

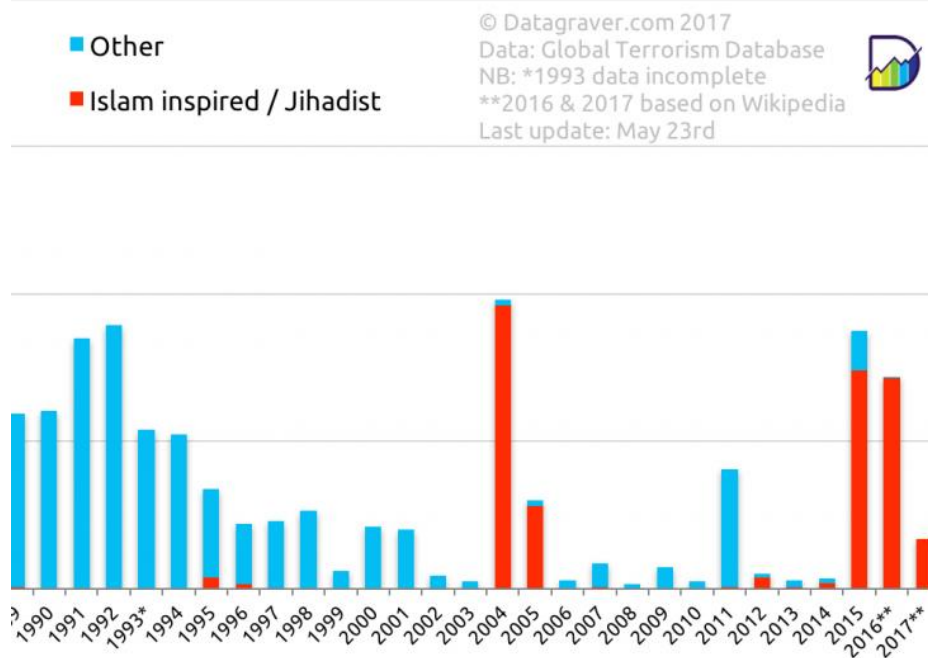


Perceived Risk of Terrorism and its Implications for (Counter-Terrorism) Communication Strategies

Elena Kantorowicz-Reznichenko (EUR), Gerdien de Vries (TUDelft), Jaroslaw Kantorowicz (UL)

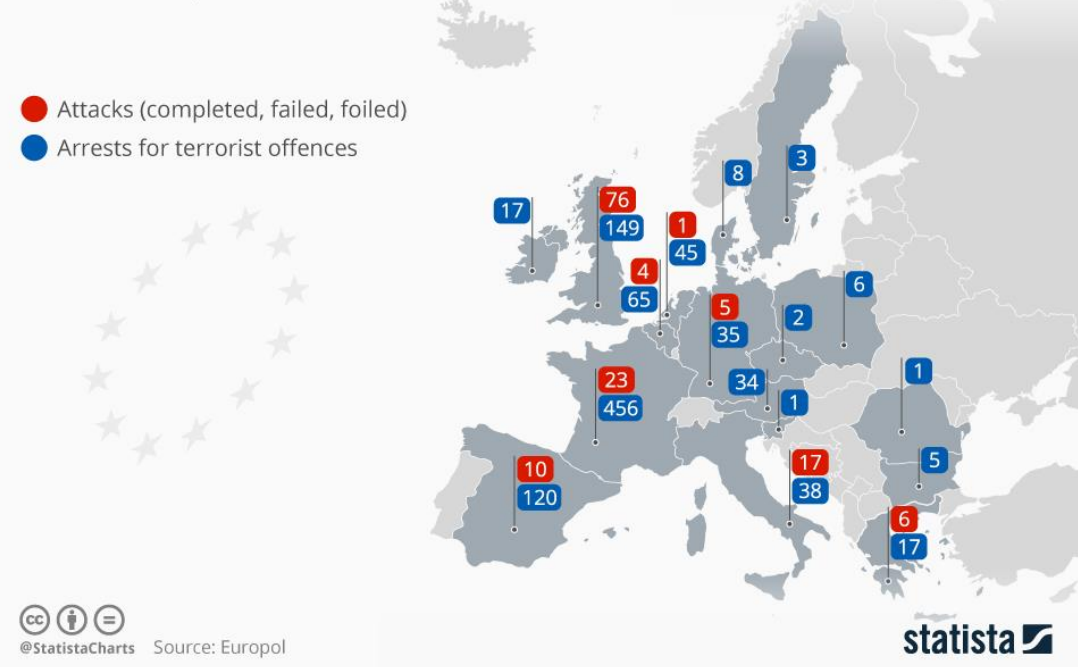
Motivation

People Killed by Terrorist Attacks in Western Europe 1970-2017



Terrorism in Europe in 2016

Number of completed, failed and foiled terrorist attacks and number of arrests in the EU in 2016



The Investigated Question

“Perception Gap” = *actual risk of terrorism (unknown) – perceived risk of terrorism*

➤ “Negative” Perception Gap = overestimation of the risk

➤ Measuring (empirically)

- Existence of Perception Gap
- Its direction
- Its causes

The Investigated Question

Potential explanations

- Cognitive biases
 - Probability neglect
 - Availability heuristic
 - Hindsight bias
 - Affect heuristic
 - Conjoint bias

- Psychometric paradigm

Importance of the Study

Important step to inform public communication strategies

- De-biasing strategies, or
- Utilization of behavioral insights to minimize the perception gap (“nudges”)

First systematic analysis to examine the psychological mechanisms behind the terrorism risk perception in Europe

Methodology

Survey Experiments

- Randomized experiments
- Using insights from psychology
- Large scale representative sample

Methodology

Example

Probability neglect bias

- Theoretical explanation
 - When the risky outcome evokes intense feelings
 - People tend to focus on the outcome and ignore the probability
 - Perceived risk becomes insensitive to changes in the actual risk

Methodology

Example

Probability neglect bias - design

- Independent Variable
 - Eliciting different levels of emotional response
 - Description of a terrorist attack – increasing level of details and “severity”
 - Three probabilities (decreasing)

- Dependent Variable
 - People’s WTP to avoid the risk of such terroristic attack
 - WTP as a proxy of perceived risk

Methodology

Example

Probability neglect bias - design

	Neutral (a)	Medium-affect (b)	High-affect (c)
(1) High probability (1/10,000)	WTP	WTP	WTP
(2) Medium Probability (1/100,000)	WTP	WTP	WTP
(3) Low probability (1/1,000,000)	WTP	WTP	WTP

Methodology

Example

Probability neglect bias - design

- Theoretical predictions
 - H0: $\Delta P = \Delta WTP$ (linear decrease)
 - H1: $\Delta P > \Delta WTP$ (non-linear decrease WTP)

- If subject to probability neglect bias
 - ΔWTP between the different probabilities will be smaller under (a) than under (c)
 - Focus on outcome and neglect of low probabilities
 - Negative perception gap

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