

UK Food and Drink Manufacturer Perceived Effectiveness of Food Safety Training: Implications for Food Safety Culture.

Laura Hewitt*¹, Alin Turila¹, Emma J. Samuel¹, Ellen Evans¹, Arthur Tatham¹, Paul Hewlett² and Elizabeth C. Redmond¹

¹ZERO2FIVE Food Industry Centre, Cardiff Metropolitan University, Cardiff, CF5 2YB, Wales, United Kingdom.

²School of Applied Psychology, Cardiff School of Health Sciences, Cardiff Metropolitan University, Cardiff, CF5 2YB, Wales, United Kingdom.

*Corresponding author: lhewitt@cardiffmet.ac.uk

Introduction

Annually, 10% of the global population reportedly acquire foodborne disease (WHO, 2022). Similarly, foodborne disease continues to be a concern in the United Kingdom (FSA, 2022). Improved food safety practices within food and drink manufacturing and processing (FDMP) businesses can lead to decreased incidence of foodborne illness (WHO, 2021) and this may be achieved using training mechanisms. FDMP businesses have a legal obligation to ensure that food safety training is appropriate, effective and delivered to all relevant members of staff (EC Regulation 852/2004). Thus, food safety training should be an integral element within all FDMP businesses.

Maintaining a positive food safety culture (FSC) has been identified as the foundation of a robust food safety management system (Balanos, 2020). Training has consistently been identified as key within various FSC frameworks (GFSI, 2018, Taylor and Rostron, 2018) and a positive FSC within FDMP businesses can contribute to increased positive food safety practices (GFSI, 2018). Determination of FDMP employee perspectives on training and other factors affecting food safety culture may identify areas for improvement used for improving training approaches and enhance the resultant potential effectiveness.

Aims

The aim of this study was to obtain a qualitative understanding of factors influencing food safety practices within FDMP businesses in the United Kingdom.

Methodology

- Interview schedules were designed to obtain bespoke company information and perceptions concerning food safety culture dimensions/components using published frameworks (GFSI, 2018, Taylor and Rostron, 2018). Interview schedules were piloted prior to use (Malmqvist et al., 2019).
- In-depth interviews (n=57) were conducted using face-to-face and online approaches with management and operative within FDMP businesses (n=3) representing low and high-risk industry sectors.
- A thematic analysis of transcribed interviews was carried out using NVivo 12 (QSR International).
- Studies received ethical approval from the Cardiff Metropolitan University Health Care and Food Ethics Panel (Reference PGR-2878; PGR-648; PGR-1547).

Results and Discussion

Overall, within three UK-based FDMP businesses, it was found that variable levels of training were determined.

Perspectives were obtained from management, supervisors and operatives within the different businesses and perspectives differed based on job roles.

- Operative employees of business one reported negative attitudes towards delivery of training, specifically towards the large number of people attending training at once whilst management employees considered training logistics efficient as they could assign trainee groups based on production schedule.
- Within business two, management employees believed that food safety training was sufficient in keeping the company compliant with relevant legislative requirements, similarly operative employees positively regarded training as an embedded, ongoing process, however this sometimes interfered with role responsibilities and content was not specifically relevant to specific roles. Employees reported training materials were clear and concise, whereas others reported rushed and insufficiently detailed training.
- Within business three, although some management employees received regular food safety training and updates, seldom did senior management employees, therefore awareness regarding company-wide food safety practices was lacking. Responsibility for monitoring and maintaining food safety behaviour rested with “supervisors observing” during production, but no global mechanism for improvement existed.

Business One

Employees <30
Interviews n=13
1x site
Managers Supervisors Operatives
High risk products

The company reported training all staff for all procedures and relies on this when someone is off-sick or the business is understaffed. Indeed, when staff are on leave or sick, another member of staff has to cover and take additional responsibilities. However, it was reported that issues usually arise when there is reduced staffing capacity.

Food safety training is delivered by an external provider. Generally, participants were reportedly satisfied with this training approach.

Some operatives indicated negative attitudes towards the delivery of the training, specifically towards the large number of people attending the training at one time. However, managers considered the logistics of training very efficient and reportedly assigned the groups of trainees based on production schedule resulting in two disproportionate groups of staff. Managers considered that by sitting in on the training, they provide a good example to the operatives.

“They’re always good actually, because they know [the trainer] very well, it prompts feedback, because everyone seems to talk about it then for a day or two.”
Management Participant

“The way it’s delivered. The course alright, but the way it’s delivered I think, they could do more. Like a one to work or one to four or five, that kind of thing.”
Operative Participant

“It shows the team that we’re prepared to sit in there with them and do exactly the same as they are doing [food safety training].”
Management Participant

Business Two

Employees >500
Interviews n=21
1x site
Managers Operatives
Low risk products

“It’s been quite informative and good.”
Operative Participant

“I think some of the in-depth stuff can sometimes get lost.”
Management Participant

All participants reported that the training provided by the business was sufficient to their role, however the depth and clarity were questioned. Two management participants questioned the depth of the food safety training.

There was an appetite for the food safety training to be more tailored to individual departments and more frequent food safety updates available, predominantly by operative employees.

All management participants considered that the food safety training in place was “sufficient in keeping the company compliant with relevant legislation”, certification, customer requirements and best practice guidelines. Similarly, operative opinions regarding training were overwhelmingly positive with many comments made on it being an ongoing process, which sometimes interfered with role responsibilities. Some participants felt that it was clear and concise, whereas others felt that it was “rushed and some of the detail gets lost”.

“I find them a little bit long and laborious sometimes but that’s the nature of training courses.”
Operative Participant

“I think the actual effectiveness of those courses is limited.”
Management Participant

Business Three

Employees <150
Interviews n=23
3x site
Head Office Managers Production Managers
High risk/low risk products

There seemed to be a range of training (internal and external) being completed across the site such as food safety, HACCP, on the job training and covid related training. However, it seems that the Covid-19 pandemic stopped classroom based training indefinitely.

There seemed to be a discrepancy of when staff are trained, some managers indicated that staff get food safety training within the induction where as others said they receive it within the first 3 months. Managers mentioned that after the companies latest recall, all of the senior leadership team received recall management training.

Refresher training seemed to be an issue; it was highlighted that many staff hadn’t received refresher training and they thought the refresher training the site provided wasn’t sufficient. One manager even stated that they had been on site for over 5 years and had “never had” food safety training, which is extremely alarming.

The induction process was also mentioned by many staff interviewed. One manager stated that they thought a tour during the induction would be beneficial so new starters can put knowledge into practice instead of a classroom environment.

“I’ve not done any food safety training myself for, for some time... not as up to speed maybe as I could be.”
Head Office Management Participant

Re: induction “lot of information being given at once”.
Production Management Participant

Significance

- Understanding of perceptions of training can inform development in training approaches to enable improved training which has the potential to improve, sustained food safety practices associated with a positive FSC in FDMP businesses.
- Tailoring of training to job role and learning style, including developing objective based training with measurable impact areas may increase knowledge retention.
- Improved communication streams may enable practical improvements to FDMP food safety training programmes.
- Development of objective based training with measurable impact areas and refreshers.

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