

Food Risk Communication

The implications for Food Safety Skills Development

Mary Brennan
Lecturer in Food Marketing
School of Agriculture, Food and Rural Development
University of Newcastle upon Tyne, UK.

Presentation Plan

1. Food Safety & the European Public
2. Food Risk Perceptions
 - The Expert Community
 - The general public
3. Why communicate food risk?
4. Food Risk Communication
5. Skills development – Questions to consider

Food Safety & the European Public

- Plethora of surveys and investigations over the last two decades
 - Eurobarometer studies (EU)
 - Annual consumer attitude surveys – national food agencies
- Based on standard consumer research techniques of measuring levels of public concern/worry associated with various food safety issues
- Do not explore in any great depth the reason for and implication of these measured levels of concern/worry
- Key differences have been identified between what the scientific community and the public are concerned about

The European Public

Q5: For each of the following issues, please tell me if you are very worried, fairly worried; not very worried or not all worried by it?

Pesticide residues in fruit, veg and cereal	63%
New viruses like avian influenza	62%
Unhygienic conditions in food handling outside the home...	62%
Genetically modified products in food/drink	58%
The welfare of farmed animals	55%
To put on weight	48%
Unhygienic conditions in food handling at home	32%

How are food risks perceived?

The Expert Community

- Define risk in narrow quantitative terms
- Experts consider the nature of harm that would occur (the hazard), the probability that it will occur (the risk) and the number of people who may be affected (the exposure)
- Have little confidence in the public's understanding of food safety and risk issues
- View the public as emotional and irrational
- Overemphasise the impact of the media on the public
- Believe that if the public understood science better then they would be more accepting of risks

**What the public should be concerned about and what
the public is concerned about?
The views of food safety experts**

	Public should be concerned.. (Rank 1-10)	Public is concerned about... (Rank -10)
E-coli	2.64 (1)	3.55 (2)
Salmonella	3.42 (2)	3.55 (2)
Listeria	4.26 (4)	6.26 (7)
Antibiotic residues	5.67 (5)	5.77 (5)
Herbicides and pesticides residues	5.70 (6)	6.09 (6)
BSE	6.56 (7)	3.53 (1)
Novel Foods	7.22 (9)	3.59 (4)

DeBoer, McCarthy, Brennan, Kelly
& Ritson (2005)

How are food risks perceived?

The General Public

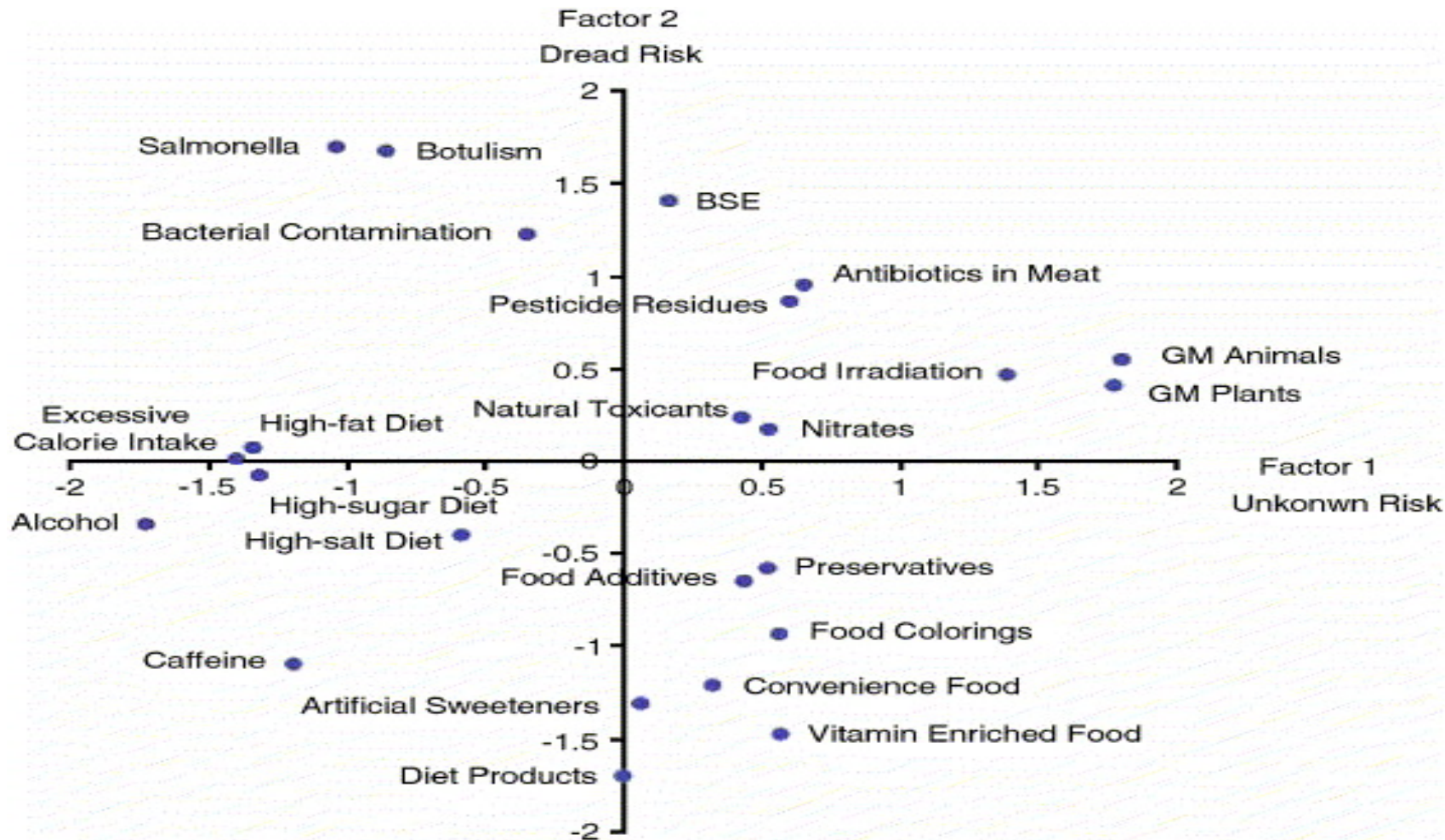
- Psychometric Paradigm (Slovic, Fischhoff & Lichtenstein, 1980)
 - Every hazard has its own unique pattern of psychologically determined characteristics that are related to perceptions of risk (Miles, Braxton & Frewer, 1999)
- Public Risk perceptions determined not so much by the hazard per se but by the social and psychological characteristics of the hazard
 - Outrage – How worried and angry people get about a risk (Sandman, 1987)
- Evidence suggests that taking a risk is of a completely different cognitive order than being subjected to a risk, even if these two poles are rarely clear cut

Bennett Fright Factors

A risk is generally more worrying and less acceptable to the public if:

1. It is involuntary, rather than voluntary
2. It threatens a dreaded form of death, illness or injury
3. It damages identifiable victims
4. Is poorly understood by science
5. Is subject to contradictory statements from responsible sources
6. Is inequitably distributed
7. Is inescapable
8. It arises from an unfamiliar/novel source
9. Is man-made rather than natural
10. Its causes hidden and irreversible damage
11. It poses particular risk to small children, pregnant women or future generations

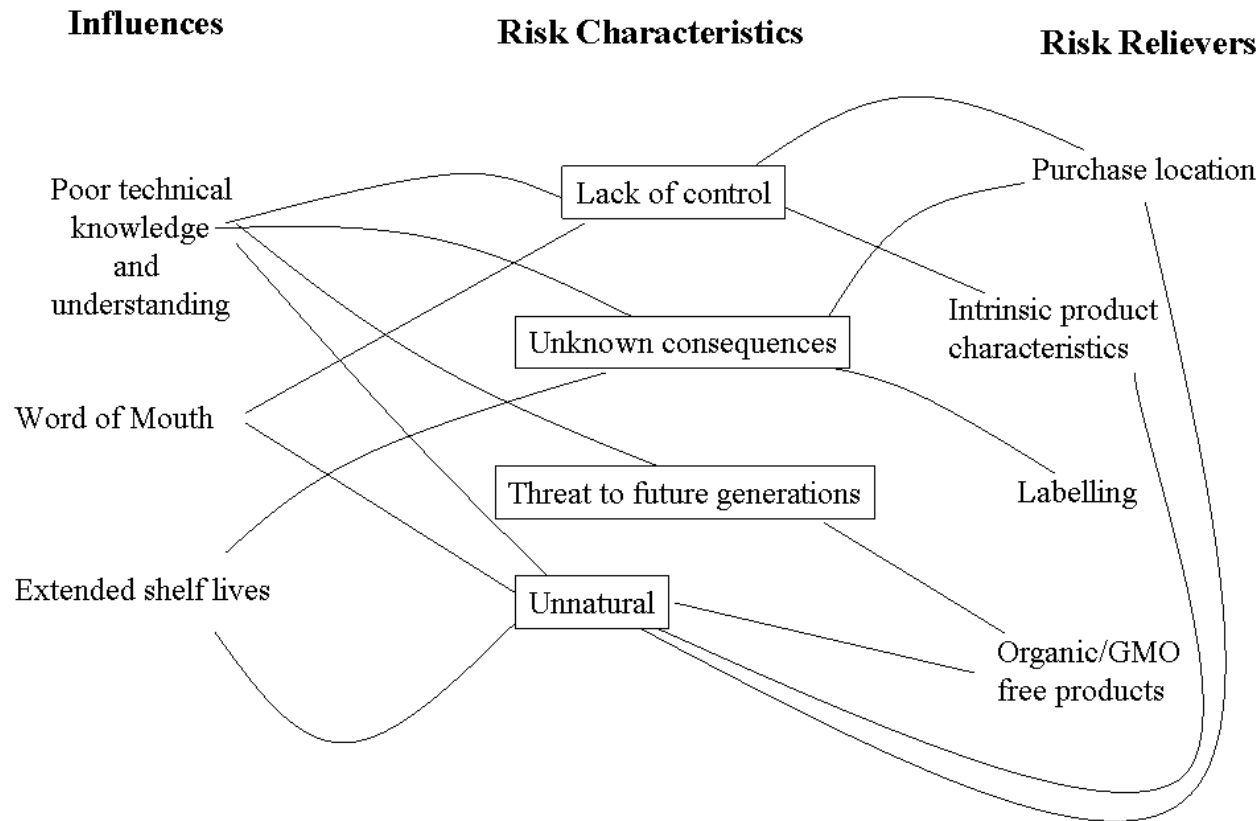
An example of Food Risk Perception Research



Siegrist, Keller & Kiers (2007)

How the public cope with food risk?

The case of (Bio)technological Hazards



McCarthy, Brennan, Ritson &
DeBoer (2006)

Expert v's General Public

The crux of the divide

The public generally pay too little attention to the hazard side of risks and exerts usually completely ignore the outrage side

Why communicate about Food Risk?

- It's a consumer/public right!
- Better health
- Gain trust
- Prevent outrage
- Find better solutions
- Obtain understanding and support

Risk Communication

A Current Definition

Risk Communication is the exchange of information and opinions concerning risk and risk related factors among risk assessors, risk managers, consumers and other interested parties

Goals of Risk Communication

1. Foster public trust and confidence in the safety of food
2. Strengthen the working relationship & mutual respect among all participants
3. Promote the appropriate involvement of all interested parties in the risk communication process
4. Exchange information, attitudes, values, practices and perceptions of interested parties concerning risks associated with food and related topics

Risk Communication Objectives

1. Inform
2. Educate
3. Persuade
4. Motivate
5. Manipulate
6. Coerce

Implications for future food safety skills development

- Does industry need to concern itself at all with food risk communication and how the public perceive food risk?
- Should industry play a role in communicating food risk or should it be the responsibility of national food safety agencies?
- Is it necessary for all employees in food safety roles to appreciate how the public and other stakeholders perceive and cope with food risk?
- Can greater industry involvement in the development and refinement of food risk communication policy benefit the industry?

Implications for future food safety skills development

- What practical skills need to be developed within the industry to empower all those contributing to and/or responsible for food risk communication activities?
- What assistance needs to be provided to the industry, especially to small and medium sized enterprises, to encourage and facilitate them to contribute and participate more effectively in food risk communication decision making?