



# Risk & Morality: Prior exposure to risk makes people more utilitarian

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## ABSTRACT

People make deontological decisions when confronted with “up-close and personal” dilemmas but make utilitarian decisions to other types. Utilitarian and risky decisions both involve cost/benefit assessment in an uncertain environment. Priming studies in decision making show that decisions are influenced by previously occurring events. We investigated how prior exposure to risk influences decisions to personal dilemmas across different factors (action/outcome and harm). In three experiments we show that prior exposure to risk increased utilitarian type decisions for different type of action/outcome (experiment 1 & 2) and different type of harm (experiment 3).

## BACKGROUND

Utilitarianism proposes that morally right action is that which maximizes benefits and minimizes harm. Deontology proposes that action in itself is morally right or wrong irrespective of outcome.

- Utilitarian moral reasoning constitutes computing right or wrong as a function of costs and benefits (Fisk & Rai, 2014).
- Risk analysis and risk taking is characterized by assessment of cost/benefit and accounting for uncertainty.
- Cost benefit analysis might be used as a decision mode or a heuristic (rule) for decision making (Benis et. al., 2010).
- Risk and utilitarian choice have the same (seven) underlying precursors and mechanism (Lucas & Galinsky, 2015).
- Utilitarian choices to personal dilemmas are judged as morally wrong.
- Factors such as physical directness of killing (instrumental/accidental), personal harm to the subject or other, inevitability of the death, and intentionality of the action affect moral decisions and judgements (Christensen et. al., 2014).

## METHODS

**General Procedure:** All participants in the risk condition were presented with a risky gambling task followed by moral dilemma. Participants in control condition were only given the moral dilemma.

### Experiment 1

- N=160 IIT GN students participated in this experiment.
- 2 (groups: control vs. risk) X 2 (type of decision: Personal accidental vs. Personal instrumental) between subjects design.
- General procedure was followed by a question:
  1. *Do you take the suggested action or not? (Y/N)*

### Experiment 2

- N=80 IIT GN students participated in this experiment.
- 2 (groups: control vs. risk) X 5 (Type of action: Self beneficial, intentional, inevitable harm, side-effect, passive action) between subjects design.
- General procedure was followed by 3 questions:

## METHODS

1. *Do you take the suggested action or not? (Y/N)*
2. *Is it morally acceptable for you take this decision? (Y/N)*
3. *How morally acceptable is it for you to take this decision? 7 point rating scale.*

### Experiment 3

- N=20 students participated in this experiment.
- 2 (groups: control vs. risk) X 5 (Type of harm: death, job loss, financial loss, property damage, emotional distress, limb loss) between subjects design.
- General procedure was followed by 4 questions:
  1. *Do you take the suggested action or not? (Y/N)*
  2. *Is it morally acceptable for you take this decision? (Y/N)*
  3. *How morally acceptable is it for you to take this decision? 7 point rating scale.*
  4. *Please explain why you decided to take this action. Open ended box.*

## RESULTS

### Experiment 1

- Accidental: Not significant.
- Instrumental: **Significant** difference between risk & control:  $\chi^2(1,80)=6.241, p=0.012; d=0.6.$  (Fig.1)
- Risk: 55% of the participants said yes (utilitarian choice).
- Control: 27.5% of the participants said yes.

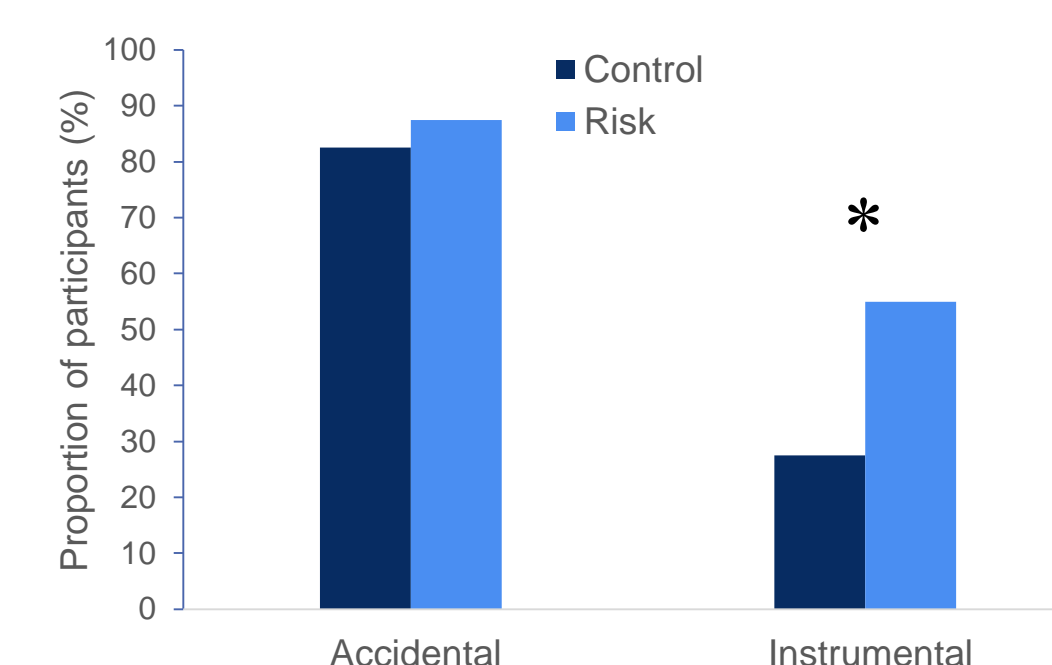


Figure.1: Percentage of participants in each condition who said "yes" (utilitarian choice)

### Experiment 2

- **Choice (Fig. 2)**
  - Self beneficial:* No difference
  - Intentional:* **Significant** difference between risk & control:  $\chi^2(1,80)=5.051, p=0.025; d=0.512.$
  - Risk: 52.5% of the participants said yes (utilitarian choice).
  - Control: 30% of the participants said yes.
- Unavoidable:* No difference
- Side effect:* **Significant** difference between risk & control:  $\chi^2(1,80)=3.660, p=0.056; d=0.432.$
- Risk: 80% of the participants said yes (utilitarian choice).
- Control: 70% of the participants said yes.
- Passive action:* **Significant** difference between risk & control:  $\chi^2(1,80)=12.832, p=0.0003; d=0.863.$
- Risk: 70% of the participants said yes (utilitarian choice).
- Control: 32.5% of the participants said yes

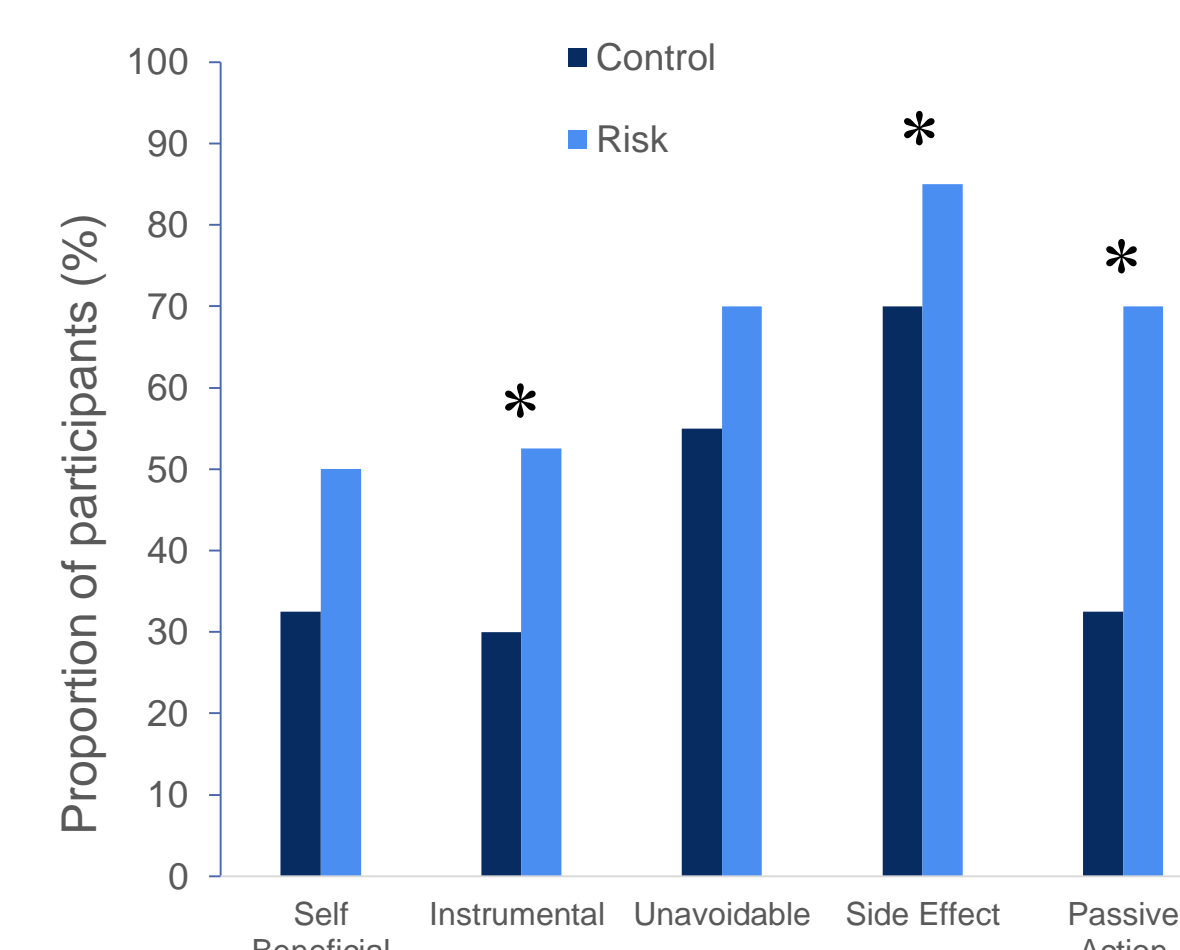


Figure.2: Percentage of participants in each condition who said "yes" (utilitarian choice).

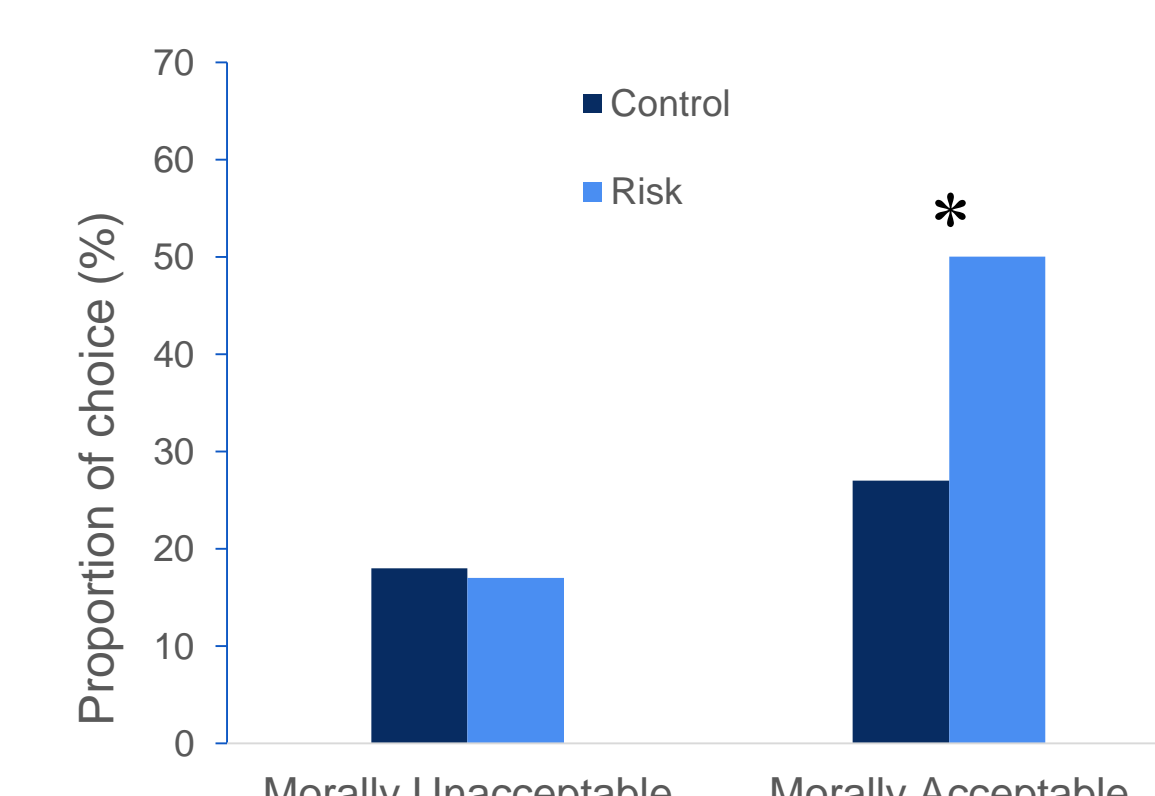


Figure.3: Percentage of utilitarian choices which were judged to be morally acceptable/unacceptable

## RESULTS

- Morally Acceptable utilitarian choice:** **Significant** difference between risk & control:  $\chi^2(1,226)=4.690, p=0.030;$  (Fig.3).
- Risk: 50% of choices judged as morally acceptable.
- Control: 27% of choices were judged as morally acceptable
- **Morally Unacceptable utilitarian choice:** No difference.

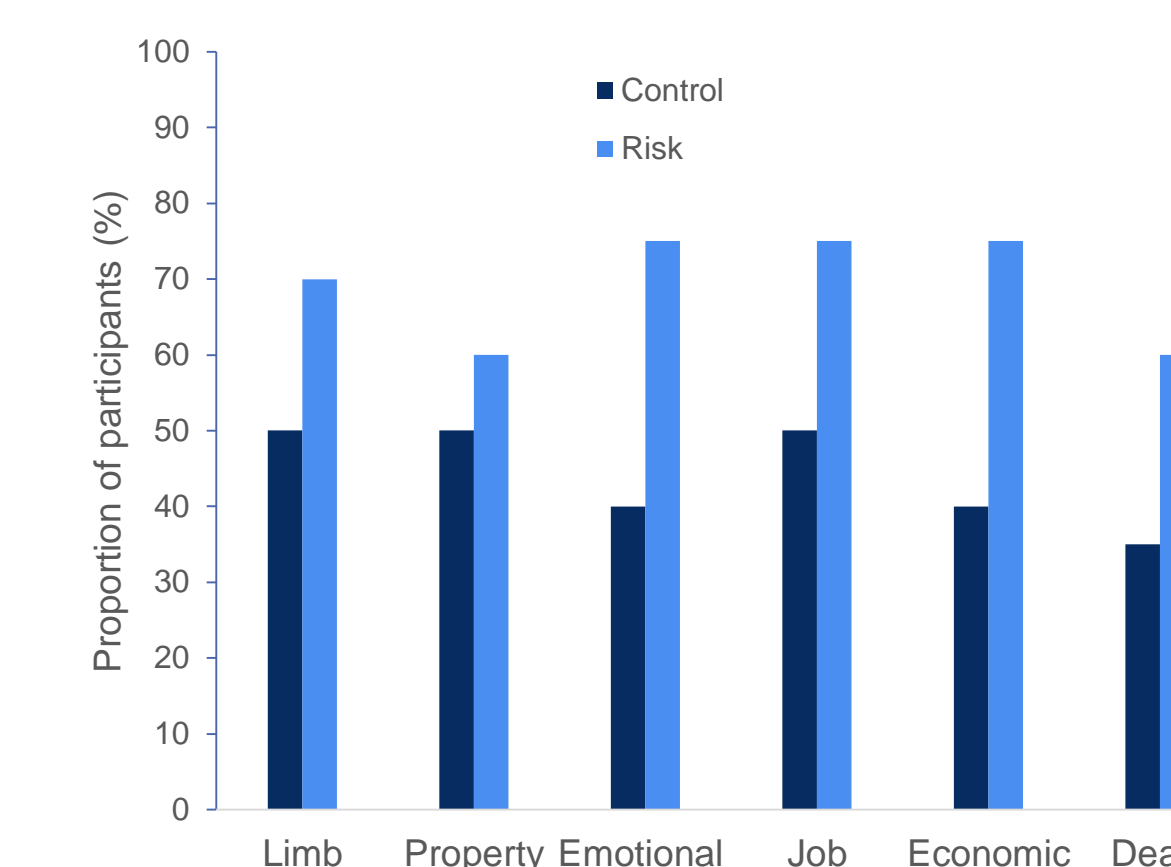


Figure.4: Percentage of participants in each condition who said "yes" (utilitarian choice).

### Experiment 3

- **Choice (Fig. 4)-preliminary results**
  - The overall pattern is that more participants in Risk group than in control group made utilitarian choice.
- **Utilitarian reason (Fig.5)**
  - The overall pattern follows that of choice data; more participants in Risk group than in control group gave utilitarian reasons for their choices.

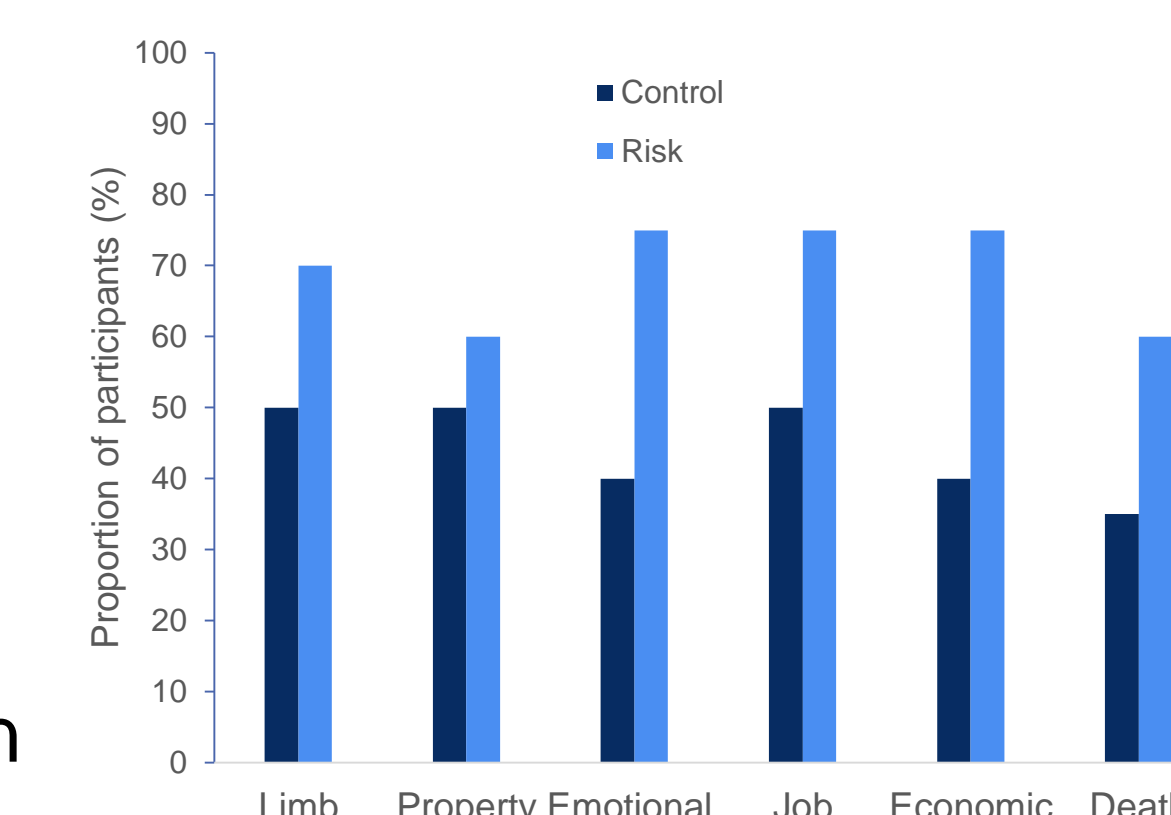


Figure.5: Percentage of participants in each condition who gave utilitarian reason for their utilitarian choice.

## DISCUSSION

- We found that prior exposure to risk resulted in a general overall increase in utilitarian type decision making for different type of actions/outcomes and different types of harm.
- More Participants gave utilitarian reasons for their utilitarian choices. This suggests that cost benefit analysis (as decision mode or heuristic) was being used for assessing moral decisions and their outcome.
- More participants in risk group judged their utilitarian choices as morally acceptable as compared to controls. This suggests that judgements were consistent with actions.
- Consistency between utilitarian choice and utilitarian judgement suggests that prior exposure to risk made the “decision to kill” in personal dilemmas “less conflicting”.

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