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Consumer Risk Reactions to Food Product-Harm Crises Over Time: Evidence From Cross-Cultural Field Studies

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1. Introduction

- Consumer risk reactions during a product-harm crisis may substantially impact the demand of food products and other services, affect business reputations and sales, and compromise the performance of marketing channels of an entire industry.
- Consumer reactions may vary greatly among countries because of cultural differences and diverging public and industry risk-management policies regarding the communication of the “actual” level of risk.
- Market barometers and consumption dropped dramatically in many countries throughout the BSE and bird flu crisis.

2. Research Objective

- To evaluate consumer risk attitudes towards and risk perceptions of harmed products (beef due to BSE; chicken due to bird flu/BF) across different countries in which different contingent market conditions occur, and
- To quantify how consumer Attitudes and perceptions affect the consumption of the harmed products within different crisis phases (pre- ; incipient- ; and post-crisis phases).



3. Theoretical Background

The influence of risk attitudes and risk perceptions on consumer risk behavior (CRB) can be used to formulate effective marketing strategies in case of a product-harm crisis (Pennings et al., 2002; Pennings & Wansink, 2004; Schroeder et al., 2007; Kalogeras, 2010). How?

By *decoupling consumer risk behavior* into the separate components of *risk attitude (RA)* and *risk perception (RP)*, and *the interaction of the two: (RA * RP)*, a more robust conceptualization and prediction of the puzzling consumer reactions to a market crisis situation may be possible.

Yet, CRB is a part of a dynamic decision problem that does not simply terminate in a specific point in time. Instead, the behavior of an individual consumer may adapt to the contingent conditions (i.e., contingent contexts) occurring in a dynamic decision environment (Hogarth, 1981; Hoch & Deiton, 1989; Bettman et al., 1998; Moorman et al., 2004)

Conceptual Model

- CRB may be conceptualized as comprising two decisions that share the same decision-making structure:
 - a) participation decision, and
 - b) quantity (reduction) decision.

These two separate but interdependent decisions reflect the reduction in the consumption of a harmed product. We hypothesize that:

*The impact of consumers RA, RP and RA*RP on consumer decisions is more likely to decrease in the pre- and post- phases than in the incipient-phase of a product harm crisis.*

Research Design

- *Method:* Face-to-face interviews with Americans & Germans regarding reduction in beef consumption due to the BSE crisis; and with Dutch, Greek and Egyptian consumers regarding reduction in chicken consumption due to the BF crisis. Interviews conducted at grocery malls.
- A structured questionnaire was used including psychometric scales for measuring RA and RP. A total of 823 American, 600 German, 294 Dutch, 302 Egyptians, and 347 Greek consumers were interviewed during different BSE and BF crisis phases.
- *Analysis:* A double-hurdle model was applied

Main Findings & Implications

	Pre-crisis phase	Incipient-crisis phase	Post-crisis phase
		Increased influence & magnitude	Decreased influence & magnitude
(RA)	Product elimination and recalls	Full product-elimination and recall strategies	Partial product-elimination and recall strategies
(RP)	Communication strategies	Investing more in communication strategies	Investing less in communication strategies
RA*RP	Mixture of strategies based on the relative importance of RA & RP	Strengthening both product-elimination and communication strategies	Partial product-elimination and investing less in communication.

- The relative importance of RA, RP, and RA* RP changed during crisis phases for different segments of the population: it is lower in the pre- and post-crisis phases
- Marketing strategies ,agribusinesses and public policies must be adapted over time.