

Contents lists available at ScienceDirect

### Safety Science



journal homepage: www.elsevier.com/locate/safety

# Explaining workers' resistance against a health and safety programme: An understanding based on hierarchical and social accountability



Katarina Arbin<sup>a,\*</sup>, Magnus Frostenson<sup>a,b</sup>, Sven Helin<sup>a,b</sup>, Tommy Borglund<sup>a</sup>

<sup>a</sup> Örebro University School of Business, 701 82 Örebro, Sweden

<sup>b</sup> Østfold University College, Faculty of Business, Languages, and Social Sciences, P.O. Box 700, NO-1757 Halden, Norway

ARTICLE INFO	A B S T R A C T		
Keywords:	The seemingly paradoxical phenomenon of workers' resistance to health and safety measures has been explained		
Accountability	in various ways, for example through production or efficiency pressure, risk-taking behaviours or problematic		
Employee	safety cultures. This article addresses resistance but analyses it through the lens of hierarchical and social		
Health	accountability. In a case study of a Swedish paper mill, a health and safety programme is resisted by workers		
Resistance	even though it enjoys support from the local trade union. Explanations for this is found in the socialising form of		
Paper mill	accountability that conditions how workers perceive of work-related health and safety. The aspects of work		
Safety	identity, facilitation and visibility are identified and understood in terms of accountability. Who you are, how		
Safety culture	you perform work, and what is visualised is filtered and evaluated through horizontal relationships rather than in		
Sweden	terms of hierarchical accountability to the company.		

#### 1. Introduction

Occupational health and safety (OHS<sup>1</sup>) issues are of great importance to both society and business. Over 2.78 million people lose their lives every year due to work-related accidents, and additionally there are around 374 million non-fatal work-related injuries each year, each resulting in more than four days of absence from work (International Labor Organization, 2020). The human cost is hard to estimate, but the economic burden of poor OHS practices is estimated at 3.94 percent of global GDP each year (International Labor Organization, 2020).

To counteract accidents and other issues related to health and safety not only legislation and regulation matter. Companies and other organisations take measures to improve behaviours and safety cultures. In recent years, research focusing on health and safety within organisations, including various programmes for improved workplace health and safety, has been on the increase (McKendall et al., 2002; Parboteeah and Kapp, 2008; Wachter and Yorio, 2014; Nordlöf et al., 2015; Kim et al., 2016; Nordlöf et al., 2017; Frick, 2019; Yuan et al., 2020). Studies focus on how to improve behaviours and safety cultures and, correspondingly, how to create a safer workplace for employees. This entails identifying factors and circumstances that lead to fewer accidents, lower sick-leave and better health in organisations (Teo et al., 2005; Clarke, 2006; Christian et al., 2009; Clarke, 2010; Nahrgang et al., 2011; Nunen et al., 2018).

Whereas several studies point to successful programmes for improved health and safety, others have identified failures or problems (Walters et al., 2016; Frick, 2019), that in some way or the other entail or even cause resistance, often among blue-collar workers supposed to benefit from the programmes. Basically, two lines of argument exist, explaining such resistance. The first one points to problems in the nature or context of the OHS programmes, for example between safety measures and production or efficiency concerns (Atak and Kingma, 2011) or tight deadlines (Daniels et al., 2016). The second one relates resistance to individuals or groups of individuals in the workforce. This research refers to risk-taking propensity (Nordlöf et al., 2015), or other factors, either at the individual or cultural level in organisations. At the collective level, safety culture (or safety climate, a neighbouring concept) has been proposed as an explanation for both successful and failed OHS programme implementation (Zohar, 1980; 2010; Choudhry et al, 2007a; 2007b; Choudhry et al., 2009; Edwards et al., 2013; Daniels et al., 2016; Casey et al., 2017; Lee et al., 2019; Nævestad et al., 2019), pointing to the shared social context where safety concerns are manifested or not.

\* Corresponding author.

https://doi.org/10.1016/j.ssci.2020.105131

Received 30 March 2020; Received in revised form 3 November 2020; Accepted 17 December 2020 Available online 8 January 2021 0925-7535/© 2021 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

*E-mail addresses*: Katarina.Arbin@oru.se (K. Arbin), Magnus.Frostenson@hiof.no (M. Frostenson), Sven.Helin@hiof.no (S. Helin), Tommy.Borglund@oru.se (T. Borglund).

<sup>&</sup>lt;sup>1</sup> OSH is also used as an acronym. The terms are identical.

To these people-related explanations, non-compliance based on mechanisms such as denial, minimisation and fatalism belong (Mishali and Weiler, 2017).

To overcome resistance among employees, and ensuring successful implementation and support of OHS programmes, worker participation is often seen as a clue (Walters and Nichols, 2006; Walters et al., 2016). If such participation exists, for example through strong and active trade union support for the programmes, one could expect less resistance from workers. This article, however, focuses on a somewhat paradoxical situation. Through a case study of a Swedish paper mill, we go into a work context that contains trade union support for an implemented OHS programme *and* negative perceptions and resistance by some of the workers. In doing so, the article answers the more specific research question of why a health and safety programme, promoted by the local trade union, is resisted by workers within an organisation.

As we see it, to understand and explain the phenomenon of worker resistance despite trade union support requires further explanations than the ones frequently brought forward in the literature. Such explanations include, as argued, risk-taking behaviours as being part of a worker culture or the relatively common explanations of resistance relating to demands for productivity and efficiency. There is a need to understand the workers' understandings of the *context* in which the OHS programme is implemented, including the various aspects of work and worker participation in OHS programmes. Avoiding an explicitly managerial standpoint (Eakin, 2010), entails including also workers in the analysis. To get a deeper understanding from a critical bottom-up perspective makes sense when trying to grasp the overarching issue of OHS and workers' resistance to it (Frick, 2019).

In the article, *accountability* is used as a theoretical tool. The article presents both the OHS programme as such, the resistance it encounterd and potential explanations for workers' resistance to it. Key to understanding and explaining the case is an understanding where specific hierarchical and socialising forms of accountability are identified. Through these theoretical concepts, an explanation for the seemingly 'irrational' resistance among workers is carved out.

As for the article structure, we first develop an understanding of workers' resistance towards OHS programmes, pointing to how it has been described in the literature. Then, the theoretical concept of accountability is explained followed by a methodology section. After that, the case is introduced and analysed and a concluding discussion finalises the article.

#### 2. Understanding workers' resistance

Reforms and measures taken to improve occupational health and safety have been studied by many researchers. Somewhat interestingly, and perhaps paradoxically if one argues that such measures are to the benefit of workers, worker resistance to OHS programmes is an issue in the literature. Resistance, defined as various form of open or covert opposition against managerial actions, is a vague term even though it has been deeply analysed and discussed in different literatures (see e.g. Mumby et al., 2017). Resistance is frequently understood in relation to organisational control (see, for example, Barker, 1993; Ezzamel et al., 2001; Fleming, 2005; Mumby, 2005; Brown and Humphreys, 2006; Courpasson et al., 2012; Paulsen, 2015; Knights and McCabe, 2016; Harding et al., 2017; Mumby et al., 2017; Ybema and Horvers, 2017; Gill, 2019). Forms of resistance vary from open and concrete expressions such as strikes or protests to more subtle forms, for example noncompliance with routines (Fleming and Sewell, 2002; Courpasson and Vallas, 2016; Ybema and Horvers, 2017) or distancing in the shape of humour, cynicism, gossip, scepticism and nostalgic talk (Fleming and Sewell, 2002; Collinson, 2003; Mumby, 2005; Fleming and Spicer, 2008; Helin and Sandström, 2010).

Within the field of OHS, worker resistance is a topic that covers conflicting aspects of managerially driven health and safety programmes. Conflicts between improved safety cultures and the values of efficiency and productivity have been noted (Hall, 1999; Atak and Kingma, 2011; see also Nordlöf et al., 2015), for example when safety concerns among workers clash with other incentives related to compensation or production requirements (e.g. Hall, 1999; Hopkins, 2005). Expectations relating to overtime and double shifts may stand in contradistinction to safety concerns and measures, as well as incentive payments (Dwyer, 1983). In short, even though the OHS programmes may be elaborated, they are implemented in a context of efficiency and productivity that tends to undermine their adequate functionality and use.

Relatedly, when resistance to health and safety measures have been noted, they have often been linked to disregard or conscious risk-taking among workers, partly dependent on goal conflicts within the work context. Risk-taking concerns the individual psychology of workers. Nordlöf et al. (2015) focus more specifically on risk-taking in a steel manufacturing company. Risk-taking propensity can be explained by general risk acceptance, individual responsibility, trade-off between productivity and safety, importance of communication, and, as they call it, the state-of-the-day and external conditions (see also Mullen, 2004). The issue of trust also matters, as distrust in supervisors and management can be a reason (Watson et al, 2005).

Researchers such as Mullen (2004) and Nordlöf et al. (2015) also link the issue to safety culture and norms in the workforce, Safety culture has been defined "as normative beliefs and fundamental values, assumptions, expectations, philosophies, norms, and rules, with regard to safety at a workplace" (Mearns and Flin, 1999, see also Nordlöf et al., 2015: 127). It affects behaviours and risk-taking (Watson et al., 2005), for example a 'macho or tough person syndrome' (Mullen, 2004). 'How we do things here' is a cultural aspect relating to norms within the organisation that contributes to behaviour, and, consequently, also to resistance to programmatic measures for improved health and safety in case clashes exist (e.g. Guldenmund, 2000; 2010; Choudhry et al., 2007a; 2007b). Safety culture entails social processes and underlying values in organisations that tend to produce (or prevent) outcomes or behaviours regarding occupational health or safety (Nordlöf et al., 2017). The relation to colleagues may be more important to uphold rather than complying with safety rules (Nordlöf et al., 2015). This may be a matter of social norms necessary to follow to keep one's status in the organisation. To do so may require breaking or ignoring safety rules. However, the idea of locating the issue of dangerous behaviours and accidents to individuals or their attitudes or cultures has also been considered problematic, not least from a trade union perspective (see e. g. Frederick et al., 2018). Rather, the lack of a contextual understanding of health and safety controls undermines a genuine understanding of the role that participation in developing routines, et cetera, may have, including positive effects on accidents and health issues (cf. Walters and Wadsworth, 2020).

Given this reasoning, it is obvious that extant literature has identified several reasons for worker resistance to OHS programmes. Notably, however, and reflecting the calls for participative approaches to developing such programmes (e.g. Frederick et al., 2018), a deeper understanding of the worker perspective is of want, but not necessarily in the broad form of (worker) culture, but in relation to OHS control as exercised in companies. In particular, research on occupational safety and health has been carried out from an explicitly managerial standpoint, rather than from a perspective of workers (Eakin, 2010). A consequence of this is a too limited understanding of the actual and functional aspects of worker participation in health and safety work, reflecting the social reality of workers (Dwyer, 1983) in relation to managerial OHS measures.

Against such a background, it is of high interest to understand the phenomenon of resistance in a context where it 'should not' exist, given that a participative approach is actually at hand—in the form of trade union support and participation in the implementation of the programme. This is striking, since one clue to successful implementation (and support of) of OHS programmes has been worker participation, at least if adequate managerial support has been at hand (Walters and Nichols, 2006; Walters et al., 2016). Or as Frick (2019, p. 2) argues: "Workers' views are hence necessary to define risks and prioritize measures, to design and implement workable upstream remedies and to monitor and fight for effective OSHM and MS. Such a critical bottom-up perspective, through worker influence, is essential for good OSH results." The existence of 'genuine' worker participation or engagement has, however, been questioned. According to Walters et al. (2016), strong corporate preferences can be found for behaviour-based safety (BBS) approaches to managing OHS, but evidence for their success seems to be mixed. Such programmes tend to emphasise "the lower end of hierarchy of controls" when focusing on worker behaviour as central to safety, for example the use of the handrail on a stairway or hearing protection (Hopkins, 2005, p. 589). Hopkins (2005) also notes the risk of 'mono-causality' involved in such behavioural approaches, since they tend to focus on worker behaviour rather than the reasons or incentives for such behaviour (cf. above). In some cases, and relating to such programmes, researchers have pointed to a reality of expecting workers to comply with corporate rules, which is not equal to effective worker representation (Walters et al., 2016).

In the following, a Swedish case, involving trade union participation and support for the OHS programme is highlighted empirically, reflecting a context which has over the years contained high trade union representation, dialogue and cooperation in companies in general and in health and safety work in particular (see e.g. Frick, 2013; Walters and Wadsworth, 2020). The trade union is also an important actor in the case, but it may possibility also be claimed (cf. Dyreborg, 2011) that the case illustrates a challenge to the general Nordic working environment model by a more market-based 'explicit' approach to OHS management where the trade union participates but possibly gets a different role than in the traditional model. First, however, we present a theoretical tool for understanding resistance, namely the concept of accountability, understood both in its hierarchical and social form.

#### 3. Understanding resistance through the lens of accountability

From previous reasoning it follows that explaining worker resistance to OHS programmes requires an understanding that takes their immediate work context into account, reflecting both how they look upon their work, themselves and the control context that the programme is implemented within. That is, it seems reasonable to avoid explanations that limit the analysis to productivity and efficiency concerns or, for that matter, individual or collective explanations relating to risk-taking or culture. One tool for understanding how workers relate OHS programmes both to the managerial control contexts and their own perceived work context is the concept of accountability. Accountability is a concept used by different streams of literature. It traces its origins to the accounting literature (e.g. Roberts and Scapens, 1985; Roberts, 1991), but the generic sociological meaning of accountability seems to provide a common ground for most understandings (Messner, 2009; Sinclair, 1995). Sociologically speaking, accountability denotes the exchange of reasons for conduct, that is, to give an account means to provide reasons for one's behaviour, to explain and justify what one did or did not do (Messner, 2009).

Roberts and Scapens (1985) define accountability as a concept that in its broadest sense refers to the giving and demanding of reasons for conduct. Accountability refers to a *relationship* in which people explain and take responsibility for their actions. The need for accountability further arises when social interdependencies exist such as between employees and organisations. Underlying accountability is a relationship between an 'account giver' (the responsible party) and a recipient (Buhr, 1991; Johansen, 2008). Accountability goes beyond formal arrangements where individuals are held accountable by laws, rules and expectations (Beu and Buckley, 2001; see Tetlock, 1985; 1992). Rather, social mechanisms also imply control, including communication by salient others (see also Ferris and Judge, 1991; Mitchell and Scott, 1990; Mitchell, 1993).

Importantly, and relevant to a bidimensional context where workers provide reasons for conduct both vertically and horizontally, Roberts (1991; 1996) differentiates between two alternative views: disciplinary forms of accountability (expressed differently, hierarchical forms) that impose an instrumental relation between the self and others and socialising forms that confirm the interdependence between the self and others. Roberts argues that disciplinary forms of accountability have individualising effects and that hierarchical systems create an instrumental order that is maintained by the objective effects of disciplinary forms of accountability (Roberts, 1991; 1996; Johansen, 2008). The socialising form of accountability is negotiated and shaped in dialogue with others, through face-to-face encounters with others in the nonsurveilled spaces of organisational life-such as corridors and toilets, chats before and after meetings, lunch breaks and outings (Roberts, 1991; 1996; 2003). Socialising forms of accountability do not necessarily lead to consensus, but are aimed at a mutual understanding and a face-to-face negotiation of the significance of organisational events (Roberts, 1991).

Previous research has focused on how to better understand the social construction of accountability (Yakel, 2001), the Anglo-American systems of corporate governance (Roberts, 2001), accountability in relation to sustainability reporting (Shearer, 2002) and accountability in non-governmental organisations (Ebrahim, 2005; Agyemang et al., 2017; Yasmin and Ghafran, 2019). Research has also attempted to understand how accountability can become problematic and that more accountability may not always be desirable (Butler, 2005; Messner, 2009; Roberts, 2009; 2018; Joannides, 2012; McKernan, 2012).

In this article, accountability helps to understand further the specifically relational responsibility aspect of the organisational context in which work takes place. Accountability, thus, explains behaviours (such as resisting an OHS programme) in the sense that the reasons for them can be related to what others think and expect of you, to whom you have to 'give an account', either vertically (managers) and horizontally (colleagues). Consequently, accountability has explanatory power in the sense that it can relate actions and arrangements to horizontal and/or vertical responsibility contexts. Individuals (workers within organisations) do not only see themselves as accountable to management, but also to peers and important others. Relating this to safety behaviour and the reception (or rejection) of workplace OHS programmes, understanding potential resistance entails a specific construction of accountability among workers. To whom they see themselves as accountable for following safety rules and other arrangements is central to understand in order to explain resistance.

To further analyse resistance to a workplace health and safety programme, we point to both hierarchical and socialising accountability, as developed by Roberts (1991), as clarified in Fig. 1.

Through this model, and in particular its dimensions of hierarchical and (primarily) social motivations for resistance, the article provides a deeper understanding of resistance to workplace health and safety measures. Next, we present our methodological approach to the issue.

#### 4. Methodology

The study was conducted from 2017 (autumn) to 2019 (spring). Initial contacts were taken in 2017, when the researchers searched specifically for a case containing the introduction of programmes or other measures related to sustainability in order to understand how individual responsibility for sustainability processes were created and shaped within companies. The Health and Safety manager at the case company was one of the managers interviewed. She was the first point of contact and the 'gatekeeper' to other positions in the company. In the first interview, she described the introduction of a specific project on health and safety within the company. This programme, a health and safety programme initiated by the local production unit, was of interest since it contained a managerial approach to health and safety that was

Object of evaluation (rule, policy, etc.)					
Type of resistance (non-compliance, etc.)					
Reason for resistance (accountability)					
Hierarchical (vertical) motivation	Social (horizontal) motivation				

Fig. 1. Analytical model of the article.

also supported by the local trade union, but apparently partly opposed by workers, and for that reason difficult to implement.

We were granted access to the company for site visits and interviews. It was important to get in contact with employees and managers at all levels in the organisation. We were therefore interested in how managers and employees responded to the health and safety programme in their daily work, not just respondents who could be said to 'own' the programme (local top management). In particular, it was important to understand how various organisational members made sense of the programme. The study has a character of being longitudinal even though we did not follow the health and safety programme from the very beginning.

In late 2018 and early 2019, on two separate occasions, interviews were carried out with managers and blue-collar workers from different functions and departments at a specific facility of the company, a paper mill (see case description below). On the first occasion, the Health and Safety manager chose the ones to be interviewed following our general requests for interviews, in some cases in dialogue with each person's manager. Participation was voluntary. On the second occasion, the respondents were picked by a trade union representative. In total, nine persons participated in formal interviews. Two of these persons were interviewed more than once, the Health and Safety manager (on two occasions) and the trade union representative (on two occasions). In addition, on our first visit to the site, we were also able to hold informal conversations during a guided tour around the facilities. Six other persons were addressed during this tour, at their specific workplaces, mostly in control rooms when they performed their ordinary work tasks. These conversations involved risk aspects, safety activities, work organisation, relations to colleagues and managers, and other things. These latter conversations were not digitally recorded but notes were taken during the tour and directly afterwards. See table 1 for a description of the respondents.

The purpose of the study was described to the respondents before the interview questions were asked. The respondents were also informed

#### Table 1

Respondents i	n the pa	aper mill.
---------------	----------	------------

Person/position	No. of interviews	Date
Health and Safety manager	3	Dec 2017,
		Nov 2018
Trade union representative	2	Nov 2018,
		Feb 2019
Supervisor mechanical workshop	1	Nov 2018
Supervisor lab	1	Nov 2018
Responsible for fire protection,	1	Feb 2019
formerly working at the		
mechanical workshop		
Pulp operator K2	1	Feb 2019
Soda boiler operator K1	1	Feb 2019
Office worker, technical support	1	Feb 2019
Person working at the outdoor	1	Feb 2019
department drives trucks, cargo,		
support to operations		
Informal talks with employees	6 (different persons including	Nov 2018
during tour together with trade	storage manager, mechanic,	
union representative	four operators)	

that the company and their names should be anonymised. The formal interviews took place in conference rooms or the like, close to the workplace with one respondent at the time (in one case two persons). Three researchers made the interviews, lasting 30–60 min each. The interviews were digitally recorded and transcribed word by word.

The intention was to get the respondents to reflect on what had been going on over the years that the programme had been ongoing. A set of semi-structured questions were used in the interviews, focusing on the respondents' positions and tasks in the company and how they related to the programme. Examples of questions included: When did you first come into contact with the health and safety programme? What were your reactions and what do you think about the programme? Was there a similar programme before? Is there anything in the programme with other employees/managers? In which sense is it relevant or not? How has the programme been received in the organisation? Can you give any examples of effects of the programme within the organisation?

As mentioned, informal conversations with blue-collar workers were possible during the first visit to the site. Observations took place in the mill itself, in control rooms, mechanical workshops, labs, and in the outdoor facilities of the mill. For further documentation, photographs were also taken of specific security measures and arrangements, for example information signs and other devices. This made it possible to identify and understand specific concretisations ('artefacts') of safety measures contained within the programme. Documents related to the programme were also collected, including the corporate level sustainability report, giving the researchers an understanding of how the programme was organised.

The transcribed interviews and the notes were coded and analysed in a three-step procedure. *Firstly*, various expressions of support or resistance to the health and safety programme were identified and coded by one of the researchers. The coding was then discussed with and validated by the other participating researchers. In other words, three specific categories were used, support, resistance and material that was not relevant for the specific analysis. This first analysis revealed strong support for the programme by management and the trade union representative. Various forms of resistance could be identified both in the descriptions of how the management and the trade union representative experienced the implementation of the programme, as well as in comments and remarks by workers. The nature of the identified resistance was verbal, but also revealed how it was manifested in concrete action, for example through not reporting specific incidents in the reporting system.

Secondly, and following the first step, specific issues of resistance found in the empirical material were analysed in terms of 'first-order explanations' (van Maanen, 1979; Nag et al., 2007; Helin and Sandström, 2010). The analytical process implied thematic analysis of qualitative kind (Braun and Clarke, 2006). That is, the material pointing to resistance was sorted into categories of underlying common attributes. Three thematic categories relating to resistance were identified. We have named these work identity, facilitation and visibility. These categories relate to who the workers want to be, how they think that work should be performed, and to what extent safety issues and incidents are visualised to others.For example, negative reactions to the programme that pointed to lacking relevance or unsatisfactory measures related to how workers perceived their job should be done in the best possible way were placed thematically in the category of *facilitation*.

Third, an analytical task was to connect these categories to the overarching framework of accountability, as described in the theoretical parts of this article. That is, the construction of hierarchical and social forms of accountability is a theoretical answer to why workers resist the health and safety programme. These 'second-order explanations' (van Maanen, 1979; Nag et al., 2007; Helin and Sandström, 2010) ascribe theoretical qualities to the categories of work identity, facilitation and visibility. As shown later in the article, understanding these factors requires an understanding of primarily social forms of accountability rather than hierarchical ones, since they concern relationships to colleagues and peers rather than managers and others. In the next section, the case company and the health and safety programme will described more in detail.

#### 5. The case - A Swedish paper mill

#### 5.1. Background

The case concerns a local production unit (a paper mill, henceforth 'The Mill') within a larger Nordic coroporation. The Mill is situated in the countryside of Sweden at a site where production has a history that dates back to the 17th century. It was set up in the first decades of the 20th century and produces bleached and unbleached long fibre sulphate pulp for paper-based materials in a range of product segments, such as filter, beverage and food processing, glass fibre, medical fibre as well as décor and electrotechnical paper for both industrial and consumer enduse worldwide. The Mill is organised as a subsidiary of a global Nordic corporation (headquarter in a Nordic country) in a commodity-based industry. Annual sales of the entire group amount to some EUR 3 billion and it employs, in total, around 8000 people. Close to 200 employees work at the Mill, mainly with impregnation, cooking and recovery processes, which include the use of potentially harmful chemicals. In a business magazine, the local managing director describes the company: "It is generations of commitment that has built up the mill and we have a strong tradition to manage and refine."

Most of the employees at the Mill are blue-collar workers. The core production processes are run seven days a week, 24 h. The workers are organised in five shifts (about 10 in each shift), each supervised by one manager. There is also a stand-by duty during nights and weekends. The machine operators spend much time supervising the production process from control rooms with 10–20 screens. They communicate with each other by walkie-talkie or mobile phones. The work is carried out autonomously, implying that managers do not have to give instructions on a daily basis as long as the process continues without serious breakdowns. A great deal of trust between the machine operators is important. Other employees, blue-collars as well as white-collars, tend to have supporting functions as repair technicians or process engineers, or work with technical support to customers, internal logistics and administrative duties.

The Mill functions as a relatively independent subsidiary within the corporate group. Importantly, there have been no common guidelines within the group on how to work with health and safety. Working in a mill, you are exposed to risks. Fire protection is a big issue as a result of pulp and paper storage and the manufacturing process. There are also risks related to equipment such as boilers, pressure vessels, and mechanical and electrical systems.

Within the Mill, safety rules have been in place for many years. But still, these rules have frequently been ignored by people that have worked at the Mill for a long time. Employees tend to behave as you always have, taking shortcuts, not using the proper protection equipment, and so on. The level of safety work was never really satisfactory and sometimes production itself has been unsafe. This was seen as a genuine problem, and health and safety became prioritised by the managing director at the Mill, with the goal of zero accidents.

Within the Mill, responsibility for health and safety had for a long time been a question for the Health and Safety manager, which reflected a centralised approach to the issues. In 2015, this changed and the last couple of years' responsibility for and ownership of health and safety issues have been decentralised to operations. This, however, was not received well by all.

"It was not very popular, much because it was a large change for some leaders. Not for managers at intermediate levels but for managers that worked closely with operations. They were hired because of their technical skills and now they were supposed to focus on being a leader informing and persuading their colleagues about acting in accordance to rules communicated from above." (Health and Safety manager, Nov 2018)

In order to improve the health and safety situation, guidelines and instructions were communicated and tools such as training and coaching were offered.

Within the Mill, the trade union was, in line with the Swedish rules and regulations, well represented. Sweden has a long tradition of close cooperation between trade unions and business (De Geer, 1992; De Geer et al., 2009), manifested in a historic agreement in 1938. The state would draw up the laws, but much freedom was given to the parties at the labour market. Trade unions have also the right by law to be represented in the board of directors in Swedish companies and are through that position often involved in corporate decisions, including health and safety. According to the Swedish 'Work Environment Act', workers have influence on health and safety issues since they are represented by a special 'safety representative', appointed by the trade union. This person has the right to participate in all changes in the work around health and safety. In larger organisations there is also a 'safety committee', consisting of representatives from the trade union and the employer, which work together with the safety representative. In larger companies threre may be more than one safety representative. In such cases, the law mandates one of these to be the principal representative. Partly due to these formal structures, one can expect management and trade unions to co-operate when implementing a health and safety programme, but that does not necessarily mean that the workers are aligned with the process.

The trade union representative, also being the principal safety representative, had been working at the Mill for many years, within pulp and other operations. There were also five regular safety representatives from different operations within the Mill reporting to the principal safety representative. In addition, there were work environment groups with representatives from the different operations. These groups met four times a year, every quarter. If the issues discussed in the different working groups belonged solely to this group, then the group together with the employer representative agreed on a solution, developed an instruction, et cetera. If the issue affected more groups, then it was brought to the department council, and if the issue was affecting the whole Mill, it was brought to and discussed at the safety committee level where the union and the representative from the Mill discussed jointly and decided what to do.

However, the commitment among those being involved in the different work environment groups, representing their colleagues, was rather low. As the Health and Safety manager expresses, one could notice low commitment and sub-optimal use of the working groups.

"Unfortunately you do not see the benefits with these meetings, you are sitting there because you must. You have coffee and a bun and then you leave. They are not prepared. I would like them to have thought beforehand about whom I am representing, that they talk to their group in advance, come to the meeting and say, 'I want to talk about this', and then bring the information back to their group. But this is not how it works so we have a pretty big job to do here." (Health and Safety manager, Nov 2018)

Regardless of the low commitment and involvement by workers, the

union and company seemed to be on the same side regarding the improvement of health and safety within the Mill. As the union representative expressed it:

"The company and we are on the same side, focusing a lot on getting employees involved in this. It can vary greatly between different shifts how one looks at safety." (Trade Union Representative, Feb 2019)

#### 5.2. Timeline

Before describing the health and safety programme and the resistance to it more in detail below, an overall brief description of the course of events is presented in Fig. 2.

#### 5.3. The health and safety programme

Health and safety issues have been important topics in the industry as well as in the company for a long time. The emphasis has increased during the last decade as a consequence of the sustainability focus in the industry. In recent years, risks at work and critical incidents had been observed to be on the increase. Going back in time, however, health and safety issues had been on the agenda in the Mill. But both health and safety management and safety culture in general are described as having been relatively relaxed. Production issues were the number one priority. It was important to keep operations going and avoid expensive stops in the production. People felt pressure both from management and from colleagues to perform, for example, maintenance and repairs as fast as possible. As one of the supervisors describes it:

"You got a pat on the shoulder if you climbed on a railing somewhere high and extinguished something. You got a pat on the shoulder, saying that you did that really well. It could have taken two hours but you did it in 10 min, well done." (Supervisor mechanical workshop, Nov 2018)

This is echoed by a trade union representative, formerly working as an operator in the mill:

"When you were repairing, people hung over your shoulder, checking and asking how long time it would take, telling you that you have to be fast." (Trade union representative, Nov 2018)

Health and safety work used to be, it is claimed, strongly centralised. Things started to change, however, with the arrival of a new managing director in 2015. The new message that she communicated was that safety should always come first and have the priority over production issues. Compared to a culture where you were seen as a 'hero' when taking risks, this was a significant change for those working in the mill. It changed the way you were supposed to look upon your work. To prioritise safety, filling out forms and letting the job tasks take longer time to perform implied a major change.

Overall, legislation on health and safety was to be heeded, of course, and the philosophy of BBS (Behaviour-Based Safety) related to the entire group. How to implement health and safety measures, however, was up to the local organisation. As a local initiative, a health and safety programme was launched in the case company in 2015. The work was initiated by the new managing director of the Mill. She was a central person pushing for the programme and enjoyed support of the local trade union.

The Health and Safety manager explains:

Yes, they definitely like the programme. We used to sit on the different sides of the table but in this case we work together. It is really a good dialogue even if we do not agree on everything, /.../ To be honest, I would want them to challenge me even more on this topic; questioned our suggestions. That would even drive development in this area. /.../ You know, sometimes I force the organisation more than it can stand. In this case it is good to have the union on your side, someone who says 'let us not lose time, 'let's go on'.

With the new managing director, it was decided that it was operations that should own the issue. As said, decentralisation was a lodestar of the programme. In other words, active participation by workers was expected. Tools such as training and meeting sessions were introduced. Training was offered to all employees, not only to managers. Meetings were introduced where everyone working at the Mill could participate to get an understanding of how to work in a safe way. BBS coaching was also introduced, reflecting the general safety philosophy of the group. Around ten coaches were appointed and trained. After being trained their task was to visit and interview people in the production facility, observing them in their work and asking about their views on job safety.

After the visit, the coach reported what had been observed and discussed in the Mill's work environment information system ('PIA'). This system was also the standard system for reporting incidents or deviations from practice. Rules and safety instructions were communicated both orally and in writing, and it was clear what applied. Ten safety commandments were decided on and communicated through training, but also through large billboards placed all around the Mill. In addition, safe walkways were marked out, clearly showing with yellow markings where it was safe to walk, that is, where you should walk.

The programme was not unrelated to legal requirements on health and safety. Rather, pointing to legal requirements was part of making employees 'buy in'.

prescribed way

2014	2015	2016	2017	2018	2019
Production more important than safety Health and safety centralised New CEO	Message from new CEO – safety should always come first Responsibility for health and safety decentralised Safety programme launched Support from local trade union	Perception of a strong top-down approach, as "police activity" People reluctant to change No obvious behavioural changes Need of a relaunch of the programme	New Health and Safety manager hired Relaunch of programme planned Introduction and implementation modified	Relaunch of programme Humbler approach, not searching for mistakes Everyone included Training well received More talk about safety among workers Changed mindset – safety more prioritised Strong support from managing director and local union	Mindset has begun to change Message that safety comes first has been received and accepted For blue-collar workers, still difficult to adapt Resistance had not completely dissapeared Rules and instructions are not necessarily followed in the

Fig. 2. Timeline of OHS programme events.

"There is a structure that builds on legal requirements and then our own interpretations of legal requirements, local rules of procedures and conduct. This was communicated, and it was communicated what you could and could not do." (Health and Safety manager, Nov 2018)

However, even though a strong focus on health and safety was manifested in the programme, it was not necessarily well received. One reason was a perception of a strong top-down approach. telling people working in the Mill what they could and could not do. It made people reluctant to change. The coaching was perceived in a negative way, as a tool for management to search for mistakes rather than a tool to help the employees work more safely. The Health and Safety manager explains:

"It has been described to me by workers and the union representative, that the first training had a military approach. It was about pointing with the whole hand, and that did not work with our workers. /.../ The coaching did not work either, people were not used to being observed and they felt as if it was some kind of police activity, rather than something that was there to help them. Also, the coaches felt uncomfortable, first because they were observing colleagues, which felt weird, and second, due to the reception they got by the persons they were to observe." (Health and Safety manager, Nov 2018)

Another respondent, one of the coaches, expresses similar thoughts:

"Ah, you really got to be a little bit cautious, for many almost think that you are like a police officer when you come. They think they have done something wrong, but it is just about discussing something that is risky in their work." (Office worker being a coach for others, Feb 2019)

The coaches were also not really up to the task. A reason for that could have been that they were appointed by superiors, without necessarily declaring a voluntary interest. They were more or less forced to become coaches.

"We were assigned the coaching training. I had perhaps not chosen it myself. This will be another workload. Many find the course difficult and then you have to seek contact with others, the ones you are going to coach." (Supervisor lab, Nov 2018)

Even if there was no outspoken general criticism of the programme, behavioural changes were not obvious either. Because of this, the managing director saw a need for a relaunch of the programme. In 2017, a new Health and Safety manager was hired (interviewed in the study), having experience from working with these issues at another mill. This person took responsibility for the relaunch, introducing and implementing a modified programme, starting in the spring of 2018. The new Health and Safety manager became part of the management group, which had not been the case for this position before. She enjoyed strong support from the managing director and the local trade union.

This time, the programme was reshaped and given a humbler approach. The relaunch mainly consisted of new training and a new way of coaching, avoiding the perception of 'police activity'. All employees were trained for a full day. Discussions were more on how you work as a human being, why you do things in the way you do, why there is resistance and what our personal responsibility is. A decision was taken not to mix managers and blue-collar workers, so that people could be open with their opinions and thoughts. Positive signs were seen, according to the Health and Safety manager:

## "The training was well received, only about a handful of people thought it was rubbish." (Health and Safety manager, Nov 2018)

New coaches for health and safety were appointed, responsible for holding talks with the employees of the company. Everyone was included, from top managers to blue-collar workers. It was also communicated that the coaching talks were not aimed at searching for mistakes. They were said to be an opportunity to talk about what was important in different working environments. The aim was that every employee should have one coaching talk. The talks were perceived more positively compared to previously. Most people liked to talk about their job in this new way. The result was that employees began to talk more about safety overall, says one of the persons interviewed:

"We talk much more about safety now. Even if some think it is silly, we still talk. And after a while you do not think it is silly, it is normalised." (Head of lab, Nov 2018)

The relaunch and the work with safety issues had some positive results. A changed mindset, in the sense that safety was more and more prioritised, even before production matters.

#### 5.4. Lingering resistance to the health and safety programme

Seemingly, the health and safety programme was successful, in particular after its relaunch, in the sense that the perceived control aspects of top-down character were reduced. To judge from the interviews, the mindset of people working at the Mill have begun to change. Mechanics now feel less stressed than before, and reparations, for example, are allowed to take more time. Other people are not standing behind anyonés backs anymore, creating stress, asking when repairs are done. The message from management that safety comes first has been received and accepted.

In terms of resistance to the program, it is clear that the way that the programme was first implemented was one of the reasons for resistance. If considered to be strict top-down approach or a kind of 'police activity' the programme could be expected to be resisted. However, despite the relaunch, the more decentralised and participative approach, as well as the support by the trade union representatives, also the new shape of the programme met with resistance. It was not drastic, in the sense of open sabotage or obstruction. But it was voiced in terms of discontent, and the measures taken seemed to have little effect on behaviour. For the bluecollar workers, it was still difficult to adapt, says one respondent:

"They do not like any changes; it can be safety glasses or whatever. People think it is hard in the beginning. Why should we like this? Why should we wear safety glasses when we have managed well without them before? [...] People did not like [even] the [new] BBS coaching. They thought it was ridiculous. That they had always done this way so why should they change?" (Person responsible for fire protection, formerly working at the mechanical workshop, Feb 2019)

The decentralisation of safety responsibility was also new to many. Increased responsibility and in some cases the appointments to coaches was a big change for managers close to operations. They had been employed because of their mechanical skills and now they were going to talk about safety and act as coaches, which they had no previous experience of. The Health and Safety manager says:

"It has not been easy. They love the nuts and bolts of the operations, but they do not like to coach people. And we are forcing them more and more towards something they do not like. It is challenging to get them to take on these softer tasks." (Health and Safety manager, Nov 2018)

And still there were people that did not buy into the communicated rules and guidelines on how to work more safely. Resistance had not disappeared within the organisation, as one supervisor says.

"Some still challenge the safety instructions and then I need to have a paper with me showing that this actually says in our regulations, and that they have no choice if they are going to stay at the Mill." (Supervisor mechanical workshop, Nov 2018)

Rules and instructions are not necessarily followed in the prescribed way, according to one interviewed blue-collar worker.

"We have a billboard there and I think that everyone, regardless if you are a manager or a worker as I am, think that you can compromise with these instructions." (Soda boiler operator K1, Feb 2019)

In summary, the first 'military' launch of the programme met with resistance by the workers. After the relaunch, which meant more of autonomy, authority and responsibility for the workers and first line mangers, there was still resistance towards specific measures and to the programme in general, as the last quotations show. Given the relaunch of the programme, it is necessary to explain this resistance not only through pointing to how it was implemented, but also how workers relate to its contents and perceive of it. In the following, we proceed the analysis by pointing to how the workers contextualise the issues at hand. Further explanations for the resistance are then possible to give. Three factors are identified; work identity, facilitation and visibility.

#### 5.5. Three identified factors

#### 5.5.1. Work identity

As stated previously, there were signs that workers wanted to continue working as they had always done, keeping their routines and habits. In relation to the OHS programme, there was resistance aimed at safety instructions that would potentially change how you worked. The programme challenged at least aspects of how to perform work. Such a challenge referred to how workers perceived their work and what it *meant* to be a mill worker, and, ultimately, their *work identity*. Work identity is a reflexion of who you are and want to be in the context of work and important others, primarily your colleagues.

One aspect of this was that idea that to be injured belonged (at least to a moderate extent) to the nature of being a mill worker. Some incidents should not count as incidents at all, it is argued. A supervisor says:

"You should write in 'PIA' if you get a scratch on your finger, that is counted as an incident. We still have different views on that, if I have a scratch on my finger, it belongs to the profession." (Supervisor Mechanical workshop, Nov 2018)

It is hard work, and as a mill worker you pull through and can handle it. Work identity implies a normative idea of who you are as a worker and what being a worker implies in the presence of others. What seems to be obvious is that the Health and Safety programme is evaluated against this identity. And as such, this identity takes shape in relation to peers and who and what you should be in relation to them.

This is not to say that safety is disregarded or does not exist as an issue. But it is something that exists among peers, in the workers' own context. A pulp operator testifies to this:

"For me personally I don't think the training or talk have given anything. There is no difference if someone comes and has a conversation with me that I should think a little bit more about safety, once a year. But, we talk a lot about it anyway, we colleagues, every day or every time there is something. We are a group and if one leaves, the new one coming is going to be cast in the same way." (Pulp operator K2, Feb 2019)

If you are cast in the same way, you form an understanding in relation to the peers that you are working with. What you get from training or conversations with others, including superiors, does not necessarily count given the work context you are in. As the Health and Safety manager describes regarding technical supervisors beginning to have coaching talks with workers:

"I almost interpret it as an identity crisis where you lose your role. What now, should I skip the screwdriver and instead talk about soft things, coaching and guiding, then there is no fun anymore at all."

Also, the trade union representative gives witness to this, referring to a specific person.

"He has worked here for 30 years and it has been hard for him to change his safety behaviour. For a long time, he has worked with other safety instructions and now there is a change. It takes time to change behaviour, but it will probably be ok eventually. There is a lot now, more stop zones and yellow lines to consider." (Trade union representative talking about a person working at control room nr 2 when walking through the factory, Nov 2018)

One could point at a strict cultural separation between blue- and white-collar workers. Going out to the control rooms and the mill revealed this clear separation. Blue-collar workers belong to another part of the organisation than the people introducing the programme. And their perceptions of work differ. The history of the company still plays a role, says one supervisor:

"Many have worked here for a long time. A few years back it was ok to work without protection equipment. No one said that this chemical can hurt you long term and the short term no one took any notice of. A lot of this is still around." (Supervisor Lab, Nov 2018)

#### 5.5.2. Facilitation

Another aspect framing the reception of the programme was how it related to the actual techniques and practices of performing work.

"There are a lot of discussions in the factory, everyone is involved. You talk a lot about it with your colleagues that you do. We talk all the time about this. This billboard for example, when you look at it you feel it is a bit unrealistic because if you were about to follow what is said there, then you cannot do your job and the production would stand still. That we talk about." (Soda boiler operator K1, Feb 2019)

Another respondent (Supervisor Mechanical workshop) reasons in a similar way

"I have meetings with my guys on the floor. We discuss how important it is that we do not perform any work that is dangerous. I used to say that everyone plans to come home after work, but not all do that. They have not thought like that, it is more, this does not happen to me. But if you do not think when you do a job, an accident will happen".

Words like 'unrealistic' reveal a distance between how the workers understand the job to be performed in a natural way and the prescriptions that the programme implies. Here, there are dissonances. You cannot do your job if you follow the rules and guidelines, it is claimed. Such a comment relates to the practical performance of the job. Safety instructions may prevent you from doing your job in the most sensible and rational way. The instructions should not be there to complicate things, but to facilitate your work. If not, you have the right to be sceptical since they interfere with the way you perform work. In other words, a factor of *facilitation* is relevant to the workers. If the programme with its instructions does not facilitate work, but complicate it, it is likely (and perhaps also recommendable) that you ignore it.

To understand the issue, it is important to point to the fact that workers share norms and ideals about how to perform work in the best possible and natural way. In a sense, they are talking about operational effectiveness. But they do it in a work and peer context (not a managerial one, where managers want as much output of production as possible). In that context you are able to evaluate whether the instructions facilitate and complicate work, as it 'should' be performed. It is also about who it is that has put the safety instructions in place. The blue-collar workers know the job but doubt that the ones in charge do. The non-involvement of workers when designing new safety processes and routines leading to difficulties to do their job was another reason.

"We do take smaller shortcuts. /.../ Now it has turned out that those who are deciding on the rules for the safety work do not have any expert knowledge about the job. And the result is that they are building in

#### K. Arbin et al.

problems, so that it becomes more problems." (Soda boiler operator, K1, Feb 2019)

Taking shortcuts, as claimed above, is a form of resistance at the micro-level. But it is not the same as obstruction. The shortcuts relate to facilitation since they facilitate the work that the paper mill workers want to do in the best way they can. The Health and Safety programme and its concrete manifestations are constantly evaluated against practical knowledge about how to perform the job in an adequate way. If a clash occurs, the practical knowledge is the lodestar and action-guiding principle, not the safety instructions as such. Rather, the new instructions may be considered as worse for safety than the paths that the practical judgements of the workers recommend. Examples are given:

"Some security things can make it more dangerous instead. /.../ Well, you can put up a fence that makes it hard for me to reach the thing I am supposed to reach. That makes me put myself in a more dangerous position." (Soda boiler operator K1, Feb 2019)

"I think management is exaggerating when it comes to certain things, like walkways, I think my old walkway might be safer than the one they (management) has decided on." (Pulp operator K2, Feb 2019)

Facilitation, in this sense, not only implies that you know best how to perform work, but also how to perform it in a safer way.

#### 5.5.3. Visibility

Another aspect of the health and safety programme is how you report incidents and deviations. As noted previously, the paper industry uses a variant of a working environment information system, called PIA. The system is mandatory. You should report incidents in it, also minor issues. Still, the system is not necessarily used by the workers, says one supervisor.

"Not many times, I might have written one or two reports (laughter). You should write there when you see an event that you find risky or if someone does a dangerous job. You should write in PIA if you get a scratch on your finger, that is counted as an incident. /.../ We still have different views on that. If I have a scratch on my finger, it belongs to the profession. But not all agree with me. But if we, I have 17 mechanics in the workshop, should write down every incident, I would have to write at least one PIA every day." (Supervisor mechanical workshop, Nov 2018)

#### Another interview person expresses similar thoughts:

Take a piece of wood lying on the floor. Sure, it can be dangerous. But if I see something that is really dangerous, then it is a big difference. .... To run around and look for a plank or a hose, that I will not do. (Soda boiler operator K1, Feb 2019)

The quotations point to the issue of work identity (the scratch belongs to the profession), as described above. But it also points to other things. Workers underreport. That, as such, could be seen as resistance. It is also considered to be unnecessary work to do it (cf. facilitation above). In one conversation, the trade union representative and an employee refer to an incident leading to a PIA report when saying that "we wrote it together". The employee did not write it on his own, but was admonished and assisted by the trade union representative. The very process of visualising health and safety issues is, one could infer, problematic.

Furthermore, one aspect that is touched upon is the *visibility* contained in the system. What you report is seen by others, not only managers, but also colleagues. In other words, you expose yourself to your peers if you report too much. If you scratch your finger or fall off your chair, and report it, you risk being ridiculed. So, you do not do it. That is, visibility is used as a means to identify security incidents and risks. But in effect, it tends to visualise individuals that have not (according to the normative understandings of at least some of the workers) performed their work well or that complain about something that is natural and part of the job. You run the risk of becoming a 'wimp' in relation to your peers. Visibility, rather, becomes a factor that implies evaluation by colleagues. Resistance, in the sense of underreporting, is connected to how important others see you in a literal sense.

It should be noted, however, that there is another aspect of visibility. In the reporting system, workers expect to see that things are taken care of.

"You have checked what has been reported, and then you have seen that nothing has happened. Then you start thinking. Why should we report, getting nothing back?" (Soda boiler operator K1, Feb 2019)

The system is a way of communicating about incidents. The workers have the possibility to form opinions both about what others write and what is done about the issues that have been reported. By means of visibility, health and safety issues are exposed and judged by the workers.

#### 6. Analysis

In the empirical material, somewhat paradoxical observations were made. Even though the health and safety programme may be to the benefit of the workers, there are signs of resistance among workers. Strikingly, the management and the trade union representatives agree on the importance of the OHS programme. They also locate the problem of implementing the programme to (some of) the blue-collar workers and their attitude to safety.

After the relaunch, some implementation aspects are dealt with. It becomes more participative, and the top-down approach is not as obvious. But still, scepticism and resistance can be found, at least among some workers. Actually, if one looks at what the supervisors say in the interviews, there is a tendency to voice resistance or scepticism also among these. They have a background as blue-collar workers, possibly sharing the underlying normative understandings despite their current positions. The issue, simply, is not so much about formal position as an understanding of what work at the Mill actually implies and how it should be performed. The identified factors of work identity, facilitation and visibility are aspects of such an understanding.

Resistance, of course, is an interpretation of the fact that some employees are non-compliant, expressed through not wearing safety glasses, crossing lines you should not, not reporting PIA incidents, being unwilling to participate in education sessions and to become BBS coaches, and so on. It should be noted that resistance is not extravagant, criticism is not sharp or hostile. It is of subtler kind. There is microresistance at the individual level (Mumby et al., 2017), noncompliance such as described above, as well as sceptical and somewhat ironical talk. All this is noticed by both management and the trade union representatives. The programme is not automatically considered to be good (or fully adequate) just because it concerns health and safety and the trade union supports it.

Importantly, the ideas behind the programme are perceived as good, but the reasons for the resistance should be traced to the work context of the workers themselves, and how they understand work, health and safety in relation to their own norms. More analytically, the programme is understood and framed, by the workers, as something that you are held accountable for in a hierarchical sense. It is a programme that is introduced 'from above', possibly an idea with the best of intentions. The focus on health and safety as such is acknowledged as positive by the workers. But one should not forget that information, education sessions, coaching, concrete safety measures, and so on, are introduced and used as a form of control. Participation is required. You are held accountable for it in relation to superiors. It means that OHS responsibility is decentralised in the organisation, not necessarily in a smooth way. It requires participation, but participation is compulsory, and workers somewhat reluctant. Becoming a BBS coach, for example, is something that few seem to aspire for. A reason given in the empirical material is that they see it as a 'police activity' and feel uncomfortable when observing colleagues and receiving feedback from these. Importantly, this connects to

a confusion of taking on a new and other role in relation to your peers in the workforce, that is, a *social and relational* dimension. The trade union, on the other hand, participates, building on a formal mandate of representation. It partly sees the programme 'from the other side', as something to be implemented to the benefit of the workers and the organisation. Obviously, one of its self-defined tasks is to get its members involved in the processes.

Strikingly, the reasoning of the workers suggests a strong normative understanding of work and behaviour, partly in contrast to what the programme seems to suggest about safety. The health and safety programme, for this reason, contains aspects that are evaluated and dealt with from the perspective of *social accountability*. Put in other terms, the implementation of the programme involves two forms of accountability that stand against each other as potential explanations for resistance (cf. Fig. 1). Routines, education, artefacts and descriptions of how to perform work in a safe manner are evaluated. In some cases, resistance is an answer. But the motivation for resistance is found in the horizontal relationships of the workers (including, possibly, employees with bluecollar background that have been promoted). The formal aspects of the programme are of hierarchical kind, but the evaluation of it by the workers is essentially of social kind.

In more theoretical terms, there is a fundamental construction of social accountability among workers, formed against a normative backdrop of how to behave and how to perform at work. Also, this normativity contains a strong idea of what this particular work is actually about. Fig. 3 illustrates the result of our analysis, showing what lies behind resistance to the measures of the OHS programme. It is an illustration of the fact that the important factors identified (work identity, facilitation and visibility) manifest themselves in terms of social accountability rather than hierarchical. The figure presents hierarchical accountability on the Y axis going from low hierarchical accountability to high (high meaning that individuals see themselves as to a large extent responsible towards management), and social accountability on the X axis going from low socialising accountability to high (high implying that individuals see themselves as to a large extent responsible towards their peers, that is, colleagues). Through placing the identified categories of work identity, facilitation and visibility in the figure, we see that these aspects are connected to a high level of social accountability and a low level of hierarchical accountability, meaning that workers are more concerned about their relationships to their peers than to management and the company itself.

The aspects of work identity, facilitation and visibility are central to understanding *why* workers oppose the programme. Work identity relates to who you are, facilitation to how you perform work in the easiest and most relevant way, and visibility to how you are exposed to others at work. Notably, all these three aspects relate to an understanding of the work context where you see yourself as accountable in a social sense, to



Fig. 3. Aspects of evaluating the health and safety programme and forms of accountability.

peers rather than managers.

*Work identity* entails professional norms and what it means to work at the paper mill, for example that 'some pain is part of the job'. It is something that you should accept as a paper mill worker, if you are 'in the job'. The programme, with its aspects of control (you have to participate in the training sessions and so on), is not necessarily seen an adequate mode of control, at least not if it fails to be congruent with the self-identity of the paper mill workers (Willmott, 1993; Gill, 2019; cf. Alvesson and Willmott, 2002). Rather, the evaluation of the health and safety programme depends on its capacity to sustain the workers' sense of self. Although a managerial tool, the OHS programme does not seem to 'manipulate' the workers into changing their identity (cf. Alvesson & Willmott, 2002). Rather, it interferes with their definitions and understandings of work in relation to how they see themselves, and resistance follows.

*Facilitation* refers to the ways that workers think the job should be performed in the easiest and most 'natural' way. One could talk perhaps see facilitation as an aspect of operational effectiveness of work (cf. Shevchenko et al., 2018), but not from a managerial output perspective, but rather from a collegial understanding of work. In line with earlier research (Walters et al., 2020), a gap can be found between the perceptions of management and the workers concerning how effective the arrangements are for performing work. Such a gap, however, is less about the perceived inability of management to see the risks, and more about its unnecessary and impractical ways of dealing with the risks, as understood by the workers. Facilitation, thus, relates to knowledge and functionality. The workers know how to perform the work and resist measures interfering with such an understanding.

Problematic *visibility* of safety measures and behaviour (through the reporting system PIA) concerns the relational aspects contained in the job. Visibility implies that you expose issues and events relating to health and security, including aspects that you do not necessarily want to be exposed. Falling off a chair or dropping a hammer on your toe is not an accident that you want to visualise. It is not material. The collegial understanding of work does not allow for such exposure. Expressed in a straightforward manner, if you are clumsy and do something that is embarrassing, others will notice. In relation to your peers, you go public when using the system and you must answer for your failures.

It should be noted that the factors of work identity, facilitation and visibility do not end up as reflecting high social accountability and low hierarchical accountability per definition. Rather, it is what the workers fill these aspects with that warrants the position in Fig. 3. For example, visibility could have been used to expose rule compliance, that each and everyone report publicly that they are following the rules and how. That would rather be related to hierarchical forms of accountability.

In another vein, other aspects could also have been brought forward as important. One example is (financial or other) remuneration. If you were remunerated for 'achievements' within the health and safety area, and that is a reason for accepting and adopting the programme, such a factor would end up high to the left in Fig. 3, representing high hierarchical accountability and low social accountability. However, given the existence and content of the identified factors, we see a clear tendency to the significance of social accountability as a fundamental explanatory factor for resistance.

When analysing the case according to the accountability literature (Roberts, 1991; 1996), we see that workers are, *from a formal point of view*, held accountable in a typically hierarchical way to achieve a safer work environment. Training, BBS talks, billboards with safety instructions, yellow lines marking where you are supposed to walk, and so on, are part of the approach. These issues, however, are experienced in a negative way by workers, not influencing them to work in a different and safer way. Instead, they ignore billboards, new safety instructions, they consciously walk outside the yellow lines and continue to work as they have always done. The hierarchical accountability contained in the implementation of the programme is not 'strong' or relevant enough to

bring about the intended changes. Factors clearly relating to hierarchical accountability are simply not found in the material even though the context is of hierarchical kind. It is not impossible, however, that such factors do exist and play a role also for issues that we relate to the social dimension, for example performance and efficiency pressures shaping the understanding of what a 'real' job contains (see discussion below).

But generally, social accountability matters more when it comes to explaining resistance. It comes to surface through informal and spontaneous talks and discussions among peers within work groups. Through these informal discussions and talks, workers influence each other and are also shaped by each other when it comes to attitudes and safety behaviour. History also matters. The Mill represents a 'masculine' work tradition, it has been there for a century or so. We clearly see the overarching explanation for resistance in the socialising form of accountability. Workers hold each other accountable for what they do and how they work. Talks, discussions and behavioural norms within the working group matter more than rules and instructions. As Mullen (2004) argues, employees may experience strong social pressure to perform work according to methods that are considered 'normal' (in line with the normative understandings of the workers themselves). We see this in our case and explain it through the concept of social accountability.

#### 7. Concluding discussion

The intention of the paper has been to answer the research question of why a health and safety programme, promoted by the local trade union, is resisted by workers within an organisation. The answer to this question is twofold. First, the programme is resisted because of its failure to address blue-collar workers' normative understanding of work identity, facilitation and visibility. Second, and more explanatory, such a normative understanding relates to the social accountability. That is, the workers relate what is good and bad with the new programme to how they and their peers perceive of how the work should be performed rather than how management (and the trade union) think it should be. An overarching conclusion of this is that in order to understand resistance to OHS programmes, it is important to contextualise control measures taken by managers to the the normative frames of work that in particular blue-collar workers share.

Thus, this article contributes in the sense that it deepens the explanations for resistance to OHS measures within organisations. We can hardly say that we refute explanations referring to production and efficiency pressure (e.g. Dwyer, 1983; Hall, 1999; Hopkins, 2005; Atak and Kingma, 2011, Nordlöf et al., 2015), or explanations referring to individual risk-taking or safety culture (e.g. Mearns and Flin, 1999; Mullen, 2004; see also Nordlöf et al., 2015). One reason for this is that the explanations may be, in some sense, interrelated. For example, we cannot rule out that the issue of expectations on productivity and efficiency matters the issue of facilitation and 'how you do work here'-for the reason that such an understanding may very well have been formed during many years of performance pressure (cf. the 'masculine culture referred to previously). And even though we connect the issue of visualisation to collegial exposure, others have pointed to the managerial aspect of this, that some managers do not act on or want 'unwarranted interference' by subordinates (Hopkins, 2005). But we deepen the discussion through pointing to relatively obvious explanations for resistance pertaining to the social dimension of work. It is, in this particular case, linked to knowledge among the workers and the perceived nature of work as defined by themselves (and not necessarily by managers). What we add is, rather, is an explanation from the perspective of the workers that sets out from their own perceptions of what an OHS programme is and how it relates to everyday work. We illustrate a control context that is made sense of by the workers of the mill.

Rules and routines are hierarchically structured elements against which employees *are held* accountable. It is a programme "including behaviour modification, individual accountability and monitoring" (Walters et al., 2016, pp. 379-380). But as the study shows, it is not necessarily in relation to hierarchical elements that the workers see themselves as accountable. Arguably, even though much effort is put into, for example, education and information, the aspect of social accountability, is not explicitly focused by management when implementing the programme. The programme contains a direction about how one should think about safety, but not necessarily from the vantage point of how people look upon safety given their social understanding of work today. The socialised normative understanding of what safety is about and when rules can be flouted exists parallel to the new programme, with its prescriptions. The norms behind such assessments are tied to the employees' more ingrained understandings of what a paper mill worker is and should be, a professional codex putting the OHS programme into context. Social accountability 'flourishes' in the informal spaces of the organisation (Roberts, 1991)-in a way that confirms selves in a horizontal dependency structure rather than a vertical one. Paradoxically, measures taken for the sake of the employees, are resisted through the construction of selves in relation to the measures, which comes to constitute the main difficulty of implementing the programme.

The case shows a context of control where the normative frames of the workers can be seen as multifaceted and, perhaps to some extent, divided by many and perhaps contradictory concerns that exist along with a managerial approach to OHS. In this case, the trade union accepts the programme. But that does not mean that the programme as such is adapted to or developed according to the normative understandings of the workers. It does not necessarily point to a rift between the trade union and the workers, but it illustrates the relatively complicated situation that arises when worker representation of formal kind is (legally) required and to some extent also internalised within the control structures of the firm (cf. Frick, 2013; 2019). Formal responsibility must be enacted by the trade union that does not necessarily represent the informal aspects of worker culture or norms (cf. Hall, 1999). The formal aspect of participation does not automatically entail that individual workers see themselves as actively and voluntarily involved in OHS programmes (Walters and Wadsworth, 2020). The 'forced participation' and appointments of BBS coaches attest to this. Rather, the trade union must work to get people involved. In the occupational context of the workers, the construction of accountability is, primarily, an issue that relates to peers, not to management or their ideas or the formal role of the trade union that is legally mandated. Relating this to work identity, the employees build their identification on norms that are not necessarily congruent with managerially defined objectives (cf. Alvesson and Willmott, 2002). Arguably, the at least moderate resistance voiced by supervisor(s) with blue-collar background underscores the fact that it is not the formal position, but the normative understanding of work that conditions resistance (or support).

As always, there are limitations to relatively small case studies with relatively limited data. Through the interviews, however, we point to work identity, facilitation and visualisation as relevant factors for explaining resistance in the context of social accountability. Our empirical material allows us to do so given what the respondents suggest. What we cannot do, of course, is to exclude other explanations or decide the magnitude, reach and range of these explanations—if they are valid for all workers and in other contexts. But as with qualitative research in general, the identified factors are part of theory-building that can be further developed and in relevant cases tested.

We also believe the case study catches the sensemaking of the workers in terms of accountability (see Roberts, 1991; 1996; 2001; 2003) when it comes to how they see themselves as responsible and to whom, in relation to managerial control measures. This goes beyond the issue of individual and collective preferences (e.g. Baarts, 2009) for safety as it concerns the underlying normative reasons for resistance. Admittedly, other theoretical perspectives could have been used in the article, for example an institutional logics approach (cf., for example, Uhrenholdt Madsen and Boch Waldorff, 2019). But after all, the organisational accountability context is of relational character,

suggesting the reasonability of the accountability perspective. It covers a situation where acts of resistance are concrete expressions of an understanding of to whom (and why) you are accountable within an organisation.

In this, the contextual nature of the case is important to emphasise. It concerns a distinctly blue-collar environment in an old industry mill. Compared to, for example, Ozmec et al. (2015), that find approaches to health and safety to be the results of negotiations between craftsmen, managers and customers in small and medium-sized companies, the industrial environment entails a blue-collar culture remote from customers and (top) managers. In our case, there is no 'final outcome' or ultimate consensus following negotiations or optimal routines (see e.g. Baarts, 2009; Shevchenko et al., 2018). Rather, what we see are explanations for resistance that takes the shape of, for example, not writing PIAs when you should, crossing lines despite not being allowed, and so on.

As for implications and from a practical perspective, the social and relational aspects of how the workers look upon their work are essential to understand when introducing a health and safety programme. The involvement of the workers could be stronger, not only as participants in the programme, but also in terms of a consultative role in designing it (Walters and Nichols, 2006; Walters et al., 2016; Frick, 2019). Dialogue with the blue-collar workers before and during the process of revising the safety instructions. At any rate, understanding how workers perceive of such programmes in relation to what they consider to be the essence and nature of their work is important.

What the article sets its finger on is the normative understanding of work within organisations. Future research would do well in trying to establish the norms within organisations and among workers in order to facilitate the context specific nature of where programmes are implemented. Such research would potentially add much to our understanding of how it is possible to introduce important programmes that are, basically, to the benefit of workers and that do not encounter resistance.

#### References

- Agyemang, G., O'Dwyer, B., Unerman, J., Awumbila, M., 2017. Seeking "conversations for accountability": mediating the impact of non-governmental organization (NGO) upward accountability processes. Account., Audit. Account. J. 30 (5), 982–1007.
- Alvesson, M., Willmott, H., 2002. Identity Regulation As Organizational Control: Producing the Appropriate Individual. J. Manage. Inquiry 39 (5), 619–644.
- Atak, A., Kingma, S., 2011. Safety culture in an aircraft maintenance organisation: A view from the inside. Saf. Sci. 49, 268–278.
- Baarts, C., 2009. Collective individualism: The informal and emergent dynamics of practising safety in a high-risk work environment. Construct. Manage. Econ. 27 (10), 949–957.
- Barker, J.R., 1993. Tightening the iron cage: Concertive control in self-managing teams. Adm. Sci. Q. 38 (3), 408–437.
- Beu, D., Buckley, M.R., 2001. The hypothesized relationship between accountability and ethical behavior. J. Bus. Ethics 34, 57–73.
- Braun, V., Clarke, V., 2006. Using thematic analysis in psychology. Qualitative Res. Psychol. 3 (2), 77–101.
- Brown, A.D., Humphreys, M., 2006. Organizational identity and place: A discursive exploration of hegemony and resistance. J. Manage. Stud. 43 (2), 232–257.
- Buhr, N., 1991. Environmental audit: Who needs it? Business Quart. 56 (3), 27–31. Butler, J., 2005. Giving an account of oneself. In: A lifeworld analysis of a rail crash, 62.
- Fordham University Press, New York, pp. 1267–1287. Casey, T., Griffin, M.A., Flatau Harrison, H., Neal, A., 2017. Safety climate and culture: Integrating psychological and systems perspectives. J. Occup. Health Psychol. 22 (3), 341–353.
- Choudhry, R.M., Fang, D., Mohamed, S., 2007a. The nature of safety culture: a survey of the state-of-the-art. Saf. Sci. 45 (10), 993–1012.
- Choudhry, R.M., Fang, D., Mohamed, S., 2007b. Developing a model of construction safety culture. J. Manage. Eng. 23 (4), 207–212.
- Choudhry, R.M., Fang, D., Lingard, H., 2009. Measuring safety climate of a construction company. J. Construct. Eng. Manage. 135 (9), 890–899.
- Christian, M.S., Bradley, J.C., Wallace, J.C., Burke, M.J., 2009. Workplace safety: A metaanalysis of the roles of person and situation factors. J. Appl. Psychol. 94, 1103–1127.
- Clarke, S., 2006. The relationship between safety climate and safety performance: A meta-analytic review. J. Occup. Health Psychol. 11, 315–327.
- Clarke, S., 2010. An integrative model of safety climate: Linking psychological climate and work attitudes to individual safety outcomes using meta-analysis. J. Occup. Org. Psychol. 83, 553–578.
- Collinson, D.L., 2003. Identities and insecurities: Selves at work. Organization 10 (3), 527–547.

- Courpasson, D., Dany, F., Clegg, S., 2012. Resisters at work: Generating productive resistance in the workplace. Organ. Sci. 23 (3), 801–819.
- Courpasson, D., Vallas, S., 2016. Resistance studies: A critical introduction. In: Courpasson, D., Vallas, S. (Eds.), The Sage handbook of resistance. SAGE Publications, London, pp. 1–28.
- Daniels, K., Beesley, N., Cheyne, A., Wimalasiri, V., 2016. Safety climate and increased risk: The role of deadlines in design work. Human Relat. 69 (5), 1185–1207.
- De Geer, H., 1992. The Rise and Fall of the Swedish Model. The Swedish Employers' Confederation and Industrial Relations Over Ten Decades. Carden Publications, Chichester.
- De Geer, H., Borglund, T., Frostenson, M., 2009. Reconciling CSR with welfare state actor roles – the problematic Swedish example. J. Bus. Ethics 89 (suppl. 3), 269–283.
- Dwyer, T., 1983. A New Concept of the Production of Industrial Accidents: A Sociological Approach. New Zealand J. Ind. Relat. 8 (2), 147–160.
- Dyreborg, J., 2011. 'Safety Matters Have Become Too Important for Management to Leave it Up to the Workers' – The Nordic OSH Model Between Implicit and Explicit Frameworks. Nordic J. Working Life Stud. 1 (1), 135–160.
- Eakin, J., 2010. Towards a 'Standpoint' Perspective: health and Safety in Small Workplaces from the Perspective of the Workers. Policy Pract. Health Saf. 8 (2), 113–127.
- Ebrahim, A., 2005. Accountability myopia; losing sight of organizational learning. Nonprofit Voluntary Sector Quart. 34 (1), 56–87.
- Edwards, J.R.D., Davey, J., Armstrong, K., 2013. Returning to the roots of culture: a review and re-conceptualisation of safety culture. Saf. Sci. 55, 70–80.
- Ezzamel, M., Willmott, H., Worthington, F., 2001. Power, Control and Resistance in 'The Factory That Time Forgot'. J. Manage. Stud. 38 (8), 1053–1079.
- Ferris, G.R., Judge, T.A., 1991. Personnel/human resource management: a political influence perspective. J. Manage. 17, 447–488.
- Fleming, P., 2005. Metaphors of resistance. Manage. Commun. Quart. 19 (1), 45–66. Fleming, P., Sewell, G., 2002. Looking for the good soldier, Svejk: Alternative modalities
- of resistance in the contemporary workplace. Sociology 36 (4), 857–872. Fleming, P., Spicer, A., 2008. Beyond power and resistance. Manage. Commun. Quart. 21 (3), 301–309.
- Frederick, J., Hudspith, B., and LeBlanc, G., 2018. A Trade Union Perspective on "The New View" of Health and Safety. USW, Unite the Union: Pittsburgh, Toronto, London. Retrieved August, 10th, 2020, from https://m.usw.org/get-involved/h sande/resources/publications/A-Trade-Union-Perspective-on-The-New-View-of-He alth-and-Safety.pdf.
- Frick, K., 2013. Work Environment Dialogue in a Swedish Municipality Strengths and Limits of the Nordic Work Environment Model. Nordic J. Working Life Stud. 3 (1), 69–93.
- Frick, K., 2019. Critical perspectives on OSH management systems and the future of work. ILO. Retrieved on August, 10th, 2020, from https://www.ilo.org/global/topi cs/safety-and-health-at-work/events-training/events-meetings/world-day-for-safet y/33thinkpieces/WCMS\_680397/lang-en/index.htm.
- Gill, M.J., 2019. The significance of suffering in organizations: understanding variation in workers' responses to multiple modes of control. Acad. Manag. Rev. 44 (2), 377–404.
- Guldenmund, F.W., 2000. The nature of safety culture: A review of theory and research. Saf. Sci. 34, 215–257.
- Guldenmund, F.W., 2010. (Mis)understanding safety culture and its relationship to safety management. Risk Analy.: Int. J. 30 (10), 1466–1480.
- Hall, A., 1999. Understanding the Impact of Mine Health and Safety Programs: Controlling and Taking Risks. Labor Stud. J. 23 (4), 51–76.
- International Labor Organization, 2020. Safety and health at work. Retrieved August, 28th, 2020, from https://www.ilo.org/global/topics/safety-and-health-at-work/l ang-en/index.htm.
- Harding, N.H., Ford, J., Lee, H., 2017. Towards a performative theory of resistance: Senior managers and revolting subject(ivitie)s. Org. Stud. 38 (9), 1209–1232.
- Helin, S., Sandström, J., 2010. Resisting a corporate code of ethics and the reinforcement of management control. Org. Stud. 31 (5), 583–604.
- Hopkins, A., 2005. What Are We to Make of Safe Behaviour Programs? Saf. Sci. 44, 583–597.
- Joannides, V., 2012. Accounterability and the problematics of accountability. Crit. Perspect. Account. 23, 244–257.
- Johansen, T.R., 2008. Employees and the operation of accountability. J. Bus. Ethics 83, 247–263.
- Kim, Y., Park, J., Park, M., 2016. Creating a culture of prevention in occupational safety and health practice. Saf. Health Work 7 (6), 89–96.
- Knights, D., McCabe, D., 2016. The "missing masses" of resistance: An ethnographic understanding of a workplace dispute. Br. J. Manag. 27 (3), 534–549.
- Lee, J., Huang, Y., Cheung, J.H., Chen, Z., Shaw, W.S., 2019. A systematic review of the safety climate intervention literature: Past trends and future directions. J. Occup. Health Psychol. 24 (1), 66–91.
- McKendall, M., DeMarr, B., Jones-Rikkers, C., 2002. Ethical compliance programs and corporate illegality: testing the assumptions of the corporate sentencing guidelines. J. Bus. Ethics 37 (4), 367–383.
- McKernan, J., 2012. Accountability as aporia, testimony and gift. Crit. Perspect. Account. 23 (3), 258–278.
- Mearns, K.J., Flin, R., 1999. Assessing the state of organisational safety-culture or climate. Current Psychol. 18 (1), 5–17.
- Messner, M., 2009. The limits of accountability. Acc. Organ. Soc. 34, 918-938.
- Mitchell, T.R., Scott, W.G., 1990. America's problems and needed reforms: confronting the ethic of personal advantage. Acad. Manage. Executive 4, 23–35.

#### K. Arbin et al.

Mitchell, T.R., 1993. Leadership, values and accountability. In: Chemers, M.M., Ayman, R. (Eds.), Leadership Theory and Research: Perspectives and Directions. Academic Press, San Diego, CA, pp. 109–136.

Mishali, M., Weiler, D., 2017. Psychological factors causing nonadherence to safety regulations in Israel's stone and marble fabrication industry: Unveiling the source of worker noncompliance. Cogent Business Manage. 4, 1–11.

- Mullen, J., 2004. Investigating factors that influence individual safety behavior at work. J. Saf. Res. 35 (3), 275–285.
- Mumby, D.K., 2005. Theorizing resistance in organization studies: A dialectical approach. Manage. Commun. Quart. 19 (1), 19–44.
- Mumby, D.K., Thomas, R., Martí, I., Seidl, D., 2017. Resistance Redux. Org. Stud. 38 (9), 1157–1183.
- Nævestad, T.-O., Storesund Hesjevoll, I., Ranestad, K., Antonsen, S., 2019. Strategies regulatory authorities can use to influence safety culture in organizations: Lessons based on experiences from three sectors. Saf. Sci. 118, 409–423.
- Nag, R., Corley, K.G., Gioia, D.A., 2007. The intersection of organizational identity, knowledge, and practice: attempting strategic change via knowledge grafting. Acad. Manag. J. 50 (4), 821–847.
- Nahrgang, J.D., Morgeson, F.P., Hofmann, D.A., 2011. Safety at work: A meta-analytic investigation of the link between job demands, job resources, burnout, engagement, and safety outcomes. J. Appl. Psychol. 96, 71–94.
- Nordlöf, H., Wiitavaara, B., Winblad, U., Wijk, K., Westerling, R., 2015. Safety culture and reasons for risk-taking at a large steel-manufacturing company: Investigating the worker perspective. Saf. Sci. 73, 126–135.
- Nordlöf, H., Wiitavaara, B., Högberg, H., Westerling, R., 2017. A cross-sectional study of factors influencing occupational health and safety management practices in companies. Saf. Sci. 95, 92–103.
- Nunen van, K., Reniers, G., Ponnet, K., 2018. Measuring and improving safety culture in organisations: an exploration of tools developed and used in Belgium. J. Risk Res. 21 (5), 622–644.
- Ozmec, M.N., Karlsen, I.L., Kines, P., Andersen, L.P.S., Nielsen, K.J., 2015. Negotiating safety practice in small construction companies. Saf. Sci. 71, 275–281.
- Parboteeah, K.P., Kapp, E.A., 2008. Ethical climates and workplace safety behaviours: An empirical investigation. J. Bus. Ethics 80 (3), 515–529.
- Paulsen, R., 2015. Non-work at work: Resistance or what? Organization 22 (3), 351–367. Roberts, J., Scapens, R., 1985. Accounting systems and systems of accountability. Acc. Orean. Soc. 10 (4), 443–456.

Roberts, J., 1991. The possibilities of accountability. Acc. Organ. Soc. 16 (4), 355-368.

- Roberts, J., 1996. From discipline to dialogue: individualizing and socializing forms of accountability. In: Munro, R., Mouritsen, J. (Eds.), Accountability Power, Ethos & The Technologies of Managing, International Thomson Business Press, London.
- Roberts, J., 2001. Trust and control in Anglo-American systems of corporate governance: the individualizing and socializing effects of processes of accountability. Human Relat. 54 (12), 1547–1571.
- Roberts, J., 2003. The manufacture of corporate social responsibility: constructing corporate sensibility. Organization 10 (2), 249–265.
- Roberts, J., 2009. No one is perfect: the limits of transparency and an ethic for intelligent accountability. Account., Org. Soc. 34 (8), 957–970.
- Roberts, J., 2018. Managing only with transparency: the strategic functions of ignorance. Crit. Perspect. Account. 55, 53–60.
- Shearer, T., 2002. Ethics and accountability: from the for-itself to the for-the-other. Acc. Organ. Soc. 27, 541–573.

- Shevchenko, A., Pagell, M., Johnston, D., Veltri, A., Robson, L., 2018. Joint management systems for operations and safety: A routine-based perspective. J. Cleaner Prod. 194, 635–644.
- Sinclair, A., 1995. The chameleon of accountability: forms and discourses. Acc. Organ. Soc. 20 (2–3), 219–237.
- Teo, E.A.L., Ling, F.Y.Y., Ong, D.S.Y., 2005. Fostering safe work behavior in workers at construction sites. Eng., Construct. Arch. Manage. 12 (4), 410–422.
- Tetlock, P. E., 1985. Accountability: the neglected social context of judgment and choice. In L. L. Cummings and B. M. Staw (eds.), Research in Organizational Behavior, Vol. 7 (JAI Press Greenwich, CT), 297 – 332.
- Tetlock, P. E., 1992. The impact of accountability on judgment and choice: toward a social contingency model. In M. P. Zanna (ed.), Advances in Experimental Social Psychology, Vol. 25, Academic Press, New York, 331 – 377.
- Uhrenholdt Madsen, C., Boch Waldorff, S., 2019. Between advocacy, compliance and commitment: A multilevel analysis of institutional logics in work environment management. Scand. J. Manag. 35, 12–25.
- van Maanen, J., 1979. The fact of fiction in organizational ethnography. Adm. Sci. Q. 24 (4), 539–550.
- Wachter, J.K., Yorio, P.L., 2014. A system of safety management practices and worker engagement for reducing and preventing accidents: An empirical and theoretical investigation. Accid. Anal. Prev. 68, 117–130.
- Walters, D., Nichols, T., 2006. Representation and Consultation on Health and Safety in Chemicals: An Exploration of the Limits to the Preferred Model. Employee Relations 28 (3), 230–254.
- Walters, D., Quinlan, M., Johnstone, R., Wadsworth, E., 2016. Cooperation or resistance? Representing workers' health and safety in a hazardous industry. Ind. Relat. J. 47, 379–395.
- Walters, D., Wadsworth, E., 2020. Participation in safety and health in European workplaces: Framing the capture of representation. Europ. J. Ind. Relat. 26 (1), 75–90.
- Walters, D., Wadsworth, E., Bhattacharya, S., 2020. What about the workers? Experiences of arrangements for safety and health in global container terminals. Saf. Sci. 121. 474–484.
- Watson, G., Scott, D., Bishop, J., Turnbeaugh, T., 2005. Dimensions of Interpersonal Relationships and Safety in The Steel Industry. J. Bus. Psychol. 19 (3), 303–318.
- Willmott, H., 1993. Strength is ignorance; slavery is freedom: Managing culture in modern organizations. J. Manage. Stud. 30, 515–552.
- Yakel, E., 2001. The social construction of accountability: Radiologists and their recordkeeping practices. Inform. Soc. 17 (4), 233–245.
- Yasmin, S., Ghafran, C., 2019. The problematics of accountability: internal responses to external pressures in exposed organisations. Crit. Perspect. Account. 64, 1–20.
- Ybema, S., Horvers, M., 2017. Resistance through complicance: The strategic and subversive potential of frontstage and backstage resistance. Org. Stud. 38 (9), 1233–1251.
- Yuan, X., Xu, Y., Li, Y., 2020. Resource depletion perspective on the link between abusive supervision and safety behaviors. J. Bus. Ethics 162 (1), 213–228.
- Zohar, D., 1980. Safety climate in industrial organizations: Theoretical and applied implications. J. Appl. Psychol. 65, 96–102.
- Zohar, D., 2010. Thirty years of safety climate research: Reflections and future directions. Accid. Anal. Prev. 42 (5), 1517–1522.