SME-MICRO ENGAGEMENT WITH OCCUPATIONAL SAFETY AND HEALTH (OSH) - THE ROLE OF THE OWNER-MANAGER.

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The heterogeneous nature of Medium, Small and Micro enterprises (SMEs and Micros) means that standard definitions of what they are may be difficult to use in practice; this in turn complicates data collection. The standard definition used by the European Communities for headcount can facilitate data collection in order to classify the enterprise size as Medium, Small or Micro. In addition to the definition of size, access to participants in SME-Micros can also difficult. This paper reviews current literature investigating the role of the Owner-Manager and factors that facilitate and inhibit SME-Micros engagement with OSH, including access to and translation of OSH information. This paper presents emerging findings from a study investigating OSH engagement among SME-Micros (≤250 employees). Emerging findings reveal issues with OSH information and legislation translation; the different OSH information needs of SME-Micros and the importance of the Owner-Manager.

Keywords: SMEs, Micros, Owner-Manager, OSH

INTRODUCTION

SME-Micros continue to be a major economic contributor globally, yet little is known about how they interact with occupational safety and health (OSH) information and knowledge. Research in this area is difficult for several reasons; including defining the SME-Micro and access to relevant cohorts. This paper investigates the definition of SME-Micros. Using qualitative methods (interviews and focus groups) researchers will investigate OSH engagement among SME-Micros across several sectors including construction, to help develop present sources of guidance and facilitate them in being more relevant to SME-Micro enterprise needs. Through research funded by the Institution of Occupational Safety and Health (IOSH), results will be compared across industries to develop best practice guidelines for OSH engagement for SME-Micros.

Definition

In May 2003 the Commission of the European Communities issued a document to standardize the definition of SME-Micros across the European Union (European Commission, 2003). This was based on the idea that the existence of different definitions could create inconsistencies in relation to legal standing, or cause distortion when structural or research funds were allocated. The Commission defined

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an enterprise is “any entity, regardless of its legal form, engaged in economic activities, including in particular entities engaged in a craft activity and other activities on an individual or family basis, partnerships or associations.”

To help define SME-Micros the Commission offers criteria in terms of staff headcount and financial turnover (Table 1), the economic thresholds are subject to scaling and updating. However, staff headcount is undoubtedly the most important and should be observed as the main criterion. Walters (2001) also classified enterprises according to size with the same numerical values as the commission.

Table 1 European Communities Criteria for SME’s and Micros

<table>
<thead>
<tr>
<th>Enterprise category</th>
<th>Headcount: Annual Work Unit (AWU)</th>
<th>Annual turnover</th>
<th>Annual balance sheet total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium-sized</td>
<td>&lt;250</td>
<td>≤€50 million</td>
<td>≤€43 million</td>
</tr>
<tr>
<td>Small</td>
<td>&lt;50</td>
<td>≤€10 million</td>
<td>≤€10 million</td>
</tr>
<tr>
<td>Micro</td>
<td>&lt;10</td>
<td>≤€2 million</td>
<td>≤€2 million</td>
</tr>
</tbody>
</table>

However, there are further criteria to determine if an enterprise fits into one of these categories, for example, it must be autonomous, it cannot be considered an SME-Micro if 25% or more of its voting rights are directly or indirectly controlled by one or more public bodies. The composition of staff headcount is also important, for example, part-time and seasonal workers may be considered in headcount, but those on internships or student placement may not. However, while several criteria are given and the European Commission definition has legal standing within Europe, there is no universal definition of what constitutes an SME-Micro (Legg et al., 2009). There are a number of reasons for this lack of consensus: SME-Micros are found across the entire spectrum of enterprise activity and so cannot necessarily be defined by a singular industrial sector. Moreover, SME-Micros can adopt several characteristics which may make them difficult to define legally. One distinguishing characteristic for SME-Micros is that they are often managed by the owner (Great Britain Committee of Inquiry on Small Firms, 1971). The concept of Owner-Management usually forms the basis of most definitions of the SME-Micro. This concept may be used to consider the terms Owner-Managed and Owner-Manager. The first, Owner-Managed, describes a situation where the owner takes on several roles within the enterprise and will often not seek specialist advice unless there is an inherent need. Where advice is supplied this is often through an external consultant who may have no pre-existing relationship with the enterprise (Lansdown et al., 2007). The latter, Owner-Manager may, for example, refer to a franchisee where the owner may have access to resources, guidance and management practices from a larger enterprise. Owner-Manager may also refer to a subcontractor working within a larger project network. Eakin et al., (2000) have also touted the term Owner-Operator, a theme common in construction as workers often own their own tools. However, the definition may also be extended to healthcare or logistics, for example; in healthcare a physiotherapist who owns their own equipment or in logistics, a driver who owns their own vehicle. The heavily subcontracted nature of the construction industry may confound OSH responsibility and render the worker’s employment status ambiguous and force them to take on the responsibility of Owner-Operator. The Owner-Manager can be viewed as the key
person in an SME-Micro as it is their values and views that determine the approach to OSH management (Antonsson, 2007; Hasle and Limborg, 2006; Baldock et al., 2006).

SME-Micros in construction have proportionally more accidents than larger enterprises (Waters, 2001; Brace et al., 2010), leading many to the conclusion that SME-Micros are not engaging with OSH. However, Crawford et al., (2013) argue that this reputation of SME-Micros is undeserved as there are signs of good and bad OSH performance and engagement. Lansdown et al (2007) identified three types of smaller companies each requiring differing interventions to stimulate engagement with OSH knowledge: unaware-inactive, anxious-active and confident-active. However, Brace et al, 2009 argued that many micro organisations are really glorified DIY workers who perceive that they have little time or resource to engage with OSH at all, even if they knew how to access the information on good practice. This study of fatal accidents in construction argued that micros were often ‘risk acceptors’ and were particularly difficult to reach through normal OSH dissemination channels. The work proposed that access through Builder’s Merchants or the LA Building Control Officers may provide new and effective channels of communication.

**OSH Knowledge in SME-Micros**

Workers in SMEs want to be safe at work and trust their own safety knowledge developed over years of work (Wadick, 2007). There is also evidence that Micros have more freedom-authority, autonomy and opportunity to choose good working methods. Wrnieniewski and Dutton (2001), highlight that it may be necessary to take advantage of this to help Micros manage their safety knowledge more efficiently. However, Wadick (2007) also argues that Micros, in the construction industry, have a poor understanding and appreciation of OSH legal requirements and accept that the work is inherently dangerous, tending to think of safety as ‘common sense’ and blaming the injured worker for not being careful enough. Hasle et al., (2012) cite that most Owner-Managers take a positive approach to OSH, but also try to talk down risk and criticise regulation as bureaucracy, as well as pushing part of the responsibility on to employees. However, Hasle et al., (2012) highlight that the Owner-Manager is important in terms of defining OSH culture, it may not be that at the Owner-Manager is taking a common sense approach; instead they try to follow what they experience as a generally acceptable standard for the working environment among stakeholders in a given sector. Reasons for the downgrading of risk and a push of social responsibility onto the workers can be found in the close social relationships and the identity process of the Owner-Manager with their business. Given the close working relationships Owner-Managers generally try to act as responsible people and thus avoid personal guilt and blame if employees should get injured. However, if employees are close friends or family members it is also possible that they may be more accepting of a more ad hoc approach to OSH. There is also evidence to suggest that Owner-Managers seek to recruit more diligent workers whom they trust (Hasle and Limborg, 2006), and that the close physical proximity of the work can allow the Owner-Manager to detect risky behaviour (Pedersen et al., 2011). Knuckey et al., (2002) suggest that as the enterprise becomes larger the lines of communication and operating procedures automatically become more formal. It has also been suggested that once an
enterprise begins to employ more than 20 employees it takes on a more formalised management structure (Wilkinson, 1999; Hedal, 2002). However, Legg et al., (2009) suggest that need for more formalised structures may come at a cut-off point of as low as 10 to 12 employees. In terms of the European Communities this would imply that Micros may have an informal management style.

The SME-Micro sector is vastly different from that of larger enterprises, even if some of the hazards are the same. Legg et al. (2009) highlight that it may be unwise to take view SME-Micros as ‘mini larger’ enterprises, or that they might evolve into larger enterprises. SME-Micros by their nature are heterogeneous in terms of; employment sector, management processes, and outputs (Breakwell & Petts, 2001). Business processes in SME-Micros are complex and intertwined. Owner-Managers take on several critical business roles which, in larger enterprises, may be delegated to specific and/or specialised staff. There is little evidence to suggest that interventions modelled around good practice in larger enterprises are applicable in SME-Micros (Lansdown et al., 2007). This could lead to a number of shortcomings, such as poor ‘offer of intervention’ timing, inappropriate stage of development for the enterprise, poor relevance, and/or a lack of marrying the needs of business and type of intervention (McKinney, 2002). SME-Micros may be less likely to have performance protocols in place to measure the effect of interventions (Lansdown et al., 2007): it may be that Owner-Managers have other work critical issues to oversee and as such OSH issues are not high, or high enough, on the agenda (Crawford et al., 2013) and it has also been reported that Owner-Managers are highly susceptible to stress and burnout (Hasle and Limborg, 2006). Failure to implement and monitor interventions is exacerbated in SME-Micros by lack of fiscal capital, work/job knowledge and human resources (Garengo, Baize, & Biotitic, 2005). Mayhew (1997) proposes that SME-Micros may also have difficulty translating legislation, not just in terms of how a complex set of text can be enacted, but also how it fits in with business processes (Toone, 2005). For SME-Micros industry specific language used by regulators and professionals can prevent access to understanding this information (Crawford et al., 2013). This is a particularly worrying finding as SME-Micros tend to use this information as it is easy to access, freely available and from a trustworthy source. For Micros there are further concerns in terms of the use and flow of knowledge of information. Some OSH documentation, for example written policy statements, are not required for businesses with five or less staff. This raises a particular problem when investigating this subset of Micros as, having no need for a written policy statement, may translate into less formal business practices. Lansdown et al., (2007) recommend that sensitivity is considered in the classification and investigation of Micros.

There is clearly a difference between large (≥ 251 employees) and SME-Micro (≤ 250 employees) enterprises in terms of business structure, culture and available resources. However, findings from Crawford et al., (2013); Lansdown et al.,(2007) and emerging findings from an Institution of Occupational Safety and Health (IOSH) funded Knowledge Project, run by researchers at Loughborough University reveal interesting similarities in terms of the flow, translation and enactment of OSH knowledge for construction companies. For example, the amount of time spent implementing OSH and tailoring communication methods for specific audiences is important to the success of OSH knowledge retention. Moreover, regardless of size of the large enterprise size, face-to-face communication appears to be one of the most effective
methods of getting work related information across to workers, with particular note given to the message conveyor. Trust in the source of information is seen as important, as is where people choose to access information. Respondents were also more likely to access information if it was freely available, for example from IOSH or the Health and Safety Executive (HSE). Intermediaries such as the National Health Service (NHS) and the HSE are seen as a crucial part of transferring OSH information to SME-Micros so as to influence their engagement with OSH and effectiveness of any subsequent interventions (Walters, 2001). Hasle and Limborg (2006) highlight at this point of contact trust, experience and cost-effectiveness are important. Legg et al., (2009) also use external consultants, training agencies and industry associations as examples of intermediaries. The authors suggest that intermediaries are one of the most critical ways to engage with workers in SME-Micros. The ability of SME-Micros to develop contacts in this area is important as is the intermediary’s ability to understand the unique workings of the SME-Micro. Barriers to transferring information were perceived to be; time constraints, workplace culture, literacy and language issues, lack of appropriate management and support, as well as the inability to get groups together due to shifts or geographical location. In construction debate has focussed on the presence and extent of trickle down of good practice and knowledge appropriation from large organisations to SMEs working as subcontractors to SMEs working alone to micros working alone. Brace et al, 2009 hypothesised that since the 1980s bad practice has gradually been replaced by good practice first in large companies then in medium companies working as subcontractors, then on their own and then to smaller companies, but with very little impact on micros. This view was also supported by Corr Willbourn (2009) where ‘Ex Big Site Conformists’ move to run small sites and apply good practices learnt elsewhere.

**METHODOLOGY/COHORT**

**Study aims and objectives**

Building on previous literature, a study was developed to meet the following objectives:

1) Investigate the perceptions of OSH among SMEs and Micros.
2) Consider barriers to access that may derive from the values and attitudes of Owner-Managers.
3) Define present sources of guidance.
4) Examine the relationship between sources of knowledge and guidance.
5) SME-Micro definition used in study as per European Communities Criteria for SMEs and Micros.

**Methodology**

Eliciting data from the SME-Micro sector is a notoriously difficult and problematic process (Barrett et al., 2005; Landsdown et al., 2007; Crawford et al., 2013). Breakwell and Peets (2001) advise caution and careful planning when eliciting information from SMEs and low response rates to surveys and questionnaires have been cited throughout the literature (Storey, 1994; Breakwell and Peets, 2001).

Effective stakeholder participation requires consideration of a) the power, reward and punishment capability of the contacting organisation, b) the complexity, embeddedness, and repetition of the communication, and c) the response requirements
(awareness, compliance, behavioural change). Direct and personal approaches were shown to be more effective than general contact. This finding will be exploited; face-to-face and telephone interviews are the primary methods for data collection supported by an online version, presented as a questionnaire. The online questionnaire will follow the same objectives and augment the cohort. The interviews and online questionnaire (same inventory) have been designed to take 10 – 15 minutes to complete. Given the heterogeneous nature of SME-Micros, The European Communities Criterion (headcount) for SME-Micros will be used to facilitate data collection and distinguish between SMEs and Micros. The researchers will work across several industries, with a specific focus on construction, logistics and healthcare. Data collected will be analysed to meet the aims and objectives listed above.

**Data collection**

**Cohort**

The eventual aim is to collect data from 230 participants across three industries; construction, healthcare, logistics as well as to other industries (see Table 2). Participants will be Owner-Managers of or working in SME-Micros (using the European Communities criterion for guidance,) as well as working inside and outside of larger established networks. Currently, data has been collected from 69 participants across from enterprises sized Medium, Small and Micro who work both inside and outside networks. Current data collection results across participating enterprises types can be seen in Table 3.

<table>
<thead>
<tr>
<th>Industry</th>
<th>(n)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accommodation</td>
<td>2</td>
</tr>
<tr>
<td>Administration</td>
<td>0</td>
</tr>
<tr>
<td>Agriculture</td>
<td>20</td>
</tr>
<tr>
<td>Construction</td>
<td>10</td>
</tr>
<tr>
<td>Food</td>
<td>5</td>
</tr>
<tr>
<td>Healthcare</td>
<td>10</td>
</tr>
<tr>
<td>Hospitality</td>
<td>1</td>
</tr>
<tr>
<td>Logistics</td>
<td>1</td>
</tr>
<tr>
<td>Maintenance</td>
<td>1</td>
</tr>
<tr>
<td>Mining</td>
<td>5</td>
</tr>
<tr>
<td>Rail</td>
<td>7</td>
</tr>
<tr>
<td>Retail</td>
<td>3</td>
</tr>
<tr>
<td>Transport</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Industry</th>
<th>Micro (n)</th>
<th>Small (n)</th>
<th>Medium (n)</th>
<th>Total (n)</th>
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</thead>
<tbody>
<tr>
<td>In networks (n)</td>
<td>6</td>
<td>10</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td>Not in networks (n)</td>
<td>43</td>
<td>3</td>
<td>1</td>
<td>47</td>
</tr>
<tr>
<td>Total (n)</td>
<td>49</td>
<td>13</td>
<td>7</td>
<td>69</td>
</tr>
</tbody>
</table>

**Table 2 Industry representation**  
**Table 3 Current data collection count**
RESULTS (EMERGING FINDINGS)

Practical use of the definition

The European Communities Criterion for SME-Micros definition is useful from a research perspective to categorise the cohort of participants when categorising the enterprises participating in this study. However, asking workers to recall headcount can be difficult. Reasons for this include; seasonal variations in employee numbers and volunteers, different people making up the enterprise by including and excluding departments. In addition, some have self-employed people who work for them but are not viewed as employees, in terms of their responsibility for these people or for professional development and OSH, but are relied upon for the running of the enterprise. As such, this ‘blurred’ line of employee headcount can mean that enterprises categorise themselves differently to each other, or indeed how they stand in relation to the European Communities Criterion headcount.

In addition to the headcount being used to categorise the enterprises this does not account for industry variables. For example, in construction an enterprise with 200 – 250 direct employees would be considered large. It is common for companies in the construction industry work as subcontractors on large builds; however, these workers are not necessarily included in the headcount as they are not employed by the contractor even though, when onsite, the contractor has overall responsibility for the OSH of all workers, directly and indirectly employed.

Another issue with the definition is the use of the annual turnover and balance sheet total. Preliminary discussions with SME-Micro owners suggested this would be difficult to ascertain for several reasons, including; the turnover is sensitive in nature and some enterprises would not want to provide this information and the study could lose out on potential participants, the numbers are not known, or not known accurately, so would not be reliable and finally asking for this data would add additional time onto an interview that was being conducted in a short time frame. As such, it was decided that this question would not be used to categorise enterprises.

Factors influencing OSH knowledge engagement

Industry specific legislation - Workers described different factors influencing their OSH knowledge, including industry specific legislation. For example, people working with food were knowledgeable about food hygiene, reportedly through information provided by the Environment Agency however knowledge of how to be healthy and safe at work has been gathered through ‘experience’. Participants, in authority of others who work for them; the ‘Owner’ and/or ‘Managers’, report understanding their position implies responsibility of OSH for their workers, however, this again appears to depend on what activities are being conducted. Much of this is based on experience and there is little detail given as to the specific information with regards to OSH legal requirements, unless this has been made clear to the participant through some external body; professional membership, including, amongst others, the HSE.

Enterprise size - The size of the enterprise and industry seem to affect how people view OSH. For Medium industries the use of consultancies for OSH appears ‘common’ however this is not the case for the Small and Micro enterprises. Industries, regardless of size, that are perceived to be high hazard; mining, rail, construction and for high hazard activities for example; working at height the serious risk to health and safety to workers and/or public is acknowledged. However the perceived lower risk
activities; moving on-site/picking-up and carrying/dust exposure were not always discussed. That is not to say they are not seen relevant nor as issues to participants, but given the short duration of the interviews there is not enough time to gather in-depth data relating to all of these potential influences on workers OSH. As such it could be assumed that the activities that cause the most immediate risk to health are discussed. Based partly on data from other projects conducted at the University, in larger enterprises there seems to be a more defined structure in terms of who provides, or is expected to provide OSH guidance and training, however, the sample is too small to draw conclusions regarding this at present.

Relevance of information
Participants were asked if the OSH information they had access to, was relevant to their job, some said that the information from legislation, professional or regulatory bodies such as the HSE was not relevant to their jobs or the way that they do their jobs. Participants noted that searching for guidance themselves improved the relevance of the information; search methods included using the internet or asking a colleague. The ability to search themselves appears, to users, as a reliable filter to remove unnecessary and irrelevant information whereas ‘official information’ can be, at times, redundant as there can be an abundance of information. This may, however be related to their ability to translate the information.

The role of the Owner-Manager
The role of the owner-manager is hard to define and, as such, interviews are being used to explore how enterprises are structured, this has shown that several of the participating enterprises have board members or more than one Owner-Manager. Currently the sample is too small to draw firm conclusions. The only time when it is clear who the Owner-Manager is, is when the enterprise is formed of one person who is self-employed or if there is only one Owner-Manager.

PRELIMINARY CONCLUSIONS
Caveat – These conclusions are drawn from preliminary data collection of a larger study. Where possible the paper has been written to address the aims and objectives as part of the larger study. These findings are generalised across all of the industries investigated, but are also relevant to construction.

The European Communities Criterion for SME-Micros offered a viable point to define cohorts for data collection. However, the heterogeneous nature of SME-Micros implies that the definition takes careful application in practice.

The literature suggests that Owner-Managers play an important role in OSH engagement. However, in practice SME-Micros may find it difficult to define Owner-Managers. This will be investigated further.

Available OSH information may not suit the working context of SME-Micro enterprises. Moreover, this information, especially legislation may be difficult for SME-Micro, specifically those with ≤5 employees, to interpret in line with their business needs.

SME-Micros are not ‘mini larger’ enterprises and so have different and unique OSH information needs.
A lack of capital and resources may limit the ability of SME-Micros to implement and maintain interventions.

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