

Reversing the trend through collaboration in the petroleum industry

K. Skarholt & G.M. Lamvik

SINTEF Technology and Society, Trondheim, Norway

ABSTRACT: The purpose of this paper is to discuss the importance of bipartite and tripartite cooperation in the Norwegian petroleum industry and how it contributes to improve safety conditions. Lack of trust between the parties and pressure on the Norwegian model has great attention in this industry today, related to major cost reductions and downsizing the last 2–3 years. We discuss these challenges and how to re-build trust between the parties. The empirical material is mainly based on qualitative data from the ongoing four year RISKOP research project (Managing Risks in Offshore Operations). In addition, the data is based on a document study about the safety conditions and collaboration in the petroleum industry.

1 INTRODUCTION

In the Norwegian oil and gas industry there is a long tradition for employee participation at work, both at an individual level, and through formal bipartite and tripartite collaboration, inviting for employees' ideas and concerns about safety issues. A tripartite collaboration consists of the authorities, employers' association and worker unions, while bipartite collaboration is a local collaboration between employer/management and worker unions within a company (Levin et al., 2012).

Employee participation is about involvement in work-related matters, with the intentions to have influence on working conditions. The term employee voice is an expression of participation at work, and is defined as an employee's discretionary communication of ideas, suggestions, concerns, or opinions about work-related issues with the intent to improve organizational functioning (Morrison, 2011:375). The contribution of employee voice is to influence decisions and contribute to improvements in a company. According to safety, it is crucial that employees' opinions and voices are listened to, if not it may lead to dangerous safety conditions and accidents. However, the conditions for employee voice are challenged in periods with economic crisis (Farndale et al., 2011; Skarholt et al., 2017). Economic crisis and downsizing has led to a more fragile bipartite collaboration where the parties and authorities experience decrease in trust. Increased economic pressure has led to concerns about possible negative effects on safety and work environment. Figures from the latest study of trends in risk level in Norway's petroleum activity (RNNP 2016) from the Petroleum Safety Authority Norway (PSA), shows that more employees

report higher work pressure and less influence on HSE than in previous RNNP studies. This negative development has led to campaigns and initiatives from both the PSA and the Ministry of Labor and Social Affairs in Norway.

Through the campaign "Reversing the trend", the PSA address what they see as a worrying development over the past years (PSA, 2016). How to actually improve bipartite and tripartite collaboration is one of the main issues in this initiative. According to PSA good collaboration between employers and employees has helped to boost the level of safety in Norway's petroleum industry. This interaction now appears to be under pressure. PSA stress the importance of employee participation in handling safety matters, stating that involvement of employees is a requirement in all phases of the petroleum sector for every issue which relates to safety. These rights and duties are to be practiced both directly by each individual worker and through union representatives and safety delegates. A good collaboration between the parties depends on mutual trust.

The Ministry of Labor and Social Affairs in Norway appointed a HSE committee representing authorities, employer organizations and employee unions in the petroleum sector in 2016, to discuss and consider the state- and development of HSE conditions in the Norwegian petroleum industry. The background for this was a negative safety trend in 2015 and 2016 with serious conditions and safety challenges. The report from this work (HSE committee—Ministry of Labor and Social Affairs, 2017) refers to that there have been major change processes with downsizing and restructuring that may be a challenge to the established collaboration between employers and employees. Indications

suggests that cooperation between the parties is more fragile compared to earlier, although disagreement prevails between the parties over how far this collaboration has come under pressure. A main conclusion in the report from 2017 is to keep and build mutual trust and respect to each other's role and responsibilities between the parties—to be able to take care of and develop the safety level in the petroleum industry.

The aim of this paper is to discuss the role of bipartite and tripartite collaboration due to develop and improve safe operations in the petroleum sector in Norway. We discuss how employee participation at work influence on safety conditions—as a mean of reducing risk of injuries and major accidents.

2 THEORETICAL BACKGROUND

2.1 *Collaboration, trust and safety*

The Norwegian oil industry, or rather the oil industry on the Norwegian Continental Shelf has been characterized by its social agreements grounded in the Norwegian model, producing alliances between all core stakeholders, thereby a “we” including the whole of the industry. The Norwegian model on a local company level is about the collaboration between management and union representatives. In Norway, this cooperation has been characterized by; trustful relations, willingness to collaborate for increased competitiveness, low level of conflicts at work (Levin et al., 2012). The voice of employees has thus to a large extent been listened to and have influenced over decisions made in the company.

Improved safety is something that all parties want for the industry. The Norwegian petroleum sector has been characterized by trustful bipartite and tripartite collaboration, and the participation among employees has been important for improving safety conditions. Important arenas for tripartite collaboration is “Working Together for Safety” (Samarbeid for Sikkerhet/SfS) and Safety Forum (Sikkerhetsforum). The aim of their work is to increase safety in the petroleum industry and strengthen trust and cooperation among the actors of the industry. These arenas are central for cooperation among the parties in the industry and the authorities as regards health, safety and environment in the petroleum activities offshore and onshore. Here, the unions, the employers’ organizations and the authorities have a significant influence on the safety agenda in this sector. One could say that this trust-based tripartite collaboration is a key cultural value related to how safety is maintained in the Norwegian petroleum industry. Trustful bipartite collaboration about

safety matters have also been an important cornerstone of the safety regime. Bipartite collaboration is an integrated and critical part of the regulatory regime for HSE in the Norwegian petroleum sector (Rosness & Forseth, 2014). To report about dangerous safety situations and conditions is easier to obtain in a bipartite collaboration, where you can have an open relation between leader and employees/unions. The economic crisis in this sector has however put the collaboration between the parties under pressure. Indications from several actors claim that the Norwegian model with bipartite and tripartite collaboration is under pressure (PSA, 2016; Ministry of Labor and Social Affairs; Falkum et al., 2017). Safety Forum was established in 2000, based on distrust from unions to the employer association Norwegian Oil and Gas—stating that they constantly failed to include the employees in decisions concerning safety (Rosness & Forseth, 2014). Compared to the situation in 2000, we are seeing a similar development today with decrease of trust between the parties.

Trust in organizations has been studied in different ways to address positive outcomes on organizational phenomena, such as positive impact on safety culture and safety performance (Burns et al., 2006; Conchie et al., 2006; Reason, 1997). Trust also affect improved communication, knowledge sharing, commitment, and organizational learning (McEvily et al., 2003; Nonaka and Takeuchi, 1995).

Research has shown that the cultural aspects of work practice influence safety as much as technology and formal organization structures (Antonsen, 2009; Guldenmund, 2000; Haukelid, 2008). Also, the work from Tharaldsen (2011), addressing differences in safety climate and trust between UK and Norwegian sector, fits this picture.

In high reliability-organizations (HRO) organizational culture/safety culture influence on safety (Weick and Sutcliffe, 2007). The key aspect of building safety culture is the level of openness and trust and access to information that may indicate compromising of safety. Reason (1997) argues that the safety culture is based on an underlying element of trust, and research shows that high levels of trust in relationships contributes to high levels of safety in high risk enterprises (Conchie et al., 2006). Their study of safety performance in the offshore industry concluded that the impact on trust and distrust on safety performance is determined by the act of being trusted (or distrusted).

Trustful relations and openness requires the existence of a variety of channels, both formal and informal. Bipartite cooperation is a relation between managers and union representatives (and safety delegates) in a company. The Norwegian Working Environment Act from 1977 regulates

the rules for formal participation at work among union employee representatives, where they have influence through information- and discussion meetings with the line management. They thus take part in problem-solving in different matters at work, such as improvement of safety, change processes and similar.

A good bipartite collaboration demands good leadership, listening to the ideas and concerns from the employees. How the dialogue and trust is between the parties will influence on how the employees are involved and have influence on their work and safety matters at work. The presence of union representation at work contributes to increased individual employee participation (Trygstad & Hagen, 2007). The relations between managers and union representatives at work will influence on employee participation outside the formal bipartite cooperation, where an involving leadership style will strengthen open communication. To make individual employees actually speak up about safety concerns, leaders must invite to openness and involvement about safety among the employees. How managers respond to employees' opinions about safety improvements, will influence on the motivation and willingness to speak up. If they signal interest and willingness to act on employee voice, the employee's motivation to inform about safety concerns are enhanced (Detert & Burris 2007; Edmondson, 2003). Detert and Burris (2007) found that management openness and transformational leadership behaviour are consistently positively related to voice. To speak up involves sharing one's idea with someone who has the power to devote organisational attention or resources to the issue raised (French & Raven, 1959). To openly speak up about work environment and safety concerns at a work place without fear of being sanctioned/punished, is a prerequisite for reporting (Antonsen, 2009; Trygstad et al., 2014). Mutual trust between managers and employees also influence to which extent the employees will tend to keep silent or use their voice when safety concerns occurs (Skarholt et al., 2017).

3 METHODS

To highlight these issues we have drawn upon various sources. An important one is the project RISKOP (Managing Risks in Offshore Operations). This project has been run by Western Norway University of Applied Sciences in Haugesund, in collaboration with SINTEF and University of Stavanger, supported by the Norwegian Research Council and nine companies in the industry. In this project, we interviewed 16 managers from five different shipping companies. These shipping

companies, that constitutes an important part of the petroleum cluster in Norway, are operating advanced vessels (e.g. supply vessels and anchor handling vessels) in the offshore petroleum industry, working for different oil and gas companies at the Norwegian Continental Shelf. Also, a broker, the Norwegian Maritime Directorate and trade unions were interviewed with topics pivoting around issues as: How the informants/shipping industry experience the crisis; What they actually do to meet and handle the situation, and; How the situation may affect safety operations offshore?

Besides the RISKOP project we have analysed some documents covering certain aspects of safety and collaboration at work. First, the Petroleum Safety Authority (PSA) and their campaign "Reversing the trend" (2016) has played an important basis for this topic. Second, in the extension of this campaign we have made use of the report "HSE in the petroleum industry" (HSE committee—Ministry of Labor and Social Affairs, 2017) to shed some light on the safety situation in the petroleum sector. Third, the survey "Participation Barometer" (Medbestemmelsesbarometeret) (Falkum et al., 2017) measure; "Is participation in Norwegian working life under pressure?" Moreover, participation as is described as main elements of leadership- and managerial practice is the focus. The survey is owned by six trade unions, covering private- (included the oil and gas industry) and public sector in Norway.

4 RESULTS

We present 1) results from the interviews with leaders in shipping companies, union leaders and broker—conducted in the RISKOP project, and 2) results from document analysis about the trend and development of safety in the Norwegian petroleum industry.

4.1 *Strong bipartite cooperation—to survive*

The economic crisis in the petroleum industry has led to fewer jobs in the offshore shipping industry, where the competition for jobs is tough in a marginal market. One of the companies we interviewed had reduced their staff with 400 employees, and feared further layoffs. Consequently, shipping companies have removed a considerable portion of the offshore fleet from the market. In December 2017, there are 134 vessels from the offshore fleet in layup, out of a total fleet of around 550 vessels. Ordinary Platform Service Vessels (PSV) were the largest category of these ships (61), while Anchor Handling Tug Supply (AHTS) were 42 vessels and the number of Seismic vessels were 14.

This layup activity has resulted in downsizing of personnel for oil companies, shipping companies and subcontractors. Another challenge for this industry, is the fewer long-term contracts compared to before the crisis. Today, most of the contracts are in the spot market, meaning short-term assignments with a maximum of one month, especially operations done by PSV's (Platform Supply Vessels) and anchor handling vessels. Leaders from shipping companies we interviewed accepted contracts they knew to be too low, not even covering basic running costs, solely to decelerate the decline of the company. When the market is weak and undergoing a crisis as today, there are many subcontractors that are weakened and not in a position to negotiate.

We find that one way to deal with this crisis is actually to fight for the survival of the work place—together in a bipartite cooperation. As a coping strategy in the offshore shipping industry, collective local organizational arrangements have been strengthened. Our material show proves of strong and solidarity constellations inside the shipping companies, e.g. close collaboration between managers and employee's in finding new solutions to handle the crisis in the industry. It seems that the major challenges in the offshore sector has made all the staff in the companies, to realize that they have a common interest in collaboration and find shared solutions. They realized that this is the time for dancing rather than boxing, to paraphrase the famous book by Huzzard et al. (2005).

Many of the shipping companies we interviewed pointed out that the unions and employees was willing to find ways to save money in the company, such as reducing salaries for a period. One of the shipping companies in our study reduced the wages by 29 percent among the crew from laid off vessels, so they could keep more of their staff and the competence in which they held. Cut in company specific bonuses was another instrument to reduce costs. Another example was change in the shift system; from four to five shifts, to be able to keep more of the employees working. This allowed for an extra shift, or crew onboard the ships, allowing extra leisure time at home. This way, the economic crisis made the cooperation between the management and the employees/union representatives really strong. As one of the leaders from a shipping company said; "*New solutions to survive is established because of the unions*". Problems and crisis become like an outer enemy that may build strong alliances between employer and employees in an organization. Labor relations become a positive force, building trust and a good working environment. We see that this is what happens in the shipping industry. Other means of survival in the Norwegian shipping market has been mergers of shipping companies the last years.

4.2 *The Norwegian model under pressure*

On the other hand, there are many indications that the climate for collaboration between the parties has become worse in recent years. Increased economic pressure has led to more concerns about possible negative effects on safety in the petroleum industry in Norway. We have made analysis of documents describing the development and trend about safety in this industry. The analysis is mainly based on these documents; Reversing the trend (PSA, 2016), HSE in the petroleum industry (HSE committee—Ministry of Labour and Social Affairs, 2017) and The Participation Barometer (Falkum et al., 2017).

Five decades after the Norwegian oil adventure began, the petroleum sector faces important safety challenges. Trends are moving in the wrong direction in a number of areas (PSA, 2017). The development over the past two years have involved safety challenges and serious conditions: Figures from the 2016 study of trends in risk level in Norway's petroleum activity (RNNP) show an increase in serious hydrocarbon leaks and well control incidents. The major accident indicator is evaluated to be at a too high level (PSA, 2016). It is a reason to believe that this situation is affected by the economic crisis with restructuring and downsizing. Changes and demands for greater efficiency raise the level of conflicts.

To get safety development back on the right track, PSA have started a campaign; "Reversing the trend". PSA has put *collaboration* as one of the main issues in Reversing the trend: "*Collaboration between the various sides in the petroleum sector is under greater pressure, both between companies and unions and between them and the government. Such bi- and tri-partite interaction occupies a key place in Norwegian safety efforts.*" PSA's concerns is that a weakened cooperation could include a poorer basis for important decisions by company managements, and weaker entrenchment with employees of important choices for the way forward. They are worried about that weaker employee participation may have negative consequences for safety in the petroleum industry. Numerous examples from major accidents in the petroleum industry show that information that could have prevented the accidents, was available, but was either not communicated or not acted upon. This indicates a safety culture lacking openness and trust for reporting and telling about dangerous situations. A key aspect of safety culture is the level of openness and access to information that may indicate compromising of safety. PSA's focus on bipartite cooperation is to emphasize the role industrial relations has on safety, where they address the responsibility of improvements towards the management

in oil and gas companies. PSA want to remind the management how safety can be taken care of and improved through formal collaboration between employer and employees. The voice of employees in decision-making is under pressure, and so the Norwegian model is under pressure.

A leader from one of the major trade unions in the petroleum sector we interviewed, stated that he/ the union did not recommend employees to involve themselves in union activities at the moment, since it has become very troublesome to ask for leave for the individual representatives to involve themselves in trade union work. This opinion from such a strong voice in the industry can be seen as a barometer or an indication of a lack of trust or lack of collaboration in the offshore industry.

The report from the HSE committee—Ministry of Labor and Social Affairs (2017) “HSE in the petroleum industry” also emphasize collaboration between the parties—to enhance safety conditions in the petroleum industry: “*Bipartite and tripartite collaboration is an important cornerstone of the safety regime, and must be strengthened and further developed.*” Participation and influence among unions/employees about safety in this industry has been given high priority for many years, and has influenced positively on safety results offshore and onshore. The Working Act law define the rights among employees to speak up and participate at work. There are both formal and informal arenas for cooperation between the employees’ organizations and the employer organization, with collective agreements regulating the bipartite cooperation. The work group with participants for employer and employee organizations recommends to strengthen the collaboration between the parties in the future, but they disagree about how far the collaboration between the parties has come under pressure. They have different experiences and interpretations weather the cooperation and the Norwegian model is under pressure or not. Further, they conclude that the level of HSE and the working environment in the Norwegian petroleum sector is high. At the same time, safety challenges and serious conditions have arisen the past few years.

The aim of the “Participation Barometer” (Falkum et al., 2017) is to analyze the development of how employees experience their influence on work, and their perceptions of control/management, organization and leadership at work. This survey is conducted annually. According to Falkum et al. (2017), “*Employee participation and trustful relations influence on company development. It serves both employees and the company’s interests at the same time*”. In the literature, leader performance/practice distinguishes between management and leadership; management means to lead through

systems and routines, while leadership means to lead through dialogue and hands on relations with employees (Ladegård & Vabo, 2010). The study measure if participation at work (the Norwegian model) is under pressure or not, and shows the development over years. The analysis emphasizes the relations between leaders, union representatives and employees. The hypothesis is that leadership practice affects the relations and cooperation between leader, union representatives and employees to a large extent. The sample was totally 3053 respondents—from private sector and public sector (county council/municipality and state). According to the results, 42 percent of the respondents answer that Norwegian working life develops to be more authoritarian, while 12 percent answers a more democratic development. 28 percent of the respondents answered no change (status quo). In the oil and gas industry there is 56 percent of the respondents answering that work life is being more authoritarian, meaning reduced participation at work and high degree of control (management) and loyalty. The analysis of the results from the survey are based on a model based on characteristics of ideal management and leadership performance/categories. And how management and leadership influence on; trust, restructuring, professional integrity and conflict handling in Norwegian work life in 2017.

The conclusions from this survey is that participation at work is the most widespread form of leadership in Norway, compared to standardization/management, despite of that many experience that working life has become more authoritarian than before.

5 DISCUSSION

5.1 *Reversing the trend—through trustful cooperation*

Based on our findings, the collaboration in the Norwegian petroleum industry is both weakened and strengthened during the economic crisis. We discuss the relationship between safety, collaboration, trust and leadership in the petroleum industry. How to improve the collaboration and re-build trustful relations—to collectively develop the safety level in this industry? On one side we find that the Norwegian model is under pressure and that bipartite collaboration needs to be improved, and the employee voice need to be heard. On the other hand, we find examples of a strengthened bipartite collaboration in the shipping companies we have studied—in the struggle of survival.

Traditionally, the Norwegian petroleum industry has been known for its high degree of safety

and trust—both in bipartite- and tripartite collaboration. However, the collaboration between the parties has been under greater pressure, both between companies and unions and between them and the government. Related to the negative trend and development with safety challenges and serious conditions in the petroleum industry over the past years, the safety has been a “hot topic” both from the authorities, oil and gas-companies, employer- and employee organizations, and researchers.

The Ministry of Labor and Social Affairs and authorities (PSA) has put effort in how to enhance safety conditions onshore and offshore at plants and installations—through collaboration. To strengthen collaboration between the parties, both bipartite- and tripartite cooperation has been one major goal and priority. PSA has through the campaign addressed cooperation, stressing the responsibility held by leaders in the oil and gas companies—to involve employees more actively in problem-solving about safety matters at work. If not, PSA are worried about that loss of employees’ opinions in problem-solving may lead to poorer safety conditions.

The voice of employees is important—to build a safety culture characterized by open communication, where one could speak up about concerns and ideas of improvements. Cost reductions and downsizing in the petroleum industry may have influenced the organization culture in a negative way with less openness and increased fear of sanctions as response of reporting. As one of the union leaders we interviewed said; he would not recommend anyone to take a role as a union representative or safety delegate today because of the pressure on employees having such positions in a company. He experienced that the free voice of union representatives was not appreciated and listened to as it used to be.

How the leaders respond to employees’ voice and how they deal with concerns will affect problem-solving about safety matters. If the leaders signal willingness to act on employee voice, the employees’ motivation to speak up are enhanced (Detert and Burris, 2007; Edmondson, 2003). The relation between worker and manager will thus impact on the degree of employee voice and the employees’ participation and influence on work and development of work. According to safety, trust is a key factor to get safety issues on the agenda and to inform the management about what the sharp end in the organization experience and know related to how to run the operations safely. Trust opens up for good communication, commitment and sharing of information and knowledge (McEvily et al., 2003). The workers are close to the operations and every day productions, with a hands on experience and knowledge about dangerous situations and possible incidents. Trust has positive impact on safety

culture and safety performance in high-risk organizations (Reason, 1997; Conchie et al., 2006).

It is assumed that trust in organizations is beneficial for safety, (e.g. promotes open communication) and distrust is detrimental (e.g. leads to failed safety initiatives) (Conchie & Donald, 2007). What may be the consequences of distrust in tripartite and bipartite collaboration related to safety? According to Falkum et al. (2017), Norwegian work life are being more authoritarian, and the oil industry are going in that directions according the survey about participation at work. Authoritarian leadership style means less involvement and participation at work among the employees. So, their voice and opinions will not be listened to in the same manner compared to a work place characterized by a good formal bipartite collaboration, and the possibility for employees individually to bring their concerns up to their line manager (closest leader), trusting that it is safe to speak up without fear of sanctions.

Leadership practices affect the relations between managers, union representatives and employees to a large extent. Models of leadership practice inviting to participation at work, leads to higher agreements both in matters about restructuring processes and enhanced commitment towards company strategies and values in the organization (Falkum et al., 2017). They find that trust decrease with a management style (control), while trust decrease related to participation at work and trustful relation with nearest leader. According to safety, authoritarian management style may lead to poorer safety because of the problems of communication not build on trust. The problems associated with distrust or lack of trust are failed safety initiative and an absence of shared inter-group safety perceptions (Clarke, 1999). Reason (1997) argue that trust promotes open communication about safety (reporting culture) which enhances organization learning about accidents (informed culture). The main problem associated with under-reporting (or biased reporting) are the reductions in organizational learning and development of informed strategies to improve safety.

There are however bright spots regarding collaboration in the petroleum industry. The findings from the RISKOP project show how the collaboration between management and employees/union representatives in the offshore shipping industry have strengthened during the economic crisis. When human societies face an obstacle or an external enemy, they seem to seek collaboration and alternative solutions. One fruitful example of such a mechanism is described by Evans-Pritchard when he discusses the political system and decision making among the tribe Nuer in Sudan (Evans-Pritchard, 1940). The core term in this book is that this community consist of “a system of segmen-

tary opposition” and illustrates that local groups and communities can be united when it is a conflict on a higher level in the society. The Nuer society consist of potential of alliances and fissions, or as one informant told the anthropologist: “We fight against the Rengyan, but when either of us is fighting a third party we combine with them” (Evans-Pritchard 1940: 143).

Transferred to the Norwegian offshore sector, it gives sense that the local shipping company see a shared value in finding common solutions. When they are facing a crisis in the sector as they are at the moment, they see new and unusual internal arrangements. Both managers and employees will seek dancing rather than conflict, to survive as a company. So once again the metaphors “boxing and dancing” are useful to illustrate the strategic choices the staff of certain companies have, when it comes to strategic choices in the daily work during extraordinary times (Huzzard et al., 2004).

6 CONCLUSION

In this paper we have discussed the relation between cooperation, trust, and safety in the petroleum industry. The authorities (PSA), employee unions and employer organizations all want to improve safety in the oil industry. The economic crises with downsizing and cutting costs seems however to have changed the cooperation climate between the parties. Union representatives and employees experience that it is more difficult to tell- and report about dangerous situations that may lead to accident and unwanted incidents. This may lead to a safety culture not responding to dangerous situations at installations/plants offshore and onshore. We argue that the voice of employees must be listened to and taken notice of as an important instrument of improving safety.

On the other hand, in the RISKOP research project, studying safety at offshore operations in the shipping industry, we found examples of that bipartite cooperation actually was strengthened. In the struggle of existence in a marginal market, there has been collective initiatives between management and employee unions fighting for the company’s survival and to keep as many jobs as possible. This way, the employees have gone a long way to find solutions, such as reduced pay in periods and abolish bonuses, and similar means of savings. Local alliances have become stronger—to fight the economic crisis.

REFERENCES

Antonsen, S. (2009). *Safety culture: theory, method and improvement*, Farnham, Ashgate.

- Burns, C., Mearns, K. & McGeorge, P. (2006). Explicit and implicit trust within safety culture. *Risk Analysis* 26 (5), 1139–1150.
- Clarke, S. (1999). Perceptions of organizational safety: Implications for the development of safety culture. *Journal of Organizational Behaviour*, 20, 185–198.
- Conchie, S.M., Donald, I.J. & Taylor, P.J. (2006). Trust: Missing Piece(s) in the Safety in Puzzle. *Risk Analysis*, 26 (5).
- Detert, J.R. & Burris, E.R. (2007). Leadership behaviour and employee voice: It the door really open? *The Academy of Management Journal*, 50(4), 869–884.
- Edmondson, A.C. (2003). Speaking up in the operating room: How team leaders promote learning in interdisciplinary action teams. *Journal of Management Studies*, 40, 1419–1452.
- Evans-Pritchard, E.E. (1940). *The Nuer*, Oxford: Clarendon.
- Falkum, E., Nordrik, B., Drange, I. & Wathne, C.T. (2017). Participation barometer 2017: Change in working life relations.
- Farndale, E., van Ruiten, J., Kelliher, C. & Hope-Hailey, V. (2011). The influence of perceived employee voice on organizational commitment: An exchange perspective. *Human Resource Management* 50: 113–129.
- French, J.R.P. & Raven, B. (1959). The bases of social power. In D.P. Cartwright (Ed.). *Studies in social power*, 150–167. Ann Arbor: University of Michigan.
- Guldenmund, F.W. (2000). The Nature of Safety Culture: A Review of Theory and Research. *Safety Science*, 34, 1–14.
- Haukelid, K. (2008). Theories of (Safety) Culture Revisited: An Anthropological Approach. *Safety Science*, 46:3, 413–426.
- Huzzard, T., Gregory, D. & Scott, R. (eds.) (2004). *Boxing or Dancing?* Houndmills, Hampshire, UK: Palgrave Macmillan.
- Ladegård, G. & Vabo, S.I. (2010). *Ledelse og styring*. Fagbokforlaget, Bergen.
- Levin, M. et al. (2012). *Demokrati i arbeidslivet: Den norske samarbeidsmodellen som konkurransefortrinn*, Fagbokforlaget.
- McEvily, B., Perrone, V., Zaheer, A. (2003). Trust as an Organizing Principle. *Organization Science* 14(1): 99–103.
- Medbestemmelserbarometeret 2017: Arbeidslivsrelasjoner i endring. FoU-resultat 2017:05, Arbeidsforskningssinstituttet ved Høgskolen i Oslo og Akershus.
- Ministry of Labor and Social Affairs (2017). HSE in the petroleum industry (Helse, arbeidsmiljø og sikkerhet i petroleumsvirksomheten). Report 09/17.
- Nonaka, I. & Takeuchi, H. (1995). *The Knowledge Creating Company*. Oxford University Press, New York.
- Petroleum Safety Authorities (PSA) (2016). Reversing the trend.
- Petroleum Safety Authorities (PSA) (2016). Trends in Risk Level in Norway’s Petroleum Activity (RNNP).
- Reason, J. (1997). *Managing the Risks of Organizational Accidents*. Aldershot: Ashgate.
- Rosness, R. & Forseth, U. (2014). Boxing and dancing: Tripartite collaboration as an integral part of a regulatory regime. In P.H. Lindøe, M. Baram, O. Renn, Eds. *Risk Governance of Offshore Oil and Gas Operations*, New York: Cambridge University Press.

- Skarholt, K., Lamvik, G., Antonsen, S., Røyrvik, R. & Jonassen, J.R. (2017). Crisis in the Norwegian petroleum industry: How does it affect safety conditions offshore? *Risk, Reliability and Safety: Innovating Theory and Practice* –Walls, Revie & Bedford (Eds), pp. 306, London: Taylor & Francis Group.
- Tharaldsen, J.E. (2011). In Safety We Trust—Sikkerhet, risiko og tillit i offshore petroleumsindustri. PhD. Universitetet i Stavanger.
- Trygstad, S.C., I.M. Hagen (2007). *Ledere i den norske modellen*. Oslo: Fafo. Faforapport 24.
- Trygstad, S.C., Skivenes, M., Steen, J.H. & Ødegård, A.M. (2014). Evaluering av varslerbestemmelsene. Faforapport 2014:05.
- Weick, K.E. & Sutcliffe, K.M. (2007). *Managing the Unexpected: Resilient performance in an age of uncertainty*. Jossey-Bass, San Fransisco.