

**Title:** Effect of isomorphic forces on safety practices in service organizations – are there dangers to homogeneity?

**Abstract:**

A wide range of different safety practices exist. However they have been developed for production-oriented high hazard environments. We know relatively little about safety practices in low hazard service sector environments where most people in the UK work and which differ from production-oriented industries in their organization, working practices and hazards. We conducted 143 semi-structured interviews in 10 stores of four leading UK retailers and an office and two warehouses of a global logistics company. These revealed 32 categories of safety practices in these service organizations which we aligned to those indicated in the OHSAS 18001 framework to allow comparison across industries. There were few practices that were not common to all service environments. Moreover these closely resembled safety practices conducted in production-oriented high hazard environments. We explain this homogeneity by institutional isomorphism which encourages conformity through coercive, normative and mimetic pressures arising respectively from legal and regulatory requirements, professional standards and training, and lack of resources and staff turnover. We draw attention to the contingent relationship between hazards and appropriate safety practices and conclude that these pressures encourage organizations to borrow practices inappropriately and to accumulate layers of practices to ensure safe working needlessly increasing organizational costs. Opportunities for further research are discussed.

**Keywords:** logistics, new institutionalism, OHSAS 18001, retail, safety practices, service sector, warehousing

## Introduction

A wide variety of organizational working practices ranging from formal policies and inspection regimes to different modes of communication and training together contribute to the creation and maintenance of a safe working environment. This diversity of safety practices is captured in the five main categories, with accompanying sub-categories, of the OHSAS 18001 framework (BSI, 2007). According to Gallagher & Underhill (2012) this framework “has gained de facto international standard status, p.232” and provides an articulation of the agreed and necessary components of occupational health and safety management systems (OHSMS). These practices were recognised as proper, adequate and necessary for managing safety and ensuring a safe working environment in more than 50k companies from more than 100 countries in 2009 (Hasle and Zwetsloot, 2011).

It is rare, however, for this full range of safety practices to be investigated simultaneously in a single organization (for exceptions see Smith *et al.*, 1978; Vredenburg, 2002; Bentley & Haslam, 2001; Mearns *et al.*, 2003). More often only a single practice is the focus of empirical investigation, for example training (Horstmanshof *et al.*, 2002) or error communication (Cigularov *et al.*, 2009). Furthermore much of the existing research on safety practices examine production-oriented, high hazard environments such as the energy sector (Antonsen *et al.*, 2012; O’Dea and Flin, 2001) construction (Conchie *et al.*, 2013; Kapp, 2012) or large scale industrial manufacturing (Zohar, 2002; Clarke and Ward, 2006). These environments employ less than 20% of the UK workforce (Office for National Statistics, 2013). Consequently, there is a gap in our knowledge of the range of safety practices enacted in low hazard service environments, where an overwhelming majority of people in the UK work. Of course accidents in high hazard environments are more likely to result in fatalities and this should be prioritized, nevertheless slips, trips and falls, which are the most common form of accident in low hazard environments, merit attention, for example through the HSE’s recent “Shattered Lives Campaign” (HSE, 2010). More than 10,000 employees in the UK suffered major injuries from these types of accident in 2008/09, and many more suffered minor injuries, generating a societal cost in excess of £800m p.a. (HSE, 2010). However, the focus still remains on developing and promoting safety practices for high hazard, production-oriented industries to the exclusion of service environments. This is reinforced in the UK by Approved Codes of Practice (ACOPs), sector specific guidance notes (e.g. Managing health and safety in construction (HSE, 2015), reports and case studies (HSE, 2011) produced by the Health and Safety Executive (HSE).

The economies of many developed countries are now based on services rather than the production of goods. The organization of firms in these service industries will differ from those in production-oriented industries but in ways that have yet to be fully distinguished (Barley and Kunda, 2001). This nevertheless suggests that organizing for safety and the resultant safety practices is also likely to differ between these contexts. Most obviously this is because service industries unlike goods production industries, engage with the general public, who are an integral consideration in the design, development and deployment of organizational processes in services. Inevitably these considerations must influence the design and execution of safety practices. Moreover, service industries differ in the types of service work they engage in (Leidner, 1993). Some sell products directly to the customer in a face-to-face encounter (e.g. retail). Others engage with customers remotely (e.g. call-centres in financial services), while others provide the customer with an experience (e.g. tourism and leisure industries). The working practices in these different service environments will vary and so will the hazards encountered. Therefore different safety practices might be anticipated in different service industries, and these would be expected to differ from those in goods-production industries.

The aim of this paper therefore is to provide an account of the safety practices in service organizations as a complement to the prior work in high hazard production-oriented settings. Specifically this paper will:

- i. Report the empirical investigation of safety practices in a range of functional areas (including shops, warehouses and offices) of different service sector organizations operating in retail and logistics in particular;
- ii. Examine the similarities and differences in safety practices between these organizations and functional areas;
- iii. Compare these practices with those reported in the research literature in high hazard environments;
- iv. Develop an explanatory frame of reference drawing on ‘institutional isomorphism’ to account for the apparent similarity of safety practices across organizational settings;
- v. Highlight some of the potentially negative implications of the tendency towards homogeneity of safety practices.

## Methods

### *Study and Organizational Context*

This study formed part of a larger investigation of safety leadership (Pilbeam et al., 2016a) and safety practices in service sector organizations (Pilbeam et al., 2016b). The study from which the data for this paper were drawn, sought to determine the contingent relationships between multiple facets of context and different practices and how this affected safety outcomes. Here we present the data on organizational safety practices exploring similarities and differences between organizational contexts drawing on interviews not only with front-line workers and supervisors or team leaders but also their managers in the local organizational units.

Interviewees came from four UK branded retail organizations and one global logistics company working across 13 different research sites (see Table 1 for the distribution of interviewees across the organizational units). Three different units came from three different UK retail chains: one retail chain with more than 700 stores sold general merchandise (Retail A), another sold DIY material and home furnishings from more than 300 stores (Retail B) and the last sold groceries from 280 stores in the UK (Retail C). The final retail unit was a model store of a retailer selling fashion and home furnishings with approximately 200 stores in the UK (Retail D). These were complemented by two warehouses and an office of the logistics company having more than 100 sites in the UK. Each of these organizations have a highly centralised bureaucratic structure with a dominant head-quarters developing policies and practices to be enacted locally without deviation.

### *Demographics of the sample population*

One hundred and forty three people consented to being interviewed and completed (as they felt able) a questionnaire soliciting demographic information. Not everyone answered every question. While there was a gender difference in interviewees between sectors (Figure 1); interviewees in the warehouses were predominantly males, while the gender balance was more equal in the retail and office environments. Overall more males were interviewed than females. Age profiles varied by environment also (Table 2). Interviewees in the retail sector ranged from 16 to 66 years of age, but with a preponderance of younger people (mean age = 34 years). The age ranges of interviewees in the warehouse were slightly older (mean age = 37 years) and older again in the office environment (mean age = 41 years).

All of the employees in the office and warehouse environments of the logistics company were full-time, with the exception of one part time worker in the office environment. This contrasts with the retail sector overall where

more than one-third of the interviewees were part-time (29 were part-time and 53 were full-time). There was variation nevertheless between the four different retail organizations, two had a more equal balance of full and part-time workers (Retail A and Retail B), where the other two organizations favoured full time workers (Retail C and Retail D). More than 60% of interviewees had been with their current employer for six years or more (Table 2), with little variation between sectors. Also, most interviewees had been with this employer for more than one year. The responses were therefore mainly from experienced employees who were familiar with their organization. Nevertheless, they may have been less familiar with their particular task environment since more than one-quarter had been in their particular post for less than one year and more than half of the remainder had been in post for five years or less (Table 2).

While interviewees had a variety of job titles, we assigned them to one of three different role categories (managers, supervisors or front-line workers) based on their duties and responsibilities within the organization in order to facilitate the data analysis. Front-line workers had no line-management responsibility for other employees while managers were accountable for functions or departments within the unit, or even the whole unit, and with responsibility for a larger number of staff. Supervisors were typically responsible for a smaller number of staff, such as a shift or a team and reported to another more senior individual (often a manager) with overall responsibility for the unit or section. The distribution of interviewees across these three role categories by sector are shown in Table 3.

#### *Data Collection and Analysis*

A total of 143 people were interviewed during the first six months of 2014. Each of these semi-structured interviews were recorded and lasted between 9 and 50 minutes (16 minutes on average). These recordings were transcribed and then coded inductively. The interview schedule enquired about “how the organization ensured safe working?”, and subsequently interviewees were asked to give their opinion on the utility of the practices they reported.

In order to benchmark the empirical data across these service organizations using a common framework and then to permit further comparison with other data from the literature, these empirical data were aligned with the categories and sub-categories of the OHSAS 18001 framework (BSI, 2007). For example the variety of training types and modes identified by the interviewees (induction, refresher, equipment, face-to-face, on-line) were

aggregated into training, and different types of communication (verbal, written, visual, and on-line) were aggregated under communication. Once the data were aligned in this way, it was possible to identify from the wide range of reported practices, those that were not enacted in any particular context, but which were enacted in others. This approach highlighted differences rather than the wide ranging similarities in practices that were immediately evident in the data.

## Findings

### *Safety practices – a descriptive overview*

A large number of different safety working practices were reported in these service organizations. The 32 emergent categories of practices identified in the interviewees were aligned to the 13 main categories in the OHSAS 18001 framework (Table 4). Some categories of the framework were more heavily referenced with different codes than others. Training for example encompassed seven different categories while monitoring OSH objectives embraced only one. This may reflect the safety awareness of the interviewees and also their particular role responsibilities. The most striking feature of these data was the similarity across these different service environments of a wide range of safety practices, so that there was little that was not common to all environments. Here we briefly describe each of these practices in the sequence of the 13 categories and sub-categories presented in the OHSAS 18001 standard giving an overview of how they were enacted in each environment.

#### *i. Develop, deploy and monitor + ii. Risk Assess*

All of the organizations held a periodic meeting, often designated a health and safety (H&S) Committee, where H&S matters were discussed. Typically these were either monthly, if H&S formed part of a wider agenda, or quarterly if the sole purpose of the meeting was to discuss H&S. A number of individuals were co-opted into these meetings representing different units or stakeholder groups within the organization. These meetings were responsible for the development of local H&S policies, the deployment of organization-wide policies and their monitoring. Planning for safety included assessing risk across all facets of activity in the organization. Typically this was part of the management and supervisor roles.

#### *iii. Resources*

Appropriate personal protective equipment (PPE) was provided. In these contexts this was mainly high visibility jackets to wear when walking in areas where there were vehicles: Lorries in delivery yards; cars in car parks; forklift trucks in stock areas. Warehouses were the only environment where man and machinery met extensively, and necessitated permanent safety barriers. Organizations developed roles either formally or informally that regularly advised or supported H&S practices within the organization. Advising roles were discrete formal roles, while H&S champions were an informal role with a responsibility to monitor H&S and advocate for it. Together these “responsible persons” and the provision of PPE and safety barriers acted as resources for safety.

*iv. Competence – training - awareness*

Training, delivered in different modes for different purposes was a highly salient practice for ensuring safety at work. All organizations offered an induction (even if it was only vaguely remembered, especially by those working in an office environment). Induction typically included an H&S briefing and often a tour of the building or site to indicate fire exits. In the warehouses it also included instructions on how to use a pallet truck, a safety knife and a tape gun. In many of the organizations across the three sectors, training was delivered either on-line or through DVDs. The content covered many of the basic operational practices in the organization, as well as including those with a specific safety component like manual handling. Safety training was therefore part of the basic training. Face-to-face training was used to supplement this on-line training, particularly in the warehouse environment, where basic practices were demonstrated and then repeated back. This also occurred in some retail stores. In order to ensure competence observation was a common practice. This involved designated individuals, typically team leaders, discretely watching others working and then providing feedback to the individual, for example, on their manual handling techniques or use of manual handling equipment. Poor technique could result in the need to repeat on-line safety training more frequently than the annual requirement normally adopted in these organizations. This observational practice was described overtly as sponsoring, where more experienced or senior individuals, including front-line workers, were involved in the training of more junior staff in a coaching-style relationship. These sponsors were required to sign-off the newer member of staff once they were deemed to be competent and were accountable for their on-going safe working practices. This sort of relationship encouraged individuals to challenge each other to work safely, use equipment properly and not seek to cut corners.

*v. Communication – participation*

Organizations encouraged communication and supported participation in a number of different ways. Daily team briefings in warehouses and ad-hoc “huddles” in some retail stores encouraged dissemination of information and knowledge exchange verbally. These were complemented in other organizations by written communications including email, newsletters and briefing notes that needed to be acknowledged as having been read. Signs, posters and notices were used to communicate H&S messages visually, while the company intra-net provided an alternative vehicle for H&S communications, providing information that individuals could access as needed. This included guidelines on specific practices as well as more general H&S guidance. Communication occurred differently in each of the three settings. Visual or on-line communications were evident in the offices, while verbal communication through briefings was found in the warehouses. No particular mode of communication was emphasized in the retail environments.

*vi. Documentation*

The existence of policies forms part of the requirement to provide documentary evidence of H&S. There was no evidence in the data of consideration of version control and updating which are parts of this aspect of a functioning H&S management system<sup>1</sup>.

*vii. Operational Control*

In these settings operational control included the provision and application of standard operating procedures and guidance on the safe use of equipment. Good housekeeping was encouraged especially in the retail and warehouse environments to ensure tidy work stations. Formalised control came through regular specified assessment and testing regimes, including DSE Assessments and PAT testing.

*viii. Emergency Preparation*

Three practices were associated with emergency preparation. These were spillage clearing, fire drills and first aid training. Fire drills and first aid training were only mentioned in the office environments.

*ix. Monitoring OSH objectives + x. Evaluating compliance*

Monitoring of occupational safety and health objectives was achieved by observation of the working practices of others, especially in the retail environment. Individuals were expected to challenge others, including those more



senior than themselves if they saw them working unsafely. They were also expected to continuously monitor the environment around them. In the warehouse continuous monitoring of the physical work space was essential, reflecting the frequently fast-paced nature of the environment with considerable stock turnover (“*I ship 32 million individually picked cases each year through 16 doors*” – Warehouse Manager). There was no reported evidence from the interviews that compliance was evaluated in these environments. However managers (and some supervisors) were responsible for auditing the safety performance of their workplace. This occurred daily in the warehouses where observations of hazardous work environments or unsafe working practices were reported to shift supervisors and their immediate managers. In retail environments monitoring and auditing occurred in response to a prescribed checklist circulated by headquarters at regular intervals, typically monthly. These provided a checklist of actions that needed to be completed and signed for. The report was then returned to their headquarters for monitoring by the central QSHE team. External auditing also occurred, mainly by members of the central QSHE team, but sometimes by inspectors from the local authority.

#### *xi. Investigate*

Some form of incident or accident reporting was identified by a significant proportion of individuals in all three sectors. There were near-miss reporting cards in the warehouses, or on-line incident forms in many of the retail stores. Upon completion these would be reviewed by managers locally or centrally in the head-quarters and investigated. Local investigations were reported centrally.

#### *xii. Audit + xiii. Review*

The QSHE team from headquarters and the local health and safety committee were responsible for reviewing H&S policies and practices, and updating them as required. The QSHE team was also available to give advice as required. A local safety advisor was present in each of the warehouses, but the office environment relied on a central QSHE team for formal safety advice.

#### *Differences in practices between functions and within a sector*

Despite the general and wide ranging similarity of practices across industries some safety practices did differ between functional environments, perhaps reflecting differences in the work context (Figure 2). No mention was made of safety barriers, equipment guidelines or standard operating procedures in office environments. In addition in the office environment no mention was made of observations to check individual competency and to

raise awareness of safety or of procedures for self-auditing safety, unlike in shops and warehouses where these were reported frequently. Work station assessments and PAT testing were not mentioned by interviewees in shops, while none of the 42 interviewees from the warehouses mentioned first aid.

Moreover, there are some differences between organizations within a sector. Figure 3 shows safety practices that were not mentioned by interviewees in four different retail companies. Some of these omissions (e.g. first aid in retail A and B, equipment checking in retail B, C and D, and provision of safety barriers in retail A, C and D) are unlikely to be neglected by these organizations because they are legal requirements. However, perhaps they do indicate what people do or do not understand by safety working practices and what receives particular emphasis in organizational safety training programmes. Modes of communication clearly differ between companies. Verbal communication was important, although not in teams in retail C. Written communication (e.g. newsletters and briefings) occurred in retail A and B, but not retail C and D. All organizations made use of visual communication through signs, posters and display boards. The absence of Health and Safety Champions and Health and Safety committees in retail C may reflect the partnership ethos of this organization, so that these functions are fulfilled in other ways.

## Discussion

### *Safety Practices in Service Organizations*

Many different practices that support safety in service organizations were reported by participants in this study. A majority of the reported practices were found in all three functional environments (shops, warehouses and offices), so there were apparently few practices that were not common to all environments. Safety practices in service organizations seem to be similar overall. Moreover these data align almost completely with every category in the OHSAS 18001 framework (Table 4).

The alignment of these observed safety practices in service organizations with the categories and sub-categories of the OHSAS 18001 framework permits comparison of these empirical data with that found in production-oriented, high hazard organizations reported in the literature because these also align almost completely in every case with the OHSAS 18001 framework (Table 5). Data in this table demonstrates that safety practices in organizations operating in high hazard environments (e.g. oil and gas platforms (Mearns *et al.*, 2003)) and mixed environments (e.g. health care (Vredenburg, 2002)) are very similar to safety practices of organizations

operating in lower hazard environments (e.g. UK post office (Bentley & Haslam, 2001)) even though the risks and hazards faced in each of these environments are very different. Furthermore SMEs (Walker and Tait, 2004) were encouraged to implement the same practices as large multinationals (Mearns *et al.*, 2003). The strong similarity in reported safety practices between these published data and the empirical data observed in our study suggest that safety practices are universally similar regardless of context.

It is perhaps unsurprising that safety practices in organizationally diverse settings appear to resemble each other because safety is a highly institutionalized domain of organizational activity being susceptible to pressures from the political and cultural environment beyond the organization. For example, Meyer and Rowan (1977) in their seminal article note that “environmental safety institutions make it important for organizations to create formal safety rules, safety departments and safety programmes, p.350”. Ashworth *et al.* (2009) concur, noting the institutionalizing force of Health and Safety regulations.

#### *Isomorphic pressures on safety practices*

Three isomorphic pressures act in institutionalized domains encouraging conformity through compliance or convergence (Ashworth *et al.*, 2009) that leads to greater homogeneity in organizational forms and practices and reduced diversity in the organizational field (DiMaggio and Powell, 1983). *Coercive isomorphism* arises from external forces exerted either formally or informally by other organizations, typically government and regulatory or other agencies. Through the Health and Safety at Work etc Act (1974), the UK government expects all UK firms to provide and maintain plant and systems of work, to deploy safety processes and practices, to provide information, instruction and training, to maintain a safe work environment and to provide necessary safety equipment. This is further reinforced in the UK by the EU framework directive 89/291/EEC mandating OHSMS for all European Union partners (CEC, 1989). UK government may introduce new regulations (The Management of Health and Safety at Work Regulations, 1999) in response to such EU directives that organizations are required to comply with. External pressures may also be exerted by contractual obligations (Ashworth *et al.*, 2009). For example powerful actors in supply chains may require other actors to comply with particular practices in order to do business with them (Pilbeam *et al.*, 2012). Nevertheless coercive isomorphism may also be less formal and more subtle. Rocha (2010) differentiated between the mandated coercive forces and voluntary adherence to safety prescriptions. Organizations may need to adopt particular practices or achieve specific safety standards (e.g. ISO 18001) if they are to access resources from external

agencies; by adopting a practice in order to access resources a firm is voluntarily submitting to safety practices prescribed by others.

These coercive forces are complemented by normative forces. *Normative isomorphism* stems from the influence of professional communities (e.g. IOSH for safety) and the effect of professional standards on organizations, causing them to change. These normative forces encourage the voluntary adoption of OHSMS, and adherence and conformity to standards considered legitimate by professional groups relevant to the organization (Ashworth *et al.*, 2009). DiMaggio and Powell (1983) note that these norms are conveyed through formal education delivered by academic specialists and through the training and certification of competence by accredited professional bodies. The curricula of safety qualifications, for example NEBOSH, encourage particular practices. This supports wide acceptance of rules governing practices and behaviours, ensuring similarity of performance. Guidance transmitted by safety consultants (Gallagher and Underhill, 2012) helps to establish expectations further around organizational practices that enhance safety. Similarly, recommendations arising from accident investigation reports, for example the expectation that boards would take greater responsibility for safety following the Herald of Free Enterprise disaster (Department for Transport, 1987), or from the outcome of legal proceedings (such as the failed appeal by Associated Octel Ltd in their protection of a contractor who was burned whilst working on their site (House of Lords, 1996)) encourage the adoption of particular practices to improve safety.

Finally, where the means to achieve specific safety outcomes are uncertain, organizations may copy or emulate the practices, structures and processes of others. This copying is *mimetic isomorphism*. Mimetic forces may also be prevalent when organizations are faced with priorities that conflict with safety goals, and more resource is focused on achieving these other goals. In these circumstances it may be easier to imitate what another organization does rather than use limited resources to develop a safety programme. The transfer of practices from one organization to another is assisted not only by employee turnover but also by the actions of consultants who widely promulgate particular practices as solutions to organizational problems, without necessarily any evidence that the practices are necessary and that performance will improve.

*Implications of homogeneity for policy and practices*

Homogeneity of practices to ensure safety reveals two assumptions about perceptions of safety. First, it suggests that a particular hazard has an identical causal pathway in every circumstance that requires the same solution, even in different environments. However, Katz & Khan (1978) noted that “a system can reach the same final state from different initial conditions and by a variety of different paths, p. 30”, a pattern described as “equifinality” (Gresov and Drazin, 1997). Hazards may demonstrate equifinality; the same outcome may have multiple different causes. Consequently policies are unable to legislate for every circumstance and practices must also vary to accommodate the different hazards present in different circumstances.

Second, it suggests that solutions to safety issues are also universally applicable regardless of context. This is unlikely. The hazards on an oil and gas platform differ from those in an office, and so it would be reasonable to expect safety practices to differ, perhaps substantially. Hazards and their resolution by means of appropriate safety practices are integrally related and contingent upon each other. Safety practices are implemented that are appropriate to the hazard and the nature of the hazard determines which practices are suitable. This contingent relationship between hazard and safety practice is nuanced further by whether the practices are enacted to prevent accidents occurring (a proactive practice) or whether they are enacted following the occurrence of an accident (a reactive practice). The required practices aligned with these two scenarios are asymmetric (Fiss, 2011). Those practices that prevent accidents occurring are not the same as those that are enacted in response to an incident. An awareness of the contingent nature of safety practices may encourage more attention to be given to the suitable application of particular practices in specific contexts.

The tendency of organizations to respond to isomorphic pressures by adopting similar safety practices militates against organizational efficiency. Adopting practices in response to normative or mimetic pressures, for example following generic safety training events, or because other organizations in the sector have done so in a ‘copy-cat’ approach, without evaluating the need in line with what is “reasonable practicable” (Health and Safety at Work Act, 1974), may add unnecessary cost to the organization. The UK’s recent coalition Government “Red Tape” agenda (Department for Work and Pensions, 2015) responds to the symptoms of increased bureaucracy associated with this response to isomorphic pressures. It nevertheless fails to deal with the pressures that managers perceive from a legal and regulatory perspective that stimulate the isomorphic response in the first place, and encourage the ‘me-to’ adoption of practices ‘just-in-case’.

A common practical response to these assumptions following the homogenizing influence of isomorphic pressures is to develop a standardized check-list of practices such as the OHSAS 18001 framework. These provide a set of rationalized institutional rules that facilitate organizational action in the face of uncertainty by prescribing particular ways of acting, and so creating stability in the organizational environment. Meyer and Rowan (1977) argued that these rules become 'rationalized myths' that "may originate from narrow contexts and be applied in different areas p.347", regardless of whether it is appropriate to do so. Such 'rules' have legitimacy because they are supposed to be rationally effective, even if their impact and usefulness in a particular context is uncertain. Failing to follow these rules would appear to be irrational making the organization prone to the accusation of illegitimate practice and non-compliance.

Convergence indicates "the extent to which all organizations in a field resemble each other more closely over time; p. 170" (Ashworth *et al.*, 2009). Organizations are embedded in a networked environment comprising other organizations either in the same sector with which they may be more or less tightly coupled, or in different sectors, which may also exert an influence on the organization. The degree to which organizations in a specific sector are connected to organizations beyond that sector indicates the permeability of the sector and its vulnerability to alternative ideas and mimetic pressures (Greenwood and Hinings, 1996). The apparent similarity of safety practices across the different service sector environments in the empirical study and to safety practices in high hazard settings might suggest that with respect to safety practices sector boundaries are excessively permeable and mimetic pressures are high (Greenwood and Hinings, 1996). Anything that enhances the safety of the workplace or encourages safe working by employees is perhaps eagerly adopted by other organizations in order to bolster confidence that risks can be controlled by building layers of protection across organizational levels to isolate triggering events before they escalate and to assure safety (Pilbeam and Denyer, 2015).

### *Limitations*

While, as far as we are aware, this is the first cross-industry comparison of safety practices in service organizations, it nonetheless has a number of limitations. The organizations involved in the study were a self-selecting opportunity sample. They were all confident in their safety performance and it is probable that they would embrace all of the legally and normatively required safety practices as well as initiating the development of new ones. Therefore they may not be representative of service sector organizations generally. Moreover, it is possible that we were given access only to their better performing units, although informal conversations with

safety staff in headquarters suggested otherwise. The data collection was predicated upon the ability of participants to identify practices that contribute to organizational safety and to be able to recall them when asked. The omission of some practices from individual responses and the necessity for prompting in the interviews suggests that individuals differ in their ability to recall when asked. Consequently, there may be more practices that were not discovered, although the relatively large sample of interviewees in each context may mitigate this. Alternatively, some of the practices deemed to be safety practices in the OHSAS 18001 standard may not be identified as safety-related practices by the interviewees, either because they are perceived to serve other non-safety related purposes (e.g. development of policies and external audit) or because they are normatively accepted as an integral part of any work environment that their relation to improving safety goes unnoticed and unremarked (e.g. risk assessment, first-aid courses, fire drills). The data collection was also cross-sectional rather than longitudinal. As a result it is impossible to discern whether homogeneity of practices is increasing (as institutional pressures mount (DiMaggio and Powell, 1983) or decreasing, as might occur in response to the removal of coercive pressures from regulatory agencies as a consequence of the UK coalition government's "red tape" agenda (Department for Work and Pensions, 2015).

#### *Future Research*

Future investigations of safety practices in service sector organizations could develop in four directions from this work. First, and building on the last limitation, a longitudinal study of changes in safety practices would indicate how changes in institutional pressures support convergence or divergence in practices. Recently recommended changes to the regulatory environment in the UK (Young, 2010; Löfstedt, 2011) have altered coercive pressures by reducing the threat of inspection, and thereby possibly impacting on the enactment of safety practices in low hazard environments. In addition, the introduction of a new H&S standard in 2016 may change the normative pressures acting upon organizations with as yet unknown effects on safety practices. Secondly, the differences detailed in safety practices between the office and warehouse environment in the same organization, suggest the need to investigate more extensively differences in the enactment and adherence to safety practices between managerial and other staff. Perceptions of hazards and safety practices differ between clerical and managerial staff in office environments (Carter *et al.*, 2013). Here, it seemed that safety requirements were satisfied by delegation to a single responsible person in the professional office environment whereas in the predominantly blue-collar warehouse environment all workers were expected to actively engage with safety practices. Thirdly, the study indicated what practices were enacted locally. It did not investigate their

origin, whether they were locally designed or mandated by a central headquarters. Neither did it explore how safety practice evolved within a single organization nor the existence of feedback loops between central headquarters and peripheral units that encourage or inhibit changes in safety practice (Crossan *et al.*, 1999). Finally, the practices identified at different sites within the same organization, for example in the two warehouses, differed. This was probably a function of prior local circumstances. Further investigation would help to disentangle the effects of local contextual pressures from more generalized institutionalized pressures on safety practices in organizations.

## Conclusions

Safety practices in service organizations are extensive and varied, yet broadly similar across organizations. Any differences between environments, notable particularly in the office environment, may be attributed to differences in the work environment and the required working practices. The safety practices noted for these service organizations are similar to those observed by others in production-oriented, high hazard environments. This apparent homogeneity of safety practices across industries may be explained by institutional isomorphism which encourages conformity through compliance and convergence. There are negative consequences of this homogeneity that potentially detract from the safety of organizations. In particular it encourages the assumptions that all environments share similar hazards and that each hazard has an invariant single causal pathway which should be mitigated in a specific way. Together these promote the unthinking accretion of safety practices which potentially increase organizational costs and individual complacency towards safety.

## References

- Antonsen, S., Skarholt, K. and Ringstad, A.J. (2012). The role of standardization in safety management – a case study of a major oil & gas company. *Safety Science*, 50, pp. 2001-2009.
- Ashworth, R., Boyne, G. and Delbridge, R. (2009) Escape from the iron cage? Organizational change and isomorphic pressures in the public sector. *Journal of Public Administration Research and Theory*, 19(1), pp. 165-187.
- Barley, S.R. and Kunda, G. (2001). Bringing work back in. *Organization Science*, 12(1), pp. 76-95.
- Bentley, T.A. and Haslam, R.A. (2001). A comparison of safety practices used by managers of high and low accident rate postal delivery offices. *Safety Science*, 37, pp. 19-37.



- BSI. (2007). *Occupational health and safety management systems – Requirements*. BS OHSAS 18001:2007. London: BSI.
- Carter, B., Danford, A., Howcroft, D., Richardson, H., Smith, A. and Taylor, P. (2013). ‘Stressed out of my box’: employee experience of lean working and occupational ill-health in clerical work in the UK public sector. *Work, Employment and Society*, 27(5), pp. 747-767.
- CEC. (1989). *Council Directive of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (89/291/EEC)*. Available at: <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31989L0391&from=en> [Accessed 26 June 2015].
- Cigularov, K.P., Chen, P.Y. and Stallones, L. (2009). Error communication in young farm workers: its relationship to safety climate and safety locus of control. *Work & Stress*, 23(4), pp. 297-312.
- Clarke, S. and Ward, K. (2006). The role of leader influence tactics and safety climate in engaging employees’ safety participation. *Risk Analysis*, 26(5), pp. 1175-1185.
- Conchie, S.M., Moon, S. and Duncan, M. (2013). Supervisors’ engagement in safety leadership: Factors that help and hinder. *Safety Science*, 51, pp. 109-117.
- Crossan, M.M., Lane, H.W. and White, R.E. (1999). An organizational learning framework: from Intuition to institution. *Academy of Management Review*, 24(3), pp. 522-537.
- Department for Transport. (1987). *MV Herald of Free Enterprise. Report of Court No. 8074 Formal Investigation*. London: Her Majesty’s Stationery Office.
- Department for Work and Pensions. (2015). *A final progress report on implementation of health and safety reforms*. London: HMSO.
- DiMaggio, P.J. and Powell, W.W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review*, 48, pp. 147-160.
- Fiss, P.C. (2011). Building better causal theories: a fuzzy set approach to typologies in organizational research. *Academy of Management Journal*, 54(2), pp. 393-420.
- Gallagher, C. and Underhill, E. (2012). Managing work health and safety: recent developments and future directions. *Asian Pacific Journal of Human Resources*, 50, pp. 227-244.
- Greenwood, R. and Hinings, C.R. (1996). Understanding radical organizational change: Bringing together the old and the new institutionalism. *Academy of Management Review*, 21(4), pp. 1022-1054.
- Gresov, C. and Drazin, R. (1997). Equifinality: Functional equivalence in organizational design. *Academy of Management Review*, 22, pp. 403-428.

Hale, A.R., Guldenmund, F.W., van Loenhout, P.L.C.H. and Oh, J.I.H. (2010). Evaluating safety management and culture interventions to improve safety: Effective intervention strategies. *Safety Science*, 48, pp. 1026-1035.

Hasle, P. and Zwetsloot, G. (2011). Editorial: Occupational health and safety management systems: issues and challenges. *Safety Science*, 49, pp. 961-963.

Health and Safety at Work etc. Act (1974). Available at:  
[http://www.legislation.gov.uk/ukpga/1974/37/pdfs/ukpga\\_19740037\\_en.pdf](http://www.legislation.gov.uk/ukpga/1974/37/pdfs/ukpga_19740037_en.pdf) [Accessed 26 June 2015].

Horstmanshof, L., Hassall, E., Hassall, S., O'Connor, C. and Glendon, I. (2002). Training for the role of workplace health and safety officers in Queensland. *Journal of Occupational Health and Safety Australia and New Zealand*, 18(1), pp. 35-44.

House of Lords (1996). *Judgment – Regina v Associated Octel Ltd*. Available at:  
<http://www.publications.parliament.uk/pa/ld199697/ldjudgmt/jd961114/octel01.htm> [Accessed 8 October 2015].

HSE (2010). *Shattered Lives Campaign*. Available at: <http://www.hse.gov.uk/shatteredlives/>

HSE (2011). *Bardsley Construction Limited. Case Study*. HSE Books. Norwich: The Stationery Office

HSE (2015). *Managing health and safety in construction. Construction (Design and Management) Regulations 2015. Guidance on Regulations*. HSE Books. Norwich: The Stationery Office.

Kapp, E.A. (2012). The influence of supervisor leadership practices and perceived group safety climate on employee safety performance. *Safety Science*, 50, pp. 1119-1124.

Katz, D. and Kahn, R.L. (1978). *The social psychology of organizations* (2<sup>nd</sup> Edition). New York: Wiley.

Leidner, R. (1993). *Fast food, fast talk: service work and the routinization of everyday life*. Berkeley, CA: University of California Press.

Löfstedt, R.E. (2011). *Reclaiming health and safety for all: an independent review of health and safety legislation*. Cm8219. Available at: <https://www.gov.uk/government/publications/reclaiming-health-and-safety-for-all-lofstedt-report> [Accessed 26 June 2015].

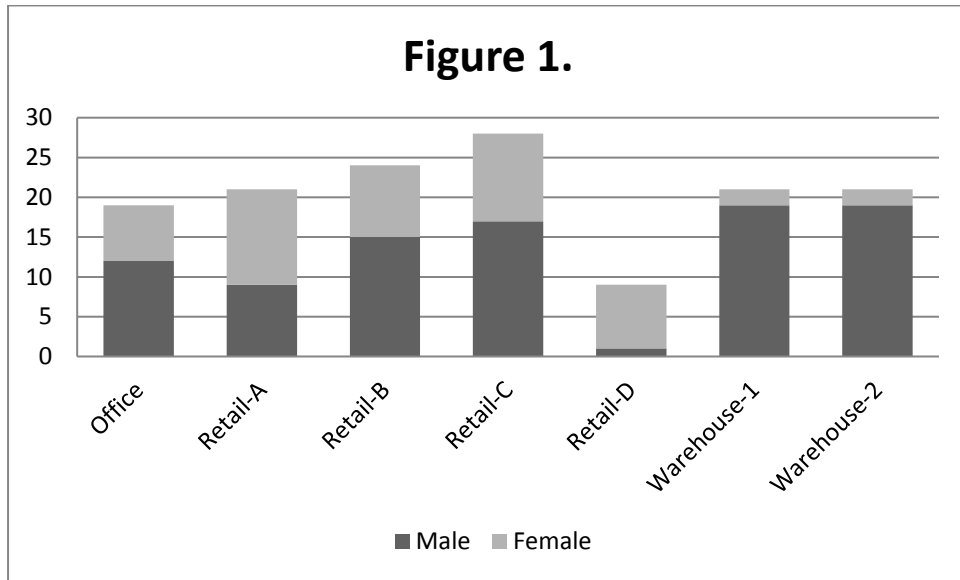
Mearns, K., Whitaker, S.M. and Flin, R. (2003). Safety climate, safety management practice and safety performance in offshore environments. *Safety Science*, 41, pp. 641-680.

Meyer, J.W. and Rowan, B. (1977). Institutionalized organizations: formal structure as myth and ceremony. *American Journal of Sociology*, 83(2), pp. 340-363.

O'Dea, A. and Flin, R. (2001). Site managers and safety leadership in the offshore oil and gas industry. *Safety Science*, 37, pp. 39-57.

- Office for National Statistics (2013). Available at: <http://www.ons.gov.uk/ons/rel/census/2011-census-analysis/170-years-of-industry/170-years-of-industrial-changeponent.html> 2013 [Accessed 15 April 2015].
- Pilbeam, C., Alvarez, G. and Wilson, H. (2012). The governance of supply networks: a systematic literature review. *Supply Chain Management: An International Journal*, 17(4), pp. 358-376.
- Pilbeam, C., Davidson, R., Doherty, N. and Denyer, D. (2016b). What learning happens? Using audio diaries to capture learning in response to safety-related events within retail and logistics organizations. *Safety Science* 81: 59-67.
- Pilbeam, C., Doherty, N., Davidson, R. and Denyer, D. (2016a). Safety leadership practices for organizational safety compliance: Developing a research agenda from a review of the literature. *Safety Science* 86: 110-121.
- Pilbeam, C. and Denyer, D. (2015). *Approaches to post-crisis change*. In: D. Denyer and C. Pilbeam, ed., *Managing Change in Extreme Contexts*. London: Routledge, pp. 279-295.
- Rocha, R.S. (2010). Institutional effects on occupational health and safety management systems. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 20(3), pp. 211-225.
- Shannon, H.S., Mayr, J and Haines, T. (1997). Overview of the relationship between organizational and workplace factors and injury rates. *Safety Science*, 26(3), pp. 201-217.
- Smith, M.J., Cohen, H.H., Cohen, A. and Cleveland, R.J. (1978). Characteristics of successful safety programs. *Journal of Safety Research*, 10(1), pp. 5-15.
- The Management of Health and Safety at Work Regulations. (1999). Available at: <http://www.legislation.gov.uk/ukxi/1999/3242/made/1999>. [Accessed 8 October 2015].
- Vredenburgh, A.G. (2002). Organizational safety: which management practices are most effective in reducing employee injury rates? *Journal of Safety Research*, 33, pp. 259-276.
- Walker, D. and Tait, R. (2004). Health and safety management in small enterprises: an effective low cost approach. *Safety Science*, 42, pp. 69-83.
- Young. (2010). Common Sense Common Safety: Report by Lord Young. HM Government. Available at: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/60905/402906\\_CommonSense\\_a\\_cc.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/60905/402906_CommonSense_a_cc.pdf) [Accessed 15 April 2015].
- Zohar, D. (2002). The effects of leadership dimensions, safety climate and assigned priorities on minor injuries in work groups. *Journal of Organizational Behavior*, 23, pp. 75-92.

Figure 1: Number of male and female interviewees in each organization



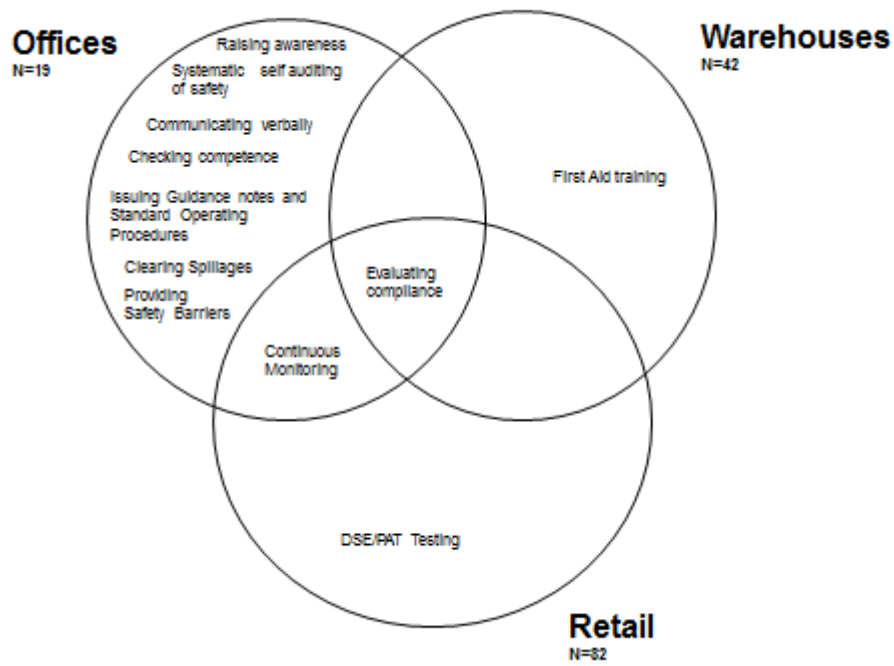


Figure 2. Specific safety related practices not reported by interviewees in each work environment from the wide variety of practices reported in interviews and aligned to the OHSAS 18001 framework<sup>1</sup>.

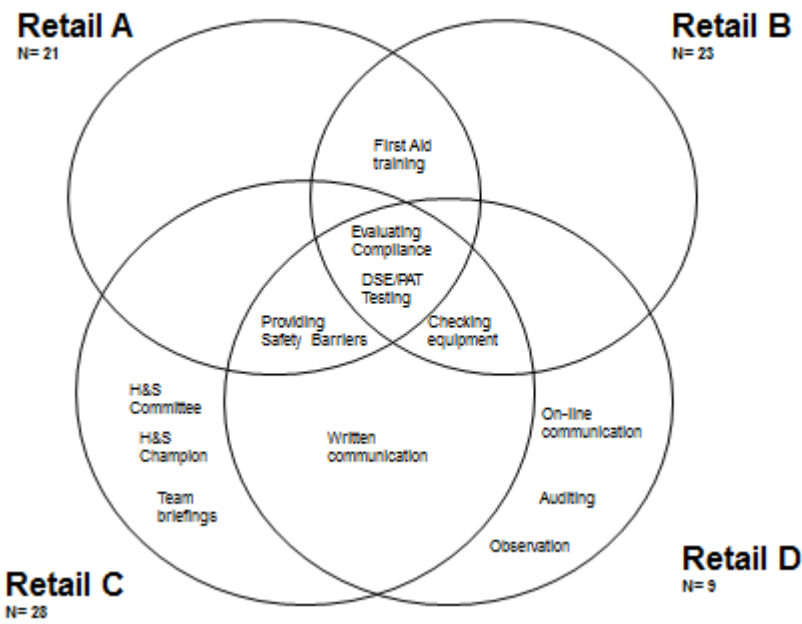


Figure 3. Specific safety related practices not reported by interviewees in four organizations in the retail sector from the wide range of practices reported in the interviews and aligned to the OHSAS 18001 framework<sup>1</sup>.

Table 1: Number of interviewees in each location

		<b>Unit</b>		
		<b>1</b>	<b>2</b>	<b>3</b>
<b>Retail</b>	<b>A</b>	11	6	4
	<b>B</b>	9	8	7
	<b>C</b>	12	9	7
	<b>D</b>	9	-	-
<b>Logistics</b>	<b>Office</b>	19	-	-
	<b>Warehouse</b>	21	21	-

Table 2. Numbers of interviewees in different age categories (years), time with employer and time in current role (in parenthesis) from three different service sector environments.

		<b>Office</b>	<b>Retail</b>	<b>Warehouse</b>
Age	16-25	1	22	3
	26-35	2	18	16
	36-45	4	16	11
	46-55	7	7	6
	56-65	1	3	1
	66-75	0	1	0
Time with Employer	<1yr	0 (1)	8 (22)	6 (11)
	1-5 yrs	4 (8)	23 (35)	12 (19)
	6-10 yrs	6 (5)	28 (17)	9 (8)
	>10yrs	4 (2)	23 (8)	13 (4)



Table 3: Number of interviewees in different roles in three different functional environments.

	<b>Manager</b>	<b>Supervisor</b>	<b>Front-line Worker</b>	<b>Total</b>
<b>Office</b>	9	6	4	19
<b>Shops</b>	15	30	37	82
<b>Warehouses</b>	9	16	16	41
<b>Total</b>	33	52	57	142*

\*One interviewee did not indicate his role in his demographic data.

Table 4. Practices aligned to categories of the British Standards management framework for Occupational Health and Safety<sup>1</sup>

<b>Categories</b>	<b>Empirical categories in the interview data</b>						
1. Develop, Deploy & Monitor OSH Policy	<b>Policies</b>	<b>QSHE Team</b>	<b>HSE Committee</b>				
2. Plan 2.1 Risk assessment/hazard identification	<b>Risk assessment</b>						
3. Implement & Operate 3.1 Resources & role clarity	<b>Responsible person / H&amp;S champion</b>	<b>H&amp;S Advisor</b>	<b>Top Desk</b>	<b>PPE</b>	<b>Safety Barriers</b>		
3.2 Competence / Training /Awareness	<b>Induction Observation</b>	<b>Training – on-line/DVD</b>	<b>Training f2f</b>	<b>Equipment/ Task training</b>	<b>Refresher training</b>	<b>Sponsors / coaching-demonstrating</b>	<b>H&amp;S Week/ Focus months</b>
3.3 Communication / Participation	<b>Huddles / team brief</b>	<b>Email</b>	<b>Signage Notices</b>	<b>Intra-net for information (Branch operating procedures)</b>	<b>Posters</b>	<b>Newsletter</b>	<b>Helping / supporting</b>
3.4 Documentation (provision and control) 3.5 Operational Control	<b>Policies</b>						
3.6 Emergency preparedness and response	<b>Equipment checking</b>	<b>Challenge</b>	<b>Standard Operating Procedures</b>	<b>DSE Assessment</b>	<b>Tidying up</b>	<b>Equip guide – work instruction notices</b>	<b>PAT Testing</b>
3.6 Emergency preparedness and response	<b>Spillage cleaning</b>	<b>Fire Drill/Fire Officer</b>	<b>First Aid Course</b>				
4. Checking 4.1 Monitor OSH objectives 4.2 Evaluate compliance 4.3 Investigate accidents / non-conformity	<b>Observation</b> -						
4.3 Investigate accidents / non-conformity	<b>Incident/ accident reporting – near miss cards</b>	<b>Continuous monitoring?</b>					
4.4 Audit	<b>Branch self-assessment Daily audit / house-keeping reports</b>	<b>Auditing / external inspection</b>	<b>Safety map</b>				
5. Review	<b>H&amp;S Committee</b>	<b>QSHE Team</b>					

Table 5. Safety practices identified in a selection of research papers and aligned to components of the OHSAS 18001 framework<sup>1</sup>.

<b>Author</b>	<b>Vredenburg (2002)</b>	<b>Smith et al. (1978)</b>	<b>Shannon et al. (1997)</b>	<b>Bentley &amp; Haslam (2001)</b>	<b>Mearns et al. (2003)</b>	<b>Hale et al. (2010)</b>
Paper Type	Empirical	Empirical	Literature Review	Empirical	Empirical	Literature Review
Country	USA	USA	USA, Canada	UK	UK	The Netherlands
Industrial Sector	Healthcare	Multiple	Multiple	Post-Office	Energy	Multiple
1. Develop, Deploy & Monitor OSH Policy	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
2. Plan						
2.1 Risk assessment/hazard identification	<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
3. Implement & Operate						
3.1 Resources & role clarity		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
3.2 Competence / Training	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
/Awareness						
3.3 Communication / Participation	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
3.4 Documentation (provision and control)			<b>X</b>			
3.5 Operational Control		<b>X</b>		<b>X</b>	<b>X</b>	<b>X</b>
3.6 Emergency preparedness and response				<b>X</b>		
4. Checking						
4.1 Monitor OSH objectives	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
4.2 Evaluate compliance						
4.3 Investigate accidents / non- conformity	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
4.4 Audit		<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
5. Review			<b>X</b>			<b>X</b>