

Food Risk Management Practices: The Views of Consumers and Experts

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Abstract

Numerous studies have analysed consumer perceptions of the risks associated with different food hazards. However, little research has considered how consumers perceive food risk *management*. If consumers' perceptions of what constitutes effective food risk management practices differ from those of experts, then consumer confidence in the risk analysis framework that underlies management practice may be compromised. This paper reports a research programme exploring attitudes to food risk management in five European countries (Denmark, Germany, Greece, Slovenia and the UK). Initial research used focus groups and follow-up interviews to identify key factors in the evaluation of food risk management practices according to consumers and experts (e.g. risk assessors and managers). The results from the qualitative phase of the study were then used to inform the development of a quantitative survey instrument to model the key determinants of consumer confidence in food risk management practice. Preliminary results suggest some agreement between consumers and experts regarding minimal requirements for positive evaluations of management practices. Both consumer and expert participants believed that it was important to ensure that good management involved the *development and maintenance of systems of control over hazards* and that risk managers needed to be *proactive in preventing the development of "food crises"*. They also emphasised the importance of *timely and appropriate risk communication*. Some differences in perceptions between consumer and expert participants regarding what constitutes good practice in food risk management were also identified. Expert participants were generally more positive about existing food risk management practices, although they did identify a number of shortcomings or constraints. Analysis of our survey results will increase our understanding of the

key factors involved in different stakeholders' food risk management evaluations, and will be used to inform the development of strategies to enhance consumer confidence in the management system.

1. Introduction

The governance of food safety has long been regarded as the domain of “experts” and professional risk managers, with minimal input from other interested parties, such as consumers. However, a number of food safety incidents in Europe in the latter years of the twentieth century prompted a series of changes in the approach to food risk management. Some of these changes are concerned with the core principles of food risk management and its institutional structures [1], while others are concerned with the promotion of greater public participation and increased transparency in decision-making [2]. Taken together, these changes are intended to overcome the loss of public trust in food safety regulation and management associated with the various “food crises” and to improve consumer confidence in food safety [3].

Numerous studies have analysed consumer perceptions of the risks associated with different food hazards [4] [5]. However, little research has considered how consumers perceive important food risk management practices *per se*. If consumers' perceptions of what constitutes effective food risk management practices differ from those of experts, then consumer confidence in the risk analysis framework that underlies management practice may be compromised. It has been suggested that experts differ from lay people in terms of their general risk perceptions [6] [7], as well as with respect to food risks [8] [5] [9]. This difference in views has become known in the literature as the “expert-lay discrepancy”. The existence of such a discrepancy has implications for the setting of agreed priorities in food risk management [5] [10].

This paper reports some results from the initial phases of the EU 6th Framework Programme project SAFE FOODS. The research was conducted by Work Package 4, with the following main objectives:

- To understand how current food risk management practices are perceived by various stakeholders with a strong interest in food safety – namely consumers, food safety scientists, food risk assessors and food risk managers.
- To examine how consumers and experts react to each others' arguments and to ascertain how well they are able to understand one another's views in relation to food risk management.
- To model the key determinants of consumer confidence in food risk management.

2. Methodology

This is a multi-phase research project, employing mixed methodologies. In the initial phases of the project, qualitative methodologies were used to identify the key

factors that influence how individuals think about food risk management. As this research was exploratory in nature, it was decided not to impose any theoretical model or framework on the process of data acquisition and analysis. The objective was not to test a particular theoretical perspective, but to explore a relatively under-researched area and to begin the process of developing a model of the factors driving consumer confidence in food safety. The results from the qualitative research phase were used to inform the development of a quantitative survey instrument to model the key determinants of consumer confidence in food risk management practices. Table 1 summarises the research programme so far, indicating the methods used and the nature of our samples.

Phase 1 (pilot)	Focus groups	Consumers	4 groups (n40)	Summer 2004
Phase 2	Focus groups	Consumers Experts	5 groups (n46) 15 groups (n62)	Autumn 2004
Phase 3	Follow-up interviews	Consumers Experts	32 respondents 39 respondents	Spring 2005
Phase 4	Survey	Consumers	2,533 respondents	Summer 2005

Table 1: WP4 Research Programme (to Summer 2005)

2.1 Phase 1 – Pilot Focus Groups

In Phase 1 of the research programme, focus groups with consumers were conducted in Denmark, Germany, Greece and the UK. These countries were chosen for their (hypothesised) cultural differences in attitudes towards risk in accordance with Hofstede values [11]. The key objective of the focus groups was to gain an understanding of the effectiveness of current food risk management practices, as well as the perceived trustworthiness of different actors involved in food risk management. The groups were also intended to test and refine the protocol used by the research team.

2.2 Phase 2 – Main Focus Groups

In Phase 2 of the study, focus groups were conducted with consumers and experts in five European countries: Denmark, Germany, Greece, Slovenia and the UK. The key objective was to identify similarities and differences in perceptions of food risk management practices held by consumers and experts with an interest in food safety. The expert focus groups comprised food risk assessors in one group and food risk managers in a second, in recognition of a distinction between these specialisms suggested by the World Health Organisation (WHO) [12]. In addition, a focus group with food safety scientists was conducted in each country, to ensure representation of individuals from across the food risk analysis process.

2.3 Phase 3 – Follow-up Interviews

In follow-up telephone interviews, participants in the focus groups were confronted with a selection of each others' views on food risk management. They were asked

to comment on the extent to which they agreed or disagreed with the opinions expressed in the statements and to indicate their reasons for doing so. The views on food risk management that were presented to respondents for comment were derived from the main focus group study. The objective was to examine how the consumer and expert focus group participants reacted to each others' arguments and to ascertain how well they were able to understand one another's views in relation to food risk management. Such a methodological approach is relatively novel and is essential for determining whether more inclusive forms of food risk management strategy are likely to be successful. If consumers and experts are not able to appreciate one another's positions, this has implications for the development of wider (and consensual) food risk management policy.

2.4 Phase 4 – Consumer Survey

Based on the results of the qualitative work, a survey instrument was designed with the objective of modelling the key determinants of consumer confidence in food risk management practices. Data collection took place in the five EU countries listed under section 2.2 and the survey was administered by means of an internet questionnaire (except in Slovenia, where it was done via telephone interview). The target sample size for each country was 500 respondents, with a 50:50 gender split, and nationally representative in terms of age and level of education.

3. Findings

This section presents a brief overview of the results from each phase of the research programme. The research team is publishing more extensive accounts of each of the phases and details are given in the text.

3.1 Phase 1 - Pilot Focus Groups

Analysis of the pilot focus groups identified three main factors that participants considered to constitute evidence of “good” food risk management: the existence of identifiable control systems that are perceived to respond quickly to contain a risk; the instigation of preventive measures; and the availability of information that offers individuals the ability to exercise informed choice. These evaluations were similar in each of the countries under consideration and were linked to ideas regarding the controllability of risks and to ideas about who is responsible for managing particular risks. The perceived trustworthiness of food risk managers was linked to the extent that they were regarded as free from “vested interests” and the degree to which they have consumers' interests in mind. The full results of this study have been published separately [13].

3.2 Phase 2 - Main Focus Groups

In the main focus group study, five key themes were identified as common to the perceptions of both consumer and expert participants, although these were not represented in the same way by both groups. The key themes were: (1) efforts made by the responsible authorities to manage food risks (including systems of control, instigation of preventive measures, the provision of information); (2) responsibility for prevention and management of food risks; (3) how priorities are established in

regulatory systems; (4) scientific progress and its implications for food risk management; and (5) the impact of media attention on food risk management. These findings are explored in more detail in Van Kleef et al [14].

On the whole, the expert participants were more positive in their evaluations of the efficacy of current food safety control systems. Both expert and consumer participants emphasised the importance of preventive, rather than reactive, food safety measures – and both groups felt that more could be done in this area. Risk communication was seen as essential by both groups, but consumers were concerned about “information overload”, while experts emphasised the need for consumer education.

In relation to responsibility for the management of food risks, the expert participants tended to highlight the importance of everyone in the food chain taking responsibility for their role in the process of food risk management. Consumer views were related to their perceived level of control over exposure to the risk. Expert participants were inclined to believe that consumer health protection is prioritised in food risk management, but consumer participants did not share a similar level of confidence that this was the case. Both expert and consumer participants acknowledged that scientific progress enables the identification of previously unknown risks. Expert participants were concerned about emerging and “hidden” risks. Both groups perceive that food risk management is impacted by the level of media attention directed towards a particular food safety issue. The expert participants blamed the media for making consumers unnecessarily worried about food safety.

3.3 Phase 3 - Follow-up Interviews

When expert and consumer participants were confronted with each others’ views about food risk management in the course of the follow-up interviews, they often agreed with the expressed opinions and demonstrated similar normative views about how food risk management *should be* conducted. However, while there might be agreement with one another’s views, the reasons for this agreement were sometimes different. Thus consumer participants agreed with the expert statement that “consumers are not sufficiently aware of food hazards”. However, while expert participants felt that consumers lack willingness to acquire information, consumer participants highlighted the inadequacy or inappropriateness of many information sources.

Differences in opinion were more marked in relation to views about current food risk management practices and the role of the media. Consumer participants were less inclined to agree with the expert view that “the responsible authorities make satisfactory efforts to manage food hazards” and they did not support the expert view that “the media must be blamed for making consumers unnecessarily concerned about food risks”. They pointed to the commercial drivers in news production and the tendency for the media to sensationalise, while also

acknowledging its importance as a communication channel. Again, the results of this study will be reported separately [15].

3.4 Phase 4 – Consumer Survey

The consumer survey conducted in summer 2005 produced a final sample of 2,533 respondents. Structural Equation Modelling techniques are being applied to the data to ascertain the extent to which various constructs influence evaluations of food risk management. The objective is to build a model of the factors driving consumer confidence in food risk management and to test the results via further experimental work. The research team intend to publish the results of the survey in the near future [16].

4. Discussion

This paper provides a brief overview of the initial phases of the research programme of Work Package 4 of the EU SAFE FOODS project. The results of the various studies give a useful indication of a range of perceptions and concerns in relation to food risk management. They also represent the first systematic evaluation of the similarities and differences in perceptions of consumers and experts on this issue. While the qualitative studies were exploratory in nature, they do point to a number of factors that need to be considered in food risk management strategies.

Rather than highlighting an “expert-lay discrepancy”, this research suggests that there is a level of agreement between consumer and expert participants about the minimal requirements for positive evaluations of food risk management. However, consumer participants were somewhat less positive in their evaluations of current practices and less certain that health protection is prioritised over economic interests. This may imply that more proactive communication regarding hazard control systems and how they are performing, as well as more public discussion of the values applied to determining risk acceptability, will have a positive impact on consumer confidence in food risk management.

In the expert community there was a general feeling that consumers lack knowledge about food hazards – and sometimes lack the willingness to acquire that knowledge. Although the importance of consumer education was emphasised, this needs to be tempered by the perception of “information overload” on the part of the consumer participants. Both groups agreed on the importance of risk communication, but the focus should be on quality rather than quantity, with messages carefully targeted to consumers’ information needs.

Experts and consumers agreed that responsibility for risk management depends on the nature of the risk (i.e. natural or technological) and the nature of exposure (i.e. voluntary or involuntary). Some food risks are seen to be beyond an individual’s influence or control (e.g. genetically modified foods or BSE) and in such instances there is reliance on institutional risk management. This finding accords with previous research on risk perceptions [17] [6] [18]. Where an individual is more able to control exposure to a food hazard (e.g. food allergy and dietary choice), then

support of personal precautionary action is regarded as best practice – again, suggesting the targeting of risk communication to consumers' information needs.

Both communities expressed the need for greater resource allocation in food risk management, particularly in the areas of emerging food risks and preventive activities. There was strong endorsement of the view that good food risk management is proactive and not reactive.

In the next phase of our research programme we plan to use our survey results and the consequential model currently being developed [16], to inform the development of communication strategies to enhance consumer confidence in the food risk management system.

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