How to envision an ecological future?

An experimental study on the effectiveness of presented vs. self-generated visions

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EC²

Overview

- Visioning and cognitive alternatives predict private and collective (environmental) action (Bain et al., 2013, Fernando et al., 2020, Wright et al., 2020)
- Predominantly based in a study on a sustainability coaching (Hamann et al., 2021)
- $N = 167$ (112 female, 52 male, $M_{age} = 31.66$, $SD_{age} = 13.83$, June/May 2020)

Visioning dream journey ($n = 38$)

Visioning videos ($n = 43$)

Meditation dream journey ($n = 31$)

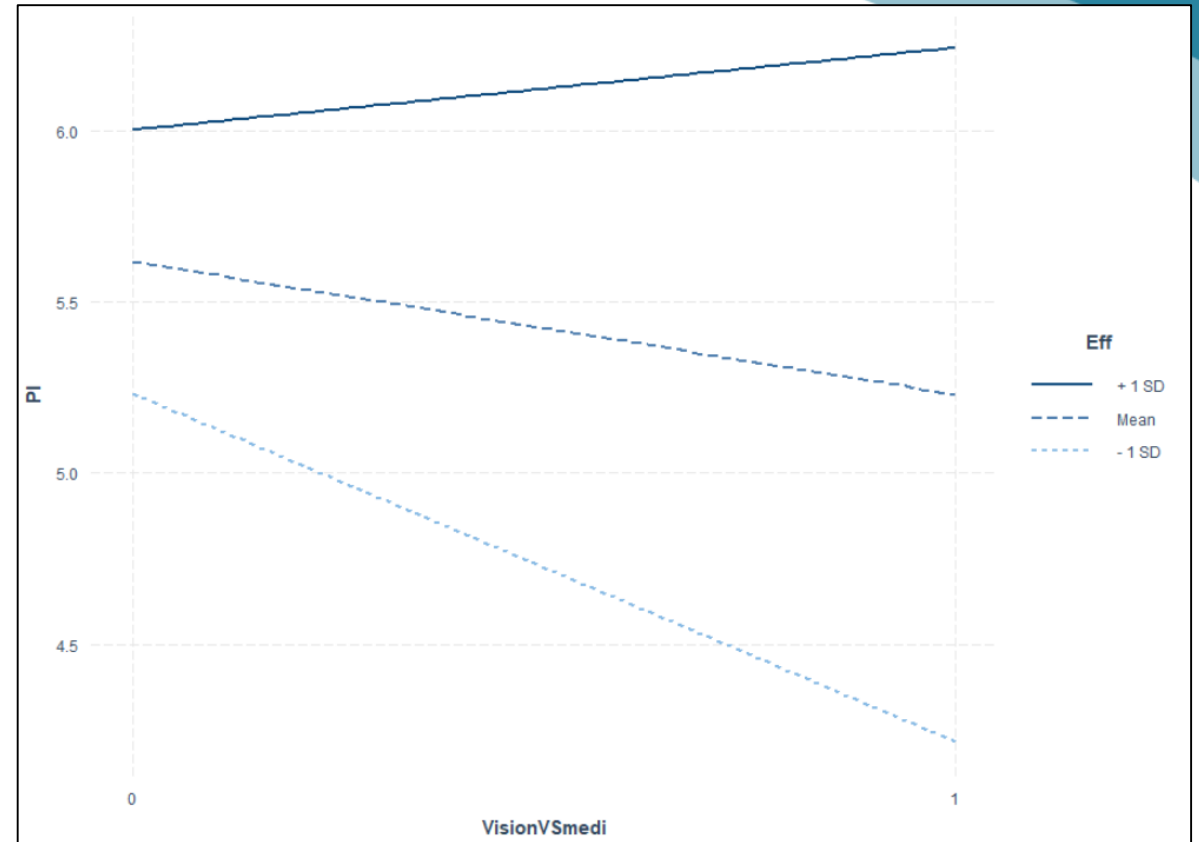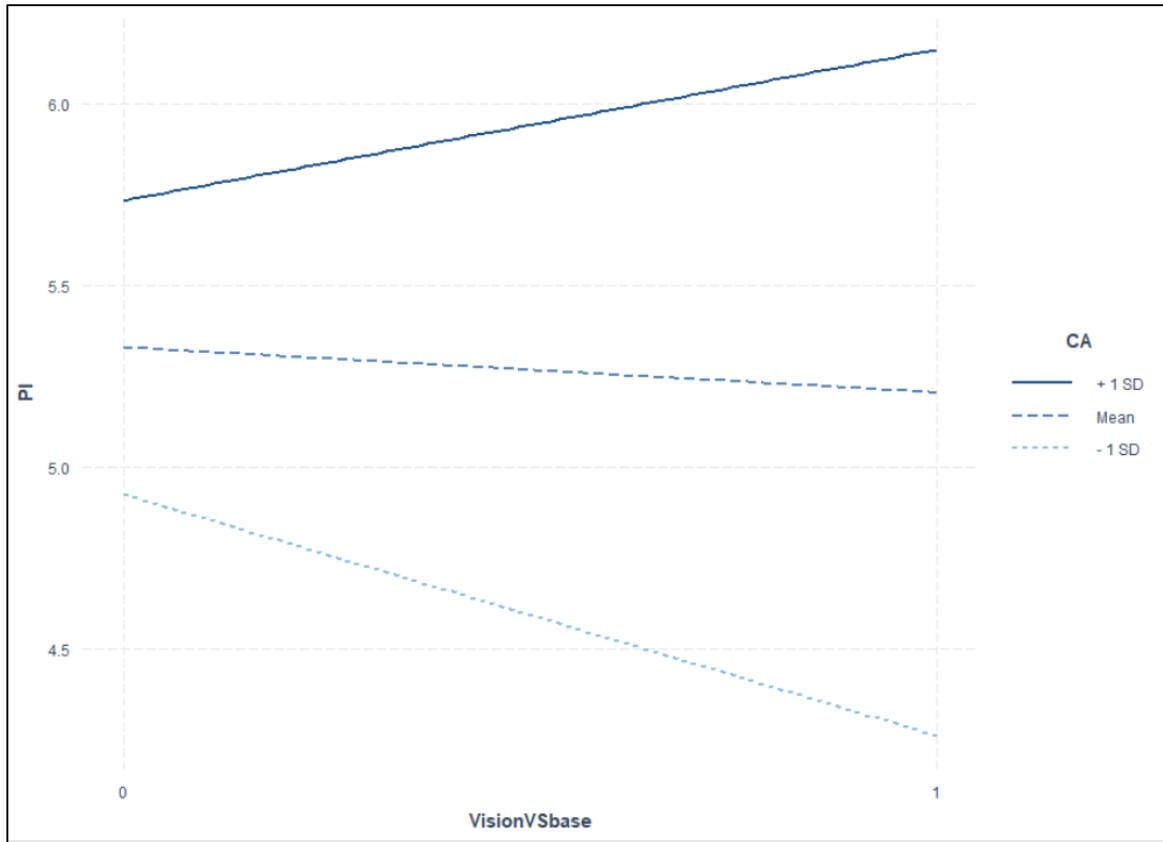No intervention control group ($n = 55$)

Results: no main effects

- Means(SDs) and ANOVA results

	Visioning dream journey	Visioning video	Meditation dream journey	Control group	Group comparison
Cognitive alternatives	5.07 (1.37)	**4.60 (1.02)**	5.04 (1.24)	5.01 (1.1)	$F(3, 163) = 1.46$, $p = .229$
Self-efficacy	5.68 (1.18)	5.85 (0.75)	5.92 (0.68)	5.95 (0.85)	$p < .05$ for all (Wilcoxon Test)
Collective efficacy (neighborhood)	5.86 (1.1)	5.67 (0.78)	5.64 (1.03)	5.61 (1.18)	$F(3, 163) = 0.46$, $p = .708$
Positive affect	4.77 (1.04)	4.77 (1.22)	4.88 (1.15)	4.49 (1.23)	$F(3, 163) = 0.91$, $p = .440$
Pro-environmental intention	5.23 (1.33)	5.43 (0.74)	5.62 (0.89)	5.32 (0.97)	$F(3, 163) = 0.94$, $p = .423$

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Explorative results: moderation

Pro-env. intention <- VisionVSbase*cognitive alternatives
Interaction: $t(89) = 2.89$, $p = .005$
Simple effects
- CA_{SD-1}: $t(89) = -2.50$, $p = .014$
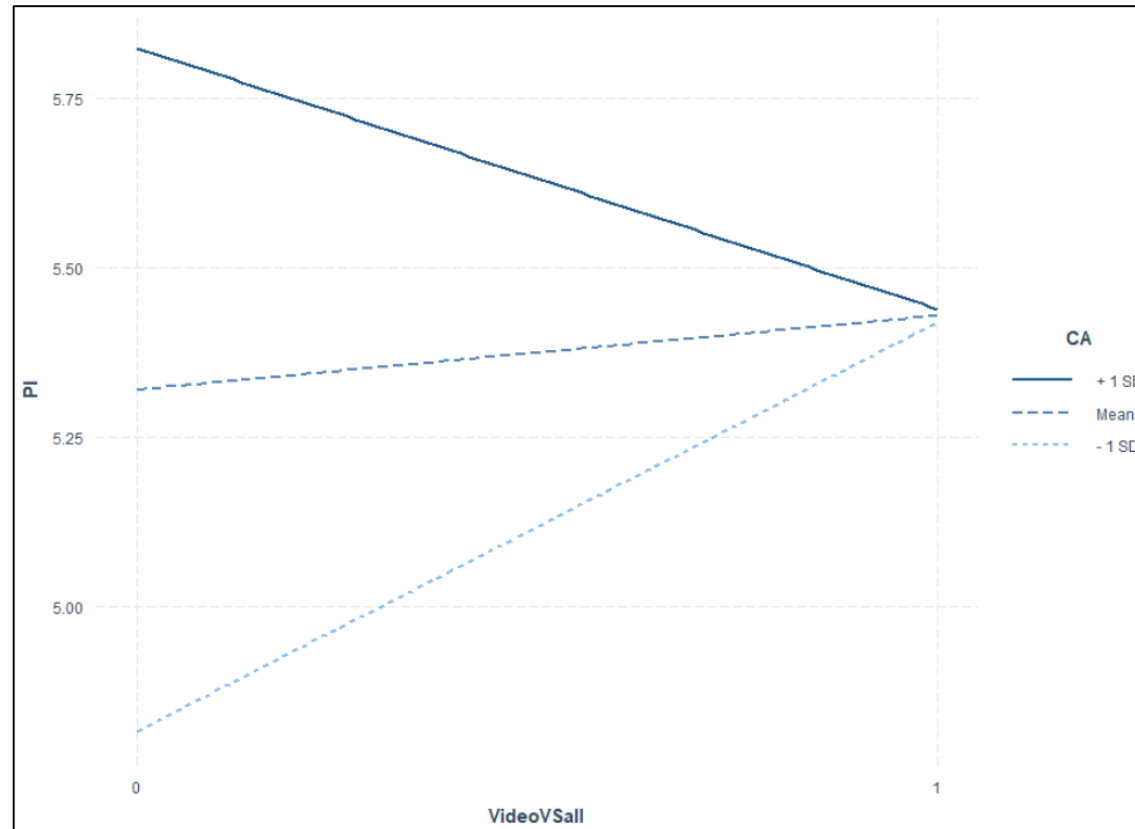- CA_{SD+1}: $t(89) = 0.42$, $p = .119$

Pro-env. intention <- VisionVSmedi*efficacy
Interaction: $t(65) = 3.14$, $p = .003$
Simple effects
- CA_{SD-1}: $t(65) = -3.71$, $p = .000$
- CA_{SD+1}: $t(65) = 0.87$, $p = .385$

Explorative results: moderation

Pro-env. intention <- VideoVSall*cognitive alternatives
Interaction: $t(163) = -2.32$, $p = .022$
Simple effects
- CA_{SD-1}: $t(163) = 3.16$, $p = .006$
- CA_{SD+1}: $t(163) = -1.42$, $p = .159$

Discussion & Limitations

- **First hints:**
  - Visioning tasks do not per se change anything
  - Visioning dream journeys might demotivate newcomers and is only effective for "the already engaged"
  - Videos of sustainability visions might be more suitable for newcomers

- **EC$_2$:** Hints for research on visions of a just and sustainable energy future?

- **BUT:**
  - Small sample size
  - Moderation exploratory
  - Data on moderators only collected after the intervention

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- https://ec2project.eu/

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