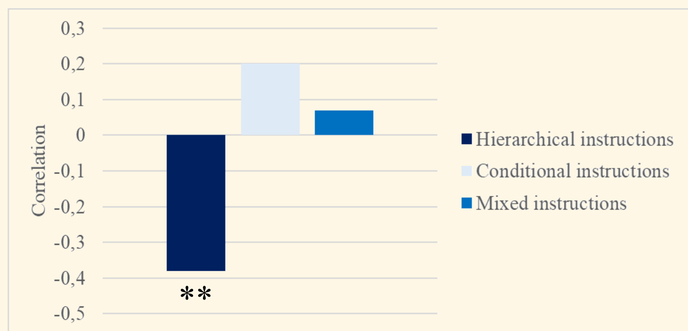

Figure 3. Correlations between conditional goal framing and perceived choice, in each conditions. *Legends.* ** p < .05.

Discussion

Contrary to expectations, this study did not replicate the effects of instructions framing on distress tolerance, emotional experience and task evaluation. However, the manipulation check revealed that instructions framing might have been unsufficient to modify in depth participants goal framing, which could explain those results.

Even though, this study revealed an unexpected impact of instructions framing on some self-determination indicators, with a superiority tendency of both conditional and hierarchical framing over mixed framing. It also revealed that, irrespective of their type, instructions framing might have some deleterious effects if they are mismatched with participants current goal framing. However, as goal framing was measured in post-test only, it is impossible to rule out some alternative interpretations.

Further studies are required to draw conclusion on those points. It seems crucial to develop more effective interventions to change participants goal framing, and to take into consideration the potential moderating effects of participants initial goal framing.

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