

Navigating the Unseen: The Consequences of Prioritizing Passive Risks

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BACKGROUND

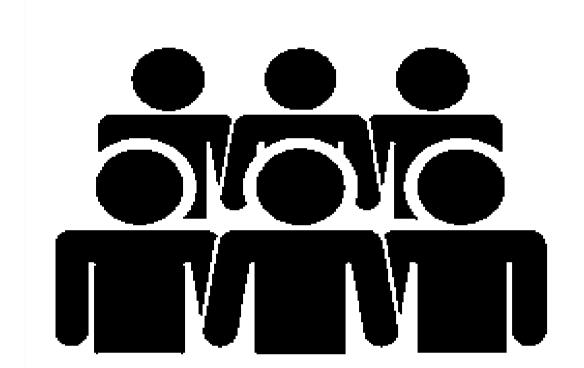
- Passive risks are risks brought on, or magnified, by inaction, as opposed to active risks, which are incurred by actions¹.
- ► Unlike active risks, passive risks are usually delayed and not vividly presented.
- ► The lack of attention may lead to an underestimation of passive risk estimations compared to active risks of the same nature².

THE CURRENT RESEARCH

Aims to examine:

- 1. Whether attention increases the perceived severity of passive risks
- 2. Whether fear mediates the relation between attention and passive risks estimation

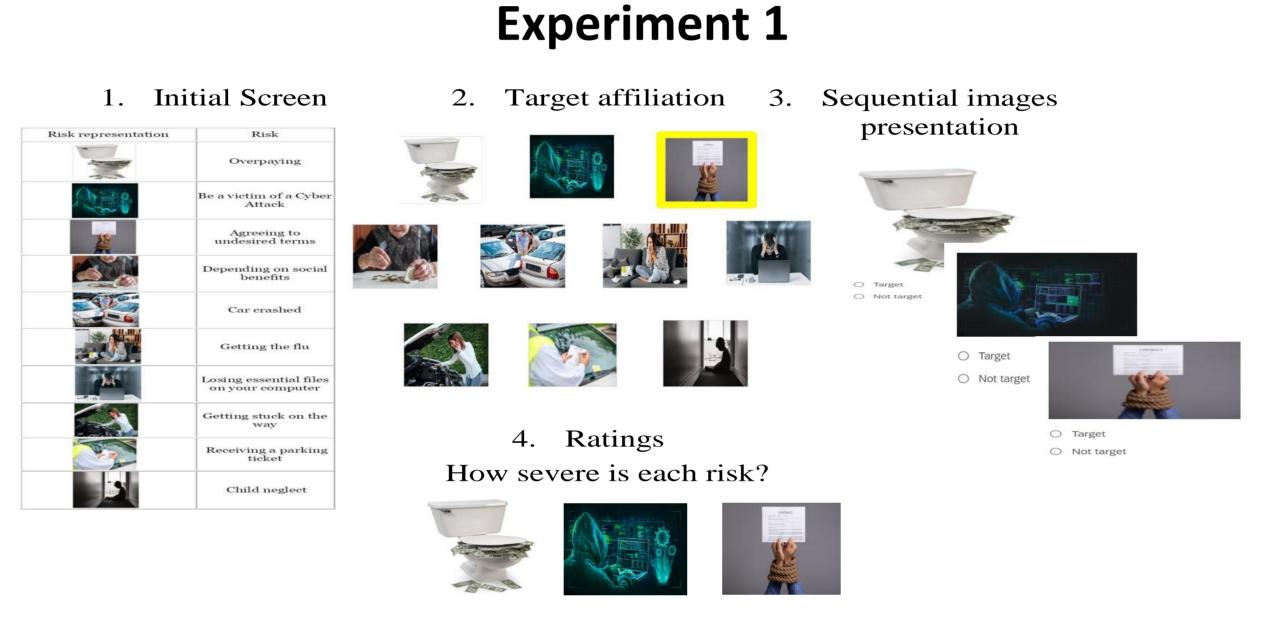
METHODS



Six hundred and forty-five (N=645)

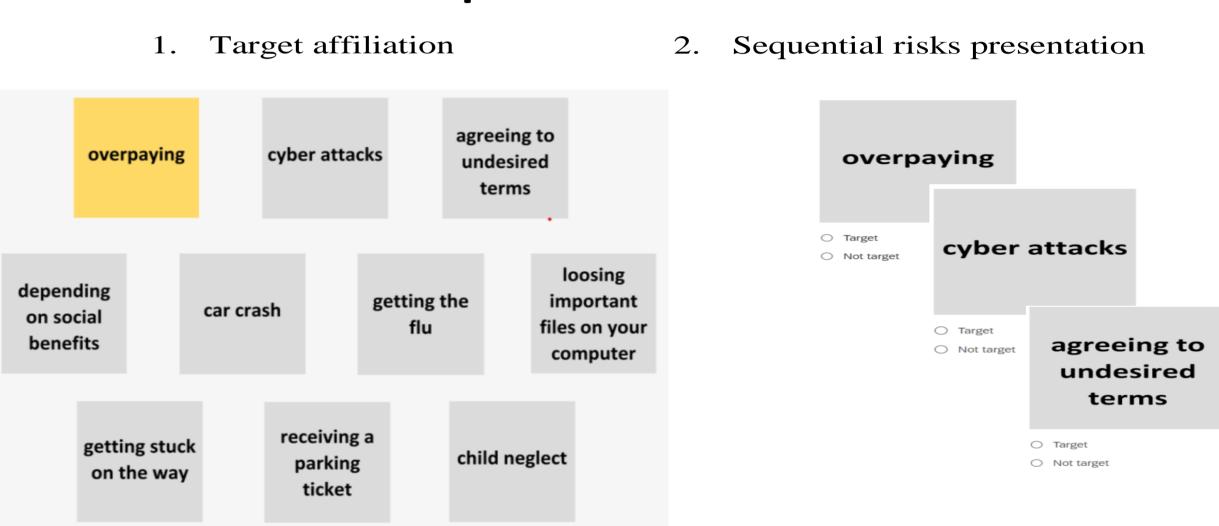
MTURK participants

across three experiments



Attention manipulation procedure: Participants viewed a screen with ten passive risks images (1). One image was randomly highlighted in yellow to be the target risk (2). Participants were presented the set of 10 images four times, and were asked to choose whether the target appeared or not (3). Then, participants assessed the risk perception of each of the images (4).

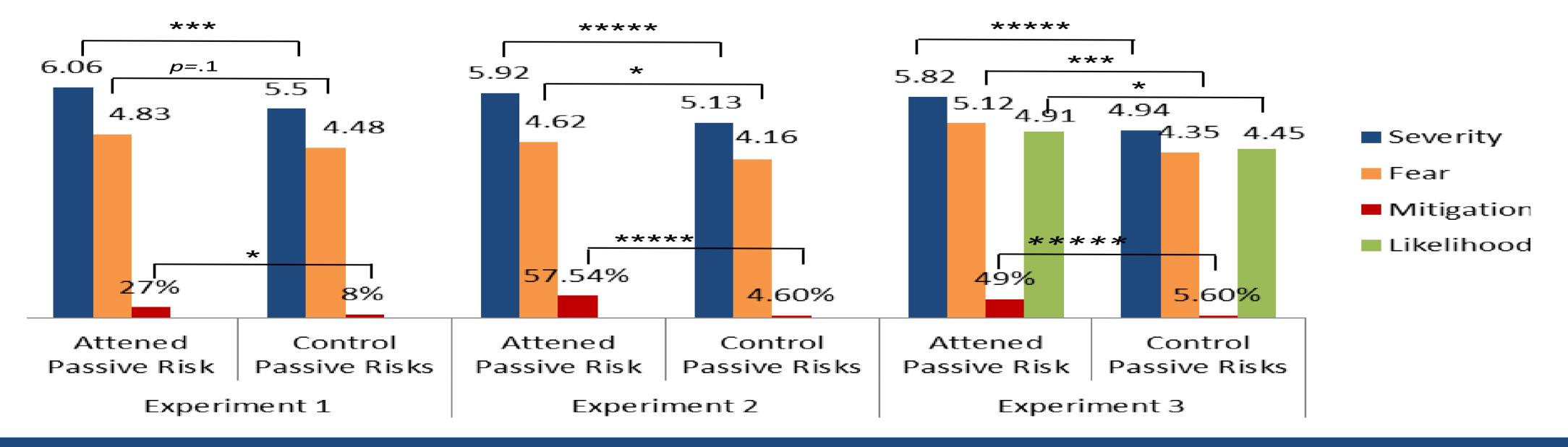
Experiment 2 & 3



Attention manipulation procedure: Participants presented with one label of risk factor highlighted in yellow on a screen containing the ten passive risks (1). Then the ten passive risks labels were subsequently presented in random order (four times). Participants were asked to choose whether the target appeared or not (2).

RESULTS

Attended passive risks were perceived as more severe, elicited more fear, and required mitigation.



A mediation analyses indicating the effect of the attention manipulation on severity was mediated by the evoked fear.

Exp2: 0.09 [0.03, 0.14] Exp 3: 0.11 [0.06, 0.17] Path a <u>Path b</u> Exp 1: 0.08 [-0.02, 0.19] Exp 1: 0.54 [0.51, 0.58] Fear Exp2: 0.17 [0.07, 0.27] Exp2: 0.53 [0.5, 0.57] Exp 3: 0.22 [0.12, 0.32] Exp 3: 0.54 [0.51, 0.57] Severity Attention c' coefficients (after controlling for fear) <u>c coefficients</u> Exp 1: 0.14 [0.05, 0.22] Exp 1: 0.18 [0.07, 0.28] Exp2: 0.22 [0.13, 0.31] Exp2: 0.32 [0.21, 0.41] Exp 3: 0.14 [0.05, 0.21] Exp 3: 0.26 [0.16, 0.34] Indirect effect ab coefficients 0.05 [0.02, 0.07]

Indirect effect ab coefficients

Exp 1: 0.04 [-0.008, 0.1]

0.05 [0.02, 0.07] Fear Path b 0.22 [0.12, 0.32] c coefficients 0.16 [0.06, 0.26] Likelihood

coefficients (after controlling for fear)

0.11[0.01, 0.21]

DISCUSSION

- Our findings support the hypothesis that the underestimation of passive risks stems, among other things, from the reduced attention towards them.
- Manipulating people's attention toward passive risks can increase their perceived severity and the willingness to reduce them.

References