

Fear from Afar, Not So Risky After All

Distancing Moderates the Relationship Between Fear and Risk Taking

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BACKGROUND

- Researchers have increasingly recognized the importance of identifying ways to mitigate **biases in decision making** (e.g., Lerner & Keltner, 2015).
- Drawing on appraisal theories (Lerner & Keltner, 2001) and the emotion regulation literature (Gross, 1998), we examined how **distancing** (Kross & Ayduk, 2017) regulates the influence of fear and anger on risk taking.

METHOD

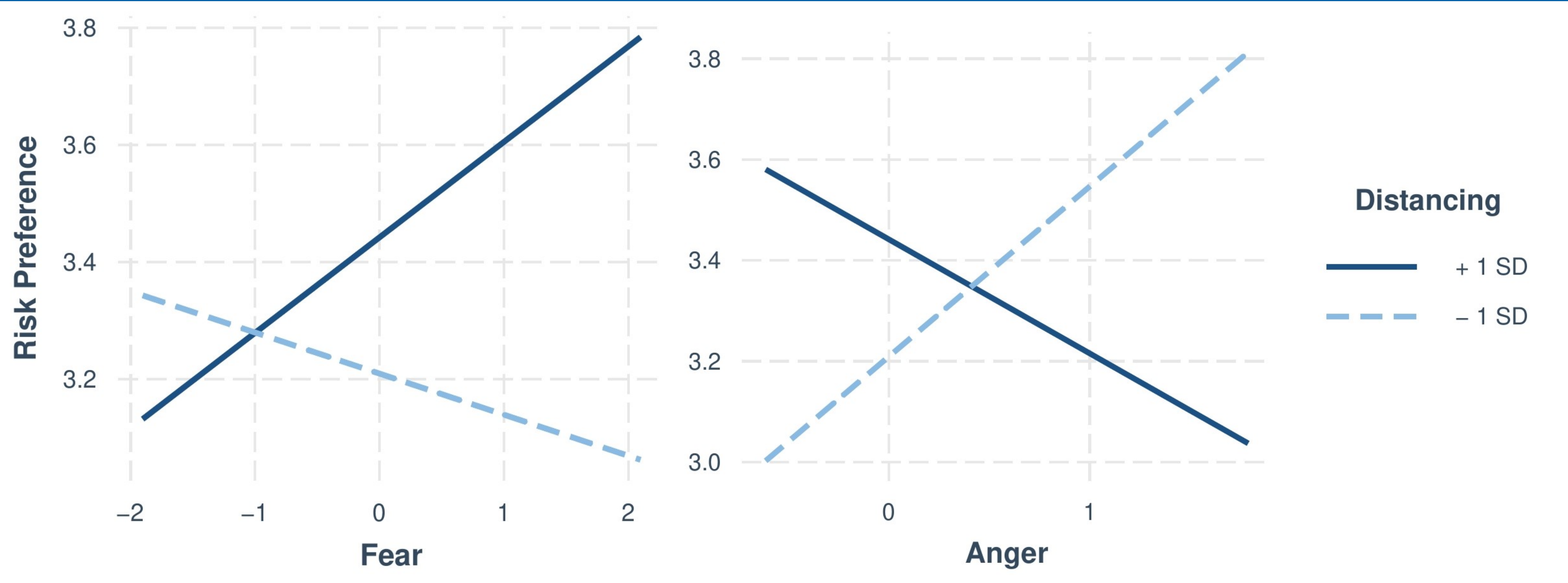
- 3 **preregistered** studies (N = 1,483) on Mturk (CloudResearch)
- Study 1: trait fear and anger and habitual distancing.
 - Study 2: trait fear and anger and manipulated distancing
 - Participants were instructed to adopt either an immersed or distanced perspective while reading risk scenarios.
 - Study 3: manipulated fear and anger and manipulated distancing.
 - Participants wrote about an aspect of the COVID-19 pandemic that made them most afraid vs. angry from an immersed vs. distanced perspective.
 - Linear mixed models in Study 1-2 to account for repeated measure of risk taking across the three risky decision-making tasks.

Overview of measures and manipulations across studies.

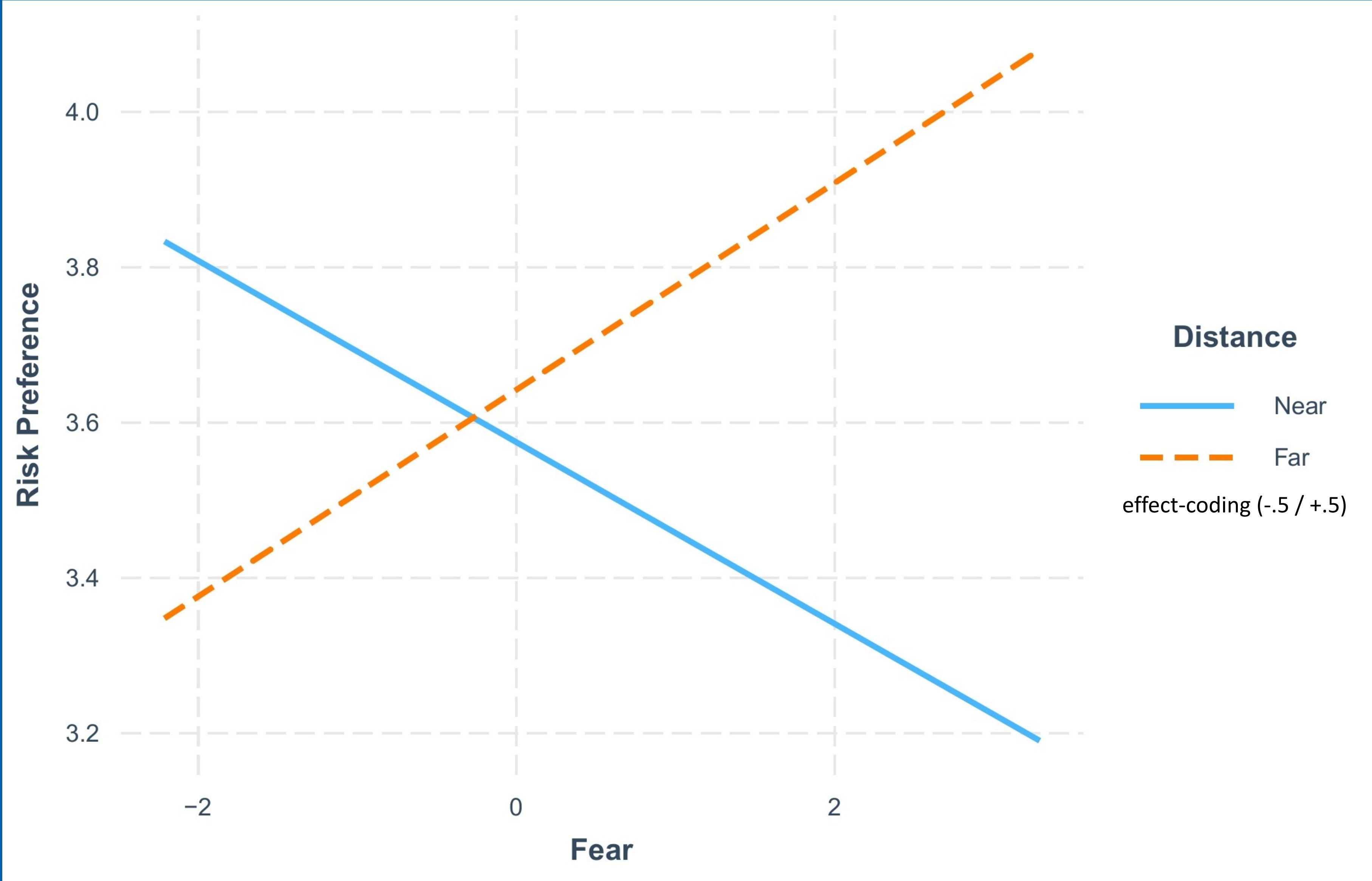
	IV		Moderator	DV
Study	Fear	Anger	Distancing	Risk tasks
1	Penn State Worry Questionnaire (Meyer et al., 1990)	State-Trait Anger Expression Inventory (Spielberger, 1999)	Temporal Distancing Questionnaire (Bruehlman-Senecal et al., 2016)	The Cancer Problem (Fagley & Miller, 1987) Plant Problem (Bazerman, 1984) Shareholding Problem (Teigen & Nikolaisen, 2009).
2	Fear Survey Schedule-II (Bernstein & Allen, 1969)	State-Trait Anger Expression Inventory (Spielberger, 1999) Anger scale (Lerner & Keltner, 2001)	Distancing manipulation (adapted from van Dijke et al., 2018)	The Cancer Problem (Fagley & Miller, 1987) Plant Problem (Bazerman, 1984) Shareholding Problem (Teigen & Nikolaisen, 2009).
3	Manipulated. Participants read news stories about rising unemployment and identified an aspect about the pandemic that makes them most fearful (Lerner et al., 2003).	Manipulated. Participants read news stories about organizations that have used the pandemic to mistreat employees and were then asked to identify an aspect of the pandemic that makes them most angry.	Manipulated. Following the emotion manipulation, participants were asked to write about the identified event from an immersed or distanced perspective (Bruehlman-Senecal & Ayduk, 2015; White et al., 2019)	Plant Problem, gain frame (Bazerman, 1984) Risk estimation scale/Optimism (Lerner & Keltner, 2001)

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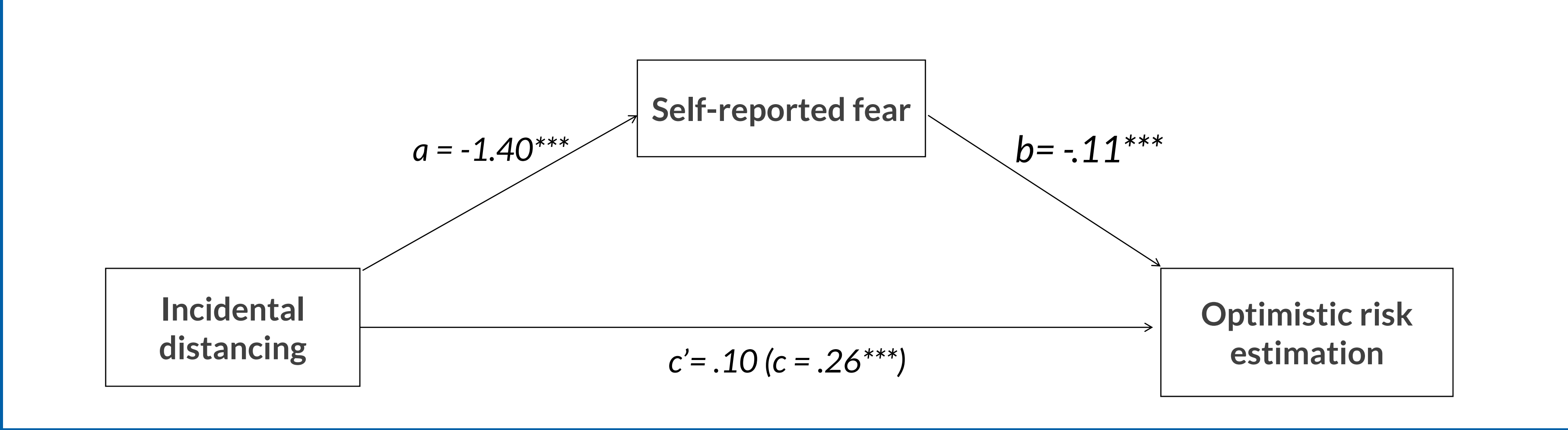
The gist:
Fear is associated with risk aversion in the ‘here and now’, but risk seeking from afar.



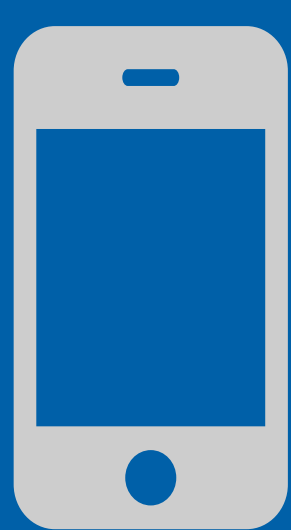
- Study 1. Interactions between:
- trait fear and habitual distancing [$\beta = .10, p = .038$ (one-tailed)].
 - trait anger and habitual distancing [$\beta = -.25, p = .029$ (one-tailed)].



- Study 2. Interaction between:
- trait fear & manipulated distancing [$\beta = .25, p = .007$ (one-tailed)].



- Study 3. Exploratory mediation model:
- distancing increases optimistic risk estimation via reduced fear.



Take a picture to access OSF page containing data, code, material and preregistrations

MAIN FINDINGS

- At **low levels of distancing**:
Replicating previous work (Lerner & Keltner, 2001), we found a negative relationship between fear and risk taking, and a positive relationship between anger and risk taking.
- At **high levels of distancing**:
We found unexpected reversal of the above associations. Specifically, there was a *positive* relationship between fear and risk taking, and a *negative* relationship between anger and risk taking.
- Distancing interacted with fear in both Study 1 (trait fear and habitual distancing) and 2 (trait fear and manipulated distancing). However, distancing interacted with anger only in Study 1 (trait anger and habitual distancing).
- Study 3 found no moderating effect of distancing, but a main effect of distancing on risk estimation. Further exploratory analysis revealed that distancing from pandemic-related fear & anger increased optimism about future events via reduced fear.

DISCUSSION

- The study contributes to a growing line of research on emotion regulation and risky decision making (e.g., Heilman et al., 2010). Unlike other studies that have looked at the general reappraisal strategy, we focused on a specific tactic of reappraisal, namely, distancing.
- Research has found that distancing is associated with a range of cognitive and affective benefits (Bruehlman et al., 2016; Grossman & Kross, 2014; Kross & Ayduk, 2017). Extending this literature, we find that distancing plays an important role in regulating incidental emotional influences on risk taking.
- The observed unexpected reversals reveal previously unknown effects of fear and anger on risk taking. It would be interesting for future studies to examine how replicable these effects are and what drives them.
- Finally, our study contributes to recent studies that have examined psychological distance in risky framing problems. Raue et al., (2015) found that increasing the psychological distance of targets in decision problems eliminated the classic framing effects. The findings of the present study suggests that psychological distance influences risky decisions by regulating emotional influences.

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