

OHS Management Skill Development and Continuing Learning

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ABSTRACT

Occupational Health and Safety (OHS) management focuses on employee safety and health; OHS legislation establishes the requirements for OHS management competencies. This study aims to identify measures for developing OHS management skills during a management career to support managers' competence development and continuing learning. A qualitative multiple-case study of seven industrial companies in the energy and processing industries and industrial services was conducted. Measures for developing OHS management skills during the following stages of a management career were identified: 1) recruitment, 2) orientation, 3) competence assessment, 4) competence development, 5) performance assessment and measurement, and 6) incentives and rewards. This study suggests practical organizational measures for developing managers' OHS competence at different career stages as general management competencies. Developing managers' OHS competence provides them with knowledge of their responsibilities and expectations, as well as company-wide OHS objectives and practices to improve OHS and operational efficiency.

Keywords: Occupational Health and Safety, Safety Management, Management Training, Competence Development

INTRODUCTION

The intended outcomes of Occupational Health and Safety (OHS) management are to prevent work-related injury and ill health and to provide safe and healthy workplaces for employees (738/2002, ISO 45001:2018). OHS is a moral obligation imposed by modern society and organizations' social responsibility (Corcoran & Shackman 2007). Moreover, OHS issues are increasingly associated with operational efficiency, quality, competitiveness, and reputation of organizations (Boyd 2003, Fernández-Muñiz et al. 2009, Köper et al. 2009).

Managing OHS includes establishing company-specific OHS policies, objectives, processes, and procedures to be integrated into the company's management and business processes (EU-OSHA 2010, ISO 45001:2018). Managers represent the employer within the scope of their duties and powers; OHS management is an area of managerial work in all types of organizations (EU-OSHA 2012, Veltri et al. 2013). Managers' resources, competence, and commitment are important in establishing successful OHS management (Conchie et al. 2013, Fruhen et al. 2013, Hale et al. 2010, Hardison et al. 2014, Simola 2005, Tappura et al. 2017). Managers at different organizational levels need knowledge and tools as well as leadership skills to promote OHS in the workplace (Simola 2005, Tappura & Hämäläinen 2012, Tappura et al. 2016). Thus, OHS management skills should be considered general management skills and developed accordingly.

Managers' active role is commonly considered a key element of successful OHS management and performance (Biggs et al. 2013, Fernández-Muñiz et al. 2007, Griffin & Hu 2013, Hale et al. 2010). Through their actions and examples, managers can support employees' behaviors and activities in OHS. Senior management has the power to delegate authority and provide resources for OHS within the organization (ISO 45001:2018). Therefore, senior managers should encourage and support other management roles in their OHS work in their areas of responsibility. Managers' commitment to OHS may be promoted by organizational measures, such as increasing their OHS awareness and emphasizing their OHS responsibilities with inspirational and participative management training (Tappura et al. 2017). Increasing managers' awareness is central to the development of OHS management skills, for example, through training, management support, and mutual cooperation and peer support between managers (Simola 2005, Tappura 2017, Tappura & Hämäläinen 2012).

To ensure managers have adequate OHS competence, their OHS responsibilities and duties should be defined (Tappura et al. 2016). Once they are defined, it is possible to consider what skills a manager must have to perform these duties. The basis for OHS management competence requirements is laid by OHS legislation (738/2002), and managers at all levels should be aware of these requirements. In addition, competence needs can be identified based on the organization's OHS policies and practices, as well as successful OHS management practices and voluntary OHS management systems (Hale et al. 2010, Hardison et al. 2014, ISO 45001:2018, Tappura & Kivistö-Rahnasto 2018). Moreover, managers' roles and responsibilities can be defined based on their organizational level to support their awareness and commitment (Tappura et al. 2016).

OHS management procedures and practices are the collective and organizational-specific competence of managers (Sydänmaanlakka 2004). Learning by doing and participating, as well as collective problem-solving, are generally the key ways to learn at work (Tikkamäki 2006). Competence self-assessment also supports a person's learning in the form of self-reflection (Viitala 2005). The development of management skills is typically acknowledged in the recruitment, orientation, training, assessment of competence and performance of managers, and development discussions (Hätönen 2003). Correspondingly, OHS management skills should be considered during different phases of the management career. In addition to developing OHS management skills, possible development measures (e.g., trainings) should focus on improving managers' OHS awareness (Simola 2005, Tappura 2017, Tappura & Hämäläinen 2012). Tappura and Hämäläinen (2011) suggested that effective OHS training for managers includes joint discussions with colleagues, demonstrations, and hands-on techniques to strengthen managers' commitment to OHS procedures. Fruhen et al. (2013) proposed that senior managers' training and guidance should focus on their problem-solving abilities and perception of others in order to support them in demonstrating OHS commitment.

In this study, management refers to management and leadership, and managers include all levels of management from shop floor supervisors to senior management. OHS management competence refers to managers' ability to perform OHS-related management activities and behaving appropriately for the required OHS performance. This study aims to identify measures for developing OHS management skills during a management career to support managers' competence development and continuing learning.

MATERIAL AND METHODS

In this study, a qualitative multiple-case study of seven industrial companies in the energy and processing industries and industrial services was conducted (see Table 1). The companies were motivated to participate in the study because they needed better support for managers in their roles to improve OHS.

Table 1: Background information of the participating organizations

Company	Industry	Turnover	Number of employees
1	Oil industry	€15 billion	5,000
2	Energy production	€819 million	1,500
3	Industrial services	€640 million	7,800
4	Industrial services	€100+ million	700
5	Chemical processing	n/a	550
6	Staffing services	€12.9 million	320
7	Industrial services	n/a	200

The results are based on thematic interviews with 52 managers and seven OHS

professionals at the participating companies. Thematic analysis was used to qualitatively examine and categorize the interview data under the main themes (Boyatzis 1998). In addition, a workshop for the OHS professionals was organized to review the interview data and to supplement organizational measures that support managers' OHS competence development.

RESULTS

Based on the interviews and the workshop, measures for developing OHS management skills were identified during the following phases of a management career: 1) recruitment, 2) orientation, 3) competence assessment, 4) competence development, 5) performance assessment and measurement, and 6) incentives and rewards. The phases and examples of the measures are presented in Table 2.

Table 2: Examples of measures for developing OHS management skills at different phases of the management career

Phase	Sample measures
Recruitment	OHS responsibility is mentioned in job advertisements Task-specific OHS requirements are set Personal characteristics (e.g., background, responsibility) are sorted out OHS issues are considered as part of technical expertise and related professional expertise Occupational safety card is required
Orientation	General management training (e.g., several days) OHS orientation as part of general management orientation (e.g., 1.5 hours) Individual OHS orientation (e.g., 1- to 2-hour discussion with OHS specialist) General OHS online course Implementation and success of the orientation are evaluated in future development discussions
Competence assessment	General management assessment (e.g., in personnel surveys) OHS management assessment (e.g., in personnel surveys) Managers' independent self-assessment Competence needs are responded to as necessary (e.g., culminates in a crisis) Based on customer inquiries Involved in development discussions, including review, development plan, and monitoring)

Phase	Sample measures
Competence development	Separate trainings (e.g., early support model training) Basic open OHS courses (e.g., 5 days of OHS training or OHS pair training) Regular OHS training days for all managers General management trainings that include OHS issues Monitoring how the OHS procedures are performed in manager's department Annual OHS days Managers' intranet pages include OHS issues As part of general management development activities (e.g., mentoring and topical information sessions) The operational steering group of department heads shares OHS information and agrees on common practices Occupational safety card training Management trainings and forums OHS workshops and development plans for managers OHS workshop for the senior management team
Performance assessment & measurement	Personnel job satisfaction survey (e.g., management style, quality of OHS management) Reactive OHS measurement (e.g., number of absences due to illness and occupational injuries) Proactive OHS actions measurement (e.g., number of safety walks and near-miss reports) Manager-specific goals set and monitored based on the OHS measurement Annual development discussions Continuous monitoring and intervention Assessment of the quality of the OHS work (e.g., in personnel surveys)
Incentives & rewards	Managers have the opportunity (including time) to do their managerial work and carry out their managerial responsibilities Injury frequency as a basis for the performance bonus OHS rewards (e.g., OHS act award of the year, rewards for OHS observations and suggestions) Reward well-performing departments in management forums Support program for unsatisfactory department performance

In the recruitment phase, the manager candidate's OHS competence and attitude can be determined when it is a selection criterion. Defining OHS responsibilities in the job advertisement or describing OHS objectives in the company description

emphasizes the company's expectations for the candidate's attitude toward OHS. In addition, the information serves as input later in the orientation, so that it can be better focused.

If the manager does not have previous OHS training or experience, OHS responsibilities must be emphasized in the early phase of the management career. Typically, an OHS briefing is conducted by the company's OHS specialist. At its best, however, the orientation is handled by the manager's supervisor, who has operational responsibility for the area in question (including OHS). Orientation supports internalization of the company's OHS culture and practices, as well as an understanding of the importance of OHS. The success of the orientation should be evaluated, for example, in a feedback discussion with the manager's supervisor or in a future development discussion. During these discussions, the need for additional orientation or other competence development is assessed. At this stage, the role of the manager's supervisor as an example, setting the direction and setting goals, is also emphasized for OHS.

After the orientation phase, managers' OHS skills must be continuously assessed and developed. This is especially necessary for managers who missed it during the orientation phase. Also in connection with job changes, key OHS issues, such as OHS risks and objectives of the new job area, must be reviewed. Competence mirrors the competence requirements defined in the task description or elsewhere. The evaluation could use traditional tools (e.g., personnel surveys, 360-degree assessments, customer feedback, self-assessment, or development discussions) more widely. For example, a 360-degree assessment of managers may include OHS responsibilities; in which case, the manager's closest work community (supervisor, colleagues, and subordinates) will also assess OHS management. Another way is to extend personnel surveys to include OHS issues. When the assessment is performed as part of another management assessment, no separate OHS management assessments are required. Similarly, it is important that the identified OHS management development needs should be included in the development of managers' general competences, such as management training.

When OHS objectives are included in evaluation of the management performance, OHS tasks and related expectations are more prominently included in the managerial work. Following the monitoring of quantitative indicators (e.g., number of safety walks completed), the next step is to assess and improve the content and quality of the OHS work. Encouraging and rewarding managers for OHS work typically focuses on complimentary feedback and applause for successful OHS work (e.g., highlighting good units). A positive message and an emphasis on successes also encourage continued OHS work.

DISCUSSION

OHS management is an integral part of management activities in organizations (EU-OSHA 2010, ISO 45001:2018), and OHS management competencies should be developed to achieve improvements in OHS. This study suggests organizational

measures for the development of managers' OHS skills at different stages of their careers, from recruitment and orientation to continuous competency development and learning. Managers' commitment to OHS can be induced by enhancing the managers' own understanding of their OHS tasks and supporting their resources such as competence (Tappura et al. 2016). Assessing and developing managers' OHS skills provide them with knowledge of their OHS responsibilities and expectations, company-wide OHS procedures, and tools for promoting OHS. At its best, this also supports managers' commitment to OHS development through increased awareness and expertise.

Defining OHS responsibilities, implementing inspiring and inclusive OHS management training, and acknowledging successful OHS work, combined with the support of colleagues, the manager's supervisor, and OHS experts help managers to commit to OHS work (Tappura et al. 2017). Supporting managers' desired safety attitudes from the beginning of their career (recruitment and orientation) and in later training further fosters their commitment to OHS management. Learning by doing and collective problem-solving, such as discussion with colleagues, are key ways to learn at work (Tappura & Hämäläinen 2011, Tikkamäki 2006). Management forums and peer-to-peer meetings are especially important for inexperienced managers who are facing new and perhaps difficult situations for the first time. The lack of OHS awareness and competence can hinder a manager's performance or burden the supervisor (Tappura et al. 2017).

Senior management's commitment to OHS provides other managers with the support they need for their day-to-day OHS work. Managers are not left alone. The organization creates tools and practices to help them and makes investments to improve their skills. Incorporating the OHS management perspective into managers' overall assessment and development reduces the need for separate OHS management development procedures. Moreover, OHS issues should be part of the overall performance evaluation and reward system.

This study adds to literature by presenting a model for continuing learning of OHS management skills and examples of related practical measures. The measures presented can be utilized in general management development at different stages of managerial careers, from recruitment and orientation to continuous development of competences. Incorporating OHS issues into managers' performance goals, development discussions, and training can improve their commitment to OHS management and help companies to achieve improvements in OHS and operational efficiency.

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