

What does ‘common sense’ really mean in health and safety?

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Abstract

Extensive literature search has revealed that construction workers refer to the use of ‘common sense’ in site safety. This was also discovered in a recently completed PhD project where workers openly discussed a common sense approach to health and safety on site. The use of this term can be problematic. Different workers labelled different behaviours under this generic term. Also, some used it to refer to positive experiences and application of knowledge based on experience. Others employed the term negatively, or dismissively: “*It’s just common sense...*” General use of the term puts emphasis on ‘basic knowledge’ required for attaining minimal or satisfactory achievement of a given task or activity. This is in conflict with some workers’ interpretation of skilled and experience based action. In academic language ideas in this field are more substantially and in depth explored under ‘communities of practice’ and ‘local knowledge’. These concepts offer an avenue for analysis not tied to specific wording employed by respondents but interpreting broader sets of data particularly for this study (i.e. observation material and text around specific extracts of text). This paper presents findings from five micro construction firms regarding the concept of common sense and site safety. Practical constraints, such as a researcher’s stage of development and skill in qualitative analysis, potentially hinder the development of argumentation. The interpretative school of thought accepts researchers’ influence on the processes; and we add depth and nuanced understanding to this discussion via practical examples of such issues. Interpretation of the data collected through ethnographic case studies indicates although workers interpret common sense differently, although it is essentially a means of working safely. However, common sense safety techniques tend to fall outside strict site rules which are often bureaucratic.

Keywords: common sense, communities of practice, interpretative research, site safety

1. Introduction

The notion of incorporating a ‘common sense’ approach to construction site safety is a fairly new concept. This concept has gradually gained momentum in the academic realm (see Ludhra, 2015; Oswald *et al*, 2015; Aboagye-Nimo *et al*, 2013) and in some policy making reports (see Lord Young of Graffham, 2010; Davis, 2009). Literature on common sense safety tends to consider common sense in a positive light, to mean ‘*the ability to behave in a sensible way and make practical decisions*’ (Ludhra, 2015: 3). An individual’s ability to behave in a sensible manner with regard to safety can be interpreted differently depending on context. Thus common sense can be studied as a practice-context related subject.

This paper seeks to generate an understanding of the meanings construction site workers attribute to the idea of common sense in construction site safety. The overall aim of this paper is to explore what workers of micro construction firms mean by the term common sense. As mentioned in the previous paragraph, the study considers the term in relation to settings of the participants of the study. In order to understand the contextual conditions that influence the way in which individuals may employ ‘common sense’. The next section explores literature on communities of practice and situated knowledge.

2. Communities of practice in construction

The focus of this study is on the micro construction firm as a ‘community’. Communities of practice are semi-formal, self-governing networks of people who share a common interest in a specific aspect of practice (Bartholomew 2008: 146). Another way of describing communities of practice is an activity system about which participants share understandings concerning what they are doing and what that means in their lives and for their lives and for their community (Edwards and Mercer, 2013). Thus, workers operating in such a community are united in both action and in the meaning that action has, both for themselves, and for the larger collective (Lave and Wenger 1991: 98). This paper investigates the common knowledge that is shared by micro construction firms in the form of local knowledge and common sense in relation to site safety.

Workers produce safe working practices and hence safe working environments by engineering heterogeneous elements including knowledge, materials, relations and communication within a community of practice (Gherardi *et al* 1998: 204). Such knowledge is known to exist outside formal organisation structures although recognized and empowered by the organisation (Bartholomew, 2008: 148-149). This type of safety practice and use of informal knowledge in construction is relatable to coalminers’ ‘pit sense’ (Kamoche and Maguire, 2011). Pit sense is described as a tacit and situated form of knowledge constituted by tunnellers as a way to navigate and assess risk (*ibid*: 725). Similarly, the construction industry uses tacit and local knowledge extensively as it is important in raising performance at an organisational level (Addis 2014: 1245). This type knowledge which is often referred to as common sense due to its inexplicable nature is very instrumental in accident prevention and site safety (Aboagye-Nimo

et al, 2015). Particularly, it helps workers to be able to choose between different physical approaches when confronted with risks (Forsythe 2014: 242).

2.1 Common sense and local knowledge

Previous studies into the use of common sense in construction site safety have defined common sense as the practical knowledge and judgement developed by workers after gaining years of experience on site (see Oswald *et al*, 2015; Aboagye-Nimo *et al*, 2013). Practical knowledge and judgement on site requires complex interaction of explicit and tacit knowledge gained through training, experience, guidance by leaders, experiential learning in new situations and from experts and experienced workers who have preceded us (Gherardi and Nicolini 2002: 192). People without extensive local knowledge may stand right next to danger and not notice it (Baart 2009: 953). Local knowledge is knowledge specific to a particular situation (Sole and Edmondson, 2002). It can be described as the knowledge that people in a given community have developed over time, and continue to develop (Tutt *et al*, 2013). Thus it can be argued that this type of knowledge is context-related. A lack of this local knowledge can result in unsafe conditions for workers and their colleagues (Koch, 2013). In terms of common sense and local knowledge, what is ‘reasonable’ in terms of safety must be shared knowledge i.e. workers must agree on it. In relation to the knowledge-sharing process on construction sites, there are four different influences namely; openness, motivation, trust and pressure of time (Fong 2007: 208).

Using this common sense and local knowledge may occasionally fall outside the scope of official safety procedures as implied by Lord Young of Graffham (2010) and confirmed by Oswald *et al* (2015). This will thus create some misunderstanding between workers using this type of knowledge (micro construction firm workers) and those implementing official safety procedures (e.g. principal contractors). Unfortunately, when misunderstandings occur between principal contractor and subcontractor, it can lead to the subcontractor can be put on a ‘blacklist’ (Taylor, 2013).

The key themes will be investigated through fieldwork. Explanation of the research methods adopted for the empirical investigation follows.

3. Research methodology

This research seeks to understand the subjective view of construction site workers in relation to common sense safety. For this reason, an interpretation of the views expressed by these workers is imperative; thus the philosophy of interpretivism is adopted. Since common sense can be argued to exist differently amongst different communities of practice (see section 2), the concept of common sense was stretched to cover phrases presenting similarities in meaning. These included phrases such as ‘*automatically knowing*’, ‘*general knowledge*’ and ‘*obvious knowledge*’. Great care was taken through methodological rigour and robustness to ensure that this did not result in ‘concept misformation’ (see Campbell *et al*, 1984). Some of the factors taken into consideration was the possibility of the researcher misinterpreting the data collected

as they were still in the process of carrying out a PhD research project. This was minimized by the inclusion of research supervisors of a variety of expertise including a linguistics expert.

Numerous researchers that have sought to understand practices of groups and teams operating on construction sites encourage the use of in-depth qualitative methods (see Fellows and Liu, 2015; Tutt *et al*, 2013). In order for a researcher to understand a context and appreciate a group's shared values and beliefs, it is important that the researcher gains insight into what, how and why their patterns of behaviour occur (Fellows and Liu 2015: 24). A researcher can thus become very effective at gaining such insight by immersing their self in the group being studied i.e. becoming part of it (Pink *et al*, 2010). Epistemologically, an ethnographic approach is one of the most effective methods by which a researcher can explore value structures and beliefs that influence the group behaviours especially during the construction phase of a project (Fellows and Liu, 2015). In this paper, the definition adopted for an ethnography is:

'an iterative-inductive research (that evolves in design through the study), drawing on a family of methods, involving direct and sustained contact with human agents, within the context of their daily lives (and cultures), watching what happens, listening to what is said, asking questions, and producing a richly written account that respects the irreducibility of human experience, that acknowledges the role of theory as well as the researcher's own role and that views humans as part object/part subject.' (adapted from O'Reilly, 2012: 3; Pink *et al*, 2010: 648).

Non-participant observations, semi-structured interviews and conversations were incorporated under the umbrella of the ethnography. Five micro construction firms operating on different sites were studied in this research (see table 1). They all operate in the East Midlands region of the United Kingdom (UK). In order to build trust between researcher and participants, gatekeepers were used to establish the contact. This was followed by an honest disclosure of the aim and nature of the study. These steps were crucial to the study because small and micro construction firms are known as 'hard-to-reach' due to their secluded nature in relation to their interaction with outsiders (Willbourn, 2009).

Analysis of the data was conducted starting with a thorough thematic coding of the information (transcribed interview data and field notes from observations) using QSR NVivo. Using this computer assisted approach helped in the better organisation of the collected data. In addition, patterns were able to be drawn from the data, especially inferences that could not be drawn from analysing interview data and observation data separately.

4. Findings and analysis

Participants from all the five sites (i.e. the five micro firms) were working at different stages of their various projects. Site activities included electrical wiring, plumbing works, brick laying, screeding, excavations, laying foundation, landscaping and roofing works. Ages of the participants and their years of experience in the construction industry also varied vastly amongst the research participants. The least experienced participant had been on site for only one year

and the most experienced site worker had worked for 40 years. This ensured a good variation in workers' views particularly when discussing a topic as contextual as common sense. Table 1 below presents an overview of the five case studies.

Table 1: Profile of case studies

<i>Details</i> <i>Case study</i>	<i>Type of work</i>	<i>Nature of the project/ work</i>	<i>Number of participants</i>
<i>Case study 1</i>	<i>General builders</i>	<i>Refurbishment of existing structure</i>	<i>5</i>
<i>Case study 2</i>	<i>Ground workers</i>	<i>Preparation for new builds</i>	<i>3</i>
<i>Case study 3</i>	<i>Ground workers and general builders</i>	<i>New building</i>	<i>3</i>
<i>Case study 4</i>	<i>General builders</i>	<i>Preparation and laying foundation for new housing community</i>	<i>3</i>
<i>Case study 5</i>	<i>General builders</i>	<i>Completing new building</i>	<i>4</i>

The owners of the micro firms were John (14 years' experience), Derek (20 years' experience), Scott (13 years' site experience), Tony (13 years' site experience) and Tom (12 years' site experience) respectively.

4.1 Initial impressions of common sense and site safety

One consistent finding from both observations and interviews was the fact that none of the newer employees (less than two years' of site experience) associated any of their safety practices to common sense or local knowledge. On the other hand, participants that had extensive experience in the industry seemed to attribute a significant amount of their safety practices to common sense and their extensive site experience. For instance, Andy (Case study 5) who had about 38 years of experience on site stated;

“Safety is common sense, isn't it?”

To him, common sense and safety are not mutually exclusive entities. He holds both concepts collectively. Tony shared a comparable view. He believed *“general health and safety”* could not flourish without common sense. Ludhra (2015) agrees with the points raised above as it was found that common sense is relevant in safety practices.

Another point that came across from most participants was how 'dynamic' common sense safety was. Andy clarified that *“common sense [safety]”* varied from site to site. He believed that common sense is demonstrated or used differently as a response to project and site conditions. Thus one needs to depend on their local or situational knowledge when

implementing the common sense approach. Rick, having over 32 years of construction site experience also mentioned that common sense depends on what a worker was doing, citing scaffold use as an example. Thus there was a general view that common sense is indeed dependent on the situation at hand. In other words, common sense is not a planned approach to safety but more of a responsive technique. The workers highlighted how important it was to have context-related knowledge on risk management. This is in line with findings from Tutt *et al* (2013) and Baart (2009) that safety knowledge can be very specific to precise situations and thus outsiders or less experienced individuals would not comprehend the level of risk or dangers prevailing.

In trying to explain what he understood by the concept of common sense safety, Tom used a past situation to illustrate how his experience and local knowledge had saved him from a potential accident. He was asked to carry out an unsafe activity; “...to jump into a trench without ladders”. His response to that request was “no”, stating that “normal people don’t do that”. He thus insinuates that there are some basic standards of safety that the average workers must have. His common sense and local knowledge about working in such conditions or situations enabled him to analyse the situation at hand and subsequently decide it was not safe and hence he would not go through with the task.

In trying to improve the understanding of the meaning of common sense in safety from the participants’ perspectives, the next sections look at different ways that common sense was found to implemented on site.

4.2 Common sense as a positive safety approach

Some workers believed common sense was a good way to approach safety. Even going to the lengths of likening good safety practices to common sense. As mentioned in the previous section, Andy rhetorically asked ‘whether common sense was not safety’. Although he likened implied common sense and safety were one entity, he clarified that further training was always needed for all workers. It is worth noting that he did not assume a complacent stance or imply that workers knew it all and hence did not need further development. This corroborates findings from Reynolds *et al* (2008) as they identified that good workers admit that further safety training is always important as it helps improve upon safety awareness and helps workers to stay focused. Through observation, it was also witnessed that Andy was very communicative with his colleagues. Although Tom did not point to common sense directly, he and Andy both agreed that the best way to help workers practice safely was to continuously tell them what is safe.

Common sense as a term may be used casually by the participants when discussing safety but when one analyses the data from interviews and observations in its entirety, it is obvious that outsiders may have a different view of what the workers ‘really’ mean. Rick added that he had been on many different sites since he began his construction career and as such had seen a variety of risks. In reference to how common sense was applied to ensure safety, he described how and when he believed people on site should apply common sense:

“it depends on what you’re doing. You may be on a scaffold, make sure there’s no hand rails missing. Yeah, you got easy access, safe access? If you’re working on excavations, are they fenced off so you can’t fall down? If there’s traffic is it, is it all fenced off so that you can get around?”

Although he attributes the above scenarios to common sense (which some claim to be basic knowledge) it may be difficult for new and less experienced workers to also identify these with such ease. A less experienced worker may assume missing handrails are part of the design and hence continue to work on it. Also, a worker new to excavations may not know the depth at which the digging may lead to serious dangers. In examining Rick’s statement, it can be gathered that he is not proposing a laid-back attitude for safety. On the contrary, he is proposing that workers question or double check whatever activity they undertake. Managing knowledge in many situations including safety matters in the construction industry is difficult because site activities are fluid and dynamic (Dainty *et al*, 2007) and for this reason, Rick’s idea of constantly reassessing situations is an effective way of maintaining site safety.

Tony discussed that using common sense and experience, he is able to manage and supervise his workers. It was through this knowledge that he is able to decide what *“PPE [personal protective equipment] to provide for all the workers [for their various tasks]”*. He believed that as a leader, it was his duty to double-check and reassess situations and help come up with effective solutions that newer workers may not be able to comprehend. He added that even though there are stricter rules for health and safety in recent times, there can be different ways of carrying out a task safely and sometimes the common sense approach will be safer than the officially written procedures. A typical example of such a situation was described as workers being forced (by official site policies) to wear gloves for every task even though it may reduce their firm grip on certain tools hence causing ‘riskier’ situations for the workers and their workmates. Forsythe (2014) explains that experienced workers possess experiential and local knowledge that will enable them to choose a safe technique when faced with different situations. For his leadership style, Tony adopted an open communication system where workers can freely debate the safest approaches in working. This is because other workers may have a better common sense approach to a particular situation than others. The open discussion technique was also encouraged by John and Derek. On one occasion, Derek was observed having a serious dialogue with one of his newer workers. The topic of discussion was whether an area they were working could be considered as an enclosed area. This discussion was joined by all the other workers and was resolved agreeably. Derek’s side of the argument won the most support from the colleagues on this particular issue. This further demonstrates the openness described by leaders. In comparing the construction industry to coalminers’ pit sense, older and more experienced workers believe it is their responsibility to protect the younger workers not as a requirement of their job but as personal protective and altruistic role.

John states that he knows all his workers are ‘*bright*’ and as such he can leave them to use their own discretion when working safely. He further adds that he still makes it a point to walk around site and have direct discussions with them in order to know that their discretionary ability is being utilized in a beneficial manner. This is also in line with Andy’s response

whereby he believes further training and teaching need to be conducted continuously as it helps in the formation and sharpening of ideas. Going beyond the formal risk assessment activities, John adds the following:

“I'm a big believer in there's never just one way of doing something. Risks do differ”.

In such situations, he firmly believes that one's common sense and experience would be invaluable as far as identifying effective solutions for the prevailing risks. This is in line with his practice of encouraging other workers to voice out their opinions with regard to safe practices. In relation to allowing new workers to use their own discretion, workers from Case study 2 were observed discussing that it was only appropriate when the worker is known to work safely. One of them added that *“you only get to know each other when you've worked with them for some time”*. This idea of getting to know one's colleagues was linked to trust because workers believed that one person's mistake or unsafe practice could easily lead to further safety problems for other site operatives. Andy's quote clarified this narrative precisely as he stated the following: *“I mean if you can't trust those you're working with, then you can't trust anyone”*. Trust is one of the main indicators of effective knowledge-sharing on site (Fong, 2007). Even though common sense is meant to be an individual's basic knowledge on safety (therefore differing from one person to another); site workers feel they have to be able to evaluate and trust exactly how much safety knowledge their colleagues have.

To summarize, by using common sense in a positive manner workers are able to question situations that they believe could lead to dangerous outcomes. More importantly, people are able to use this common sense more effectively if they have gained a wealth of experience on site. Also, an important part of using common sense safely is by knowing that one's colleagues have a good understanding of safety and thus can be allowed to work to make decisions on their own. This section has presented a positive aspect of common sense and safety. The next section offers empirical findings of workers that did not perceive this concept in same light.

4.3 Using the notion of common sense to avoid bureaucracy

Out of all the five sites visited, workers from Case study 3 showed the least regard for official safety practices. This was also reflected in their responses concerning common sense safety. In trying to dismiss discussions about site safety, George (from Case study 3 with 8 years' of experience) casually responded by saying *“As you can see, it's all up and down. It's just common sense”*. George associated health and safety to official site policies and regulations. This response was quite the opposite of what workers from the other four cases had been presenting. On the contrary, the other sites' participants had clarified how they believed workers needed to question situations and be open about how they perceived risks. Scott also revealed that he believes that safety should be about general knowledge and for that reason, it should be left to the workers on site. He stated that the bureaucrats sitting in site offices did not really know what was happening ‘on the ground’. It is clear that his problem is not working safely but instead he had a problem with bureaucratic arrangements put in place by those in managerial positions. He states:

“[They should] Leave it to us really. [We] know what we’re doing anyway”.

He believes the individuals that set the site rules and regulations should appreciate workers have enough safety knowledge (i.e. common sense) when dealing with practices. Considering he is the owner of this small company, he could be in the position to encourage communication between his team and the openness and further discussion of the best safety methods. He based his feelings on situations he had encountered from previous projects whereby they had worked as subcontractors. Kamoche and Maguire (2011) found that managers in the coalmining industry may turn a blind eye to workers using pit sense. In other words, they know the practices may not be official but they understand that it is a safety technique that the experienced workers are adopting. Unfortunately, Scott and his team had not experienced this kind of attitude on construction sites.

In trying to further clarify his views on how he feels about bureaucratic safety rules, Scott stated that: *“Obviously we’ve all got basic general knowledge of health and safety so we all know what’s safe and what’s not safe...”*. Scott has strong views about what he believes the people higher up in the management chain ought to be doing but has failed to engage with them. This may be out of fear of his company being blacklisted. In one of the discussions observed during a lunch break in Case study 5, workers of the small company openly discussed the potential ramifications of pointing out impractical sections found in official rules and regulations. One worker described it as “commercial suicide” because he believed it was an act of killing one’s own business opportunities; another indication of being placed on a blacklist. According to Taylor (2013), many prominent principal contractors in the UK were guilty of using this blacklist to exclude many firms from their projects.

Some of Scott’s comments indicated that he was more concerned about finishing works than working safely, for example, *“[People] probably want to get their work done fast obviously because you need to get the work done as fast as possible”*. To him, completing tasks was a necessary trade-off if safety was to be sacrificed. This was also associated with project manager and principal contractors having bureaucratic safety rules that slowed down productivity and still demanded workers to finish activities in an unattainable timeframe. When asked about working with teams (i.e. as fellow subcontractors), he insisted that his preference was to have site managers and other subcontractors out of their way. This could be resultant of the pressures of having to deliver projects in timeframes so tight that they would rather carry on with their work and not get distracted. Workers from this group were using the term common sense in two ways; the first was common sense as a safety approach i.e. a similar view to what others had expressed on other sites and second, was using the concept to avoid having to confront safety bureaucratic rules and regulations. With regard to the second point, coalminers trying to use their informal and local safety knowledge (pit sense) were forced to increase or maintain productivity in the face of increased bureaucratic measures increased in their industry (Kamoche and Maguire, 2010).

Steve was the most experienced worker in Case study 3 with 28 years of site experience. Although he shared some similar views to his colleagues’, he showed some contrasting views as

well. He believed bureaucracy was getting in the way of carrying out practical work. He expressed unhappiness at how bureaucratic health and safety issues in the construction industry had become. Specifically, he talked about how safety rules and procedures have become prescriptive: “[*People should*] use common sense. *They’re too much by the book instead of common sense. You can’t always do jobs like you can on paper*”. This comment was in reference to risks being more practical and dynamic and hence standardizing safety approaches was not the way forward. This view was shared by all the other groups. Fong (2007) highlights one of the major factors to affect knowledge-sharing on site to be pressure of time. As indicated by Scott, he and his team would rather get on with their work, thus the pressure of time is clearly preventing the possibility of knowledge sharing that could have happened between their team and others.

4.3.1 The odd one out

Steve (the most experienced participant from Case study 3) shared some positive safety views with respect to the use of common sense and safety. Steve had assumed the role of safety representative of their team i.e. he was in charge of discussing safety matters with principal contractors and other teams on the site. He was observed telling George and Scott what was supposed to be done regarding certain safety issues. Considering Steve’s views and behaviours in the context of findings from his colleagues, it can be interpreted that he acts as the ‘moral compass’ of their group. Alternatively, it can be argued that he has more experience of working with different contractors and hence is more experienced in ‘playing the game’ of job satisfaction. His colleagues do not exhibit the same amount of restraint when having to deal with those they observed to be in rule-making positions. It may be possible that Steve is the one that has kept their company in business for so long as he has prevented the other team members from committing commercial suicide by using a different form of common sense i.e. knowing when and how to satisfy project requirements especially when dealing with safety matters. With the many hoops and hurdles that workers have to jump through on site, participants from Oswald *et al* (2015: 533) were quoted as stating that they ‘*couldn’t finish their jobs without breaking rules*’.

5. Conclusions

Findings from five micro construction firms operating in the East Midlands of the UK have been presented in this paper. The methodological strengths of this study lied with the philosophical underpinnings. For the ontological aspect of this study, common sense was approached to be a subjective concept i.e. different people would interpret it differently. For this reason, it was crucial that the researcher got very close to participants being studied. Through multiple ethnographic case studies, the chosen micro firms were closely studied to gain understanding of how site workers perceive and use common sense safety.

Unless teams and individuals in decision-making positions accept the need for including the common sense and local knowledge approach in site safety, workers will feel pressured by what they consider to be overbearing bureaucratic measures. Unfortunately, if these conditions

continue to prevail, workers of small and micro construction firms may be forced further underground. As mentioned earlier (see Willbourn, 2009) they are already known to be the hard to reach groups especially on safety matters. Workers may also carry out practices that may be prohibited even though they may be safer. Additionally, under the time pressures coupled with excessive site rules, workers may also end up cutting corners creating more unsafe environments an opposite of what the rules were supposed to accomplish. Common sense is not a laissez-faire attitude towards safety. In some instances, it challenges workers to double-check situations that would have not been critically evaluated under the bureaucratic safety measures. Workers may be afraid to discuss their views of using this informal type of safety approach with major contractors out of fear of being blacklisted. When construction common sense safety is compared to pit sense used by coalminers, it is evident that more can be done in the industry to accommodate this invaluable approach to safety as it is based upon experience and vital local knowledge.

This study was part of a larger PhD research project and future studies have been recommended to look into the safety practices of other micro construction firms in other regions of the country. Following the anticipated success of this next phase, the study can be extended to cover projects outside the UK.

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