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Employers' perceived importance and the use (or non-use) of workplace risk assessment in micro-sized enterprises and SMEs in Europe with focus on Cyprus

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Abstract

Occupational Safety and Health is often poorly managed in micro-sized enterprises (MiSEs) and small and medium enterprises (SMEs). Previous studies have shown that employers in such enterprises do not conduct and/or regularly review workplace risk assessments, even though this is required by legislation. In other cases, they may conduct a superficial workplace risk assessment just to comply with legislation and satisfy the authorities. This study attempts to shed some light into the actual use or non-use of workplace risk assessment by MiSEs and SMEs, the level of its utilization, and investigate if it is used as a tool of occupational safety and health promotion and the reduction of workplace accidents and occupational diseases. It also introduces the concept of employers' perception of the actual value of the risk assessment process. Data from ESENER-2 survey were analysed as well as data gathered by a survey conducted in Cyprus that included 201 MiSEs employing less than five employees, an area not covered by previous ESENER surveys. Analysis revealed that a significant percentage of employers in MiSEs do not perceive risk assessment as a valuable tool for improving occupational safety and health, indicating a problematic perception of and attitude towards health and safety issues. Moreover, considerable differences were identified not only in occupational safety and health management, but also in the perceived value of workplace risk assessment between northern and southern European countries, as well as for enterprises employing less than five employees.

Keywords: risk assessment, SMEs, micro-sized enterprises, employers' perception, safety management, ESENER, Cyprus

Introduction

Small and medium-sized enterprises (SMEs) are regarded as key drivers of employment and economic growth globally, forming the backbone of most countries' economies, either developed or developing ("European Union Labour Force Survey - Eurostat", 2016). Statistics show that about 85% of European workers are working in SMEs (EU-OSHA – European Agency

for Safety and Health at Work, 2009). Different economic sectors utilise different definitions of small businesses (Cunningham et al., 2014). For our research, the 2003/361/EC Recommendation (European Commission, 2003) will be used to define SMEs based on staff headcount, that defines Micro (< 10 employees), Small (< 50 employees), and Medium-sized Enterprises (< 250 employees).

SMEs are often characterized by significant flexibility that may offer advantages regarding the adoption of new methods, procedures and technologies. Eardley et. al. (1997) suggest that flexibility is the ability to change direction rapidly or deviate from a predetermined course of action (Eardley et al., 1997). Even though this ability could mean that SMEs are successfully implementing management practices, they face many challenges. Most SMEs have high staff turnover and an associated instability in labour conditions (EC - European Commission, 2004).

According to previous studies, occupational safety and health (OSH) is often poorly managed in SMEs, with workers at greater risk of workplace accidents or work-related ill health (Boustras and Guldenmund, 2017; Cagno et al., 2014; Champoux and Brun, 2003; Fabiano et al., 2004; Hasle and Limborg, 2006). Research has provided growing evidence that those working in SMEs are more frequently exposed to hazardous situations and suffer more work-related injuries and illnesses than those working in large enterprises (Clifton, 2000; Micheli and Cagno, 2010; Sørensen et al., 2007). Those figures may become even worse if an assumable high level of under-reporting in small businesses is considered (Probst and Estrada, 2010). Particularly in small and micro enterprises, precarious work and flexible, non-prescriptive legal requirements are rarely translated into workplace practice (Bluff, 2019). The aim of this study is to assess the actual use of risk assessment by employers for improving OSH in SMEs and micro-sized enterprises (MiSEs) across Europe, taking into consideration their perception on the importance of the workplace risk assessment process and their engagement.

The introduction of the European Union Framework Directive on Safety and Health at Work back in 1989 (89/391/EEC) raised the importance of a well-conducted, systematic and documented workplace risk assessment for every workplace in EU ("COUNCIL DIRECTIVE of 12 June 1989 on the introduction of measures to encourage improvements in the safety and health of workers at work (89/391/EEC)", 1989). Transposition of the directive into national legislation and other national legislative provisions mandates the implementation of risk assessment either in every workplace or in workplaces employing staff above a nationally specified threshold. Auditing and enforcement of proper implementation is performed by the

National Labour Inspectorates (NLIs) of EU Member States. Risk assessment is regarded as the first and most significant step in managing OSH in the workplace. It should include both traditional and emerging risks (e.g. psychosocial risks, risks arising from emerging technologies). A thorough risk assessment addressing different types of risks can also provide a structured framework during OSH auditing procedures.

Taking care of usual business and also doing this in a safe way may often be really challenging for MiSEs and SMEs. There are several reasons for this, like limitations in human resources, financial aspects, or lack of expertise and/or experience (Boustras and Guldenmund, 2017). In any case, all enterprises must comply with European directives and national Legislation requiring them to conduct a risk assessment and implement measures and audits on the basis of the findings. Although, in some Member States, like Cyprus, enterprises employing less than five (5) workers, are not required to conduct a workplace risk assessment.

Previous studies have shown that there were considerable shortcomings in translating policy into practice within SMEs, especially MiSEs (Boustras and Guldenmund, 2017; EC - European Commission, 2004; Schulte et al., 2018). On top of that, statistics reveal that SMEs account for an uneven share of work-related injuries, illnesses, and fatalities, since official statistics report that 82% of all occupational injuries and around 90% of fatal accidents occur in SMEs (Eurostat, 2004). One of the key reasons associated with those figures is considered to be the fact that risk is less well managed in SMEs than in larger organizations (Walters, 2004).

Most of MiSEs, have an informal organisational structure, where the employer is the owner of the enterprise who also acts as the general manager of the firm managing every aspect of the business including health and safety issues, even though they may lack the appropriate competencies and knowledge (EC - European Commission, 2004). Despite the fact that previous studies have identified a positive association between worker participation and the implementation of OSH management measures, worker participation is usually neglected by employers while SMEs and MiSEs are predominately non-unionised (Frick and Walters, 1998). In addition, the employer often does not have sufficient time to dedicate to OSH management, given the burden of other responsibilities (Anyfantis and Biska, 2017; Vassie et al., 2000). Another essential factor may be close social relationships present in those enterprises, which may pose difficulties for employees to raise OSH concerns to the employer, resulting in workers being more likely to accept poor working conditions. Finally lack of available

resources may also be an excuse, since most of available resources are spent with particular focus on short-term survival (Anyfantis et al., 2016).

The European Commission, through EU-OSHA recognizes all those peculiarities and limitations of MiSEs, as well as the importance of conducting a workplace risk assessment (Wadsworth and Walters, 2018). In this context, it provides a variety of information sources and tools on workplace risk assessment, including OiRA (Online interactive Risk Assessment), that is an on-line easy to use tool for conducting a risk assessment (EU-OSHA, 2018a). This tool provides the resources and expertise required to enable mainly micro and small organisations to assess risks using their own resources. In many cases, such tools may be the only legitimate OSH related procedure for the firm, since because of the large number of MiSEs, the probability of receiving a proactive visit by the NLI is actually low (Walters, 2004).

An important factor to consider when conducting a workplace risk assessment and implementing an effective safety management system is risk perception (Parker et al., 2007; Reinhold et al., 2015). Especially for MiSEs, this approach provides reasoning about the way that the employer and employees perceive risk and their concerns towards risk and potential consequences (Aven, 2016). Perceptions of acceptable and unacceptable risks may be misleading, resulting in MiSEs adopting a more tolerant approach regarding risks, ignoring actual high risks that are considered as acceptable and spending valuable resources ineffectively (Walters, 2001). During the last few years, the role of poor hazard recognition and the underestimation of safety risk has received some attention by academic research. The main focus was in industries that are dynamic and unpredictable, such as the construction industry, where a large proportion of hazards go undetected (Albert et al., 2014; Carter and Smith , 2006).

A critical question is then raised, about the actual use and implementation of risk assessment for the case of SMEs and MiSE as a subset. That is because, in many cases, risk assessment is conducted just for compliance purposes, to satisfy the NLI (in case of an audit) and is not used appropriately for the successful management of OSH and reduction of accidents and occupational diseases (Baldock et al., 2006). Therefore, risk assessment may lose its dynamic nature, and findings may neither be implemented nor communicated appropriately to employees since previous studies reveal that MiSEs are looking only for an acceptable level of risk (EU-OSHA, 2018b). It is like answering the question: *"How much do we have to do in order to be accepted by workers, customers, authorities, peers and the local community?".* Today

there is enough evidence that even in the leading economies of European Union, such as Germany, only a small percentage of companies carry out workplace risk assessment which not only will meet the essential procedural requirements but will also take into consideration new and emerging risks in a comprehensive manner (Beck and Lenhardt, 2019; Lenhardt and Beck, 2016).

Therefore, the perceived importance of risk assessment for employers and managers in SMEs is equally important. The perceived importance of the value of risk assessment and its respective exploitation are determining factors of its use (Slovic et al., 1982), with risk perception being a determining factor in risk evaluation and management (Klinke and Renn, 2002; Slovic, 2000).

Few studies have been performed to investigate the current status of risk assessment in European SMEs and MiSEs. A study in Denmark reported that the size of small firms is negatively correlated with risk assessment compliance (Jensen et al., 2001). Annual reports of NLIs also provide some evidence. In Greece, based on the data collected in the hair-dressing sector (micro-enterprises) in 2013, it was found that only 20% had a workplace risk assessment in place. For the same year, only 69% of the audited enterprises in the recycling sector had conducted a risk assessment that was regarded as acceptable by the labour inspectors. According to the results of another campaign in SMEs in the logistics sector in 2012, only 57% had conducted a thorough workplace risk assessment. The remainder had never conducted a risk assessment or their risk assessment covered only the minimal content in order to avoid a direct sanction by the NLI. The most commonly reported reasons for failure to comply were lack of time and knowledge (SEPE, 2013).

In 2009, EU-OSHA launched the first European Survey of Enterprises on New and Emerging Risks (ESENER-1) (EU-OSHA, 2010). Another one followed in 2014 (ESENER-2) (EU-OSHA, 2015, p.) while the latest ESENER wave was carried out in 2019 (EU-OSHA, 2019). ESENER-2 focused on establishments with ten or more employees in the 27 EU Member States and additionally on Croatia, Turkey, Norway and Switzerland while it included enterprises that employed more than five (5) employees, covering in this way a proportion of MiSEs within the EU.

However, businesses employing 1-5 employees were not included in ESENER 2 (EU-OSHA, 2015), even though they represent a significant percentage of enterprises. As a result, an important part of the picture has been left unattended on a European level, since in many

Member States like Greece a workplace risk assessment is required for every employer, even though other states such as Cyprus apply a threshold of five employees.

The current study will investigate the use and effectiveness of risk assessment in European SMEs and MiSEs as perceived by employers. Additionally, it will investigate risk communication issues, based on risk assessment findings and the implementation of adequate control measures. It will also verify the dynamic nature of the process, in terms of periodical review. The case of Cyprus will be our main focus. Cyprus is a small economy in which the vast majority of businesses are micro and small enterprises. It belongs to the Mediterranean countries that are characterized as low trust cultures, in that one trusts family first and foremost, whereas institutions such as government are not highly trusted and supported, unlike the Nordic countries for which the opposite would apply (Giordano, 2012). This differentiation is backed by the concept of cultural relativity in organizational practices (Hofstede, 1983). Differences across those two groups of counties will also be assessed in our study.

Our study will therefore attempt to answer two main research questions:

Q1: To what extent do employers in MiSEs and SMEs across Europe recognize the importance of risk assessment and do they accordingly engage with the process of conducting it?

Q2: Are there differences in terms of the risk assessment process, between MiSEs and SMEs across European countries and specifically between Mediterranean and Nordic countries?

Materials and methods

Primary and secondary data were used for analysis. A survey was conducted with SMEs including micro enterprises in Cyprus, while secondary data were used through ESENER for other EU Member States.

ESENER-2 is a pan-European survey of management and worker representatives, of commonly accepted value, readily available for analysis. The statistical population comprises all organisations that have five or more employees in the 36 participating countries, while it covers most sectors of economic activity except private households (NACE T). One interview was conducted per organization with the person “most knowledgeable about health and safety”. There were 85 questions (not all were answered by all respondents) in nine categories.

Answers to specific ESENER questions were analysed in this study. Specifically, our research included analysis and assessment of the following questions:

- *Q250*: Does your establishment regularly carry out workplace risk assessments?
- *Q251*: Are workplace risk assessments mainly conducted by internal staff or are they contracted to external service providers?
- *Q254*: In what year was the last workplace risk assessment carried out?
- *Q255*: Has it been documented in written form?
- *Q256*: Who has been provided with the findings of the workplace risk assessment?
- *Q259*: In your establishment, is the risk assessment procedure seen as a useful way of managing health and safety?

In order to acquire a more detailed view and the actual use or non-use of risk assessment by SMEs, apart from the data that refer to Cyprus, two groups of countries were further formed and analysed. The first group included Mediterranean countries (Cyprus, Greece, Spain, Malta, Portugal, Italy), which are considered to have a similar OSH related culture and approach to OSH. The second group included the Nordic countries (Denmark, Finland, Norway, Sweden), which have been regarded as relatively developed in health promotion (WHO, 2002).

Another source of valuable data for our research was the annual reports published by the NLIs, which are freely available from the NLIs' web sites. These reports usually vary from country to country, however, they may include several interesting parameters, such as type of violations identified during on-site visits. Our main concern related to audit results on the existence and content of risk assessments. Annual reports from Greece and Cyprus were analyzed and assessed.

Finally, a survey study on OSH was conducted in Cyprus during the first quarter of 2017 focusing on small and MiSEs. A pilot study was conducted among ten micro-firms to test whether the questions of the questionnaire were easily comprehended by the respondents. Based on the results of the pilot study, the questionnaire was optimized for clarity and finalized. The final ESENER-based questionnaire was distributed to micro and small enterprises that additionally included questions about the importance of the risk assessment process, shortages of resources, including staff, money, time, and expertise. Additional questions on management awareness, current economic situation and the degree of employees' involvement in OSH management were included. There were 85 questions (not all of them are answered by all respondents) distributed in nine categories.

We distributed the questionnaire to enterprises that represent a broad range of economic sectors, that MiSEs cover in Cyprus, according to the National Statistical Service (Cyprus Statistical Service, 2018). Accordingly, our study included SMEs from the wholesale sector, the retail sector, leisure activities, manufacturing, construction and services sector.

Data analysis

Out of the 350 enterprises targeted, 201 agreed to participate in our study (57.4% response rate). First, bivariate correlations were calculated to examine potential associations between the perceived importance of risk assessment and independent variables like size of the enterprise, economic sector, use of external OSH professionals, degree of workers' involvement, etc. Additionally, regression modeling was used on the data collected through our survey, to identify those drivers and barriers significantly impacting upon conducting an effective risk assessment, for the case of micro and small enterprises.

As the dependent variable the employer's perception of the importance of risk assessment was used, that is summarized in this question: "Do you consider risk assessment and the produced document as one of the most important tools for workplace safety?". The independent variables used were either enterprise specific like number of workers, year of establishment or OSH specific, like use of external OSH services, degree of workers' involvement in OSH management, etc.

Results

The responses to ESENER-2 questions for Cyprus and the Mediterranean and Nordic countries are presented in Table 1.

Table 1.

Chi-square and Mann-Whitney U tests were performed for each question presented in Table 1, to identify differences related to risk assessment between Mediterranean and Nordic countries. There were statistically significant differences between the responses of those two country groups to all questions except Q254, which refers to the year that risk assessment was conducted. In Nordic countries, 74.8% of workplace risk assessments are mainly conducted by internal staff, while for Mediterranean countries, the respective rate falls to 24.2%. Moreover, in Nordic countries, in 84.9% of responses reported that the employees are provided with the findings of risk assessment, while for Mediterranean countries, the respective rate is 68.9%.

Analysis of the collected data from our MiSE specific survey conducted in Cyprus revealed that only 31% of respondents recognized the importance of risk assessment in improving OSH. Moreover, only 65% were aware of the existence of a workplace risk assessment. Almost 50% replied that there was no available document that explains responsibilities and procedures on health and safety to people working in the establishment and another 55% reported that OSH-related issues were not regularly discussed in team and staff meetings.

The results of our survey were analysed to identify correlations between the perceived importance of risk assessment and workplace / OSH characteristics. These correlations are presented in Table 2. The perceived importance of risk assessment was not significantly correlated with the size and year of establishment of the organization. Moreover, it did not correlate with possible lack of time, money, staff, management awareness, expertise or special support. Positive correlations were found between the perceived importance of risk assessment and the use of external OSH services and the degree of employee involvement in OSH management, whereas a negative correlation was identified for the complexity of legal obligations. However, all correlations were small in magnitude.

Table 2.

Logistic regression results are presented in Table 3. The final regression model predicted 15% of the variance in perceived importance of risk assessment. Predictive factors for the perceived importance of risk assessment were the use of external OSH expertise and the degree of involvement of employees or their representatives.

Table 3.

Discussion

The analysis of the data used in this research aimed to shed some light on the critical question of use or non-use of risk assessment on MiSEs and SMEs and its perceived importance by employers. Furthermore, we explored differences between Mediterranean and Nordic countries.

Workplace risk assessment is regarded as a systematic process that provides a roadmap to achieve acceptable levels of health and safety in the workplace. This means that employers should effectively communicate risk assessment findings to workers, and provide specific training and additional materials that would inform, train and explain responsibilities and procedures on health and safety, to the people working in the establishment.

Our analysis of ESENER-2 data indicated a statistically significant difference between SMEs in Nordic (88%) and Mediterranean countries (94%) on whether the risk assessment procedure is seen as a useful way for managing health and safety. This finding is surprising and might indicate that in Nordic countries respondents have developed a different mindset. Nordic countries have a long tradition in OSH and may have a developed a safety culture thus several issues may be more scrutinized and their true value questioned. It might also indicate a perceived need for improvement of the risk assessment process to incorporate various methods (Marhavilas et al., 2011; Mohaghegh et al., 2009).

Our survey in Cyprus that also included MiSEs employing less than five employees, provided significantly lower results compared to ESENER-2. According to these findings, only 31% of respondents recognized the importance of risk assessment in improving OSH. Moreover, 20% reported not providing their employees information related to the findings of the risk assessment. There are several considerations in relation to these findings.

For the case of MiSEs and SMEs, employers may not consider workplace risk assessment as a useful tool for effective risk management. For the scientific community it is well known that risk assessment provides a structured and organized approach in managing risk in the workplace (Carrivick et al., 2002; Health and Safety Executive (HSE), 2001; ISO, 2018). However, in MiSEs and SMEs, employers may either not perceive risk in a clear and unbiased way or they may doubt about the effectiveness of risk assessment as a methodological approach to improve working conditions (Arezes and Miguel, 2008; Gallagher et al., 2003). Several factors define employers' perception of health and safety and the importance of risk assessment, as well as the actual use of it, like past experience, educational level, emotional intelligence, and organizational skills (Jeffries, 2011). Many employers also perceive the risk assessment process as an integral part of improving OSH, either by developing a safety management system or by just complying to legislative provisions. However, smaller enterprises prioritize OSH less in comparison to larger organisations and are less likely to hire external experts to assist them with the risk assessment process(Boustras and Guldenmund, 2017).

Furthermore, our analysis of ESENER-2 data indicated that the majority of MiSEs and SMEs, both in Nordic and Mediterranean countries reported they have conducted a workplace risk assessment and consider this a useful approach in managing OSH. Risk assessment findings

were reported to be provided both to management and employees in most organisations, although this was less common in Mediterranean than in Nordic countries. This finding provides some evidence that European SMEs are engaging with risk assessment and there are differences across different countries.

However, when it comes to specific countries, findings become considerably different. In the case of Cyprus, ESENER-2 data indicate that 38% of MiSEs and SMEs reported that they do not regularly carry out a workplace risk assessment. These enterprises reported either not having a risk assessment process in place, or the risk assessment has not been reviewed for at least 2 years. This contradicts one of the basic properties of risk assessment: workplace risk assessment should be a live document, revised at regular intervals as well as when there are significant changes that take place in the enterprise (Aven, 2016). Moreover, we found similar findings for MiSEs employing less than five employees in our survey in Cyprus. According to these, 29% reported not having a workplace risk assessment process in place while 5% were not even aware of risk assessment. Approximately half of the respondents reported that health and safety issues are not regularly discussed in staff or team meetings. This situation poses an additional burden on OSH, by plummeting the importance of worker participation in SMEs' OSH management (Biggins et al., 1991; Frick and Walters, 1998; Glendon and Booth, 1982; Santos et al., 2013).

Our analysis did not indicate any relationships between lack of resources, such as time, money of staff and the perceived value of risk assessment. We found an association with complexity of legal requirements which is well-known obstacle of engagement in OSH for smaller organisations (EU-OSHA, 2018b; Vassie et al., 2000). Furthermore, those enterprises that reported valuing the risk assessment process also reported involving employees in this process and using external OSH services.

This finding is in line with previous studies highlighting the importance of worker participation especially when high-engagement methods are involved, like active participation and dialogue (Bluff, 2019; EU-OSHA, 2011; Popma, 2009). Furthermore, more awareness in relation to OSH and its importance has been found to be associated with more use of external services, however this is more so in larger organisations (EU-OSHA, 2010).

Moreover, it should also be considered that in many countries, legislation provides the employer the right to conduct their own workplace risk assessment. Taking into account the limited resources in smaller enterprise, having a generic risk assessment being conducted by

an external consultant, at a low price just to comply with legislation, can become a convenient, cost effective and tempting solution for many employers. However, in those cases the quality would be questionable since some workplace specific hazards would never be identified and there would be several pitfalls (Beale, 2001, Gadd et al., 2004). Focused campaigns conducted by NLIs could help limit with raising awareness in relation to this phenomenon and its effects.

Another interesting finding of our ESENER-2 analysis, is that for the case of Nordic countries, the risk assessment is mainly conducted by internal staff, whereas external service providers were reported to conduct more than half of the risk assessments for Mediterranean micro enterprises and SMEs. This could also be related to the degree of ownership and employee involvement in occupational safety and health processes. It indicates the development of a more robust safety culture in Nordic countries (Reader, 2019).

From a macroscopic point of view, our findings identify a gap between what scientific knowledge suggests is optimal and the actual way that OSH is managed in real life enterprises, especially in micro and SMEs. Such findings should preoccupy the scientific community as well as OSH experts about the application of scientific knowledge on real life practices. The interface that interconnects scientific knowledge to real life practices should be redefined, re-evaluated and re-established. Researchers should develop more action-oriented research, in cooperation with practitioners (Hasle and Limborg, 2006).

Our study is based on cross-sectional data and causality cannot be inferred. Further research is required using specific and focused questions, like those presented in our survey in Cyprus on the actual use or non-use of risk assessment, referring to micro and SMEs in more countries. Further comparative research between national level and European surveys would also be beneficial.

Conclusion

The findings of our research indicate that according to the ESENER study, the majority of SMEs, both in Nordic and Mediterranean countries have conducted a workplace risk assessment and consider this as a useful approach in managing OSH, while both the management and the employees have been provided with the findings.

However, the findings of our study, performed in Cypriot MiSEs, including micro enterprises employing less than five employees, identified a significant percentage of SMEs that do not perceive risk assessment as a valuable tool for improving OSH, indicating a lack of an

appropriate attitude towards health and safety and a lack of appropriate engagement with the workplace risk assessment process. There are considerable differences in OSH management and the perceived risk assessment value between European countries, SMEs and MiSEs employing less than five employees, as well as in engagement with the risk assessment process. The risk assessment procedure was not found to be considered of equal importance in Nordic and Mediterranean countries while a significant difference was identified between those two groups of counties in the number off MiSEs that report that they regularly carry out a workplace risk assessment, employee participation in the process and the use of external consultants. Moreover, this study identified a gap between knowledge in relation to good OSH management practices and the actual implementation of these practices in SMEs and MiSEsPublic OSH and sectoral organisations as well as the NLIs could play a key role in the diffusion of knowledge, and sharing of experiences to address this gap, apart from the enforcement of OSH policies and standards.

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594

Table 1. Responses to ESENER-2 risk assessment related questions for the cases of Cyprus, Mediterranean countries and Nordic countries.	Cyprus	Mediterranean	Nordic	Comparison
Q250: Do you regularly carry out workplace risk assessments?#				
YES	446 (59.4%)	7928 (82.3%)	5154 (85.2%)	$X^2(2) = 22.03$, $p < .001$
NO	284 (37.8%)	1622 (16.8%)	855 (14.1%)	
Q251: Are workplace risk assessments mainly conducted by internal staff or external service providers? #				
Internal Staff	198 (44.4%)	1936 (24.2%)	3888 (74.8%)	$X^2(3) = 3697.44$,
External Providers	122 (27.6%)	4656 (58.1%)	527 (10.1%)	$p < .001$
Both equally	124 (27.8%)	1326 (16.6%)	726 (13.9%)	
*Q254gr: Year of last risk assessment (revision)^*				
before 2010	5 (1.1%)	65 (0.8%)	27 (0.52%)	
2010	5 (1.1%)	61 (0.8%)	43 (0.8%)	
2011	7 (1.6%)	154 (1.9%)	137 (2.7%)	
2012	42 (9.4%)	509 (6.4%)	434 (8.4%)	$U(7) = 50.06$, $p = .177$
2013	173 (38.8%)	2673 (33.7%)	1600 (31.1%)	
2014	198 (44.4%)	4216 (53.2%)	2787 (54.1%)	
don't know	14 (3.1%)	228 (2.9%)	101 (1.9%)	
Q256_1: provided with the findings: management#				
YES	398 (89.7%)	7448 (93.9%)	4920 (95.5%)	$X^2(2) = 19.46$, $p < .001$
NO	22 (4.9%)	313 (3.9%)	149 (2.9%)	
Q256_5: provided with the findings: employees themselves#				
YES	327 (73.7%)	5466 (68.9%)	4377 (84.9%)	$X^2(2) = 466.18$,
NO	89 (20.1%)	2206 (27.9%)	623 (12.1%)	$p < .001$
Q259: In your establishment, is the risk assessment procedure seen as a useful way of managing health and safety?#				
YES	420 (94.2%)	7474 (94.3%)	4521 (87.7%)	
NO	22 (4.9%)	304 (3.8%)	285 (5.5%)	$X^2(3) = 229.98$,
There are conflicting views about that	3 (0.7%)	107 (1.4%)	268 (5.2%)	$p < .001$

595 # Chi-square was used to identify differences between Mediterranean and Nordic countries.
596 ^ Mann-Whitney U test was used to identify differences between Mediterranean and Nordic countries.
597 Note. Some values do not sum to 100% because not all respondents answered every question.
598

599 **Table 2.** Correlation between perceived importance of risk assessment and workplace or OSH
600 parameters.

	Spearman's rho	*p*
Use of external OSH Services ^	.19	.008
Lack of time or staff #	.03	.664
Lack of expertise or specialist support #	.01	.875
Current economic situation of this establishment #	.01	.898
Lack of money #	.01	.971
Lack of awareness among management #	-.04	.565
Number of employees	-.05	.462
Number of years in operation	-.07	.325
The paper-work #	-.11	.130
The complexity of legal obligations #	-.15	.035
The degree of involvement of employees or their representatives #	.18	.012

601 ^ No=0, Yes=1
602 # Likert scale 1-7.

603 **Table 3.** Regression analysis between perceived importance of risk assessment and
604 workplace/OSH specific variables.

Parameters (R^2=0.089)	Stand. Beta	*t*	*p*	95% CI
(Constant)		5.24	<.001	
Use of external OSH Services^	0.23	3.18	.002	[0.09, 0.37]
Degree of involvement of employees or their representatives#	0.19	2.52	.013	[0.04, 0.34]

605 ^ No=0, Yes=1
606 # Likert scale 1-7