

Responsibility, recalls, and reputations of organizations: theory-based experimental studies to improve food safety crisis communication

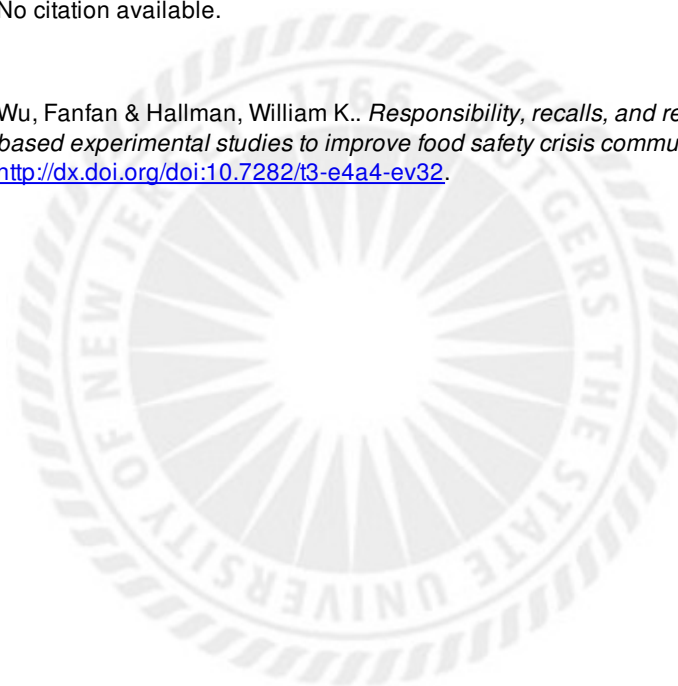
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Responsibility, Recalls, and Reputations of Organizations: Theory-Based Experimental Studies to Improve Food Safety Crisis Communication

Fanfan Wu, PhD and William K. Hallman, PhD

Background

Food Safety Crisis in this study refers to incidents that involves food contamination, food adulteration, foodborne illness outbreaks, mislabeling involving allergens, and similar incidents that would represent a threat to public health and would likely result in major food recalls and other actions designed to reduce that threat.

Food safety crises pose major threats to public health

The US Centers for Disease Control and Prevention (CDC) estimates that about 1 in 6 Americans (48 million people) get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases each year.

Food safety crises also pose major threats to economic and reputational viability of responsible companies

A food safety crisis can disrupt an organization's operations, negatively affect its finances and reputation, and sometimes even pose threats to the continued existence of the organization, or even put an entire industry in danger.

Table 1. Selected food safety crises in recent years and impacts

Food Safety Crisis	Cause	Threats to Public Health	Threats to Organization
2006 Spinach Recall	<i>E. coli</i> O157:H7	26 states, 199 reported infections, 31 hemolytic uremic syndrome (HUS), 3 deaths	Estimated loss of \$74 to 100 million dollars to the spinach industry
2009 Peanut Corporation of America (PCA) Peanut Butter Recall	<i>Salmonella</i> Typhimurium	46 states, 716 reported infections, 9 deaths	<ul style="list-style-type: none"> Estimated \$144 million economic losses Bankruptcy of the former (PCA) Conviction and jail terms of key management
2015 Blue Bell Ice Cream Recall	<i>Listeria</i>	4 states, 10 reported infections, 3 deaths	Estimated loss from \$180 to \$200 million
2015 – 2017 Chipotle outbreaks	<i>E. coli</i> , <i>Salmonella</i> , and norovirus	Multiple outbreaks	\$26.4 million in just the first quarter of 2016

Can food safety crisis communication optimize the balance between the needs of public health and organizational reputation? And how?

There is little empirical research specifically focused on food safety crisis communication with the goal of protecting both public health and organizational reputation. To address this issue, we examined public responses to different types of food safety crises and different food safety crisis communication strategies to an unfolding fictitious food safety crisis.

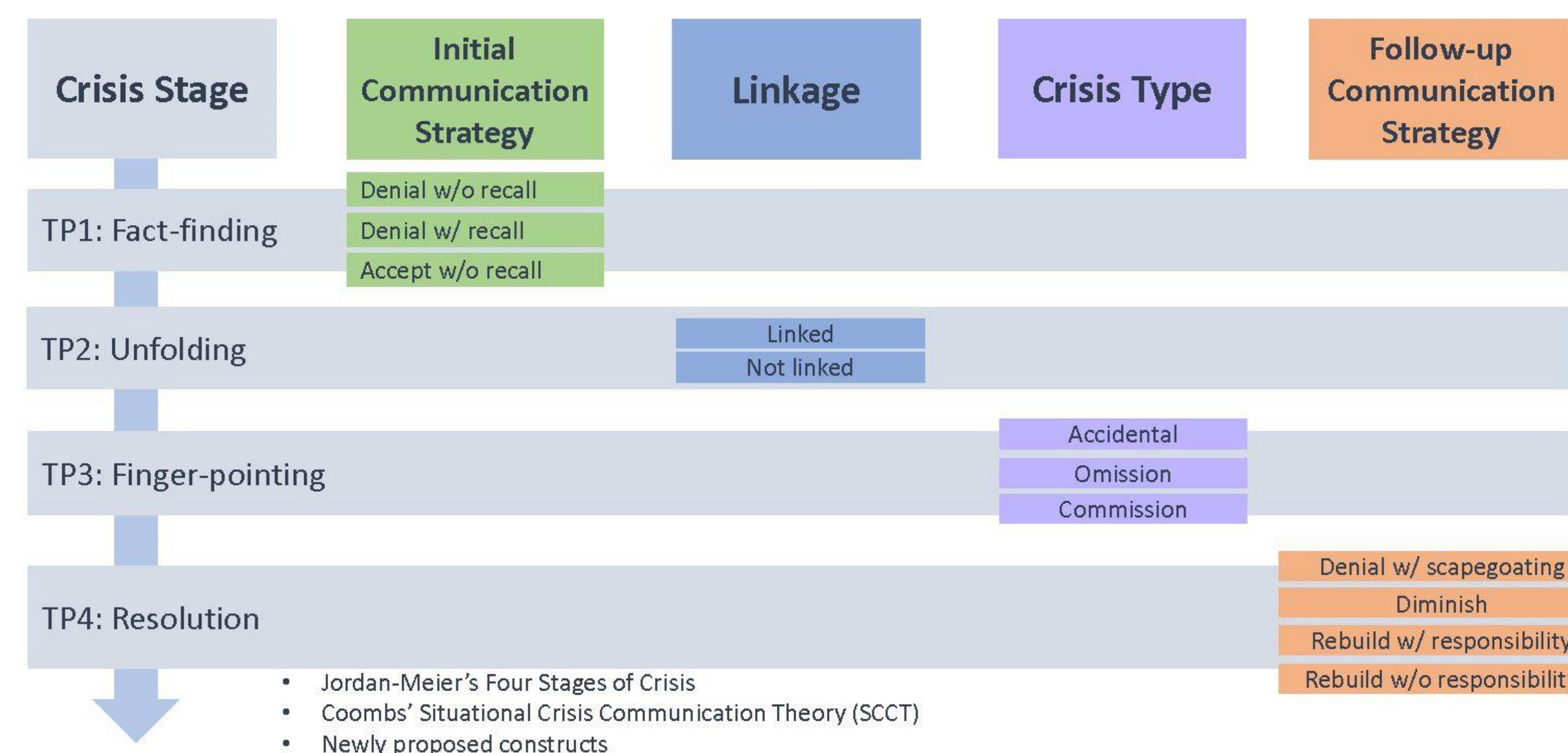
Several highlights of this study:

- Theory-based experimental design:** we used a widely used crisis communication theory - Situational Crisis Communication Theory (SCCT) to guide the experimental design.
- Unfolding crisis + Unique circumstances posed by food safety crisis:** we designed 4 different time points to reflect how a typical food safety crisis unfold in real life, so we can apply our findings in a way that is ecologically valid.
- Advanced the theory:** we proposed and tested new categorization of food safety crises and new crisis communication strategies.
- Comprehensive public responses:** we examined a comprehensive list of public responses to a food safety crisis and its communication (see methods and materials).

Methods and Materials

Food Safety Crisis Communication Components

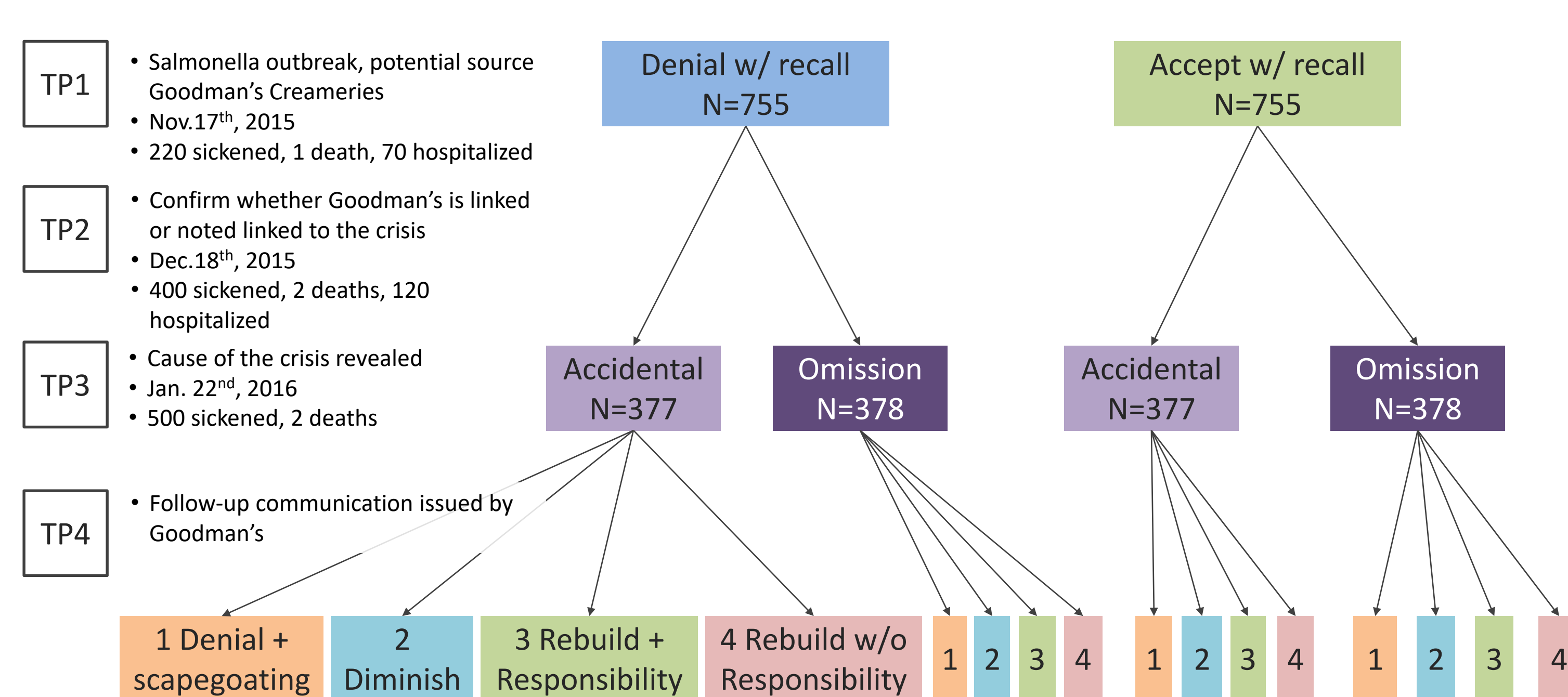
Figure 1. Food safety crisis communication components tested



Experimental Design

- Scenario: a *Salmonella* outbreak, potentially associated with a fictional company Goodman's Creameries' ice cream products
- Participants recruited via Qualtrics Panel: 18 years or older, randomly assigned

Figure 2. Experimental design flow chart



Measurements

- Demographics
- Post-crisis attitude toward the company
- Behavior intentions
- Attribution of responsibility and blame
- Obligation and ability
- Emotional reactions (anger, sadness, fright, anxiety)
- Perception of legal outcomes (fine and jail time)

Funding Source

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Results

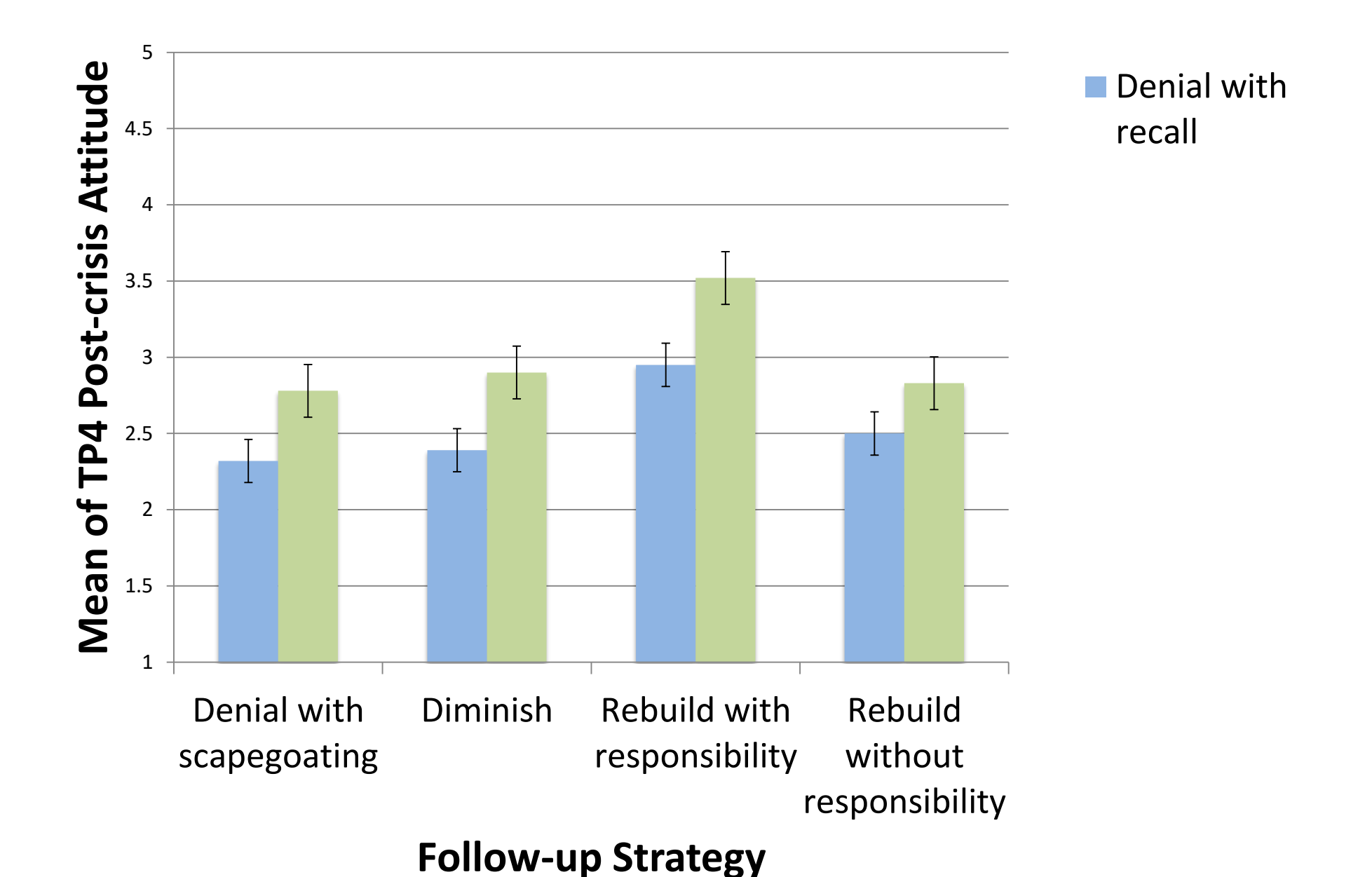
Demographics

- 1,510 included in the final analysis; Female : male = 1 : 1; White: 81.8%
- Region: national representative

Impacts of Initial Crisis Communication Strategy on Public Responses

Accept with recall generated significantly better public responses than denial with recall on almost all of the outcome measurements

Figure 3. Effects of initial strategy on TP4 behavioral intentions

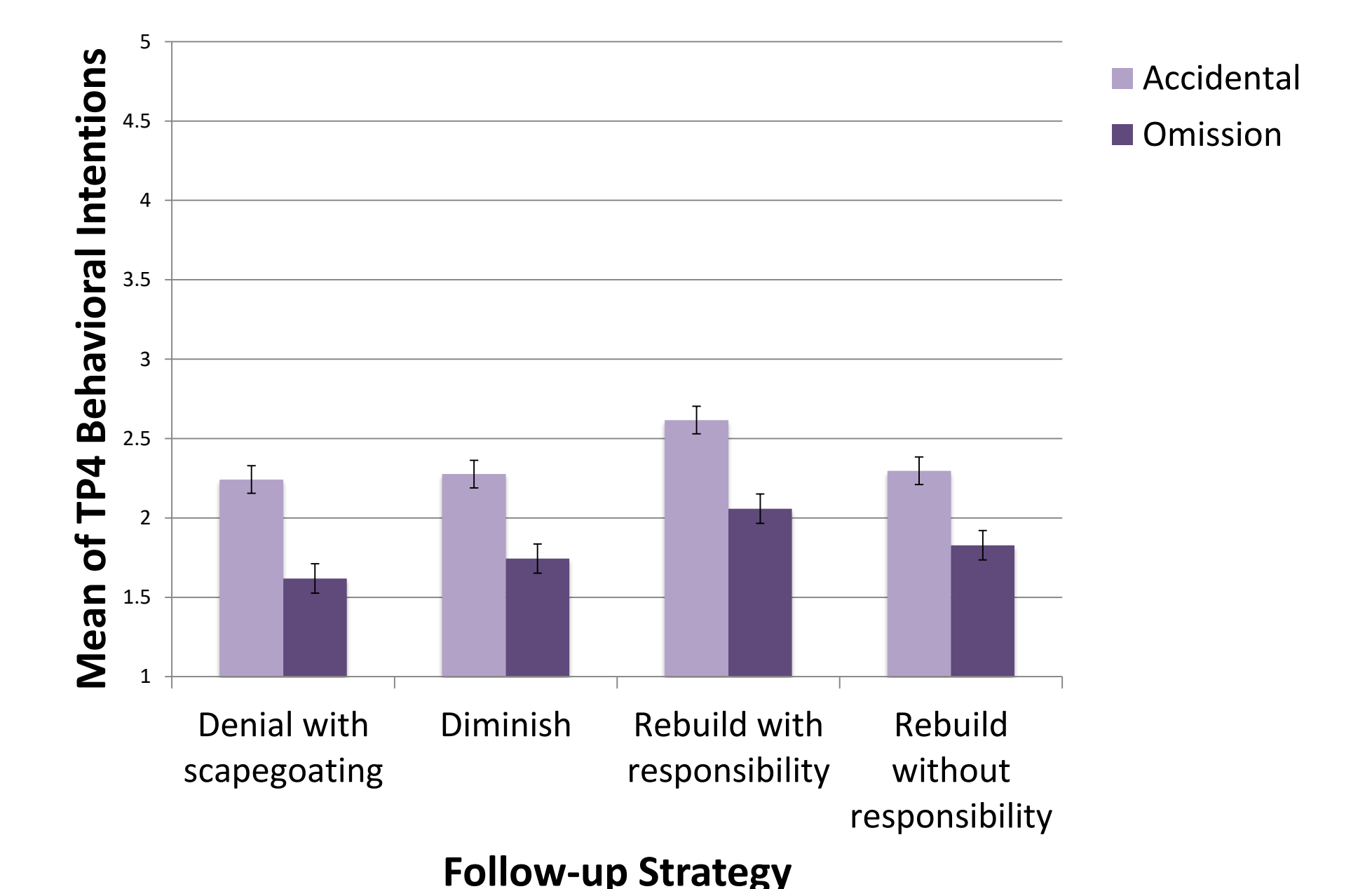


Impacts of Crisis Type on Public Responses

Accidental crisis is associated with significantly better public responses than omission crisis on almost all of the outcome measurements

Rebuild with responsibility follow-up strategy generated significantly higher behavioral intention score than other three follow-up strategies

Figure 4. Effects of crisis type on TP4 behavioral intentions



Conclusions and Implications

This study has shown:

- Issuing a recall and accept responsibility at the early stage of a food safety crisis can protect both public health and organizational reputation.
- Accidental type of food safety crisis is linked to less negative public responses.
- At the later stages of a food safety crisis, the best follow-up communication strategy for the responsible company to adopt is to take responsibility, apologize, and take actions to fix the problem.

Implications:

- A food company involved in a food safety crisis should adopt initial and follow-up communication strategies as the crisis unfolds.
- The best food crisis communication strategy to protect public health also turns out to be the best strategy to protect and restore organizational reputation.

* The experiment reported in this poster is a part of a comprehensive investigation of how to improve food safety crisis communication. For more information, please contact the researchers at fanfan31@gmail.com