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Risk and Responsibility: from Theory to Empirical Research

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- “Ideas of risk and responsibility are in fact closely linked” (Giddens 1999)

Contents:

1. Risk and responsibility: theoretical issues
2. Empirical studies of risk and responsibility (3 examples)

Part I. Risk and responsibility: theoretical issues

Risk-responsibility link depends upon the definition of risk

3 ways of using the term “risk”:

- risk as hazard, loss, damage or threat
- risk as risk taking
- risk as calculation (Zinn 2008)

Responsibility is related to **causes** of the danger or damage

Beck and “organized irresponsibility”:

- “...there is a general complicity, and the complicity is matched by a general lack of responsibility. Everyone is cause and effect, and thus non-cause” (Beck 1992)

Douglas and the “forensic theory of danger”:

- in a moralistic and politicized universe adverse events are perceived and explained in terms of guilt and responsibility (Douglas 1992)

Who is blamed?

- the victim
- the individual adversary
- the outside enemy

...it depends upon “the way the society is organized”

Risk as danger: conclusion

Modern dangers:

“organized irresponsibility” vs. responsibility ascriptions

Empirical question: is the ascription of responsibility a **problematic** or **trivial** issue for complex cases?

Responsibility is related to **decisions** that have consequences in future

- “Risks only exist when there are decisions to be taken... The idea of responsibility also presumes decisions. What brings into play the notion of responsibility is that someone takes a decision having discernable consequences” (Giddens 1999)

Risk vs. danger

- “The potential loss is either regarded as a consequence of the decision, that is to say, it is **attributed to the decision**. We then speak of risk - to be more exact of the risk of decision. Or the possible loss is considered to have been caused externally, that is to say, it is attributed to the environment. In this case we speak of danger” (Luhmann 1993)

Risk as decision: conclusion

Risk-as-decision	Risk-as-danger
Oriented to the future	Oriented to the past
Responsibility for possible outcomes	Responsibility for actual damage
Responsibility is assumed / ascribed	Responsibility is ascribed

Empirical evidence:

“I would always want to make the final decision myself! ...ah it means that I am in charge! In charge of my life”

(interview with women with breast cancer: Charles et al. 1998)

Ideas of risk and responsibility are mutually exclusive

- objective risk vs. moral vision / juridical perception
- “The judge supposes that there would have been no accident without a fault. The insurer's calculation is based on the objective probability of an accident, regardless of the action of will: no matter whether it results from someone or other's fault, or whether it could have been averted, the fact is that... accidents occur at a particular, specific rate” (Ewald 1991)

Risk as probability: conclusion

“objective” analysis of probabilities vs. moral vision implied by risk-as-danger and risk-as-decision

Future research:

How do these two “modes” of reasoning interact in real cases?

Part II. Empirical studies of risk and responsibility

2 directions of research

Direction	Our question
Studies of naïve moral responsibility and blame ascriptions (Lagnado & Channon 2008; Lickel et al. 2003)	How to find the responsible actors by analyzing naïve discourse?
“Psychometric paradigm” (Slovic 1987; 2000)	Do responsibility judgments correlate with traditional risk perception indicators?

Study 1: 2011 Domodedovo Airport bombing

Goal

To reconstruct lay categories of actors and analyze underlying principles of responsibility ascriptions

Data and method

- 1050 posts from LiveJournal.com
- Codifier of (1) actors, (2) actions, and (3) responsibility ascriptions

Results

- 55% references to actors include responsibility ascriptions
- terrorists and authorities were the **top mentioned** actors, religious groups were mentioned significantly less frequently
- terrorists were **blamed rarely** unlike authorities and religious groups

Studies of naïve responsibility and blame ascriptions

	References, %	Responsibility attributions, p
Terrorist	14.1	3.8
Authorities	10.3	90.7
Power structures	9.7	61.4
Taxi drivers	6.5	54.2
President / Prime-minister	6.5	66.7
Specific Ministry	5.8	67.2
Caucasians	4.8	26.4
Others (overall)	42.3	62.9
Examples:		
Groups and departments of power structures	1.3	60.0
Religious groups (e.g. Islamic fundamentalists)	1.5	58.8
Leaders of a specific region	0.2	100.0
A representative of a “power structure”	2.9	84.8

Study 2: Terrorist attacks in Volgograd (2013)

Goal

Explaining the “innocent terrorists” finding

Data and method

- 26 essays written about the events
- codifier of (1) actors, (2) actions, and (3) responsibility ascriptions
- follow-up online survey for evaluating the level of responsibility and the causal impact of actors

Results

- high correlation ($r=0.75$, $p<0.05$) of frequency of actors between two studies (references in blog posts and essays)
- all actors were blamed (the high and the rarely mentioned ones) according to the survey data
- terrorists had the same high blame ratings as the Islamic fundamentalists

Studies of naïve responsibility and blame ascriptions

	References in essays, %	Responsibility , M	Causal impact, M
Terrorist	28.2	5.9	5.4
Authorities	28.2	5.6	5.2
Power structures	10.3	5	3.6
President	2.6	5.3	4.4
Caucasians	2.6	4.4	4.7
Others (overall)	25.6	-	-
<i>Examples:</i>			
Volgograd FSB unit	-	6	3.4
Islamic fundamentalists	7.7	5.5	5.4
Volgograd authorities	-	5.3	4
FSB director A.Bortnikov	-	5.3	3

Study 3

Integrating the responsibility dimension into the “psychometric paradigm” (PP) design

Data and method

- online survey (n=84)
- standard PP questionnaire
- 2 risks – transport accidents and terrorist attack
- 4 new questions concerning responsible actors

Standard questions

Involuntary

Effects delayed

Unknown to exposed

Unknown to science

Controllable

Old and familiar

Catastrophic

Dread

Certain to be fatal

Little preventive control

Not easily reduced

Not acceptable

Responsibility questions

- How do you think, who should be responsible for preventing the risk of this kind? (open question)
- Think about the actor from your answer to the previous question. How do you evaluate his ability to cope with the task of risk prevention? (7-point scale)
- Is he successful or not successful dealing with this problem? (7-point scale)
- How do you think he can or can not alone cope with the task of preventing the risk of this kind? (7-point scale)

Results - 1

- no problems identifying actors that should prevent this risk

Transport accidents

Actor	%
Government / Authorities	32
Transport users	30
Service staff	15
Others	23

Terrorist attack

Actor	%
Security agencies	43
Government / Authorities	40
Others	17

Results - 2

- low correlation with the “standard” “psychometric paradigm” questions. Exceptions:
 - “little preventive control” correlates with “inability to cope” and “inability to cope alone” for **both** risks ($r=0.2-0.3$)
 - “unknown to science” correlates with “inability to cope” ($r=0.2$) and “inability to cope alone” ($r=0.25$) for **transport accidents**
 - “new” (unfamiliar) and “chronic” correlate with “inability to cope” ($r=0.27$ and $r=0.24$) for **transport accidents**. These two judgments also correlate with “unsuccessfulness” of the actor ($r=0.29$ and $r=0.19$) in the **terrorist attack** case

Results - 3

- principal components analysis shows:
 - different patterns for the transport accidents and terrorist attack cases
 - the only stable pattern for both cases is the correlation of three responsibility judgments and the “preventive control” variable

Conclusion

- judgments of responsibility specify the “preventive control” question
- judgments of responsibility may form a distinct dimension of risk perception

Limitations

- small sample size
- only two risks analyzed

Conclusion

- link between risk and responsibility is ambiguous
- the risk-responsibility link can be integrated into the current research of risk and responsibility ascriptions
- our empirical results correspond to the risk-as-danger definition
- the most promising task is to verify the hypotheses arising from understanding of risk as probability



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Thank you
for your attention!

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