

Academic and Food Industry Management Perspectives of Food Safety Culture

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Introduction

Food safety culture (FSC) can be defined as ‘*shared values, beliefs and norms that affect mindset and behavior toward food safety in, across and throughout an organization*’ (GFSI, 2018). The concept of FSC has renewed recognition of the importance of individual employee behaviors within food sector organizations by shining a spotlight on awareness and accountability (Jespersen and Bedard, 2015).

FSC is a key contributory factor to the food safety performance of food establishments (Nyarugwe *et al.*, 2016) and demonstrating FSC and meaningful, positive improvement is challenging. Understanding FSC perceptions and related improvement approaches may be achieved from determination of industry and academic perspectives.

Aims

To explore FSC perspectives from professional influencers in the food-industry and academia to ascertain effective improvement approaches and key actions used in industry to facilitate culture change.

Methodology

- Interview schedule development:** Literature was reviewed to explore concepts that support theories of desirable attributes, behaviors and attitudes associated with FSC in food manufacturing / processing environments; findings were used to inform development of an interview schedule / discussion route.
- Sample and data collection:** Semi-structured, in-depth interviews (n=22) were conducted with professional, food industry and academic influencers regarded as ‘leading the field’ in terms of FSC improvements. Interviews, conducted face-to-face, via telephone and video-calls, obtained qualitative insights into perceptions of FSC, including desirable key actions, characteristics, behaviors and attitudes associated with facilitation of culture change.
- Data analysis:** A thematic analysis of transcribed interviews was undertaken using NVivo 12 (QSR International).

This research has received ethical approval from the Cardiff Metropolitan University Health Care and Food Ethics Panel (Reference PGR-1360)

References

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- Nyarugwe, S. P., Linnemann, A., Hofstede, G. J., Fogliano, V. and Luning, P. A. (2016) Determinants for conducting food safety culture research. *Trends in Food Science & Technology*. Vol. 56, p77-87.

Results and Discussion

An in-depth understanding of FSC improvement complexities indicated differences between academic and industry professional perceptions of FSC. Reported understanding of FSC (Figure 1), visualization of a strong, positive FSC (Figure 2), rationale for FSC focus (Figure 3) and reported actions to improve FSC (Figure 4) are presented below.

Figure 1. Reported understanding of FSC.

Those in manufacturing environments tended to describe food safety culture as “*what people do, when they think no one is watching*” them, using practical language, simple words.

Academics described food safety culture using terminologies that are more complex and difficult to understand for layman.

“*a set of dominant or prevailing attitudes and behaviors, that will directly and indirectly affect how people think and behave around food safety*” (Academic)

“*food safety culture is properly equipping training and managing your processes. It’s giving people the tools to be successful every day*” (Food Industry Manager)

Figure 2. Visualization of a strong, positive FSC.

Food industry respondents reported mental images to visualize what their manufacturing plants would look like with a strong positive FSC.

Academic or consultant respondents tended to describe a strong, positive FSC with theoretical words that are less practical.

“*it’s that sense of empowerment and involvement*” (Academic)

“*Everything is clean, everything is well ordered, all the color coding of the cleaning equipment, everything is on the boards, all the good identification is there*” (Food Industry Manager)

“*where we would walk into a plant and see frontline teams that are knitted together as a very high performing team*” (Academic)

“*no-one is trying to cover things over, and they want to do the right thing*” (Food Industry Manager)

Figure 3. Rationale for FSC focus.

Many respondents suggested that developing a food safety culture was either ‘*a burning platform*’ (a recent incident), evolution to take food safety management to the next level or Global Food Safety Initiative (GFSI) benchmarking.

“*external focuses, or pressures.....and regulators are changing their demands, third party standards are changing, GFSI benchmarking documents*” (Academic)

“*motivated by fear and they look around and they think heaven forbid, we don’t want that to be us, and so they get on it*” (Food Industry Manager)

“*people who have a bad...some type of catastrophic event or significant near-miss and then the organization gets focused on food safety culture*” (Food Industry Manager)

Figure 4. Reported actions for FSC improvement.

Most academics and industry managers discussed improvement of training and education to achieve a basic level of employee responsibility to food safety. Industry managers indicated that to bring about FSC improvement, they have implemented more frequent communications (predominantly videos).

“*we have the video, then it’s a little bit on the education and communication*” (Food Industry Manager)

“*start with the organizations’ values and belief statement*” (Academic)

“*finding that way of communicating it, or mapping it to more specific things that are happening, to make people see*” (Academic)

Conclusions

- Academic influencers reported FSC using more complex terminologies and theorized perspectives, whereas food industry managers indicated more practical and applied perceptions of FSC.
- Industry and academic differences in perceptions of FSC have the potential to make application of FSC improvement approaches in the food industry challenging. Further research to explore and understand such differences may help overcome FSC challenges.



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