



Occupational Safety and Health Coordinators – Puzzle-piece Caretakers or Necessary Evils¹

■ **Jeppe Zielinski Nguyen Ajslev²**

Senior researcher, The National Research Centre for the Working Environment, Denmark

■ **Jeppe Lykke Møller**

Post Doc., The National Research Centre for the Working Environment, Denmark

■ **Ika Elisabeth Ejstrup Nimb**

Research assistant, The National Research Centre for the Working Environment, Denmark

ABSTRACT

The construction industry continues to be high-risk in terms of occupational safety and health (OSH) issues. A pivotal instrument in preventing these risks at both European and Danish levels is the OSH coordinator. In spite of the important role of the coordinator, little research on their roles and functions exist, and critics have pointed out that OSH professionals in general may only confer limited impact on preventive OSH work. This study argues that professional identities and struggles to maintain preferred, as well as rejecting unwanted identities are highly important to understand OSH coordinators' practices. The study investigates OSH coordinators professional identities and their implications for practice through analysis of interviews with 12 experienced OSH coordinators in the Danish construction industry. The study reveals how struggles for maintaining a positive self-image and social recognition may explain why coordinators struggle to prioritize preventing OSH risks over legitimization and social practices.

KEYWORDS

Construction industry / ethics / OSH professionals / OSH coordinators / professional identity / qualitative methodology

Introduction

The construction industry continues to be a high-risk industry to work in. Both in terms of risk for accidents, heavy physical work and potentially hazardous chemical exposures (Swuste et al. 2012). Since 1992, one of the foremost strategies towards ensuring a coordinated and beneficial OSH effort on construction projects in the European Union has been vested in role of the OSH coordinator. By law, the task of the OSH coordinator is to coordinate the client's (i.e. the owner of the project) responsibilities and ensure that general prevention principles are applied throughout the construction site. For larger construction projects in the EU, the client is obligated to appoint an OSH coordinator for the design and execution phase of the project (EU-OSHA 1992).

¹ You can find this text and its DOI at <https://tidsskrift.dk/njwls/index>.

² Corresponding author: Jeppe Z. N. Ajslev, The National Research Centre for the Working Environment, Copenhagen, Denmark. E-mail: jza@nfa.dk.



Considering the central role of the OSH coordinator, it is interesting that little research so far concerns the roles and functions of OSH coordinators. In one of the few existing studies, Rubio et al. show that OSH coordinators often experience a lack of OSH compliance from construction employers, managers and workers (Rubio et al. 2008). The rest of the scarce existing literature is mainly concerned with competences demanded for performing OSH coordination using various methods like literature reviews, expert surveys, and document analyses. As such, the list of important competences for OSH coordinators is long (Møller et al. 2021).

This is, however, not surprising when taking into consideration that OSH coordinators are a particular type of OSH professional. The literature on the roles of OSH professionals in general has been blooming in recent years, and illustrate that taking up all the potential roles of OSH professionals demand a complex set of skills or competences (Provan et al. 2017). To categorize the activities performed by OSH professionals, Rae and Provan (2019) conceptualized a framework consisting of four overarching types of OSH professional practice; demonstrated, social, administrative, and physical safety work. They conclude that OSH professionals spend too much time and energy on the organizational legitimization practices, the so-called ‘demonstrated’, ‘social’, and ‘administrative’ aspects of safety work, while paying too little attention to the ‘physical safety work’; OSH activities that actually improve physical safety (Provan et al. 2019). A critique mimicked in reviews on the functional effect on OSH initiatives targeting OSH training programs and campaigns (Andersen et al. 2019).

The prioritizing of legitimization practices rather than improving actual OSH is also relevant to understand OSH coordinators and their impact on OSH in construction. However, in order to understand why people do what they do in work and organizations, it is important to know the professional identity characteristics they evaluate themselves and others by. This is important because studies have shown that being able to demonstrate a proper professional identity is key to social and organizational acceptance and recognition as well as to maintain a job in the long run (Ajslev et al. 2013; Alvesson & Willmott 2002; Brown & Coupland 2015; Kuhn 2009). Understanding how OSH coordinators characterize a good OSH coordinator and identify themselves can show both the idealized characteristics of OSH coordinators as well as unveiling the dilemmas and barriers (in the sense of unwanted identity categories) to practicing OSH coordination. While the existing studies have identified important competences for OSH coordinators, no previous research has investigated the professional identities of OSH coordinators. This paper thus asks the questions, (1) how may we understand professional identities among OSH coordinators, and (2) how do these identity configurations affect coordinators’ orientations towards practice.

In order to frame the analysis within a wider discussion on OSH professionals and their professional identities, existing research on professional identity and OSH professionals in general is discussed. Thereby, OSH coordinators is seen as being part of a wider OSH profession sharing the same purpose; to improve OSH in organizations (Pryor et al. 2019). The subsequent analysis is based on interviews with 12 highly experienced OSH coordinators working in the Danish construction industry, in which more than 1000 people take the coordinator certification course yearly (DEI 2020).

This study contributes to OSH research and to professional identity research in several ways. First, the study contributes to professional identity research by showing the identities that OSH coordinators inscribe themselves in. This reveals identities that

coordinators not only connect with professional quality, meaning, and engagement, but also identities that coordinators explain to be ascribed by others in their organizations. These identities are connected to uncomfortable characteristics such as being, for example, redundant, in conflicts and excluded from planning and resources. Here, it contributes by unfolding complex tensions where coordinators struggle against emotional commitment to the unwanted identities ascribed to them by other stakeholders. The coordinators do this by inscribing themselves in several other identities focused on (re)configuring the coordinator as capable of affecting OSH work in their organizations. These insights are valuable contributions to professional identity research as they reveal how members of a profession may draw on available discursive resources to negotiate and reject unwanted identity configurations and seek to strengthen identify configurations of their choosing.

By showing these things, the study also contributes to the OSH field seeking understanding of why OSH professionals put their main efforts into the social and legitimizing practices. The study suggests that this is at least in part because OSH professionals experience a need for legitimizing their own professional identities. It does however at the same time shift the coordinators' focus away from the work of actually preventing OSH risks and towards preventing risks to their own sense of self. At the cost of the OSH work. Based on the findings, the study discusses the possible development of a more prominent ethical care-identity as a foundation for OSH coordinator practice. On a practical level, the findings may contribute to future education and the development of professional standards, as well as OSH professionals wishing to improve their skills and awareness.

Professional identities, OSH professionals, and OSH coordinators

It is widely agreed within the field of social science that identities are a complex and fluctuant matter that concerns the various meanings, which people attach to themselves or conform to be ascribed by others. While some identity characteristics are relatively stable throughout a person's life, others are more changeable and have different expressions in different contexts. A long tradition for investigating different aspects of identities exist and there is general agreement that most people value being accommodated and recognized by others, for the characteristics they ascribe to themselves. In this sense, people feel emotionally committed to the identities they attach to themselves (Davies & Harré 1990; Goffman 1982). Also, it is agreed that identities are subject to both biological, structural, environmental, contextual, and social influences, while also subject to individual agency (Barad 2007; Davies & Harré 1990; Foucault 1983; Goffman 1982; Ibarra 1999; Schein 1978; Slay & Smith 2011).

Professional identity research refer to the study of a particular aspect of identity, namely the aspects of identity concerning the profession a person is part of (Ibarra 1999; Slay & Smith 2011). Previous research on professional identities show that professional identity not only relates to how one identifies oneself or others as good professionals; it is also a measure by which people evaluate their colleagues, employees, and others they engage with in general. Displaying proper professional identity characteristics may be important to a person's sense of wellbeing (Davies & Harré 1990; Goffman 1982) and may be highly influential in being recognized as a legitimate participant in the practices



of work, thereby having consequences for one's employability in an organization or field (Ajslev et al. 2013; Alvesson & Willmott 2002; Slay & Smith 2011). As put by Buch and Andersen:

The construction of self-identity becomes the yardstick for the individual's sense-making and, a fortiori, for the individual's sense of strain or enthusiasm in relation to work. Strain can be caused by work-related conflicts, unfulfilled ambitions, and professional intimidations—strains that put pressure on the professional self-identity and threaten the individual's ontological security. (Buch & Andersen 2013, p. 159)

Earlier studies of professional identities have employed *positioning theory* (Davies & Harré 1990) as an analytical framework to understand the discursive practices involved in the (re)configuration of professional identities (Ajslev et al. 2013; Kuhn 2009). The theory argues that the ascription of characteristics to others and to one self goes on through speech acts in which subjects are positioned. Through *interactive* positioning people ascribe characteristics to others, and through *reflexive* positioning, they ascribe characteristics to themselves. Later research has argued that interactive positioning is also employed to ascribe characteristics to other phenomena – that is, elements of the world (Ajslev et al. 2017, 2019). It is important to note that in positioning practices, people may draw on general discursive resources available to them at a given time, for example, references to knowledge about OSH, to experiences, and other kinds of references to phenomena outside the conversation. Attempts of positioning may be accepted or contested in these discursive practices. One central point of the theory is that positioning's people make about themselves, or characteristics they accept as part of their identity in the negotiation of truth with others, become part of their identity, that is, they start to recognize themselves as containing these characteristics. As people in general seek to maintain a relatively stable, rational, and coherent narrative of self in the eyes of themselves and others, they commit to the identity characteristics to which they conform. In this understanding, identity can be understood as an always ongoing process of recognizing oneself as a 'self' with certain characteristics, made available through the currently available discourse (Davies & Harré 1990; Foucault 1983). On this basis, we may expect that OSH coordinators will seek to position themselves and the good OSH coordinator in order to construct coherent and rational identities in accordance with the discursive resources they perceive to be available. This also means that they may display unwanted identities because these are the reason for challenges to practice and to maintain the identities that coordinators themselves wish to conform to, and which coordinators find comfort in. An example of this may be drawn from professional identifications performed by young lawyers facing claims of being 'corporate lackeys'. Here, Kuhn describe how lawyers draw on four identification strategies for legitimizing their practice. They identify with particular professional ethics, with company policies, with a conception of autonomous morality, and with their profession's ability to serve social welfare (Kuhn 2009). In this sense, professional identities also become an important part of shaping ethics, along with tasks, roles, and technologies in work (Krøjer & Dupret 2015). In a similar way, it may be expected that OSH coordinators identify with certain personal, professional, and organizational ethics that are important to their practice.

There are almost no studies on the professional identities of OSH professionals. A canonical text written by Hale (1995) considers the *roles* of the OSH professional. In this, the particular roles, OSH professionals take upon them, are the roles of *expert*, *coordinator*, and *controller*. The expert is oriented towards identifying and suggesting solutions for OSH risks, the coordinator is mainly concerned with how to accomplish this in complex organizations, and the controller focuses on showing or indeed legitimizing that something has been done (Hale 1995). These reflections on the roles of OSH professionals are relevant to understand OSH coordinator identities as well. As such, it may be expected that OSH coordinators will identify themselves with identities similar to the expert, controller, and coordinator roles depicted in earlier research.

Recent research on OSH professionals has described the field as ‘fuzzy’ and being in an identity crisis (Ge et al. 2019), as ‘blurry’ (Pryor et al. 2019) and in need of strengthening an ‘actual profession’ (Uhrenholdt Madsen et al. 2019). This alleged fuzziness may in terms of professional identity reflect the reality that professional identities are not static entities. Like other types of identities, professional identities are contextually, historically, and materially bound, but may be invoked differently in different situations, and change over time (Foucault 1983). As reflected in the work of Uhrenholdt (2019), OSH professionalism in Denmark is a rather new field of work and only began its emergence in the 1970s. OSH coordination is even younger, as it was introduced in EU legislation in 1992. Because these professions are highly subjected to political framings and changes as well as technological and workplace-related changes, it may be expected that ongoing (re)configurations of OSH coordinator vis-à-vis professional identities take place, which could mean that roles that was important to identify with in the 1990s are more peripheral in the twenty-first century.

Picking up the mantle from Hale (1995), Provan, Dekker, and Rae (2017) reviewed the literature on the roles of OSH professionals and found that they fill a vast array of roles within organizations. They monitor safety, promote safety culture, improve stakeholder relationships, or challenge the plans or decisions of others in the organization, etc. Many of these roles can be expected to be part of the professional identities of OSH coordinators. For instance, the caricature of the OSH professional as a police officer, issuing orders, and referring to legislation (Limborg 2001).

The only scientific literature on the professional identities of OSH professionals is Provan et al.’s paper from 2018. They notably find that, first, OSH professionals view their success as dependent on their abilities to promote change and learning through people and programs. Second, that OSH professionals view modern safety bureaucracy as an encumbrance on safety as the systems have become overly complicated and focused on compliance and legitimization of both OSH professionals’ managerial and organizational efforts regarding OSH practices rather than actual change. Third, that safety professionals have a moral and ethical motivation for safety work based on previous experiences with unsafe conditions, which motivates them to prevent human suffering (Provan et al. 2018). Both the roles that OSH professionals fill and the professional identities they orient to may be relevant to OSH coordinators who navigate in the complex organizational and physical setting of the construction site.

To understand the professional identities of OSH coordinators and how these identities affect their professional practice, we draw upon the described positioning analysis approach. We employ this approach to analyze how coordinators ascribe identities to



themselves and others through interactive and reflective positioning in our interview study.

Methods

The analysis is based on interviews with 12 experienced OSH coordinators from the Danish construction industry. The OSH coordinators were selected using a survey among 79 OSH experts in the construction industry. The expert-panel consisted of people employed in unions, employers' associations as well as OSH advisory companies. These were asked to identify the best OSH coordinators in the industry. Twenty-four coordinators received at least two nominations and were deemed eligible as cases. Twelve of these accepted our invitation to become cases in the study. The other 12 coordinators rejected to participate for the following reasons: Not performing coordinator tasks at the moment ($n = 8$), working at confidential construction sites ($n = 2$), retirement ($n = 1$), and lack of time ($n = 1$). All the invited OSH coordinators expressed great interest in the study.

The coordinators were all highly experienced at OSH coordination and other OSH advisory work in the construction industry. They were between 40 and 70 years of age, and had between 14 and 50 years of experience. Eight were male and four were female. The selection of the highly experienced and peer recommended coordinators make for a *best-case* study selection (Flyvbjerg 2006) in the sense that based on these criteria, we may expect that the selected coordinators have the best possible conditions for practicing their preferred identities. On this basis, we may expect that other coordinators in general experience at least the same level of struggles to maintain their preferred identities. This confers a high level of generalizability to the study.

The interviews were semi-structured (Järvinen & Mik-Meyer 2005) and focused on the OSH coordinators' background and experiences, the ways they described the characteristics of 'good' coordinators, that is, how they inscribe themselves and others in narratives of professional identities (what it means to be a good coordinator), the conditions and barriers for performing OSH coordination, the interviewee's motivations for performing their work, their views on their roles and the competences required for performing OSH coordination, and concrete episodes from their workdays. Before performing the interviews, the researchers followed each OSH coordinator during some workdays, in order to better understand their work, and to be able to ask appropriate and contextually based elaborating questions (Järvinen & Mik-Meyer 2005).

The interviews were of lengths between 48 and 175 (avg. 89) minutes and were carried out between March 2017 and December 2018. For the analysis, each interview was transcribed, coded, and analyzed in Nvivo 11 (Nvivo 11 2015). The coding was based on reflexive and interactive positioning (Davies & Harré 1990), which coordinators performed in the interviews and through which they ascribed characteristics to themselves as OSH coordinators and thereby to the discourse of the 'good OSH coordinator', that is, professional identities. This coding of positionings led to the thematization of similar positioning into the overarching professional identity categories depicted and exemplified in the findings section. Following this analysis, the transcripts were re-analyzed to ensure that all positionings attributable to each category was accounted for. All names in the analysis are pseudonyms.

Findings

As earlier research on OSH professionals in general has shown (Provan et al. 2017), coordinators too take on a varied set of identities. The positioning analysis led to the identification of six overarching professional identity categories, each consisting of several similar positionings performed by coordinators in the interviews. The findings of this analysis along with the number of coordinators positioning themselves within each category are briefly summarized in Table 1.

Table 1 Professional identity categories and contents in brief

Professional identity categories	No. of OSH coordinators	Contents in brief – coordinators' positioning themselves or others as:
1. Puzzle-piece caretaker	12	<i>Caretaker of life and death, motivated by improving OSH, motivated by dynamic, changeable industry, small pieces in complex organizations.</i>
2. Necessary evil	12	<i>At odds with other stakeholders, responsible for OSH among uncaring others, someone others can do without.</i>
3. Peripheral decision maker	8	<i>One who is excluded from resource and planning decisions, often underfinanced, one who's job can be done fast and easy.</i>
4. Risk assessor	12	<i>Knowledgeable on construction processes and tasks, capable of making fast analyses of risks and solutions, capable of performing structured thorough analyses.</i>
5. Alliance builder	12	<i>Collaborative, solution oriented, enquiring, relation-building, engaged with all stakeholders.</i>
6. Orchestral leader	12	<i>Listening, balancing needs between policing and pleasing, paying attention to detail, insisting on planning and clarity.</i>

In order to unfold how OSH coordinators inscribe themselves in different professional identities and the challenges, tensions as well as opportunities for practice this implies, the analysis initially engage with how OSH coordinators position themselves as motivated and engaged in their work as captured by the puzzle-piece caretaker identity. After this, the identities necessary evil and peripheral decision maker are exemplified, as these pose particular challenges to practice the puzzle-piece caretaker identity. Subsequently, three professional identities (the risk assessor, alliance builder, and orchestral leader) assisting coordinators in practicing the puzzle-piece caretaker identity are unfolded and exemplified.

Puzzle-piece caretaker

The OSH coordinators positioned themselves in different ways in relation to their motivations. The central motivation for all of them, however, concerned the impact on the health and safety of workers. Even life and death. The coordinators often feel alone with



this endeavor, as the construction project as a whole is more focused on getting things done.

‘At the basic, principal level, I believe that the work I am doing as an OSH coordinator is highly important – it’s a question of life and death... But in the bigger picture, we are such a small, small piece of the puzzle. People have to think about economy, branding, consumer satisfaction, insurance, esthetics, design [...] But it’s my passion, I think it’s exciting and I like to improve things.’ (Finn, OSH coordinator)

As this shows, the OSH coordinators position themselves as passionate caretakers for the health and wellbeing of workers. There are many examples of this, as all OSH coordinators in some way positioned the OSH coordinator as a caretaker or moral backbone of the construction project, which was typically described as being a cynical workplace focused on profit. This category included the position as caretaker of ensuring wellbeing among workers as well as a sense of justice and confidence between workers, supervisors, and managers – who are often employed by numerous different entrepreneurs.

The citation also exemplifies how the OSH coordinators almost always positioned themselves and OSH as small pieces in a large construction puzzle. In this example, the OSH coordinator elucidates on the many other aspects of a project, which construction managers must attend to during both design and execution, and which OSH must compete with for attention, for example, esthetics, economy, deadlines, insurance, design, sustainability, etc. In this way, the OSH coordinators positioned themselves as caretakers but also as small pieces in the large construction puzzle. While complicating their work, the participation and navigation in the complex and often large construction projects was also a passion of the OSH coordinators:

‘Both the professional aspects but also the changeable character of things, I like those. But also the combination of the theoretical, the written work with the design papers and the physical work out on the site. I think the combination is amazing, and then all the different people you get to work with.’ (Anne, OSH coordinator)

As shown above, the coordinator position herself as engaged and amazed by the dynamism of construction projects and the many tasks involved. This infatuation with the construction project structure and complexity was reiterated across interviews. Similarly, the interaction with many different people and being a hub for problem solving among different stakeholders in the construction organization was described as a source of pride among interviewees. The OSH coordinators described being most comfortable, when they felt the respect of their colleagues on site and was seen as important to the organization, contributing to making the project run safely and efficiently. These aspects of the OSH coordinator identity; taking care of workers as a small and often neglected agenda in a complex organizational puzzle, configure the OSH coordinator as a *puzzle-piece caretaker*.

A necessary evil

While central to their identity narratives, most OSH coordinators described challenges to practicing the puzzle-piece caretaker identity. All of the coordinators described it was

hard to implement OSH measures, because most other stakeholders in the construction organization do not prioritize OSH over other agendas and may be quite dismissive of the OSH coordinator.

'I think the job is full of conflict. And that's hard. I almost miss normal OSH advisory work. You want to be appreciated when you visit a client, right. But sometimes, you're just a necessary evil. And that leads to a lot of negative things. I'm tired of it when I have to throw in the towel and say; 'it's my way or the highway'. That's sort of a defeat, it's not a way of working. But it's necessary at times.' (Charles, OSH coordinator)

This example of how OSH coordinators position themselves as a 'necessary evil' to the construction organization, contributes to the configuration of a professional identity, which is at odds with stakeholders and shows how the coordinators view themselves as someone who others would prefer to do without. The citation also exemplifies how coordinators will struggle to not be put aside or have their directions neglected by other stakeholders. This is an identity struggle between identifying with and practicing the puzzle-piece caretaker identity and conforming to the necessary evil identity. Thus, there seems to be a discrepancy between identification with the puzzle-piece caretaker and the identity they experience others ascribe to them, and which they, as exemplified, identify themselves with. The following example emphasise the struggle of performing as a puzzle-piece caretaker:

'At the end of the day, you get so immensely tired of telling them to put on that helmet. Or telling them to clean up, it's like; 'Are we ten years old, right. Every time I come here, I have to tell you to do these things, and we talk about it at safety meetings all the time.' Then you get tired. And that's not okay. And sometimes I get really angry – other times, I just let it be. Because I just can't do it again. And that's not okay either, because it's my responsibility, but I'm just a human too.' (Anne, OSH coordinator)

Anne positions herself as the responsible person compared to others, who do not care about the initiatives she suggests from her OSH coordinator position. The OSH coordinators all described numerous situations in which they suggested solutions, measures, activities, programs, communication plans, etc., and these had been denied. Several coordinators had even left construction projects because the site management was too negligent about OSH. The act of leaving the job positions the coordinator as a person with a strong professional integrity and underlines that the puzzle-piece caretaker identity is of high importance to OSH coordinators, both morally and to his or her reputation. However, the citation above citation also exemplifies how coordinators at times eventually conform to a position of resignation in the face of other stakeholders' lack of OSH engagement. This in turn becomes a conformation of the 'necessary evil' that coordinators identify with when perceiving themselves through the eyes of others.

The peripheral decision maker

A similar challenge to the puzzle-piece caretaker identity can be conceptualized through the peripheral decision maker identity. Even though the coordinator legally is supposed

to have a strong mandate to coordinate OSH, the coordinators described that being assertive about the role of the coordinator is a trying task.

‘Our company made the whole budgeting with architects, landscapers etc. And I’ve been the design-phase coordinator the whole time and I’m supposed to be the execution phase coordinator too. [...] All of a sudden, I’m told by the project manager that there are very few hours left for the coordination. Then I had to say that it says in the papers that I’m the OSH coordinator for the next two or three years. So, I negotiated my way to one day a week, and that’s just too little.’ (Finn, OSH coordinator)

Finn’s exclusion from the budgetary decisions is only one example of coordinators positioning themselves as powerless or highly peripheral in the negotiation of resources allocated for OSH coordination. In this particular case, the coordinator had one day a week to perform the execution phase coordination on a €67 million construction project. In similar ways, other coordinators positioned themselves as rather peripheral in the negotiations for time and activities regarding OSH during both design and execution phases. Most of the coordinators talked of having been ‘put’ on projects where the coordination had been sold as a ‘free-of charge’ service along with the rest of the projecting work.

‘Usually it works like; ‘woah, we need some OSH coordination as well... hmm what might that cost?’ and then I have to calculate a price. Then I send my estimate to my colleagues, but I can’t be sure, they don’t just cut down the price. So, you have to be lucky to have some projects where they accommodate you and you actually have the time. Most projects, I have too little time.’ (Anne, OSH coordinator)

This positioning of the OSH coordinator as again a peripheral negotiator of OSH coordination budgets emphasizes the difficult task of having a fair estimation of the necessary tasks and costs into to the tender. In most cases, OSH coordinators described that colleagues responsible for the design phase expected OSH coordination as a more or less free task that it could be done ‘just like last time’. More than half the coordinators described that this approach to OSH coordination meant lower quality of both design and execution phase coordination, because the coordinator often would not have enough time on a project to perform the necessary tasks as thoroughly as needed. This shows how the coordinators are obstructed in practicing their professional identity as puzzle-piece caretakers because they have to struggle with the position of being peripheral decision makers.

Other coordinators were more confident in this negotiation and positioned themselves quite opposite to the above. Several of the interviewed OSH coordinators described that, typically, their estimated time were completely accepted. These coordinators described that being particularly specific about the time needed for safety walks and meetings, reporting, as well as methods for reviewing design phase materials, worked for them to get their estimations into the project descriptions leading to a more powerful position in negotiating their budgets. They did however relate to stories of other OSH coordinators having insufficient time, and explained this was a general problem in the industry.

Risk assessor

One of the things OSH coordinators do in order to promote OSH, is to position themselves and the good OSH coordinator in a particular identity of risk assessors coming up with solutions based on both ad hoc and systematic risk assessments. The coordinators, we interviewed, all had many years of experience with OSH coordination and counseling in the construction industry. They all emphasized the importance of mastering a broad range of knowledge about construction processes and their associated risks concerning different construction trades and tasks as well as solutions to these risks. In many interviews, the OSH coordinators exemplified this need to draw on their knowledge concerning OSH risks on the fly, which contributes to a particular configuration of the expert identity of the OSH coordinator.

‘Actually, what I do is, I make a risk assessment inside my head, and that’s my prioritization. We had an issue yesterday where the crane is craning out above the street and risks dropping the load on the road with pedestrians, bikes, cars. And, I told them – “we have to stop traffic, while we do this, so it doesn’t end badly.”’ (Peter, OSH coordinator)

With quotes like this, the coordinators positioned themselves as ‘on the fly – risk assessors’, capable of identifying a risk on sight, or from the description of a planned work process, to assess its severity and, importantly, proposing an instantaneous solution.

Another aspect of the risk assessor identity involved the positioning of being highly systematic.

‘It demands a systematic approach, I think. My experience means that I know what risks occur in different types of projects, and when you have that, then you just need a systematic approach. In my experience, you can do OSH coordination in the design phase based on these two things.’ (Michael, OSH coordinator)

The point that structure and a methodological approach to the design-phase coordination is needed was emphasized by all coordinators. Some linked it to accountability and legitimization of their work, while others maintained the focus on applying methodological approaches as important to identify and mitigate risks before the construction project goes into execution phase. The coordinators emphasized that their systematic approaches went beyond mere checking lists and that they were all highly sensitive to the contextual complexities and processes of the unique construction project. This was in several situations a positioning separating the interviewed OSH coordinators from ‘other’ coordinators. In this way, they also positioned the good OSH coordinator as a systematic and thorough risk assessor particularly in working with design-phase coordination. These aspects of work were, however, in some instances extended to execution-phase coordination tasks involving safety inductions, safety walks, and safety meetings.

Suggesting solutions was an important aspect of positioning as a risk assessor, as it allowed production to continue, which was described as imperative to maintain the good relationship with stakeholders on site. OSH coordinators often described concerns about deciding to stop work, because no apparent solution was available, risking making themselves highly unpopular. An important way to avoid unpopularity was described as the ability to display sufficient expert knowledge about the risks, and to be able to draw on relevant legislation to back up these knowledge claims.



OSH expertise also was described as the ability to identify the limitations of one's knowledge and when one needed assistance. The coordinators described it as very important not to make unsupported claims to maintain the legitimacy and authority on OSH matters. Making insufficient knowledge claims would in turn undermine their risk assessor identity and reiterate being identified as a necessary evil. The coordinators carefully positioned themselves in opposition to stories of unnamed coordinators who had undermined their own authority by not being able to display sufficient knowledge or by overextending their knowledge. Functioning as a puzzle-piece caretaker is configured as dependent on being able to inscribe oneself in risk assessor identities.

Alliance builder

Another central positioning in enabling the coordinators to take on their puzzle-piece caretaker identities in practice was alliance building. Building alliances encompassed multiple strategies and was important to negotiate the terms of their work, but also to function and perform OSH work on a daily basis.

(R): You don't always agree with the contractor, because they have other things to think about; materials, time schedules etc. However, I think it's important that you approach them with open arms and try to contribute with some solutions. They may not be satisfied, but you try to cooperate and maybe discuss the options rather than categorically saying no. You listen to pros and cons and then try to make a decision. (Peter, OSH coordinator)

By using the generalizing operator 'you', the coordinator position himself and the good OSH coordinator as often disagreeing with entrepreneurs. Further, he positions the good coordinator as embracive, solution oriented, and collaborative rather than categorically negative. Being an alliance builder was often tied together with expert knowledge as a prerequisite for being able to gain respect among other organizational parties. Expert knowledge had little use if no one was willing to put it into action.

In similar ways, all coordinators described the importance of developing the relationship to the client, but also to contractors, construction managers, supervisors and to workers on site. This was, however, often described as a challenge because many stakeholders have their own professional agendas and identities. The OSH coordinators described that often, the many interests in terms of time, money, quality, and productivity at stake in the negotiation of OSH among all the different stakeholders, forms into a game with rules, you need to know. In this game of interests, the OSH coordinator must try to create influential relationships with entrepreneurs, architects, site managers, engineers. The final identity, which all coordinators oriented themselves towards, concerns the OSH coordinator as an orchestral leader.

The orchestral leader

Positioning oneself as an 'orchestral leader' involved positioning oneself strategically on a continuum of how to deal with others where the 'police officer' and the 'pleaser' was mentioned numerous times as extremes.

'There are some considerations about how hard you go at them or not go at them. Where are you in that spectrum between yelling and then letting all things pass. And some of my colleagues have called me an up-tight bitch, because at some point enough is enough. And then, I tell a group of construction managers that now, that work is stopping! Then, I may call the client and say; I'm stopping that work because of this and that.' (Louise, OSH coordinator)

In similar fashion, all coordinators positioned themselves as people who would eventually put down their foot, if their directions were continuously ignored. The opposite position was the 'pleaser' with whom everyone could cut a deal about exemptions from the OSH requirements. However, all of the interviewed coordinators also described that as a coordinator, you would rarely want to position yourself at either extreme, because these positions would give you trouble in the long run. Being the police officer would tire people in the organization, and gaining influence, information and trust would become impossible, most likely leading you to get fired or not hired by the client again. Being the pleaser would lead people to think they could always cut a special deal – because everybody else could – and no one would take OSH directions seriously – rendering it impossible to maintain a puzzle-piece caretaker identity.

In order to navigate this spectrum, coordinators positioned themselves as interested, cheeky, funny information-seeking, and assuming naivety in asking questions.

'I'm thinking, we're like orchestral leaders and we hear when the orchestra is playing well, and we can hear if one of the instruments plays falsely, right... And that's what I listen for, when for instance a site manager answers questions about their processes, then I can hear... HEY, here are some things that he has not got under control. Of course, I draw on my experience here.' (Gert, OSH coordinator)

While perhaps not using similar euphemisms, other coordinators described how they would also challenge the plans or actions of others in order to gain precise insight of how work processes are to be fulfilled and to be able to evaluate the associated risks. As shown, this causes the coordinators to enter many potential conflicts, and in some cases, they even described tactics such as going to the media, working authorities, or going around the chain of command and directly to directors or project chiefs, in order to gain influence. All coordinators told stories about how hard this could be, that the conflict level involved in working as an OSH coordinator could be exhausting, and that many people just become apathetic or quit from frustration of not achieving OSH improvements. However, some of the coordinators also saw the particular ability to challenge and to succeed in these negotiations as a central part of their professional identity.

'I feel that, I actually like that when... I have some ability for getting the conflicts resolved, and I actually like when I succeed. [...] And, I think that if you're engaged, then you can make a difference. If you're not, then it's just a job where you get time to pass [...]. But engagement, we just need that back; that's what it takes to make a difference.' (Peter, OSH coordinator)

This final example serves to show how these highly experienced OSH coordinators saw it as a main part of their professional identity to resolve the conflicts concerning OSH



and make a positive impact. It also exemplifies how a strong sense of engagement in OSH was often described as a main tool for the good coordinators for retaining a sense of purpose and to sustain the puzzle-piece caretaker identity during all the challenges that coordinators experience in their work.

Discussion

In summary, the analysis shows that OSH coordinators are motivated by their identities as puzzle-piece caretakers – taking care of workers health, safety, and wellbeing, while navigating the complex organizations that construction projects are. The identification of the puzzle-piece caretaker identity, which consists of both the identification with caring for the health, safety, and wellbeing of parties in the construction organization, but at the same time recognizes the OSH coordinator's role as a small piece in the larger picture, is a main contribution of this study. This perspective further unfolds existing research on OSH professionals' identities, which have emphasized the tensions between OSH professionals' moral aspirations and the more un-ethical organizations in which they function (Provan et al. 2018). It also assists to position OSH coordinators work and professional identities in family with the professional identities of consultants more broadly, who experience ambiguity, difficulties in completing tasks to their own professional quality standards, and tensions between doing the right thing, and financial results (Buch & Andersen 2013; Humle 2014).

The analysis highlights some critical challenges to the OSH coordinators, namely, the identities of the coordinator as a necessary evil and a peripheral decision maker. These identities put the coordinator in a difficult position when trying to influence OSH in projects, and are experienced by all the coordinators in the study. An important point is that both the OSH work on the construction sites, and the OSH of coordinators themselves are at stake, because the coordinators may suffer psychological strain from conflicts as well as negative self-identification caused by conforming to the unwanted identities (Buch & Andersen 2013; Davies & Harré 1990; Foucault 1983; Goffman 1982). This means that coordinators put a great effort into legitimizing their own position in the construction organization, which may come at the cost of putting that effort into preventing OSH risks. By shedding a light on these unwanted identities, the study provides explanations for why the OSH coordinator is in a difficult situation when putting OSH on the agenda, which is a known challenge for OSH professionals in general (Provan et al. 2017). At the same time, these identities are illustrative of the general position of OSH in construction, where it is often neglected in favor of other interests (Ajslev et al. 2013; Grill et al. 2018; Pirzadeh et al. 2015).

While these identities challenge the OSH coordinators' opportunities for practicing the puzzle-piece caretaker identities, all the interviewed coordinators inscribe themselves in professional identities that mitigate and help them navigate the complex organizational and relational landscape of OSH coordination in construction. Embracing these identities enable them to function as OSH coordinators and to work towards practicing their puzzle-piece caretaker identities. Here, the identities of the risk assessor, alliance builder and orchestral leader are important contributions to understand what it means to be an OSH coordinator.

Enabling their companies to live up to legislation has earlier been mentioned as an important competence of OSH professionals in general (Hale & Guldenmund 2006; Olsen 2012). This definitely seems to be the case for OSH coordinators as well (Møller et al. 2021). The particular unfolding of the on-the-fly risk assessor and the systematic risk assessor are, however, not previously described in research, and, as such, these are contributions to the scientific understanding of the particular characteristics of OSH coordination in construction. These more specific understandings of particular risk-assessor identities may even be of importance to other OSH professionals and worth of further study. Interestingly, the study do not replicate the point that OSH coordinators perceive themselves to be unnecessarily burdened by bureaucratic measures (Provan et al. 2018). This may be because the level of standards and measurements, common to other parts of OSH professionals' practices, have not yet reached the OSH coordinators, or that the strong focus on and systematic approach to safety in construction actually benefits from strong bureaucratic measures.

Alliance builder and orchestral leader identities are also central to the OSH coordinators in their work to position themselves as professionals and as puzzle-piece caretakers. Regarding the alliance builder identities, the OSH coordinators in particular inscribe themselves in identities as collaborators with other parties in the construction organization, as being solution-oriented, engaged, and oriented toward building influential relationships with all levels of organizational actors; from workers to top managers and clients. In line with this, research on OSH professionals have earlier proposed that alliance building is important (Theberge & Neumann 2010) and that facilitation skills to substantiate this alliance building are important for OSH professionals (Limborg 2001). Positioning oneself on the continuum between 'police officer' and 'pleaser' is, however, an ongoing tension in OSH coordinator identities that may derive from the analysis of the challenger identities that OSH coordinators also inscribe themselves in. As suggested by Limborg (2001), the interviewed coordinators prefer not to act as police officers, but they perceive this as necessary in situations where organizational participants disregard OSH regulations, standards, or advice. Judging by the recent critiques of OSH professionals' room for agency and their practices (Provan et al. 2018; Rae & Provan 2019), this seems to be challenges of relevance to OSH professionals more broadly.

One suggestion from the coordinators to mitigate this challenge is to inscribe themselves in the identity of the OSH coordinator as an orchestral leader, which is actually known from research in other industries as well (Amble & Gjerberg 2003). The orchestral leader demands clear notes and asks questions until there is clarity regarding the addressed work processes. At the same time, the orchestral leader listens to each of the instruments (professional groups) in order to understand their part in performing the concert – architects, engineers, designers, managers, different construction professions, etc. The orchestral leader thereby enables the OSH coordinator to inscribe her or himself as a puzzle-piece caretaker, who understands the full picture, but may contribute with exact OSH knowledge applicable to the situation at hand. The main role of the orchestral leader is similar to that of a constructive enquirer as earlier research on OSH professionals describe (Grote 2015; Rebbitt 2013). The orchestral leader may also directly challenge priorities or actions in either design phases or during execution of the construction project (Woods 2006). All with the aim of being able to perform as a puzzle-piece caretaker.



When coordinators express a need to sometimes resign in the face of resistance or negligence from other stakeholders, this concerns the tension inherent in their struggle against being positioned as necessary evils or peripheral decision makers. As congruent with identity theories, coordinators become emotionally attached to the identities they conform to (Davies & Harré 1990; Foucault 1983; Goffman 1982). Therefore, the coordinators work to maintain their professional identities as puzzle-piece caretakers, risk assessors, alliance builders and orchestral leaders because conforming to the other identities would hurt their sense of self. While this is troubling to OSH coordinators at an empirical level, it shows how a profession may draw on available discursive resources in seeking to steer their profession and people sharing its identities out of the discomfort of being perceived as peripheral or necessary evils.

Interestingly, the puzzle-piece caretaker identity widely resemble professional identities among traditional care and health professions such as nurses, care-workers, or doctors. Among these professions, the most central part of professional identity is focused on caring for patients and keeping them safe (Mueller et al. 2008; Waerness 1984). Within the care work research, it has been argued that workers perform different strategies or ‘workarounds’, which allows them to make better time for personal care (Dupret 2017). Knowing how to perform workarounds to focus on caring for people, has been termed ‘moral literacy’ (Krøjer & Dupret 2015). In relation to this, it is interesting that the puzzle-piece caretaker identity is mainly referred to, by the OSH coordinators as a self-identity, rather than a generalized characteristic of the good OSH coordinator. Only a few coordinators pointed to caring, making a difference, and engagement as important characteristics of the good OSH coordinator. Defining and foregrounding the puzzle-piece caretaker identity as a characteristic of the good OSH coordinator and OSH professional may help developing a moral literacy of OSH professionals, which would correspond well with recent literature on OSH professionals. As described, it has been suggested that too much focus is given to legitimizing, administrative, and socially engaging practices of OSH work, rather than improving the ‘physical OSH work’ (Rae & Provan 2019). While these are important points, Rae and Provan (2019) may have overlooked the point that, for instance, systematic risk assessment in the design phase of a construction project is a highly proactive task that may lead directly to eliminations or substitutions of risk-filled tasks, which are arguably some of the most important OSH measures (NIOSH 2015; Pirzadeh et al. 2015). However, the point remains that OSH coordinators are in a difficult situation having to legitimize both their own position and the practices of their organizations. The rather unwanted identities of the OSH coordinator as a necessary evil and peripheral decision maker may indeed lead to exactly the focus, which recent research on OSH professionals have criticized; A focus on maintaining structures, practices, and standards that make the company look good and relieves the coordinators of conflicts, rejection, and unwanted self-identification, rather than having any actual, substantial positive effects on workers’ health, safety, or wellbeing.

Strengths and limitations

The study is an interview study, and this comes with some limitations. Interviews are conversations about topics, in which both researcher and interview persons co-create

narratives on the topics in question (Järvinen & Mik-Meyer 2005). This puts a demand on researchers to not impose their own evaluations and perspectives on the interview persons. In investigating the professional identities that interview persons ascribe to themselves and members of their profession, the interviewer must rather seek to show genuine interest and curiosity in allowing the interview persons to unfold their views. Validity in the interviews is promoted as the interview person draws on their views on work, organization, and conditions to promote themselves as rational, consistent, and recognizable subjects themselves (Goffman 1982; Järvinen & Mik-Meyer 2005). The positioning analysis approach to analyzing interviews is particularly strong for identifying how interlocutors draw on discursive resources to reflexively or interactively inscribe themselves in identities by making claims about themselves, others, or phenomena in the world.

The fact that the study is conducted with OSH coordinators in the Danish construction industry means that there may be contextual limitations to its empirical generalizability. However, seeing that literature on OSH professionals more broadly share a number of the same issues as the coordinators in our study it is very likely that both OSH coordinators and professionals may widely benefit from the results of the study. Also, in the wake of performing the study, we organized workshops both in Danish coordinator networks and the international safety and health coordinator organization (ISHCCO). Both groups were accommodating of the results which confers a communicative validity to the study (Emerson et al. 2011) and underlines our suggestion that the findings are relevant to OSH coordinators and professionals internationally.

Conclusion

This study set out from the notion that OSH coordinators' professional identities affect their orientations toward professional practice and that this in turn directs attention toward legitimizing and sociable practices and away from actually preventing risks.

The study has argued that professional identity is important to professionals here-under OSH coordinators both for configuring a coherent, relatively stable and rational narrative of self, to maintain social acceptance and a job, and to maintain personal comfort and wellbeing. On this basis, the study has argued that the analysis of professional identity and the struggles that coordinators express as connected with rejecting unwanted identities provides important explanations for their orientations in practice.

The analysis of interviews with 12 highly experienced OSH coordinators in the study has shown that a central motivation and property of the OSH coordinators' professional identity is the puzzle-piece caretaker identity, and that this identity is challenged by unwanted identities positioning the coordinator as a necessary evil and peripheral decision maker. It then shows how coordinators seek to reject these unwanted identities by inscribing themselves in risk assessor, alliance builder, and orchestral leader identities.

The study provides insights to why coordinators may be focused on legitimizing their practice to mitigate risks to their own sense of wellbeing rather than maintaining focus on implementing preventive OSH measures as well, as insights to how professionals may reject unwanted identities by drawing on other available discursive resources to strengthen identity configurations of their choosing.



On basis of these findings, the study suggests that foregrounding and defining the puzzle-piece caretaker identity as a central element of OSH coordinator vis-à-vis OSH professional practice may assist in developing moral literacy among members of the professions and provide a foundation for improved preventive OSH practice.

References

- Ajslev, J. Z. N., Lund, H. L., Møller, J. L., Persson, R., & Andersen, L. L. (2013). Habituating pain: Questioning pain and physical strain as inextricable conditions in the construction industry. *Nordic Journal of Working Life Studies*, 3(3), 195–218.
- Ajslev, J. Z., Møller, J. L., Persson, R., & Andersen, L. L. (2017). Trading health for money: agential struggles in the (re)configuration of subjectivity, the body and pain among construction workers. *Work, Employment and Society*, 31(6), 887–903.
- Ajslev, J. Z. N., Højbjerg, H., Andersen, M. F., Andersen, L. L., & Poulsen, O. M. (2019). Occupational identities and physical exertion in (re)configurations of new technologies in eldercare. *Nordic Journal of Working Life Studies*, 9(4).
- Alvesson, M., & Willmott, H. (2002). Identity regulation as organizational control: Producing the appropriate individual. *Journal of Management Studies*, 39(5), 619–644.
- Amble, N., & Gjerber, E. (2003). Emosjonelt arbeid og mestringspraksis. *ST*, 11(3), 248–272.
- Andersen, J. H., Malmros, P., Ebbehøj, N. E., Flachs, E. M., Bengtson, E., & Bonde, J. P. (2019). Systematic literature review on the effects of occupational safety and health (OSH) interventions at the workplace. *Scandinavian Journal of Work, Environment & Health*, 45(2), 103–113.
- Barad, K. (2007). *Meeting the Universe Halfway – Quantum Physics and the Entanglement of Matter and Meaning*. Duke University Press, Durham, USA.
- Brown, A. D., & Coupland, C. (2015). Identity threats, identity work and elite professionals. *Organization Studies*, 36(10), 1315–1336.
- Buch, A., & Andersen, V. (2013). (De)stabilizing self-identities in professional work. *Nordic Journal of Working Life Studies*, 3(3), 155–174.
- Carmen, R. M., German, M., Carlos, R. J., & Javier, O. (2008). Role of the civil engineer as a coordinator of safety and health matters within the construction sector. *Journal of Professional Issues in Engineering Education and Practice*, 134(2), 152–157.
- DEI (2020). The Danish Institute for Evaluations [Danmarks Evalueringsinstitut]. *OSH educations [Arbejds miljøuddannelserne]*.
- Davies, B., & Harré, R. (1990). Positioning: the discursive production of selves. *Journal for the Theory of Social Behaviour*, 20(1), 43–63.
- Dupret, K. (2017). Working around technologies—invisible professionalism? *New Technology Work and Employment*, 32(2), 174–187.
- Emerson, R. M., Fretz, R. I., & Shaw, L. L. (2011). *Writing Ethnographic Fieldnotes, Second Edition*. Chicago: University of Chicago Press.
- Directive 92/57/EEC – temporary or mobile construction sites – EU-OSHA, 92/57/ECC (1992). <https://osha.europa.eu/da/legislation/directives/15>.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219–245.
- Foucault, M. (1983). The subject and power. I *The Essential Foucault (Rabinow, P. and Rose, N. (eds.))* (Bd. 2003, s. 126–144). The New Press.
- Ge, J., Xu, K., Zheng, X., Yao, X., Xu, Q., & Zhang, B. (2019). The main challenges of safety science. *Safety Science*, 118, 119–125. doi: <https://doi.org/10.1016/j.ssci.2019.05.006>.
- Goffman, E. (1982). *Interaction Ritual – Essays on Face-to-Face Behavior* (1st Pantheon Books ed edition). Pantheon.

- Grill, M., Nielsen, K., Grytnes, R., Pousette, A., & Törner, M. (2018). The leadership practices of construction site managers and their influence on occupational safety: an observational study of transformational and passive/avoidant leadership. *Construction Management and Economics*, 1–16.
- Grote, G. (2015). Promoting safety by increasing uncertainty – Implications for risk management. *Safety Science*, 71, 71–79. doi: <https://doi.org/10.1016/j.ssci.2014.02.010>.
- Hale, A., & Guldenmund, F. (2006). *Role and Tasks of Safety Professionals: Some Results From an International Survey*. Safety Science Group, Delft University, Netherlands.
- Hale, A. R. (1995). Occupational health and safety professionals and management: identity, marriage, servitude or supervision? *Safety Science*, 20(2–3), 233–245.
- Humble, D. M. (2014). The ambiguity of work: Work practice stories of meaningful and demanding consultancy work. *Nordic Journal of Working Life Studies*, 4(1), 119–137.
- Ibarra, H. (1999). Provisional selves: Experimenting with image and identity in professional adaptation. *Administrative Science Quarterly*, 44(4), 764–791.
- Järvinen, M., & Mik-Meyer, N. (2005). *Kvalitative metoder i et interaktionistisk perspektiv. Interview, observationer og dokumenter* (1. udg.). Hans Reitzels Forlag.
- Krøjer, J., & Dupret, K. (2015). Moral literacy in technological care work. *Ethics and Social Welfare*, 9(1), 50–63.
- Kuhn, T. (2009). Positioning lawyers: Discursive resources, professional ethics and identification. *Organization*, 16(5), 681–704.
- Limborg, H. J. (2001). The professional working environment consultant—A new actor in the health and safety arena. *Human Factors and Ergonomics in Manufacturing & Service Industries*, 11(2), 159–172.
- Mueller, F., Valsecchi, R., Smith, C., Gabe, J., & Elston, M. A. (2008). ‘We are nurses, we are supposed to care for people’: professional values among nurses in NHS Direct call centres. *New Technology Work and Employment*, 23(1–2), 2–16.
- Møller, J. L., Kines, P., Dyreborg, J., Andersen, L. L., & Ajslev, J. Z. N. (2021). The competences of successful safety and health coordinators in construction projects. *Construction Management and Economics*, 0(0), 1–13.
- NIOSH. (2015). *Hierarchy of Controls*. The National Institute for Occupational Safety and Health. <https://www.cdc.gov/niosh/topics/hierarchy/>.
- Nvivo 11 (Version 11). (2015). [NVivo qualitative data analysis Software]. QSR International Pty Ltd.
- Olsen, K. (2012). Occupational health and safety professionals strategies to improve working environment and their self-assessed impact. *Work*, 41, 2625–2632.
- Pirzadeh, P., Lingard, H., Blismas, N., Mills, T. H., & Kleiner, B. (2015). *Proactive evaluation of occupational health and safety performance in construction projects using the hierarchy of controls concept*. Proceedings of CIB W099 International Health and Safety Conference: Benefitting Workers and Society through Inherently Safe(r) Construction (CIB W099), Belfast, Northern Ireland.
- Provan, D. J., Dekker, S. W. A., & Rae, A. J. (2017). Bureaucracy, influence and beliefs: A literature review of the factors shaping the role of a safety professional. *Safety Science*, 98, 98–112.
- Provan, D. J., Dekker, S. W. A., & Rae, A. J. (2018). Benefactor or burden: Exploring the professional identity of safety professionals. *Journal of Safety Research*, 66, 21–32.
- Provan, D. J., Rae, A. J., & Dekker, S. W. A. (2019). An ethnography of the safety professional’s dilemma: Safety work or the safety of work? *Safety Science*, 117, 276–289.
- Pryor, P., Hale, A., & Hudson, D. (2019). Development of a global framework for OHS professional practice. *Safety Science*, 117, 404–416.
- Rae, A., & Provan, D. (2019). Safety work versus the safety of work. *Safety Science*, 111, 119–127.



- Rebbitt, D. (2013). The dissenting voice: Key factors, professional risks & value add. *Professional Safety*, 58(04), 58–61.
- Schein, E. H. (1978). *Career Dynamics: Matching Individual and Organizational Needs*. Addison Wesley.
- Slay, H. S., & Smith, D. A. (2011). Professional identity construction: Using narrative to understand the negotiation of professional and stigmatized cultural identities. *Human Relations*, 64(1), 85–107.
- Swuste, P., Frijters, A., & Guldenmund, F. (2012). Is it possible to influence safety in the building sector? A literature review extending from 1980 until the present. *Safety Science*, 50(5), 1333–1343.
- Theberge, N., & Neumann, W. P. (2010). Doing ‘organizational work’: Expanding the conception of professional practice in ergonomics. *Applied Ergonomics*, 42(1), 76–84.
- Uhrenholdt Madsen, C., Hasle, P., & Limborg, H. J. (2019). Professionals without a profession: Occupational safety and health professionals in Denmark. *Safety Science*, 113, 356–361.
- Waerness, K. (1984). The rationality of caring. *Economic and Industrial Democracy*, 5(2), 185–211.
- Woods, D. D. (2006). How to design a safety organization: test case for resilience engineering. I *Resilience Engineering: Concepts and Precepts* (s. 315–325). Ashgate.