

Transparency: The way to enhance effective risk communication

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Consumer perceptions of risk, benefit, uncertainty and cost

Contextualizing consumer attitudes towards food safety issues



Emerging societal issues in the Agri-food sector

- Consumer Health
- Food Safety
- Food Quality
- Sustainability



The key questions that need to be asked

- What is driving consumer perceptions of *risk* and *benefit*?
- Who *trusts* whom to inform and regulate?
- How does this relate to *consumer confidence* in the food chain and associated science base?
- Are there *cross-cultural, inter- and intra-* individual differences in perceptions and information needs?
- How do other consumer attitudes (*ethics, wider value systems*) relate to perceptions of risk and benefit?
- How do the public react to information about *risk/benefit uncertainty*?
- How do we understand *risk/benefit variability* across different population groups

What does this mean for consumer decision-making about health, wellbeing, and choice?



Consumer risk perception

- The **psychology of risk perception** drives public risk attitudes
 - An **involuntary risk** over which people have no control is more threatening than one people choose to take
 - Dioxin contamination of the food chain
 - Potentially **catastrophic risks** concern people most
 - Major food poisoning outbreak
 - **Unnatural (technological) risks** are more threatening than natural ones
 - Gene technology, nanotechnology, convergent technologies versus
Organic production, ecological foods



Consumer risk perception

- **Ethical representations, values and concerns** are emerging as an important determinant of societal and consumer decision making
 - animal welfare
 - environmental impact,
 - sustainability
- Perceptions that the **“truth” is being hidden** increases both risk perception and distrust in regulators and communicators
 - increased transparency in risk management

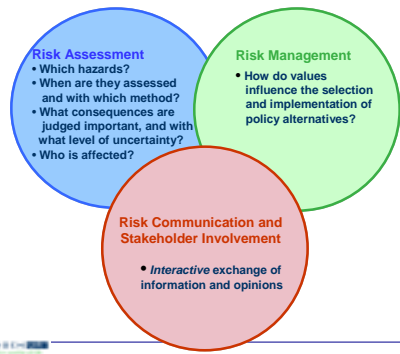


Risk Analysis Framework; improving trust through increased transparency?

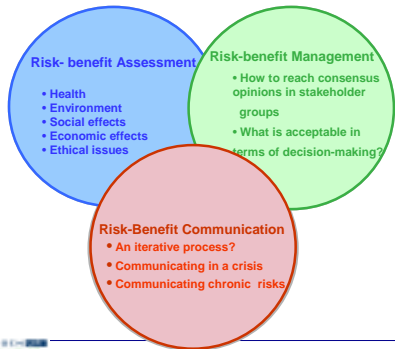


(after WHO, 1998)

Increased transparency raises more communication needs?



A Risk-benefit Analysis Framework; improving trust through increased transparency?



Trust in regulatory institutions and risk-benefit governance

- People may not always have a view regarding different Agri-food technology applications or food safety issues
- Trust in regulatory institutions is important, particularly in the area of potentially controversial applications or food safety issues
- People may react emotionally in response to specific issues (particularly if they do not want to think about relevant issues in depth)

Building societal trust in food risk management:

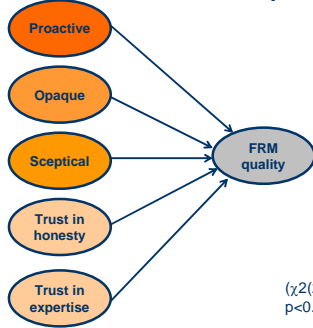
What needs to be communicated?

What determines good food risk management?

The constructs (derived from lay-expert focus groups)

- Proactive consumer protection
- Opaque and reactive risk management
- Scepticism regarding risk assessment and risk communication practices
- Trust in expertise of food risk managers
- Trust in honesty of food risk managers

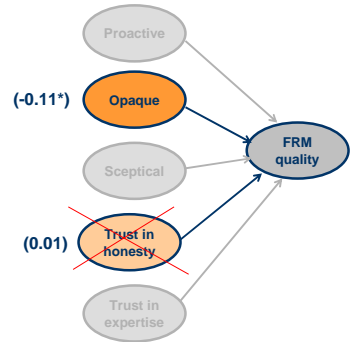
Structural model – FRM quality



($\chi^2(2420)=8429$, $p<0.01$; RMSEA=0.07).

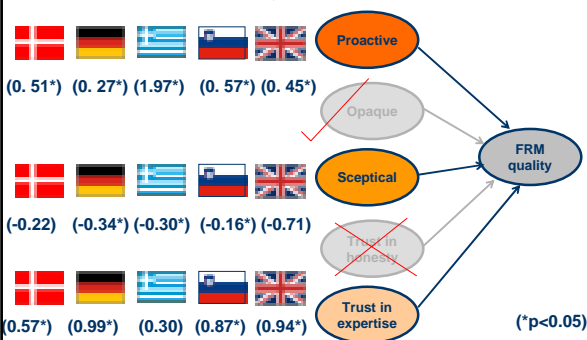
Van Kleef et al., submitted, risk analysis

Quantitative results: no country differences



(* $p<0.05$)

Country differences



(* $p<0.05$)

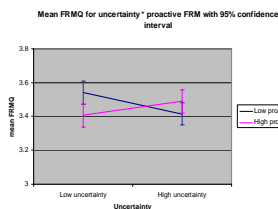
Quantitative results

- Factors of universal importance
 - Pro-active consumer protection
 - Opaque and reactive risk management
 - Trust in the expertise of food risk managers (*except Greece*)
- Factors of local importance related to food risk management quality evaluations:
 - Scepticism in risk assessment and communication practices

Communication example; GM potato with nutrition benefits

- Uncertainty x Proactive management communication

High uncertainty about the risks associated with the food, people prefer **proactive** FRM activities.



Low uncertainty about the risks associated with the VAP, people are **less concerned** about proactive FRM activities.

$F(1,2) = 9.85$, $p = 0.002$

Van Dijk, H., Van Kleef, E., Frewer, L.J., et al. (in preparation). Consumer responses to communication about food risk management.

Explaining individual differences

Psychological factors determine consumer attitudes, decision-making and impact on self-protective behaviors and food choices

Thank you!

Any Questions?