

## Central Lancashire Online Knowledge (CLoK)

Title	Whistleblowing as a countermeasure strategy against food crime
Type	Article
URL	<a href="https://clock.uclan.ac.uk/id/eprint/17997/">https://clock.uclan.ac.uk/id/eprint/17997/</a>
DOI	<a href="https://doi.org/10.1108/BFJ-01-2017-0001">https://doi.org/10.1108/BFJ-01-2017-0001</a>
Date	2017
Citation	Soon, Jan Mei and Manning, Louise (2017) Whistleblowing as a countermeasure strategy against food crime. British Food Journal, 119 (12). pp. 2630-2652. ISSN 0007-070X
Creators	Soon, Jan Mei and Manning, Louise

It is advisable to refer to the publisher's version if you intend to cite from the work.  
<https://doi.org/10.1108/BFJ-01-2017-0001>

For information about Research at UCLan please go to <http://www.uclan.ac.uk/research/>

All outputs in CLoK are protected by Intellectual Property Rights law, including Copyright law. Copyright, IPR and Moral Rights for the works on this site are retained by the individual authors and/or other copyright owners. Terms and conditions for use of this material are defined in the <http://clock.uclan.ac.uk/policies/>



British Food Journal

## Whistleblowing as a countermeasure strategy against food crime

Journal:	<i>British Food Journal</i>
Manuscript ID	BFJ-01-2017-0001.R1
Manuscript Type:	General Review
Keywords:	Food, crime, countermeasures, whistleblowing, Consumer Protection

SCHOLARONE™  
Manuscripts

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

1  
2 **Purpose:** The aim of this research was to undertake a two-phase desktop review of literature  
3 sources in order to conceptualise, frame, and critique existing whistleblowing models and  
4 strategies and consider how whistleblowing strategies form part of an effective food crime  
5 management system (FCMS) especially for small and medium sized organisations.  
6 **Design:** Existing literature from academic sources, financial, healthcare, food industries has  
7 been reviewed and critiqued in order to construct a conceptual framework that can inform  
8 future empirical research.  
9 **Findings:** Whistleblowing strategies can form an effective part of a FCMS. Appropriate  
10 regulatory protection of those who whistleblow is crucial to not only safeguard individuals  
11 but also to mitigate food crime and protect consumers from loss and potential harm. Barriers  
12 to whistleblowing exist and if these are not addressed then individuals will be reluctant to  
13 report food crime. Further empirical research is required to assess the influence of these and  
14 other factors identified in this research and how they can be overcome.  
15 **Originality / Value:** The framework will provide food industry practitioners with guidance  
16 on the effective application of whistleblowing strategies within a FCMS  
17 **Keywords** food, crime, countermeasure, whistleblowing, consumer protection,  
18 vulnerability

19 **1. Introduction**

20 Whistleblowing can be a mode of ethical resistance (Glazer and Glazer, 1989); a  
21 vehicle to promote rights through movements such as consumer issues (Greenwood, 2015); or  
22 a process to give a voice to animal rights and environmental concerns with regard to an  
23 organisation’s practices. Whistleblowers are seen as either individuals who undertake heroic  
24 and noble deeds; or as malcontent, trouble-makers and misfits for exposing wrongdoing  
25 (Zakaria, 2015). The term ‘whistleblow’ was coined by Nader *et al.*, (1972) as disclosure by  
26 organisational members of illegal, immoral, or illegitimate practices that are executed under

the control of their employers, to persons or organisations that may be able to effect action as a result of that disclosure (Miceli and Near, 1984; 1985; Near and Miceli, 1995; Near and Miceli, 2016). Publically Available Specification (PAS) 1998 (2008:9) Whistleblowing arrangements: Code of practice defines a whistleblowing concern as a “reasonable and honest suspicion an employee has about a possible fraud, danger or other serious risk that threatens customers, colleagues, shareholders, the public or the organisation’s own reputation”.

The authoritative individual that whistleblowers disclose to can be either *internal* to the organisation: e.g. a supervisor (Soeken, 2014), manager (Miller, 2015; The Economist, 2015), or someone in the direct chain of command, or *external* such as regulatory officers or independent supervisory bodies, inspectors, auditors, the police, MPs, consumer/citizen groups, undercover reporters (Evans, 2014; Tang and Babich, 2014) or the media (Harris and Barrett, 2009; PAS 1998, 2008). The Ethics Resource Centre (2012) report that 84% of private sector employees stated they would report any wrongdoing internally, but only 18% would report to external parties. Whistleblowing is the only means of uncovering illicit practices instigated or condoned by senior management (Moy, 2015). Organisations benefit from early internal detection and prevention of criminal practices, so it is in their interest to facilitate this means of detecting, preventing or mitigating criminal activity. Further appropriate risk management with regard to criminal practice will deter potential food safety issues, product recall, profit loss, and will maintain integrity, reputation, trust and brand value for the organisation.

Organisations can implement a range of measures to reduce risk associated with criminal behaviour, such as implementing additional or upgrading existing procedures. The costs of a missed opportunity to address a criminal threat can be great: fines, requests for compensation, higher insurance premiums, a regulatory investigation, lost jobs, lost profits and even lost lives (PAS 1998:2008). External parties including regulators can benefit too

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

52 from saved resources to investigate illicit activities, prosecution and public services costs.  
53 The positive consequences of whistleblowing have been synthesized (Figure 1).

54 **Take in Figure 1**

55

56 The aim of this research was to undertake a two-phase desktop review of literature  
57 sources in order to conceptualise, frame, critique existing whistleblowing strategies and to  
58 consider how whistleblowing strategies could be integrated within an effective food crime  
59 management system (FCMS). The scope of the review included peer-reviewed articles, trade  
60 publications and online news items. Regulatory sources were reviewed to provide examples  
61 of legislative frameworks adopted to provide protection to whistleblowers. The second phase  
62 of the review included analysis of literature sources to provide an evidence base for historic  
63 examples of disclosure of criminal activity in the food chain and to critique the context in  
64 which they had occurred. This analytical approach led to a preliminary conceptual  
65 characterisation of whistleblowers and the factors that influence them. Lastly, the value of  
66 whistleblowing strategies in the food sector was considered and critiqued. In this context food  
67 crime has a wide focus and illegal activity can span food safety and food quality issues as  
68 equally as illicit activity and behaviour. The aim of this paper is not to contextualise what  
69 constitutes food crime specifically, but to look at the use of formal whistleblowing strategies  
70 within a FCMS to mitigate and, where possible prevent, illegal activity. If the food industry  
71 wants to effectively counter illicit and illegal practice, it must proactively ensure that internal  
72 reporting channels are available for staff. If these protocols do not exist, there is increased risk  
73 that external channels will be used to disclose wrongdoing and prevent an organisation from  
74 rectifying the problem internally first (Near and Miceli, 1985). This highlights the importance  
75 of whistleblowing as a management control mechanism to identify, mitigate and where

possible deter wrongdoing. The next section of the paper focuses on examples of whistleblowing in the food industry.

## 2. Whistleblowing and whistleblowers

Previous studies of whistleblowing mostly involve corporate or public sector malpractice such as corruption (Schultz and Harutyunyan, 2015), police agencies (Park and Blenkinsopp, 2009; Rothwell and Baldwin, 2006), accounting and financial reporting (Hwang *et al.*, 2008, 2013), auditing (Alleyne *et al.*, 2013; Arnold and Ponemon, 1991; Brennan and Kelly, 2007; Maroun and Solomon, 2014), government agencies (Cho and Song, 2015), and healthcare (Philipsen and Soeken, 2011). Within the health setting, McDonald and Ahern (2000) reported that health workers who reported misconduct were subjected to severe official reprisals including demotion, reprimand and referral to a psychiatrist. There were also instances of individuals experiencing threats, rejection by peers, pressure to resign and being treated as a traitor, or experiencing a lack of progression in their career. Hwang *et al.*, (2008, 2013) assert that personal relationships, fear of retaliation and also media coverage discourage whistleblowing in Chinese society. Vinten (1996) associated the act of whistleblowing to a “bee-sting phenomenon” suggesting the approach can only be used once, before the act itself jeopardises the career of the whistleblower. Thus it is a high-stakes action and the potential consequences post-reporting (both positive and negative) will influence an individual’s decision to either remain silent or to blow the whistle.

The PAWC (2013) report “Whistleblowing – The Inside Story” reviewed 1000 cases between August 2009 and December 2010 across all industry sectors. Food and beverage cases represented just 3% of the total cases so the results cannot be critiqued to reflect the food supply chain specifically, however overarching themes associated with whistleblowing can be determined. The whistleblowers’ position was identified as executives (2%), managerial (15%), professional (26%), skilled (27%) unskilled (13%) and administrative

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

(8%). This complies with the conclusions of Miceli *et al.*, (2008) that whistleblowers are more likely to be older, have more experience, work at supervisory levels, with higher pay, and feel a sense of responsibility for reporting wrongdoing, and have greater knowledge of appropriate internal channels. Whistleblowers can be motivated by moral purposes, professional integrity (Motarjemi, 2014), courage (Zakaria, 2015), internal locus of control (Chiu, 2003) and being proactive (Bjørkelo *et al.*, 2010). Whistleblowers tend to have more positive reactions to their work, be male and belonged to larger work groups (Miceli and Near, 1988) with knowledge of circumstances and the individuals involved in fraudulent practices (Zakaria, 2015). These characteristics highlight the individual or personal factors that encourage whistleblowing a theme drawn upon later in the paper.

Wider constructs of organisational culture and subjective norms will influence the intention to whistleblow. Subjective norm is the perceived social pressure to engage, or not in a given behaviour in this case whistleblowing. Alleyne *et al.*, (2013) suggest that norms provide implicit guidelines and team norms are a moderating variable that create legitimate, socially shared standards against which an individual’s behaviour is measured (see Chatman and Flynn, 2001). Thus a whistleblower on the one hand can be seen as a member of a team or group who then goes against such team norms and attempts to change improper group behaviour (Miceli and Near, 1984 cited by Greenwood, 2015) or alternatively follows an organisational, team or group culture that welcomes whistleblowing. In previous research, the Theory of Planned Behaviour (TPB) see Fishbein and Ajzen (1975); Ajzen and Fishbein, (1980) and the Theory of Reasoned Action (TRA) see Ajzen (1985; 1991) have been used to study how attitudes and subjective norms affects an individual’s behaviour towards food handling, consumption and purchase (Bianchi and Mortimer, 2015; Irianto, 2015; Mullan *et al.*, 2015), but not whistleblowing specifically in the food sector and this is worthy of further study and explored further in this paper.

Historic whistleblowing cases in the food industry suggest that whistleblowers themselves suffer negative personal consequences including: depression and symptoms of extremely poor mental health (Motarjemi, 2015a; 2015b); altered responsibilities (Dyck *et al.*, 2010), refusal of pay increment, lack of peer support (Curtis, 2006), removal from usual duties (Soeken, 2014), loss of employment (Motarjemi, 2014; Motarjemi, 2015a; Philipsen and Soeken, 2011), stigma associated with being a “troublemaker” (Philipsen and Soeken, 2011); psychological harassment (Motarjemi, 2015a); resignation under duress (Dyck *et al.*, 2010), threats of revenge and isolation (Tan and Ong, 2011), and possibly even murder (Zhuang, 2012). Ponemon (1994) suggest that the nature and extent of the retaliation imposed by the organisation’s management or co-workers against the whistleblower is perhaps the most significant determinant of a whistleblower’s intention to disclose wrongdoing. Furthermore, if whistleblowers seek personal redress from organisations for the personal consequences of their disclosure, in the event that the case comes to court, corporate bodies if they so choose have significant financial resources to “buy witnesses, delay the legal processes and exert political pressure” leaving the employee in question unable to progress with new employment or to have closure (Motarjemi, 2015a).

As part of this research a range of contemporary whistleblowing case studies across the food industry have been drawn together. The cases reflect issues such as potential animal welfare violations, bribery, corruption, and negligence with regard to food safety and food quality issues (Table 1). Disclosure was conducted both internally, and also externally to parties such as regulators or the media.

#### Take in Table 1

The breadth of the scope of examples shown in Table 1 demonstrates that it is difficult to draw boundaries around, define and contextualize types of illicit behaviour associated with



the food chain and that need to be addressed within an organisation’s FCMS. Illicit behaviour is not binary in terms of products, activities or actors and often reflects an acceptance of customary illegality i.e. the acceptance and tolerance of illicit activities by predominantly legal economic actors (Gregson and Crang, 2016). Factors that can drive customary illegality including market competition and resource scarcity, inadequate governance, lack of sanctions and low probability of discovery, rapid development of systems, logistics and technology, data swamping and opacity (Charlebois et al. 2016; Manning et al. 2016; Manning, 2016; Marvin et al. 2016). Opacity, even food crime itself, is driven by market dynamics and seeking to survive in market economies with organisations that have better economies of scale or operate as oligopolies (Manning *et al.*, 2016).

2. Food crime

Many illicit practices go undetected by both regulatory authorities and senior management in food businesses. Hence, the discovery of such practices often relies on individuals who report wrongdoing. Illicit activities elude formal enumeration and measurement and circumvent institutional systems, regulations and associated enforcement penalties (Feige, 1990). Further, the types of process verification activities undertaken in market-focused second party audits and third party certification audits are constrained by the scope of the system standards used, the planned nature, the time available and the frequency of the audits, and the volume of data to be assessed (Manning, 2013; Manning and Soon, 2014). Illicit behaviour in the food supply chain arises as a result of misrepresentation associated with:

- **product integrity:** the intrinsic quality attribute of totality or completeness (Manning and Soon, 2014);

- 175 • **process integrity**: the activities undertaken to produce the food item encompassing
- 176 the design, assurance, monitoring and verification of processes within the product
- 177 life-cycle to ensure that they remain authentic and intact, i.e. extrinsic characteristics;
- 178 • **people integrity**: the honesty and morals exhibited by an individual; and/or
- 179 • **data integrity**: the consistency and accuracy of data through the food product life-
- 180 cycle (Manning, 2016)

181 Food **crime** prevention **measures can utilise** well-established tools such as Six Sigma  
182 and **hazard analysis critical control point (HACCP)** methodologies (Moyer *et al.*, 2017),  
183 **HACCP being routinely associated with food safety and legality**. Similarly the use of threat  
184 analysis critical control point (TACCP) and vulnerability analysis critical control point  
185 (VACCP) methodologies such as **Publically Available Specification Guide to Protecting and**  
186 **Defending Food and Drink from Deliberate Attack** (PAS 96: 2014) and CARVER+SHOCK  
187 have utility in addressing wider food crime. Effective countermeasures within a FCMS reduce  
188 criminal opportunity (Spink *et al.*, 2015). Countermeasures can be developed to mitigate risk  
189 **associated with food crime and illicit behaviour** with regard to all four elements of food  
190 integrity: product, process, people and data. Spink *et al.*, (2016) suggest that crime  
191 countermeasures fall into five distinct categories: **detection** i.e. the identification of  
192 opportunity, **mapping** of the food chain to identify vulnerabilities or hotspots, **deterrence** by  
193 inhibiting opportunity to commit crime, **prevention** through promotion of the robust  
194 management systems and **disruption** should crime occur. Indeed there must be a holistic  
195 approach whereby detection and deterrence countermeasures operate in consort as elements of  
196 a FCMS that includes a product testing programme (Moyer *et al.*, 2017). However, advanced  
197 product testing methods **require highly technical laboratory skills and the tests incur**  
198 **considerable cost that supply chain pressures may not be able to bear, putting this option**  
199 beyond the financial resources also be overcome by strategic, competent and knowledgeable

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

actors, thus unless it is part of a wider integrated FCMS it can be of limited value. Detection, mapping and prevention activities can only be developed to address known issues or activities making TACCP and VACCP also of limited value with regard to emerging and novel illicit behaviour or entrepreneurial, enterprising, situational crime risk that is reactive, responsive and specific to an organisation, the products it produces and the associated supply chain.

3. Food crime management

Food crime is undertaken by individuals and/or groups with varying criminal and business modus operandi (Manning *et al.*, 2016). FCMS can be both transactional and transformational in nature. Transactional processes focus on the policies, procedures and protocols, often called pre-requisites that drive formal management of food crime and illegality and minimise risk (Manning *et al.*, 2016). Conversely, transformational processes encompass both formal and informal organisational culture and the role of employees, irrespective of formal responsibilities, in enabling the organisation to maintain legal and ethical practice and to detect, deter and disrupt criminal activity. Transformational elements of a FCMS seek to inspire staff to consider that food legality and compliance is important and to empower them to realise fully their specific role in ensuring compliance. Further employees need to be aware that there is always the potential for emerging or re-emerging crime challenges that must be effectively controlled, or where possible eliminated. Thus whistleblowing strategies need to be embedded into both the transactional FCMS to ensure that individuals are aware of the organisation’s systems and procedures and also in the transformational culture. Senior management must demonstrate both through their commitment to the FCMS in terms of both engagement and appropriate resource allocation and also in their overseeing of an effective business culture that demonstrates that in a transparent business such strategies are welcomed and adopted as part of a wider corporate disclosure discourse. Lamming *et al.*, (2001) determine that there is a spectrum between

transparency and opacity proposing that organisations can work in a form of corporate “hinterland” in terms of their selective discourse. Therefore, crime risk increases in this hinterland where transactional controls do not operate as intended and an informal culture can not only just exist, but flourish.

Criminal organisations and networks complement and interact with traditional markets and supply chains reducing transaction costs, and providing increased business opportunities for both buyers and sellers (Williams, 2001). This entrepreneurial illicit approach (Manning *et al.*, 2016) is in contrast to the regulatory hierarchical mindset, bureaucratic rivalry and competition, interagency antipathies, and hesitancy to share information, align databases or coordinate enforcement operations (Williams, 2001). This makes crime mitigation activities often less agile and reactive than the criminal networks they are seeking to disrupt. Whilst FCMS are of value, integrated reactive measures such as whistleblowing protocols are essential too.

### 3. Regulatory response towards protecting whistleblowers

#### 3.1 European Union

The European Committee on Legal Co-operating (CDCJ) of the Council of Europe developed the Recommendation CM/Rec (2014)7 on the protection of whistleblowers (Council of Europe 2014). Member states are encouraged to develop a robust national framework that facilitates and protects whistleblowers. The Recommendation sets out a number of key principles to ensure that: laws to protect whistleblowers cover a broad range of information that is in the public interest; individuals have access to more than one channel to report and disclose such sensitive information; mechanisms are in place to ensure reports and disclosures are acted upon promptly; whistleblowers are entitled to have their identities kept confidential by those to whom they report; and all forms of retaliation are prohibited as long

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

as the individual whistleblower has reasonable grounds to believe in the accuracy and credibility of the information.

Four EU member states have advanced whistleblower protection laws including the United Kingdom (UK), Luxembourg, Romania and Slovenia. Of the other twenty-three EU member states, sixteen include partial legal protection for whistleblowers in the public and/or private sectors. For example, in October 2012, Italy included into its Anti-Corruption Law the country’s first ever provision intended to legally protect government employees against negative implications linked to disclosure acts of wrongdoing. Previously, Italy has no specific whistleblowing protection laws in place (World Law Group 2012). There were cultural barriers in Italy where whistleblowing was viewed as treason (Osterhaus and Fagan, 2007) or betrayal (Dungan *et al.* 2015). Efforts by workers’ unions in Italy to protect whistleblowers led to the proposed amendments to Italy’s Anti-Corruption Law (G20 Anti-Corruption Action Plan, 2010). The Italian public sector can report wrongdoing as long as it is not committed out of defamation or intent to harm a person’s right to privacy. The act however, does not apply to the private sector. There has been a call by Transparency International Italia for wider protection covering employees in both public and private sectors (Worth, 2013). In France, a new anti-corruption law was adopted on December 9, 2016 (Law 2016-1691) the so called “Law Sapin II”. This strengthened the law with regard to whistleblowing particularly against discrimination or retaliation against whistleblowers. The law lays down precise requirements that provide context to whether a whistleblower would be entitled to protection under the law (WIN, 2017a). The remaining seven countries (i.e. Bulgaria, Finland, Greece, Lithuania, Portugal, Slovakia and Spain) have limited or no legal frameworks (Transparency International’s Secretariat, 2013).

In the UK, the Public Interest Disclosure Act 1998 protected workers from unfair treatment or victimisation from their employer if they reported wrongdoing in the workplace

(FSA, 2016a). Employees, who are aware of wrongdoing within the food industry, including suspecting or witnessing of a breach in welfare of an animal at slaughter, can disclose that wrongdoing under the protection the Act affords if they raise their concerns in accordance with the Act's provisions. A given act of disclosure is a qualifying disclosure for whistleblowing if the worker reasonably believes one or more of the following has occurred: criminal offence, breach of a legal obligation, miscarriage of justice, danger to the health and safety of any individual, damage to the environment and deliberate concealment of information is happening currently, occurred in the past or is likely to happen in the future (FSA, 2016b). In implementing this Act, the UK Food Standards Agency (FSA) has extended protection to food industry workers, whether or not the information is confidential, and whether or not the wrongdoing occurred in the UK itself (Motarjemi, 2014).

In the aftermath of the 2013 European horsemeat incident, the FSA's National Food Crime Unit (NFCU) was created as a result of the recommendations in the Elliott Review (2014) to help ensure that prevention measures are put in place to protect consumers from food fraud (FSA n.d.). In addition to setting up the Unit, the Elliot Review strongly recommended firstly that any incident of suspected and known food crime should be reported directly by staff to their own employers and secondly that customers can report to management any potential concerns (Elliot Review, 2014). Further there should be encouragement of a culture within the food industry that questions sourcing in its supply chain and also wider food integrity. However, the mechanisms that enable whistleblowing and reporting with the food industry, including regulatory bodies, need developing further. The whistleblowing procedures and facilities provided by the NFCU enable potential whistleblowers to disclose confidentially (FSA, 2016a, 2016b) dishonesty at any stage within the production or supply of food, drink or animal feed (FSA, 2016b). Members of the public are encouraged to whistleblow or to report suspicions of food fraud to their local authority or

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

the NFCU (FSA, 2016a). All intelligence received is logged on the Food Fraud Database (FFD) and the identity of the whistleblower protected at all times. Outcomes are logged on the Food Fraud Database and if requested reported back to the whistleblower (FSA, 2016a; IMTA, 2016). Food safety and quality concerns can also be raised via the FSA’s “Report a food problem” site targeted specifically on local food businesses (FSA, 2016c). The UK FFD serves as an important source of intelligence and a tool to detect emerging patterns of fraudulent and criminal activities (FSA, 2016a, d). In 2011, there were 54 complaints and in 2012 81 such complaints. The food fraud team handled 134 cases in 2013 that comprised sale of unfit food (42), general hygiene issues (39), mis-description (13), illegal re-dating of food (7), single cases each of adulteration and authenticity (Elliot Review, 2014).

**3.2 United States**

The United States (US) has one of the most comprehensive whistleblower provisions developed in relation to the Sarbanes and Oxley Act (SOX) and was passed by the US congress to protect general public and shareholders from fraudulent practices in financial markets (Sarbanes-Oxley Act, 2002; Schultz and Harutyunyan, 2015). Under the US Food and Drug Administration (FDA), the Food Safety Modernization Act (FSMA, 2011) Section 402 prohibit retaliation by food businesses against whistleblowers who have: provided information relating to any violation of the Food, Drug and Cosmetic Act (FD&C) to the employer, the Federal Government, or the attorney general of a State; testified, assisted, or participated in a proceeding concerning a violation of the FD&C or; objected to or refused to participate in any activity that he or she reasonably believed to be in violation of the FD&C (FSMA, 2011; Moy, 2015; OSHA, 2014). This regulation has driven the development of whistleblowing procedures to comply with the US Sarbanes-Oxley Act (Osterhaus and Fagan, 2007).

**3.3 Serbia**



On 25 November 2014, the Parliament of Serbia adopted the Law on the Protection of Whistleblowers, the law coming into force in June 2015 (WIN, 2017b). The legislation clearly describes the act of whistleblowing, the rights and entitlements to protection not only of the whistleblower themselves, but also the officials who are then required to perform a duty to investigate. Indeed every employer with more than ten employees by law is required to endorse an internal whistleblowing procedure. The procedure must be in a visible, accessible location for all employees and it must also be posted on the company website if the company has one. Fines can be imposed if businesses fail to undertake this requirement. There are also strict timings set for competent authorities to adhere to in the event of external disclosure of wrongdoing.

#### 4. Market response towards protecting whistleblowers

The UK Department of Business, Innovation and Skills (BIS) issued a report in March 2015 titled “Whistleblowing: Guidance for Employers and Code of Practice (BIS, 2015). The report states that whilst a voluntary requirement it is good business practice to create an open, transparent and safe working environment through implementing a whistleblowing policy in the workplace. Depending on the nature and size of the business, PAS 1998 (2008) outlines that overall responsibility for enabling whistleblowing should rest with either the Board, Chief Executive, Group Secretary, with routine responsibility falling to the human resources department. In a small food business with both strategic and operational roles filled by one or two individuals this could prove more difficult to disassociate.

In this research the development of whistleblowing policies as a market response has been considered with three cases using publically available policies for Associated British Foods (ABF) plc, Home Retail Group (HRG) plc, and Tesco plc. ABF (2016) state that the purpose of their voluntary whistleblowing policy is to protect individuals working within their



1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

organisation when raising matters of public interest to stop malpractice and wrongdoing. The organisation outlines a five step plan:

- **Step 1:** Inform manager or head of department;
- **Step 2:** raise the matter with alternative internal contacts if unable to raise with line manager;
- **Step 3:** Initial assessment and determination of corporate action; and
- **Step 4:** Opportunity if response/outcome is not deemed sufficient to raise the matter with others internally.
- **Step 5:** If steps 1 to 4 cannot be followed then contact external confidential whistleblowing hotline Expolink.

Expolink are a privately owned organisation, founded in 1995, that specialise in providing whistleblowing hotlines supporting over 20% of FTSE 100 companies, many FTSE 250 and Fortune 500 companies, local authorities, government departments, police forces and multi-national corporations (Expolink, 2016a). Expolink (2016b) report that 3.3 million employees made contact in the January-June 2016 period with an incidence rate of 1.24 reports per 1000 employees from a range of organisations. Fifty three percent of the reports were anonymous, with seventy percent made by telephone. The issues raised by order of frequency were: malpractice (9.9%), fraud (5.1%), theft (3.7%), security (1.6%), corruption (1.3%), other (78.4%). The frequency of theft and fraud from 2009 – 2016 (Table 2) shows a reporting frequency of 10% in 2009 down to 3.7% of contacts in 2016 and for fraud a reporting frequency of 8% in 2009 down to 5% in 2016.

**Take in Table 2**

HRG (2016) also has a five step approach for raising issues:

- **Step 1:** Raise with line manager;

- 375 • **Step 2:** Raise with line manager's manager either as a first contact or if individual
- 376 raising issue is unhappy with the initial response in Step 1;
- 377 • **Step 3:** Raise at Director level if these two steps have not given the response to the
- 378 individuals satisfaction;
- 379 • **Step 4:** Internal enquiry or more formal investigation; and
- 380 • **Step 5:** Formal arrangements for a third party legal advice organisation in this case
- 381 Public Concern at Work (PCAW). This organisation can give advice on external
- 382 disclosure. PCAW are a charity established in 1993 (PCAW, 2016).

383 The Whistleblowing Tesco Colleague and Suppliers Protector Line Policy outlines how

384 Protector Line, a confidential telephone and email service, operates for both internal and

385 external stakeholders (Tesco, 2016). Suppliers can report concerns on a website that is

386 managed by Expolink. Thus all three organisations have similar reporting systems using a

387 specific external contractor to address whistleblowing that is either not raised internally, or

388 has been raised but not addressed to the satisfaction of the person raising the concerned. It is

389 **important in all these cases to differentiate between an employment** grievance and an instance

390 of whistleblowing. PAS 1998:2008 states that an employment grievance is a dispute or

391 private complaint regarding the employee's own employment position and therefore it has no

392 additional public interest dimension. **These cases show that a** positive whistleblowing culture

393 and environment associated with an ethical culture practiced by the organisation encourages

394 staff to have strong conscience to report wrongdoing (Miceli *et al.*, 2008; Mendonca, 2011).

395 Depending on national culture, some societies fear shame but not necessarily guilt (e.g. China

396 is a shame-based society), hence shame can be used as an effective mechanism to enforce

397 staff compliance (Tang and Babich, 2014). In contrast, a culture with supportive supervisors,

398 appropriate formal structures for reporting (Brennan and Kelly, 2007) and protection afforded

399 to whistleblowers (Cho and Song, 2015; Zakaria, 2015) will drive whistleblowers to report

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

wrongdoing. The challenge with purely voluntary governance measures, rather than the Serbian approach, that each organisation will develop their own discrete protocols that can vary in their degree of efficacy. Thus personal (individual), organisational/cultural and situational factors (Dungan *et al.* 2015). are now explored further in the paper.

**5. Whistleblowing models**

A number of whistleblowing models exist in the literature that have been designed to address mainly corporate fraud in the financial, business and public sectors but none specifically for food industry. These have been analysed within this research (Table 3). The models often reflect individual (Henik, 2015), organisational (Alleyne *et al.*, 2013; Brennan and Kelly, 2007) and cultural factors (Hwang *et al.*, 2008). Although many studies have applied the TRA and TPB to food and food service sectors, little research has dealt with their application to whistleblowing. Table 3 then provides the context for the potential application within a food production or supply chain setting. Henik (2015 citing Goldberg *et al.*, 1999) describes three types of whistleblower: (i) the strategic moral guardian (SMG); (ii) the fed-up vigilante (FUV) and (iii) the inactive individual called in this research as the servant of two masters (STM) see Table 4.

**Take in Tables 3 and 4**

Henik (2015) draws upon existing theory to discuss a five-stage whistleblowing model around which organisational whistleblowing strategies, such as those described in this paper for ABF and HRG, can be developed.

**Stage 1 – A trigger event**

A trigger event is as an event that is deemed by an individual or group to be problematic (Henik, 2015). Factors that can trigger whistleblowing include internal

motivation (Schultz and Harutyunyan, 2015), personal responsibility (Hwang *et al.*, 2008, 2013), seriousness of wrongdoing (Graham, 1986; Curtis, 2006) and loyalty towards the company (Dungan *et al.*, 2015) see Table 3. An individual trigger may be clear in terms of its legality or the trigger may be opaque creating uncertainty as to whether to raise the issue with others (PAWC, 2013). □

## Stage 2 – Determining of appropriate action

The whistleblower may be concerned whether complicity means that they themselves may face sanction and this may limit action. PAWC (2013) identify in their study that in only 8% of the cases they examined the whistleblower admitted that they have been involved in the issue themselves. Other factors that affect willingness to take action are fear of reprisal or retaliation, being unsure whether the activities warrant action, uncertainty over what action is possible and appropriate and the opportunity cost versus the benefit or having little faith that any corrective action will be done (PAWC, 2013; Henik, 2015 citing March and Simon, 1958; Latané and Darley, 1970; Miceli and Near, 1992). However, Henik (2015) argues it is emotion and value conflict that actually motivates action or inaction. Stage 2 is a crucial stage in the whistleblowing process as individual, organisational and situational factors play a mediating role in encouraging or discouraging potential whistleblowers.

## Stage 3 – Action of whistleblowing

PAWC (2013) suggest that a whistleblower's position in an organisation will be a factor that influences the route they follow to raise their concern. The group of workers they identified as less likely to approach their line manager or senior management was unskilled workers. In fact their study suggested that unskilled and skilled workers were more likely to approach the individual(s) who they thought was the wrongdoer or disclose to an independent body rather than other workers, or finally a regulatory body. This highlights if people are to come forward with concerns that as well as transactional structure in the FCMS,

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

transformational elements such as an open culture, training and coaching are required. Administrative workers were more likely to approach senior management or a union representative through and use the employment grievance procedure rather than follow a whistleblowing process or a specialist channel. This may be due to the type of trigger that they were reporting, or greater awareness of policy and practice, but they were reticent about approaching their line manager. Managers and executives were more likely to raise their concern initially to senior management and also more likely to approach the media. Ultimately, in order to prevent or reduce loss of profit, reputation and trust with customers, the food industry should aim to resolve the problems internally whilst ensuring confidentiality for the whistleblowers.

**Stage 4 – Organisational reaction to action**

PAWC (2013) state that from their dataset whistleblowers felt that no action was taken after the first attempt of internal disclosure in 74% of cases and this rose to 80% when it was unskilled workers who were making the disclosure. At the third attempt in 44% of cases whistleblowers felt there was no organisational reaction; this was zero cases at executive level, but still 80% for unskilled workers. The work of Henik (2015) shows that the organisation needs to make sure that they do not alienate the individuals who seek to disclose potential wrongdoing especially as this can then provide personal motivation for justice and restitution. Ensuring there is full confidence in the management process surrounding whistleblowing is critical.

**Stage 5 – Whistleblowers response**

The whistleblowers who actively report on wrongdoing are the SMG or FUV (see Table 4 for definitions). Inaction can be due to conflicting emotions and values. Therefore, a FCMS encompassing both transformational and transactional approaches will be beneficial to encourage the STM to act. Henik (2015) asserts that a differentiation of emotion will

influence the methods and aims of a given whistleblowing disclosure and the whistleblowers response and whilst SMG retain their focus on halting wrongful activities, FUV will focus on the desire for restitution. The causal factors that underpin the five steps outlined above and their interrelationship with an associated FCMS have been conceptualised in Table 5 and represented visually in Figure 2. Understanding these factors will assist food industry practitioners and regulators to develop policies, guidance and best practice. These transactional and transformational elements are now explored.

#### Take in Table 5 and Figure 2

Adoption of crime countermeasures is based unique assessment by each organisation, the organisation's risk appetite and the unique crime opportunity of the given supply system (Spink *et al.*, 2016). These countermeasures then need to be integrated into an effective FCMS. Countermeasures are intended to reduce criminal opportunity so if appropriate countermeasure strategies are to be developed and adopted then it is important to establish both the type of crime and the typology of the criminal (Manning, 2016; Manning *et al.*, 2016; Spink *et al.*, 2015). Organisations should as part of this approach recognise and accommodate effective whistleblowing channels. Failure to do so could lead to what Motarjemi (2015a) describes as "wild whistleblowing" i.e. extra-legal or illegal approaches to reporting or disclosing information through internet "leaking" type approaches. Further, a condoning of negative behaviour towards whistleblowers leads to a repressive, unhealthy management culture (Motarjemi, 2015b) that ultimately will stifle employee loyalty, and the potential for innovation, creativity and new ideas within the organisation.

Loehr and Kaye (2011) have proposed the use of the 5 C's framework in order to encourage and build a loyal and committed workforce. This can be extended to consider the integration of a whistleblowing strategy within a FCMS. The five "C's have been adapted in this context:

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

- 500 • **Commit** to employees’ professional growth and success so that they feel personally
- 501 invested in by the organisation and then as a result less likely to be compelled to
- 502 commit food crime;
- 503 • **Communicate** the organisational culture that is needed to minimise the potential for
- 504 food crime to all levels of staff and in the context that they will understand;
- 505 • **Clarify** organisational goals in terms of legality, product and personal integrity and
- 506 their role in helping to achieve them;
- 507 • **Coach** through providing appropriate and continuous training for employees so they
- 508 feel empowered to support the organisation and ensuring the products and services are
- 509 legally compliant and if necessary disclose with regard to wrongdoing; and
- 510 • **Create** accountability through a formal yet dynamic and reactive system that has
- 511 appropriate communication channels and assists employees to deliver their roles and
- 512 commitments at all levels of the organisation.

513 The 5 Cs demonstrate the transformational infrastructure that needs to be in place to underpin

514 the FCMS. A cultural shift towards an encouraging, and supportive environment for

515 whistleblowing can provide a source of intelligence that can help organisations to prevent

516 potential public health implications, loss of profit and protect the reputation of company. In

517 the development and implementation of a FCMS, small and medium sized food companies

518 may not have the resources and knowledge necessary to carry out risk assessments using tools

519 such as VACCP or TACCP, but with appropriate industry guidance they can more readily

520 implement a whistleblowing protocol within their organisation and with their suppliers.

521 With appropriate induction and refresher training, and ongoing coaching an

522 effective, and reactive FCMS can be developed which is appropriate to the situational needs

523 of every business. Indeed PAS 1998:2008 states that where the business is small and everyone

524 is known by name, transformational management processes may be strong enough so that a

525 complicated written protocol is not required, instead a simple statement will be of value to  
526 that simply explains: the difference between whistleblowing and a private complaint with  
527 management; how an employee can make an external disclosure and the benefits of an  
528 independent helpline that facilitates the disclosure process; that whistleblowing is not a  
529 mechanism for undermining managers; and the challenges with maintaining confidentiality.

530

## 531 6. Concluding remarks

532 Whistleblowing exposes illegal, inappropriate and fraudulent practices with the goal that  
533 private and/or public exposure will force change. Many of these criminal practices go  
534 undetected by regulatory authorities and at times senior management of an organisation.  
535 Conventional behavioural models such as TRA and TPB can be extended to include  
536 individual, organisational, cultural and situational factors to study whistleblowing intention  
537 among food production workers and this has been the approach used in this conceptual paper  
538 in developing Figure 2. Greater understanding not only the forward process, but also the  
539 feedback loops, and the situational factors of influence will assist food industry practitioners  
540 in developing effective FCMS that include a whistleblowing strategy. Therefore appropriate  
541 regulatory protection of those who engage in whistleblowing activities is crucial to both  
542 mitigate food crime and protect consumers from loss and potential harm. Without considering  
543 the specific difficulties that arise and addressing the existing barriers to whistleblowing it is  
544 unlikely that the whistleblowing can become an effective strategy for addressing food crime.  
545 Therefore further empirical research is required to assess the influence of these barriers and  
546 how they can be overcome. The model in this paper provides opportunity for such primary  
547 research.

548



References

ABP (2016), Associate British Foods PLC Whistleblowing policy, Available at: [http://www.abf.co.uk/documents/pdfs/policies/cr\\_policies\\_whistle\\_blowing.pdf](http://www.abf.co.uk/documents/pdfs/policies/cr_policies_whistle_blowing.pdf) (Accessed on 26 November 2016)

Ajzen, I. (1991), "The theory of planned behaviour", *Organizational Behaviour and Human Decision Processes*, Vol. 50 No. 2, pp. 179-211.

Ajzen, I. (1985), "From intentions to actions: A theory of planned behaviour", in Kuhl, J. and Beckman, J. (Eds.), *Action Control: From Cognition to Behaviour*, Springer-Verlag: New York.

Ajzen, I. and Fishbein, M. (1980), "*Understanding attitudes and predicting social behaviour*", Prentice-Hall, Englewood Cliffs, NJ.

Alleyne, P., Hudaib, M. and Pike, R. (2013), "Towards a conceptual model of whistle-blowing intentions among external auditors", *The British Accounting Review*, Vol. 45 No. 1, pp. 10-23.

Arnold, D.F. and Ponemon, L.A. (1991), "Internal auditors' perceptions of whistle-blowing and the influence of moral reasoning: An experiment", *Auditing: A Journal of Practice and Theory*, Vol. 10 No. 2, pp. 1-15.

Basu, M. (2015), "28 years for Salmonella: Peanut exec gets groundbreaking sentence", available at: <http://edition.cnn.com/2015/09/21/us/salmonella-peanut-exec-sentenced/index.html> (Accessed 2 March 2016).

Bianchi, C. and Mortimer, G. (2015), "Drivers of local food consumption: A comparative study", *British Food Journal*, Vol. 117, No. 9, pp. 2282-2299.

BIS (2015) "Whistleblowing: Guidance for Employers and Code of Practice" UK Department of Business, Innovation and Skills report March London.

Bjørkelo, B., Einarsen, S. and Matthiesen, S.B. (2010), "Predicting proactive behaviour at work: Exploring the role of personality as an antecedent of whistleblowing behaviour", *Journal of Occupational and Organizational Psychology*, Vol. 83 No. 2, pp. 371-394.

Bowers, J., Fodder, M., Lewis, J. and Mitchell, J. (2012), "Chapter 5: The three tiers of protection", In, *Whistleblowing: Law and Practice*. Oxford: Oxford University Press, pp. 78-113.

Brennan, N. and Kelly, J. (2007), "A study of whistle-blowing among trainee auditors", *British Accounting Review*, Vol. 39 No. 1, pp. 61-87.

Caillier, J.G. (2016), "Public service motivation and decisions to report wrongdoing in U.S. Federal agencies. Is this relationship mediated by the seriousness of the wrongdoing," *The American Review of Public Administration*, doi:10.1177/0275074015626299

- Charlebois, S., Schwab, A., Henn, R., and Huck, C. W. (2016). "Food fraud: An exploratory study for measuring consumer perception towards mislabelled food products and influence on self-authentication intentions". *Trends in Food Science and Technology*, Vol. 50, No. 1, pp. 211-218.
- Chatman, J. A., and Flynn, F. J. (2001). "The influence of demographic composition on the emergence and consequences of cooperative norms in work teams", *Academy of Management Journal*, Vol. 44, No. 5, pp. 956-974.□
- Chiu, R. K. (2003). "Ethical judgment and whistleblowing intention: Examining the moderating role of locus of control", *Journal of Business Ethics*, Vol. 43, No. 1, pp. 65-74.
- Cho, Y.J. and Song, H.J. (2015), "Determinants of whistleblowing within government agencies", *Public Personnel Management*, Vol. 44 No. 4, pp. 450-472.
- Council of Europe (2014), "Recommendation CM/Rec (2014) 7 of the Committee of Ministers to member States on the protection of whistleblowers", available at: [http://www.coe.int/t/dghl/standardsetting/cdcj/CDCJ%20Recommendations/CMRec\(2014\)7E.pdf](http://www.coe.int/t/dghl/standardsetting/cdcj/CDCJ%20Recommendations/CMRec(2014)7E.pdf) (accessed 4 March 2016).
- Curtis, M.B. (2006), "Are audit-related ethical decisions dependent upon mood?" *Journal of Business Ethics*, Vol. 68 No. 2, pp. 191-209.
- Dungan, J., Waytz, A. and Young, L. (2015), "The psychology of whistleblowing", *Current Opinion in Psychology*, Vol. 6, No. 1, pp. 129-133.
- Dyck, A., Morse, A. and Zingales, L. (2010), "Who blows the whistle on corporate fraud?" *Journal of Finance*, Vol. 65 No. 6, pp. 2213-2253.
- Eisenhammer, S. (2017), "Whistleblower in meat industry scandal takes on powerful industry" available at: <http://uk.reuters.com/article/us-brazil-corruption-food-whistleblower-idUKKBN16V2FO> (accessed on 18 April 2017)
- Elliot Review (2014), "Elliot review into the integrity and assurance of food supply networks – final report. A national food crime prevention framework", available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/350726/elliott-review-final-report-july2014.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/350726/elliott-review-final-report-july2014.pdf) (accessed 5 March 2016).
- Ethics Resource Center (2012), "Inside the mind of a whistleblower. A supplemental report of the 2011 National Business Ethics Survey", available at: [http://www.kkc.com/wp-content/uploads/2014/08/ERC\\_Inside-The-Mind-Of-A-Whistleblower.pdf](http://www.kkc.com/wp-content/uploads/2014/08/ERC_Inside-The-Mind-Of-A-Whistleblower.pdf) (accessed 4 March 2016).
- Evans, S.J. (2014), "Shanghai shuts factory 'supplying out-of-date meat to American fast food chains including McDonald's and KFC'", Mail Online 22 July 2014, available at: <http://www.dailymail.co.uk/news/article-2699623/McDonalds-KFC-China-face-new-food-scandal.html> (accessed 6 March 2016).

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60

647 Expolink (2016a) Expolink website Available at:  
648 <http://expolink.co.uk/whistleblowing/whistleblowing-hotline/> Accessed on 28 November  
649 2016  
650  
651 Expolink (2016b) Expolink Whistleblowing benchmark report Available at:  
652 <http://www.expolink.co.uk/Expolink-Whistleblowing-Benchmarking-Report.pdf> Accessed 28  
653 November 2016  
654  
655 Expolink (2014), Expolink Whistleblowing benchmark report Available at:  
656 <http://expolink.co.uk/whistleblowing/blog/whistleblowing-benchmarking-report-2014/>  
657 (accessed 28 November 2016)  
658  
659 Farnsworth, S. (2016), “Echuca abattoir under investigation after whistle-blower filmed  
660 animal mistreatment.” Available at: [http://www.abc.net.au/news/2016-11-23/echuca-abattoir-](http://www.abc.net.au/news/2016-11-23/echuca-abattoir-under-investigation-after-animal-mistreatment/8047318)  
661 [under-investigation-after-animal-mistreatment/8047318](http://www.abc.net.au/news/2016-11-23/echuca-abattoir-under-investigation-after-animal-mistreatment/8047318) (accessed 18 April 2017)  
662  
663 Feige, E.L., 1990. Defining and estimating underground and informal economies: The new  
664 institutional economics approach. *World development*, Vol. 18, No. 7, pp.989-1002.  
665  
666 Farrell, D., & Petersen, J. C. (1982). “Patterns of political behavior in organizations”. *The*  
667 *Academy of Management Review*, Vol. 7, No. 1, pp. 403–412.  
668  
669 Fishbein, M. and Ajzen, I. (1975), *Belief, attitude, intention and behaviour: An introduction*  
670 *to theory and research*. Addison-Wesley Publishing Company, MA.  
671  
672 FSMA, Food Safety Modernization Act (2011), “FDA Food Safety Modernization Act P.L.  
673 111-353 January 4, 2011. Sec. 402. Employee protections”, available at:  
674 [http://www.whistleblowers.gov/acts/fda\\_402.html](http://www.whistleblowers.gov/acts/fda_402.html) (accessed 4 March 2016).  
675  
676 FSA (n.d.) Food Standards Agency, “The National Food Crime Unit”, available at:  
677 [www.food.gov.uk/enforcement/the-national-food-crime-unit](http://www.food.gov.uk/enforcement/the-national-food-crime-unit) (accessed 21 January 2016).  
678  
679 FSA, Food Standards Agency (2016a), “Reporting food fraud”, available at:  
680 <https://www.food.gov.uk/enforcement/the-national-food-crime-unit/foodfraud> (accessed 4  
681 March 2016).  
682  
683 FSA, Food Standards Agency (2016b), “Whistleblowing”, available at:  
684 <https://www.food.gov.uk/enforcement/the-national-food-crime-unit/foodfraud/whistleblowing>  
685 (accessed 4 March 2016).  
686  
687 FSA, Food Standards Agency (2016c), “Report a food problem”, available at:  
688 <http://www.food.gov.uk/enforcement/report-problem> (accessed 30 August 2016).  
689  
690 FSA, Food Standards Agency (2016d), “The National Food Crime Unit”, available at:  
691 <https://www.food.gov.uk/enforcement/the-national-food-crime-unit> (accessed 30 August  
692 2016).  
693  
694 G20 Anti-Corruption Action Plan (2010), “Protection of whistleblowers: Study on  
695 whistleblower protection frameworks, compendium of best practices and guiding principles

- 696 for legislation”, available at: <https://www.oecd.org/g20/topics/anti-corruption/48972967.pdf>  
 697 (accessed 5 May 2016).  
 698  
 699 Glazer, M. P., and Glazer, P. M. (1989). *The whistleblowers: Exposing corruption in*  
 700 *government and industry*. New York: Basic Books, Inc.□  
 701  
 702 Goldberg, J. H., Lerner, J. S., and Tetlock, P. E. (1999). “Rage and reason: The psychology of  
 703 the intuitive prosecutor”. *European Journal of Social Psychology*, Vol. 29, No. 1, pp. 781–  
 704 795.□  
 705  
 706 Graham, J.W. (1986), “Principled organization dissent: A theoretical essay”, *Research in*  
 707 *Organizational Behaviour*, Vol. 8, No. 1, pp. 1-52.  
 708  
 709 Greenwood, C.A. (2015), “Whistleblowing in the Fortune 1000: What practitioners told us  
 710 about wrongdoing in corporations in a pilot study”, *Public Relations Review*, Vol. 41, No. 1,  
 711 pp. 490 – 500  
 712  
 713 Grundy, H.H., Kelly, S.D., Charlton, A.J., Donarski, J.A., Hird, S.J. and Collins, M.J. (2012),  
 714 “Food authenticity and food fraud research: Achievements and emerging issues”, *Journal of*  
 715 *the Association of Public Analysts*, Vol. 40, No. 1, pp. 65-68.  
 716  
 717 Harris, D. and Barrett, K. (2009), “Former manager says peanut plant complaints ignored”,  
 718 ABC News, available at: <http://abcnews.go.com/GMA/story?id=6888169&page=1> (accessed  
 719 2 March 2016).  
 720  
 721 Henik, E. (2015), “Understanding whistle-blowing: a set-theoretic approach”, *Journal of*  
 722 *Business Research*, Vol. 68 No. 1. pp. 442–450  
 723  
 724 Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms,*  
 725 *organizations, and states*. Cambridge, MA: Harvard University Press.□  
 726  
 727 Home Retail Group (2016), Whistleblowing Policy, Available at:  
 728 [https://www.homeretailgroup.com/crreports/2007/pdfs/HomeRetailWhistleblowingPolicyOct](https://www.homeretailgroup.com/crreports/2007/pdfs/HomeRetailWhistleblowingPolicyOct2007.pdf)  
 729 [2007.pdf](https://www.homeretailgroup.com/crreports/2007/pdfs/HomeRetailWhistleblowingPolicyOct2007.pdf) (Accessed on 27 November 2016)  
 730  
 731 Hwang, D.B.K., Staley, A.B., Tsai, Y. and Chui, C.L. (2013), “A comparative study of the  
 732 propensity of whistle-blowing empirical evidence from China, Taiwan and the United States”,  
 733 *International Journal of Accounting and Financial Reporting*, Vol. 3 No. 2, pp. 202-204.  
 734  
 735 Hwang, D., Staley, B., Te Chen, Y. and Lan, J. (2008), “Confucian culture and whistle-  
 736 blowing by professional accountants: an exploratory study,” *Managerial Auditing Journal*,  
 737 Vol. 23 No. 5, pp. 504-526.  
 738  
 739 IMTA, International Meat Trade Association (2016), “Food fraud and suspicious activity  
 740 reporting”, available at: <http://www.imta-uk.org/food-fraud-reporting> (accessed 12 November  
 741 2016).  
 742  
 743 Irianto, H. (2015), “Consumers’ attitude and intention towards organic food purchase: An  
 744 extension of Theory of Planned Behavior in gender perspective”, *International Journal of*  
 745 *Management, Economics and Social Sciences*, Vol. 41, No. 1, pp. 17-31.

1  
2  
3 746  
4 747 Johnson, R. (2014), *Food Fraud and “Economically Motivated Adulteration” of Food and*  
5 748 *Food Ingredients, Congressional Research Service, CRS Report January, 10, 2014*  
6 749  
7 750 Kelly, S., Heaton, K. and Hoogewerff, J. (2005), “Tracing the geographical origin of food:  
8 751 The application of multi-element and multi-isotope analysis”, *Trends in Food Science and*  
9 752 *Technology*, Vol. 16 No. 12, pp. 555-567.  
10 753  
11 754 Latané, B., and Darley, J. M. (1970). *The unresponsive bystander: Why doesn't he help?* New  
12 755 York: Appleton-Century Crofts. □  
13 756  
14 757 Lamming, R.C., Caldwell, N.D., Harrison, D.A., Phillips, W. (2001). “Transparency in supply  
15 758 relationships: concept and practice”. *Journal of Supply Chain Management*, Vol. 37, No. 3,  
16 759 pp. 4-10.  
17 760  
18 761 Loehr A, and Kaye J. (2011). *Managing the unmanageable: How to motivate even the most*  
19 762 *unruly employee*. Pompton Plains: Career Press.  
20 763  
21 764 Manning, L., Smith, R., and Soon, J.M (2016). “Developing an Organizational Typology of  
22 765 Criminals in the Meat Supply Chain”, *Food Policy*, Vol.59, No. 1, pp. 44-54  
23 766  
24 767 Manning L. (2016), “Food Fraud, policy and food chain”, *Current Opinions in Food Science*,  
25 768 Vol. 10, No. 1, pp. 16-21  
26 769  
27 770 Manning, L. and Soon, J.M. (2016), “Food safety, food fraud, and food defense: A fast  
28 771 evolving literature”, *Journal of Food Science*, Vol. 81, No. 4, R823-R834  
29 772  
30 773 Manning, L and Soon, J.M, (2014), “Developing systems to control food adulteration”, *Food*  
31 774 *Policy*, Vol. 49, No. 1, pp. 23-32  
32 775  
33 776  
34 777 Manning, L., (2013), “Development of a food safety verification risk model”, *British Food*  
35 778 *Journal*, Vol. 115, No. 4, pp. 575-589  
36 779  
37 780 March, J. G., and Simon, H. A. (1958). *Organizations*. New York: Wiley. □  
38 781  
39 782 Maroun, W. and Solomon, J. (2014), “Whistleblowing by external auditors: Seeking  
40 783 legitimacy for the South African audit profession”, *Accounting Forum*, Vol. 38 No. 2, pp.  
41 784 109-121.  
42 785  
43 786 Marvin, H. J., Bouzembrak, Y., Janssen, E. M., van der Fels-Klerx, H. J., van Asselt, E. D.,  
44 787 and Kleter, G. A. (2016). “A holistic approach to food safety risks: Food fraud as an  
45 788 example”, *Food Research International*, Vol. 89, No. 1, pp. 463-470.  
46 789  
47 790 McDonald, S. and Ahern, K. (2000), “The professional consequences of whistleblowing by  
48 791 nurses”, *Journal of Professional Nursing*, Vol. 16, No. 6, pp. 313-321.  
49 792  
50 793 Mendonca, M. (2011), “Preparing for ethical leadership in organizations”, *Canadian Journal*  
51 794 *of Administrative Science*, Vol. 18 No. 5, pp. 266-276.  
52 795  
53  
54  
55  
56  
57  
58  
59  
60



- 796 Miceli, M.P., Near, J.P. and Dworkin, T.M. (2008). *Whistle-blowing in organization*.  
 797 Psychology Press, Taylor & Francis Group, New York.  
 798
- 799 Miceli, M. P., and Near, J. P. (1992). *Blowing the whistle: The organizational and legal*  
 800 *implications for companies and employees*. Lexington, MA: Lexington Books.  
 801
- 802 Miceli, M.P. and Near, J.P. (1985), "Organizational dissidence: The case of whistle-blowing",  
 803 *Journal of Business Ethics*, Vol. 4 No. 1, pp. 1-16.  
 804
- 805 Miceli, M.P. and Near, J.P. (1984), "The relationships among beliefs, organizational position,  
 806 and whistle-blowing status: A discriminant analysis", *Academy of Management Journal*, Vol.  
 807 27 No. 4, pp. 687-705.  
 808
- 809 Miller, H. (2015), "Nestle CEO takes stand in harassment suit brought by executive",  
 810 *Bloomberg Business*, available at: [http://www.bloomberg.com/news/articles/2015-12-](http://www.bloomberg.com/news/articles/2015-12-16/nestle-ceo-takes-stand-in-harassment-suit-brought-by-executive)  
 811 [16/nestle-ceo-takes-stand-in-harassment-suit-brought-by-executive](http://www.bloomberg.com/news/articles/2015-12-16/nestle-ceo-takes-stand-in-harassment-suit-brought-by-executive) (accessed 4 March 2016).  
 812
- 813 Motarjemi, Y. (2015a), "The real problem with whistleblowing", *le News* 19/02/2015,  
 814 *available at: <http://lenews.ch/2015/02/19/the-real-problem-with-whistleblowing/>* (accessed 21  
 815 April 2017)  
 816
- 817 Motarjemi, Y. (2015b), "Workplace abuse.It's happening in Switzerland too", *le News*  
 818 *18/08/2015, available at: [http://lenews.ch/2015/08/28/workplace-abuse-its-happening-in-](http://lenews.ch/2015/08/28/workplace-abuse-its-happening-in-switzerland-too/)*  
 819 *switzerland-too/* (accessed 21 April 2017)  
 820
- 821 Motarjemi, Y. (2014), "Whistleblowing. Food safety and fraud", *Food Safety Magazine*,  
 822 June/July, available at: [http://www.foodsafetymagazine.com/magazine-archive1/junejuly-](http://www.foodsafetymagazine.com/magazine-archive1/junejuly-2014/whistleblowing-food-safety-and-fraud/#References)  
 823 [2014/whistleblowing-food-safety-and-fraud/#References](http://www.foodsafetymagazine.com/magazine-archive1/junejuly-2014/whistleblowing-food-safety-and-fraud/#References) (accessed 4 March 2016).  
 824
- 825 Moy, G. (2015), "Whistleblowing and the food industry", *The World of Food Science*,  
 826 available at: <http://worldfoodscience.com/article/whistleblowing-and-food-industry> (accessed  
 827 13 March 2016).  
 828
- 829 Moyer, D. C., DeVries, J. W., and Spink, J. (2017). The economics of a food fraud incident–  
 830 Case studies and examples including Melamine in Wheat Gluten. *Food Control*, Vol. 71, No.  
 831 1, pp. 358-364.  
 832
- 833 Mullan, B., Allom, V., Sainsbury, K. and Monds, L. A. (2015), "Examining the predictive  
 834 utility of an extended theory of planned behaviour model in the context of specific individual  
 835 safe food handling", *Appetite*, Vol. 90, No. 1, pp. 91-98.  
 836
- 837 Nader, R., Petkas, P.J. and Blackwell, K. (Eds.). (1972). *Whistle blowing: The report of the*  
 838 *conference on professional responsibility*, Grossman Publishers, New York, pp. 39-136.  
 839
- 840 Near, J.P. and Miceli, M.P. (2016), "After the wrongdoing: What managers should know  
 841 about whistleblowing", *Business Horizons*, Vol. 59 No. 1, pp. 105-114.  
 842
- 843 Near, J.P., Rehg, M.T., Van Scotter, J.R. and Miceli, M.P. (2004), "Does type of wrongdoing  
 844 affect the whistle-blowing process?" *Business Ethics Quarterly*, Vol. 14 No. 2, pp. 219-242.  
 845

1  
2  
3 846 Near, J.P. and Miceli, M. (1985), "Organizational dissidence: the case of whistle-blowing",  
4 847 *Journal of Business Ethics*, Vol. 4 No. 1, pp. 1-16.  
5 848  
6 849 Nitsch, D., Baetz, M. and Hughes, J. C. (2005), "Why code of conduct violations go  
7 850 unreported: A conceptual framework to guide intervention and future research", *Journal of*  
8 851 *Business Ethics*, Vol. 57, No. 1 pp. 327-341.  
9 852  
10 853 OSHA, Occupational Safety and Health Administration (2014), "Procedures for handling  
11 854 retaliation complaints under Section 402 of the FDA Food Safety Modernization Act",  
12 855 available at:  
13 856 [www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=FEDERAL\\_REGISTER&p\\_id=24284](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=24284) (accessed 13 March 2016).  
14 857  
15 858  
16 859 Osterhaus, A. and Fagan, C. (2007), "Alternative to silence: Whistleblower protection in 10  
17 860 European countries", available at:  
18 861 [http://www.right2info.org/resources/publications/publications/09\\_12\\_01%20ti-](http://www.right2info.org/resources/publications/publications/09_12_01%20ti-Alternative%20WB%20protection.pdf)  
19 862 [Alternative%20WB%20protection.pdf](http://www.right2info.org/resources/publications/publications/09_12_01%20ti-Alternative%20WB%20protection.pdf) (accessed 5 May 2016).  
20 863  
21 864 Park, H. and Blenkinsopp, J. (2009), "Whistleblowing as planned behaviour – A survey of  
22 865 South Korean police officers", *Journal of Business Ethics*, Vol. 5 No. 4, pp. 545-556.  
23 866  
24 867 PAS (Publically Available Specification) 96 (2014), Guide to Protecting and Defending Food  
25 868 and Drink from Deliberate Attack, ISBN 978 0 580 85537 5, BSI Standards Limited, London.  
26  
27  
28  
29 869 PAS (Publically Available Specification) 1998:2008, Whistleblowing arrangements Code of  
30 870 practice ISBN 978 0 580 50973 5 BSI Standards Limited, London.  
31  
32  
33 871 Parker, L. E. (1993). "When to fix it and when to leave: Relationships among perceived  
34 872 control, self-efficacy, dissent, and exit". *Journal of Applied Psychology*, Vol. 78, No. 1, pp.  
35 873 949–959.  
36 874  
37 875 PCAW (Public Concern at Work) (2016), Available at: <http://www.pcaw.co.uk/> (accessed on  
38 876 28 November 2016)  
39 877  
40 878 PCAW (2013) Whistleblowing the inside story. Available at:  
41 879 <http://www.pcaw.co.uk/files/Whistleblowing%20-%20the%20inside%20story%20FINAL.pdf>  
42 880 (accessed on 28 November 2016)  
43 881  
44 882 Philipsen, N.C. and Soeken, D. (2011), "Preparing to blow the whistle: A survival guide for  
45 883 nurses", *The Journal for Nurse Practitioners*, Vol 9 No. 9, pp. 740-746.  
46 884  
47 885 Ponemon, L. A. (1994), "Whistle-blowing as an internal control mechanism: Individual and  
48 886 organisational considerations", *Auditing: A Journal of Practice & Theory*, Vol. Fall 1994, pp.  
49 887 118-130.  
50 888  
51 889 Rothwell, G.R. and Baldwin, J.N. (2006), "Ethical climate theory, whistleblowing and the  
52 890 code of silence in police agencies in the state of Georgia", *Journal of Business Ethics*, Vol. 70  
53 891 No. 4, pp. 341-361.  
54 892  
55  
56  
57  
58  
59  
60

- 893 Sarbanes-Oxley Act (2002), "A guide to the Sarbanes-Oxley Act", available at:  
 894 www.soxlaw.com (accessed 13 March 2016).  
 895
- 896 Schultz, D. and Harutyunyan, K. (2015), "Combating corruption: The development of  
 897 whistleblowing laws in the United States, Europe and Armenia", *International Comparative*  
 898 *Jurisprudence*, [doi:10.1016/j.icj.2015.12.005](https://doi.org/10.1016/j.icj.2015.12.005)  
 899
- 900 Schultz, Jr. J.J., Johnson, D.A., Morris, D. and Dyrnes, S. (1993), "An investigation of the  
 901 reporting of questionable acts in an international setting", *Journal of Accounting Research*,  
 902 Vol. 31 Suppl. 1993, pp. 75-103.  
 903
- 904 Soeken, D.R. (2014), *Don't kill the messenger: How America's valiant whistleblowers risk*  
 905 *everything in order to speak out against waste, fraud and abuse in business and government*,  
 906 CreateSpace Independent Publishing Platform, North Charleston, pp. 1-181.  
 907
- 908 Spink, J., Moyer, D. C., & Whelan, P. (2016). The Role of the Public Private Partnership in  
 909 Food Fraud Prevention—includes implementing the Strategy. *Current Opinion in Food*  
 910 *Science*. <http://dx.doi.org/doi:10.1016/j.cofs.2016.10.002>  
 911
- 912 Spink, J., Moyer, D. C., Park, H., Wu, Y., Fersht, V., Shao, B., & Edelev, D. (2015).  
 913 Introducing Food Fraud including translation and interpretation to Russian, Korean, and  
 914 Chinese languages. *Food Chemistry*, Vol. 189, No. 1, pp. 102-107.  
 915
- 916 Spink, J. and Moyer, D.C. (2011), "Defining the public health threat of food fraud", *Journal*  
 917 *of Food Science*, Vol. 76 No. 9, pp. R157-R163.  
 918
- 919 Tan, P.M. and Ong, S.F. (2011), "Comparative analysis of whistleblower protection  
 920 legislation in England, USA and Malaysia", *African Journal of Business Management*, Vol. 5  
 921 No. 27, pp. 11246-11255.  
 922
- 923 Tang, C.S. and Babich, V. (2014), "Using social and economic incentives to discourage  
 924 Chinese suppliers from product adulteration", *Business Horizons*, Vol. 57 No. 4, pp. 497-508.  
 925
- 926 Tesco (2016) Whistleblowing Tesco Colleague and Suppliers Protector Line Policy,  
 927 Available at:  
 928 [https://www.tescopl.com/assets/files/cms/Resources/Trading\\_Responsibly/Whistleblowing\\_](https://www.tescopl.com/assets/files/cms/Resources/Trading_Responsibly/Whistleblowing.pdf)  
 929 [pdf](https://www.tescopl.com/assets/files/cms/Resources/Trading_Responsibly/Whistleblowing.pdf) Accessed on 27 November 2016  
 930
- 931 The Economist (2015), "Whistleblowing in Switzerland rough terrain", 15<sup>th</sup> December,  
 932 available at: [http://www.economist.com/news/business/21679456-two-court-cases-illustrate-](http://www.economist.com/news/business/21679456-two-court-cases-illustrate-struggles-employees-who-allege-wrongdoing-rough-terrain)  
 933 [struggles-employees-who-allege-wrongdoing-rough-terrain](http://www.economist.com/news/business/21679456-two-court-cases-illustrate-struggles-employees-who-allege-wrongdoing-rough-terrain) (accessed 4 March 2016).  
 934
- 935 Transparency International's Secretariat (2013), "International principles for whistleblower  
 936 legislation. Best practices for laws to protect whistleblowers and support whistleblowing in  
 937 the public interest", available at:  
 938 [http://www.transparency.org/whatwedo/publication/international\\_principles\\_for\\_whistleblow](http://www.transparency.org/whatwedo/publication/international_principles_for_whistleblower_legislation)  
 939 [er\\_legislation](http://www.transparency.org/whatwedo/publication/international_principles_for_whistleblower_legislation) (accessed 6 March 2016).  
 940



1  
2  
3 941 Trevino, L. K. and Victor, B. (1992), "Peer reporting of unethical behaviour: A social context  
4 942 perspective", *Academy of Management Journal*, Vol. 35 No. 1, pp. 38-64.  
5 943  
6 944 Vinten, G. (1996), "Corporate communications through whistleblowing", *Corporate*  
7 945 *Communications*, Vol. 1 No. 1, pp. 30-35.  
8 946  
9 947 Waytz, A., Dungan, J. and Young, L. (2013), "The whistleblower's dilemma and the fairness-  
10 948 loyalty tradeoff", *Journal of Experimental Social Psychology*, Vol. 49 No. 6, pp. 1027-1033.  
11 949  
12 950 Withey, M. J., and Cooper, W. H. (1989). "Predicting exit, voice, loyalty, and neglect".  
13 951 *Administrative Science Quarterly*, Vol. 34, No. 1, pp.521-539.  
14 952  
15 953 Williams, P., (2001). Transnational criminal networks. In: Arquilla, J., Ronfeldt, D. (Eds.),  
16 954 Networks and Netwars: The Future of Terror, Crime and Militancy. Rand Corporation, Santa  
17 955 Monica, pp. 61-97.  
18 956  
19 957 WIN (2017a) (Whistleblowing International Network), Sapin II first look at how the French  
20 958 are doing whistleblower protection, available at:  
21 959 [https://www.google.co.uk/amp/s/whistleblowingnetwork.org/2017/03/16/sapin-ii-a-first-look-](https://www.google.co.uk/amp/s/whistleblowingnetwork.org/2017/03/16/sapin-ii-a-first-look-at-how-the-french-are-doing-whistleblower-protection/amp/)  
22 960 [at-how-the-french-are-doing-whistleblower-protection/amp/](https://www.google.co.uk/amp/s/whistleblowingnetwork.org/2017/03/16/sapin-ii-a-first-look-at-how-the-french-are-doing-whistleblower-protection/amp/) (accessed 3 May 2017)  
23 961  
24 962 WIN (2017b) (Whistleblowing International Network) Serbia, available at:  
25 963 [https://whistlenetwork.files.wordpress.com/2017/01/law-on-protection-of-](https://whistlenetwork.files.wordpress.com/2017/01/law-on-protection-of-whistleblowersfinal.pdf)  
26 964 [whistleblowersfinal.pdf](https://whistlenetwork.files.wordpress.com/2017/01/law-on-protection-of-whistleblowersfinal.pdf) (accessed 3 May 2017)  
27 965  
28 966 World Law Group (2012), "Global guide to whistleblowing programs", available at: [file:///lha-](file:///lha-012/pers-J/00075EF2/Downloads/WLG%20Global%20Guide%20to%20Whistleblowing%20Programs-2012-Revised.pdf)  
29 967 [012/pers-](file:///lha-012/pers-J/00075EF2/Downloads/WLG%20Global%20Guide%20to%20Whistleblowing%20Programs-2012-Revised.pdf)  
30 968 [J/00075EF2/Downloads/WLG%20Global%20Guide%20to%20Whistleblowing%20Programs](file:///lha-012/pers-J/00075EF2/Downloads/WLG%20Global%20Guide%20to%20Whistleblowing%20Programs-2012-Revised.pdf)  
31 969 [-2012-Revised.pdf](file:///lha-012/pers-J/00075EF2/Downloads/WLG%20Global%20Guide%20to%20Whistleblowing%20Programs-2012-Revised.pdf) (accessed 5 May 2016).  
32 970  
33 971 Worth, M. (2013), "Whistleblowing in Europe. Legal protections for whistleblowers in the  
34 972 EU", available at:  
35 973 [https://www.transparency.de/fileadmin/pdfs/Themen/Hinweisgebersysteme/EU\\_Whistleblow](https://www.transparency.de/fileadmin/pdfs/Themen/Hinweisgebersysteme/EU_Whistleblower_Report_final_web.pdf)  
36 974 [er\\_Report\\_final\\_web.pdf](https://www.transparency.de/fileadmin/pdfs/Themen/Hinweisgebersysteme/EU_Whistleblower_Report_final_web.pdf) (accessed 4 May 2016).  
37 975  
38 976 Yeates, J. W. (2012), "Whistle-blowing in the veterinary profession", *The Veterinary Journal*,  
39 977 Vol. 191, No. 2, pp 147-150.  
40 978  
41 979 Zakaria, M. (2015), "Antecedent factors of whistleblowing in organizations", *Procedia*  
42 980 *Economics and Finance*, Vol. 28, No. 1, pp. 230-234  
43 981  
44 982 Zhang, J., Zhang, X., Dediu, L. and Victor, C. (2011), "Review of the current application of  
45 983 fingerprinting allowing detection of food adulteration and fraud in China". *Food Control*,  
46 984 Vol. 22 No. 8, pp. 1126-1135  
47 985  
48 986 Zhuang, P. (2012), "Mystery surrounds death of whistleblower Jiang Weisuo", 24 November  
49 987 2012, South China Morning Post, available at:  
50 988 [http://www.scmp.com/news/china/article/1089540/mystery-surrounds-death-milk-](http://www.scmp.com/news/china/article/1089540/mystery-surrounds-death-milk-whistleblower-jiang-weisuo)  
51 989 [whistleblower-jiang-weisuo](http://www.scmp.com/news/china/article/1089540/mystery-surrounds-death-milk-whistleblower-jiang-weisuo) (accessed 4 March 2016)  
52 990  
53  
54  
55  
56  
57  
58  
59  
60

991 **Table 1. Examples of whistleblowing incidents in the food industry**

Year	Description of whistleblower	Internal Whistleblower (WB)	External (Official) WB	External (Media) WB	Description	Outcome	References
<b>2006 ongoing</b>	Food safety manager of Nestle	Reported there was an inadequate process in validating the nutrient content of infant formula biscuits that could result in babies choking and incorrectly labelled packaging.			Request for audit of her department was turned down. The former food safety manager is claiming \$2million compensation plus an allowance for lost earnings.	Claims of acts of reprisal including being 'treated like a child' and being humiliated. Both the former food safety manager and Nestle failed to agree on a settlement and the case went to trial.	Miller (2015); The Economist (2015)
<b>2008</b>	Manager at Peanut Corporation of America (PCA) (Texas processing plant)	Report to the Chief Executive Officer (CEO) of PCA about rodent infestation and leaky roof. The CEO did not respond to the manager.	Manager then reported to Texas Department of Health, and did not receive response. Subsequently, Texas authorities searched their database but found no record of emails from the manager.	The manager finally whistleblow to Safe Tables Our Priority (STOP) a national health organisation and went on Good Morning America.	The manager was triggered to whistleblow when his/her granddaughter became ill after eating peanut butter crackers.	PCA went bankrupt and on September 2015, the former CEO of PCA was sentenced to 28 years in prison.	Basu (2015); Harris and Barrett (2009); Near and Micelli (2016)
<b>2008</b>	Truck drivers (PCA)			Truck drivers whistleblow to media	Packages of peanut paste burst in truck and were later shovelled up and replaced back in barrels. Shipment was rejected by one Georgia company, but PCA signed for it and accepted the delivery		Harris and Barrett (2009)
<b>2012</b>	Local Chinese TV broadcast			Undercover reporting by media	TV reported that KFC's supplier (Liuhe Group) in China added illegal drugs in chicken feed to accelerate their growth cycles.	KFC's products were boycotted and sales plummeted 25% by early 2013. KFC stopped purchasing chickens from Liuhe Group.	Tang and Babich (2014)

2014	Local Chinese TV broadcast			Local Chinese broadcast blew the whistle by airing footage of workers conducting fraudulent practices.	TV report showed Shanghai Hushi Food Co. Ltd. workers apparently picking up meat from the factory floor and mixing fresh meat together with expired meat; employees were overheard saying that if their clients knew what they were doing, the firm would lose its contract	McDonald's and Yum Brands Inc. (owner of KFC, Pizza Hut and Taco Bell) stopped using the supplier after the broadcast. The processing plant was sealed and products seized whilst Shanghai Municipal Food and Drug Administration investigated the allegations.	Evans (2014)
2016	Worker in abattoir		Worker secretly filmed more than 170 hours that focused on mistreatment of animals inside an Australian abattoir.		Video sent to animal rights group Animals Australia who forwarded to the regulatory authority, PrimeSafe.	PrimeSafe undertook an investigation, sanctioned the business and requested removal of four staff	Farnsworth (2016)
2017	Government health inspector in abattoir		Government health inspector went to Federal Police in 2014 with concerns over illicit behaviour in a Brazilian slaughterhouse		Alleged inappropriate practices in a slaughter plan. Alleged bribes paid by meat companies to government food-sanitation inspectors.	Undercover investigation launched and in March 2017 over 100 arrests made. Temporary export bans put in place by many countries. Case ongoing	Eisenhammer (2017)

**Table 2 - Expolink – Incidence of issues (Adapted from Expolink, 2014; Expolink, 2016a; Expolink, 2016b)**

Year	2009	2010	2011	2012	2013	2014	2016
Theft	10%	12%	7%	7%	5%	4%	4%
Fraud	8%	6%	5%	4%	6%	6%	5%
Breach of company policy*	5%	5%	5%	6%	8%	Nr	9%
Unprofessional behaviour*	4%	5%	5%	7%	6%	6%	7%

Nr – not reported \*may not be illegal

Table 3. Review of existing whistleblowing models and applicability to food settings

Focus	Model	Description	Potential application in Food Settings	References
Public accounting	The Graham Model –	Greater perceived seriousness of wrongdoing, and personal responsibility and lower perceived personal cost predicted greater whistleblowing intention.	A positive culture (mood) in food processing environment will encourage food production workers to have a greater sense of responsibility hence increased intention to whistleblow. Having procedures in place in the food business to protect the whistleblower and effective training, coaching and mentoring of staff will also increase the likelihood of whistleblowing	Curtis (2006); Graham (1986); Schultz <i>et al.</i> (1993)
Multiple	Fairness-loyalty tradeoff	Individuals who value fairness over loyalty demonstrates increased willingness to report wrongdoings.	Workers are motivated to whistleblow in the service of fairness and justice but can also appear disloyal to colleagues and the teams in which they operate, hence creating a dilemma that affects willingness to take action. This dilemma can be mediated by highlighting internal reporting channels and also ensuring anonymity to protect whistleblowers.	Dungan <i>et al.</i> (2015); Waytz <i>et al.</i> (2013)
Police agencies	Theory of Planned Behaviour (TPB)	Attitudes, subjective norm and perceived behavioural control had positive effects on internal whistleblowing intentions.	Park and Blenkinsopp (2009) supported the relevance of TPB in whistleblowing intention. TBP is used as the basis of understanding and enabling whistleblowing intention among food production workers by influencing perceptions and thus attitude, subjective norm and perceived behavioural control..	Park and Blenkinsopp (2009); Rothwell and Baldwin (2006) Ajzen (1985, 1991)
Multiple	Theory of Reasoned Action (TRA)	Prediction of intention through beliefs, attitude and subjective norms.	TRA can be used to predict food workers’ intent to blow the whistle.	Ajzen and Fishbein (1980); Fishbein and Ajzen (1975)
Multiple	The Henik model	Model of the factors of influence in the whistleblowing decision making process through characterisation of potential whistleblowers into strategic moral guardians (SMG); fed-up vigilante (FUV) and servant of two masters (STM) via the influence of emotions.	SMG retain their focus on halting wrongful activities, while FUV shift their focus to restitution. Thus, while anger is present in both cases, the goals, targets and methods of a whistleblowing disclosure depend on the source of the anger.	Henik (2015)

**Table 4. Characterisation of actors in the whistleblowing process (Adapted from Henik, 2015; Goldberg *et al.* 1999)**

Characterisation	Description
Strategic moral guardian (SMG)	Individual who focuses on accountability and results and who are motivated by strong extra-organisational allegiances and emotion (anger) at organisational inaction following their internal reporting. They seek appropriate mechanisms that will limit personal or professional impact.
Fed-up vigilante (FUV)	Individual who is initially motivated to advocate against wrongful activities by strong extra-organisational principles and is driven by revenge and catharsis, justice and restitution. As they may have already suffered retribution they can feel they have nothing left to lose or fear.
Servant of Two Masters (STM)	Individual trying to manage conflicting values of potentially whistleblowing in order to protect victims or report wrongdoing and alternatively taking no action so that they can continue to observe activities but this might bring feelings of shame or regret.

Table 5. Causal factors for whistleblowing or to remain silent and associated countermeasures (Adapted from Yeates, 2012)

Factors	Action	Inaction	Food Crime Management System	
			Transactional	Transformational
Individual				
Personal characteristics	Moral purpose	Weakness of will	Awareness training during induction; Ongoing and updated training in examples of food crime.	Leading by example.
	Empathy for victims	Empathy for suspected respondent		
	Loyalty to company and concern over wrongdoer and their impact on the organisation, staff and customers.	Loyalty to wrongdoer who may be difficult to differentiate from the company		
Awareness	Knowledge of what is illegal, unethical or immoral behaviour	Ignorance or uncertainty about what is illegal, unethical or immoral behaviour	Documented and implemented whistleblowing policy with associated audit and verification programme	Encouraging supportive, sense of belonging with a specific focus on team and group culture with common purpose.
	Knowledge of reporting procedure	Ignorance or uncertainty of reporting procedure		
	Duty	Belief that others will report the wrongdoing so inaction is acceptable		
	Severity of wrongdoing (Near <i>et al.</i> 2004; Caillier, 2016)	Perception that wrongdoing is not significant.		
Situational and Organisational factors				
Consequences	Positive impact e.g. to reduce future wrongdoing	Fear of negative consequences e.g. retaliation to whistleblowers	Protect confidentiality of whistleblower through effective procedures.	Encourage supportive, sense of belonging with a specific focus on organisational culture
	Faith in the system	Lack of faith in system (e.g. employer is perceived to be non-responsive to complaints) (Nitsch <i>et al.</i> , 2005)		

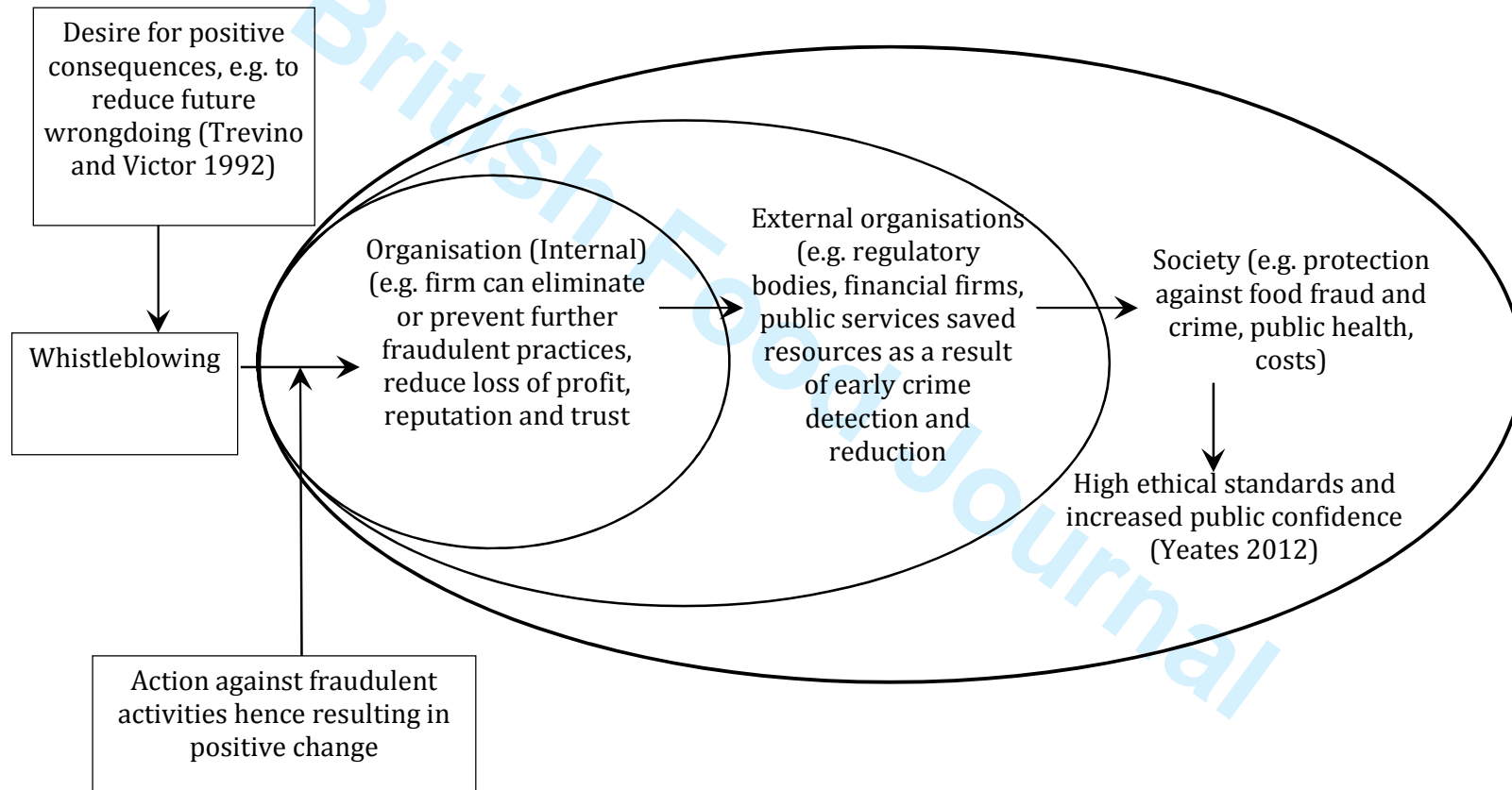


Figure 1. Positive consequences of whistleblowing (Adapted from Bowers *et al.*, 2012)



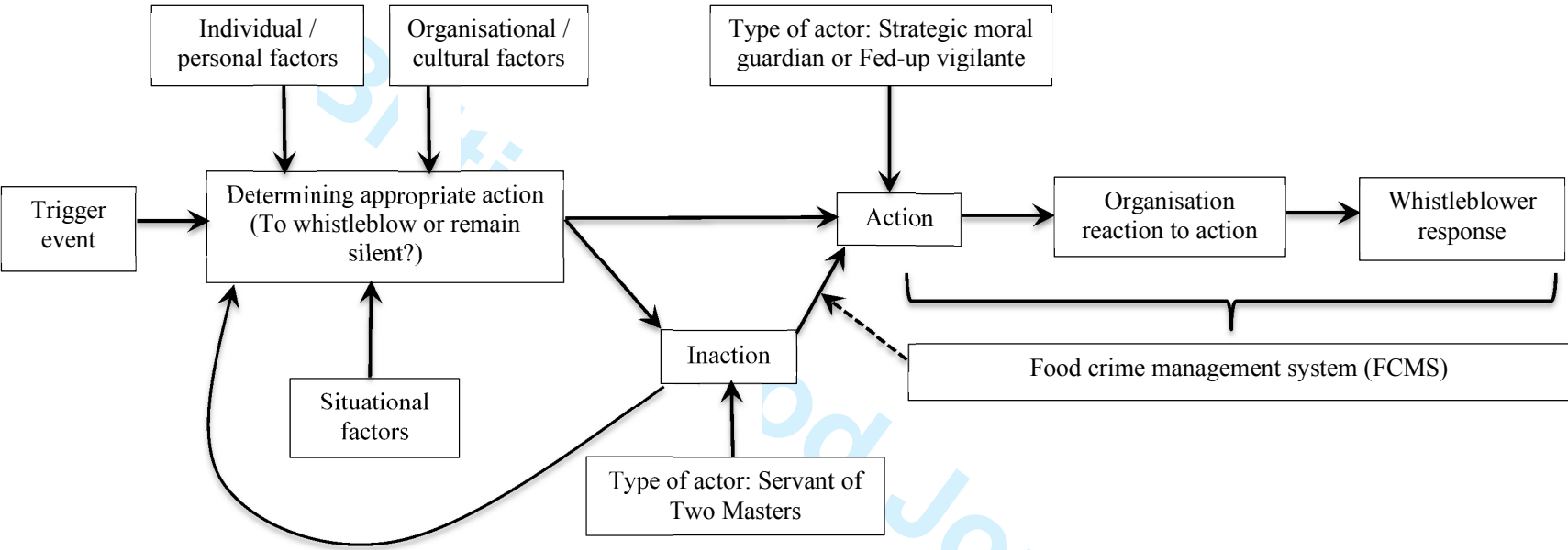


Figure 2. Whistleblowing strategies within the 5 stage whistleblowing model (Adapted from Henik 2015)