

Practices, preferences, and understandings of rewarding to improve safety in high-risk industries.

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Highlights:

- Qualitative research examines safety rewarding in high-risk industries.
- Rewarding practices on 8 sites across 3 countries are being discussed.
- Employee rewarding preferences are derived from 41 semi-structured interviews.
- Symbolic recognition and care by the company is important to employees.

Keywords:

Safety

Multicultural workforce

Safety incentive programs

Qualitative research app

International reward management

Hazard Identification cards

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1. Introduction

Each year, the 28th of April is celebrated as World Day for Safety and Health at Work. To mark this occasion in 2018, a Malaysian supply base delivering equipment and spare parts to offshore vessels and oil and gas installations is holding its quarterly Mega Toolbox Talk. It is early morning when about 300 employees line up, in orderly rows, outside the administrative building, wearing T-shirts especially designed for this occasion and looking expectantly at the podium decorated with balloons and banners. The ceremony starts with a collective morning prayer. Soon, with music playing, employees participate in the morning gymnastics and chant the company's safety slogan. This is a good time for the company director to deliver his safety message to a receptive audience. Names of the winners of the company's safety reward

programme are read out and proud employees are congratulated, receiving a certificate and a material reward in front of their peers.

In high-risk industries such as the oil and gas sector, there is an assumption that rewards can motivate employees to prioritise safe behaviours, thus contributing to reducing potentially fatal accidents and major hazards (Hopkins and Maslen 2015). Recognition or rewarding programmes might be offered by companies for a range of reasons, such as employees' above-average performance or years of service, or in the pursuit of diverse goals such as creating a culture of recognition or increasing retention.¹ In a survey of US-based companies, incentivisation programmes to motivate specific behaviours were shown to have increased from 25% of companies using them in 2008 to 52% in 2017 (WorldatWork 2017).

Safety incentivisation has been practiced for a long time in many industries and is an integral part of safety interventions. New risk management approaches from the 1980s onwards sought to increase employee participation in safety processes (Dekker 2017). In the oil and gas industry, these developments were paralleled by the introduction of the Health and Safety at Work Act 1974, which lays down wide-ranging duties on employers to protect the health, safety, and welfare of employees. Several major accidents, such as the 1988 Piper Alpha oil rig disaster where poor safety culture was found to be an important determinant of the accident led to significant changes in sectoral and organisational approaches to risk and safety management (Cox and Flin 1998). Critical scholars have argued that safety programmes in high-risk industries constitute a neoliberal shift towards placing responsibility for risk management with individuals, instead of management taking responsibility for eliminating environmental hazards and ensuring safe working conditions (Rolston 2010, Coulson 2018, Gray 2009).

This article examines safety incentivisation programmes that aim to encourage and reward safe behaviour. While rewards are understood to provide a means of enhancing safety behaviour, and safety incentives might reduce workplace accidents over a short period of time, incentivisation might not be effective at reducing unsafe behaviour when rewards are not valued. Incentives can also have unintended consequences such as discouraging the reporting of incidents. A key debate in the rewards management literature has focused on the value of

¹ In this article, the terms rewarding, incentivising and recognising are used interchangeably.

financial versus non-financial rewards, and the importance of social recognition in rewarding. However, little qualitative research has been carried out in high-risk industries that examines how employees would like to be rewarded and recognised by such programmes and why, and what their understandings of safety and rewarding are (exceptions are Guo et al 2018, McDermott et al. 2018). Moreover, rewarding of safe behaviour in the oil and gas industry is still under-explored, even though this is a high-risk industry with a long history of using incentives.

Given this relative lack of research, we focus on the oil and gas sector—Our research adds empirical evidence to the existing, largely quantitative, scholarship on safety incentivisation by examining employees’ understandings, practices, and preferences, drawing on fieldwork comprising interviews and observation research across eight sites of the same company in three different countries. In addition to there being no research addressing the safety rewarding practices in the oil and gas industry, most existing research on rewarding focuses on leaders’ and senior managers’ perspectives. By contrast, the data that inform this article derives from interviews with employees on sites across all job levels, from deck crew, scaffolders, and painters to supervisors, technicians, and managers. This approach enabled us to analyse employees’ experiences and preferences in depth, including the perspectives of leaders and managers and those in lower-paid and/or lower-skilled positions, and the differences between their understandings of rewarding.²

The article now proceeds as follows: in the following section, we review the scholarship on safety incentivisation in high-risk industries as well as employee recognition and reward management in general. After touching on the methodology in section three, we move to discussing our empirical data. To understand how rewarding practices and preferences worked on the sites where this research was undertaken, we first examine the function of Hazard Identification (HI) cards in rewarding systems. We then outline our findings regarding rewarding practices and preferences and examine the need for reciprocity that emerged from participants’ narratives.

² Safety programmes on the company’s various installations were not only incentives- based but also disciplinary, as was for example visible in the company’s deviation guidelines. Examining how employees experienced deviation management goes beyond the scope of this article, however.

2. Factors influencing incentivisation preferences

In reward management theory, rewards are understood to provide a means of influencing behaviour, encouraging employees to contribute additional effort (Armstrong 2007). A review of behaviour-based safety (BBS) research found that, in every study considered, incentives enhanced safety and/or reduced accidents in the workplace, at least over a short period of time (McAfee and Winn 1989). However, later research has shown that BBS programmes are not always effective at reducing unsafe behaviour, particularly when there is a lack of management commitment, a lack of resources, or value incongruence, or when rewards are not valued (Choudhry 2014, Guo et al. 2018). These are important insights for downstream construction projects in the high-risk oil and gas sector, which have a limited timeframe and employees from a range of backgrounds join for a specific construction phase only. It is important to note that the company whose safety incentivisation practices we examine in this article did not have in place a formal behaviour-based safety programme, although the term BBS was loosely employed by some managers.³

Incentives represent a central element in the employer-employee exchange relationship (Eisenberger et al, cited in Chiang and Birtch 2005), but the motivational effectiveness of a reward relies very much on whether it is valued and meaningful to the recipient (Bonache and Paz-Aparicio 2015). Rewards can include direct financial incentives, such as pay, indirect financial incentives, such as benefits and services payments and nonfinancial incentives such as work conditions or employment security (Chiang and Birtch 2005). One of the key debates in rewards management has been centred around the question of whether financial rewards are effective (Rynes et al 2004) and it has been claimed that monetary incentives can erode employees' intrinsic motivation (Deci, cited in Guo et al. 2018). More importantly, in high-risk industries, financial rewards for low injury rates have led to underreporting of incidents. For example, it has been argued that bonus arrangements for minimising personal safety hazards had served to distract attention from process or major hazard safety in the BP Texas City refinery disaster (Hopkins and Maslen 2015). One alternative to monetary rewards that has received significant attention in the literature and in the rewarding practices of organisations is social recognition, a term used to describe a range of non-financial rewards,

³ BBS can be defined as a “bottom-up” approach which aims to identify and modify critical unsafe behaviour through a combination of observation, feedback, training, and goal setting’ (Guo et al 2018, 103).

such as praise, letters of commendation, prizes, training, travel, or additional time off (Long and Shields 2010).

Non-cash incentives are particularly regarded as an effective way to foster employees' affective commitment to their organisation, which in turn might further encourage the behaviour they are being incentivised for. Additionally, acknowledgement from peers, supervisors, family, and friends can extend the value of non-cash (but tangible) incentives, highlighting the social utility of rewards or so-called *trophy value* (Jeffrey et al. 2013). At the same time, monetary rewards too can provide a sense of recognition, both because of their instrumental value, which means they can be exchanged for other desired outcomes, and because of the symbolic value of one's contribution being recognised, and status asserted (Long and Shields 2010). Stajkovic and Luthans (2003) investigated the combined effectiveness of social recognition, money, and feedback and found that combining all three had a synergistic effect. In the rewarding practices of organisations, combining rather than substituting reward programmes, has become adopted as total rewards management. However, much of the research on financial and non-financial rewards has been conducted in advanced industrialised countries, focusing on the specific socio-economic and cultural contexts of companies operating in such countries, and has most often sought to understand the preferences of leaders and senior managers.

Organisations need not only to decide which type of rewards to select for their programmes (the *what*); consideration also needs to be given to the policies, mechanisms, and principles by which they administer and distribute reward outcomes (the *how*, *who*, and *how often*) because these factors influence the motivational effect of incentivisation. For example, it was found that incentivisation programmes aimed at individuals can increase performance by 27 per cent, while incentive programmes aimed at teams can increase performance by 45 per cent (Smith 2004). Regarding reward choice, previous research shows that it can increase performance by as much as 40 per cent, but only when the available choices are attractive to employees (Caza 2015; Chiang and Birtch 2006). Employees who design their own reward system perform better than those who have a reward system imposed on them (Fang et al 2012) and allowing employees to design their own reward system increases employees' perceptions of fairness (Caza 2015). As we will show in the empirical sections of this paper, reward choice was not offered on any of the eight research sites.

Organisations engaged in multi-national activities, such as the company examined in this study, need to be aware of the potentially significant influence that diverse social and national culture contexts might have on reward preferences and their motivational effectiveness and consider whether rewards are aligned with recipients' social and national cultural values (Schuler and Rogovsky 1998). The effectiveness of different organisational structure designs, safety management practices and leadership characteristics may depend on characteristics of the national culture where the organization resides, thus linking national cultures and organizations' safety cultures (Yorio et al. 2019).

Scholars exploring the relationships between national culture and compensation frequently draw on Hofstede's (1984) bi-polar national culture dimensions (Chiang 2005; Chiang and Birtch 2005; Chiang and Birtch 2006; Chiang 2007; Marin 2008; Gerhart 2008; Schuler and Rogovsky 1998): masculinity-femininity, individualism-collectivism, uncertainty avoidance, power distance, and long-term orientation. Again, such studies tend to focus on financial rewards and the views of specific employee groups, such as expatriates, managers, or executives. When comparing culturally different countries, similarities are often more notable than any differences in reward allocation preference (Chiang 2005; Schuler and Rogovsky 1998). Sometimes, countries differ in ways opposite to conventional predictions and country effects may be misinterpreted as national culture effects (Gerhart 2008). What is more, as much as Hofstede's model is widely used in relation to researching compensation practices, its overly simplistic dimensional concept of national culture (the original data stems from a single multinational corporation and was derived from questionnaire research) ignores cultural heterogeneity and cultural change over time (Sweeney 2002). Values between individuals of one country vary more than values between countries, refuting the claim that national culture determines values (Fischer and Schwartz 2011). In the context of oil and gas sector workplaces such as the ones we examined here, it is not untypical for an asset to house dozens of nationalities, linguistic groups, religions, and other cultural identities.

Indeed, a range of studies have asserted that demographic, contextual, and organisational factors have a greater influence on the values governing reward allocation preferences than national culture values (Chiang and Birtch 2006; Olsen 2015). For example, a strong preference for job security – described in Hofstede's model as having high uncertainty avoidance – might well stem from situational factors and economic conditions such as layoffs, downsizing, and increased use of technology to replace labour (Chiang and Birtch 2005; Chiang 2007), or from

relative position in the organisational hierarchy (Mamman et al. 1996, cited in Chiang and Birtch 2006). Other reasons might be short-term work contracts or high competitiveness for jobs, or union presence (Marin 2008). In our data, the importance of these contextual factor was clearly apparent in the preference for certificates amongst migrant workers in the Middle East, to secure future employment, or in the preference for training among Mexican staff who were anxious about the possible near-future sell off of the asset. Conversely, factors that might determine a company's compensation strategy include regulatory, organisational (industry, company culture), individual and economic concerns. Company size may also account for differences in practices and therefore shape reward preferences. An example from our research are large ceremonies or stand-offs to congratulate winners of safety reward programmes on big construction sites, a format which is not practicable on an offshore platform or vessel.

Our study did not set out to evaluate the effectiveness of rewarding for specific behaviour as such, on which there is an extensive literature, but rather sought to understand in greater depth how rewarding for safe behaviour in the high-risk oil and gas sector was understood and negotiated by those for whom it was designated. As demonstrated in this literature review, much of the previous rewarding research has been survey-based, and it has frequently centred on capturing attitudes and perceptions of senior staff. Where qualitative interviews have been conducted, they have often been an additional component to survey research (e.g., Guo et al 2018) or have focused on executive incentives to safety performance (e.g., Hopkins and Maslen 2015; McDermott et al. 2018). By contrast, our study was designed to develop a qualitative understanding of the views and experiences of safety incentivisation of a range of workers across multiple sites run by the same company. This allowed us not only to produce data on workers' experiences of safety programmes and associated rewarding and recognition preferences in a high-risk industry, but to understand why they had these preferences, how they made sense of safety initiatives more generally and how a company's policies are adopted and articulated differently across sites.

3. Methodology

This study has sought to examine employees' experiences, understandings, and interpretations of safety rewarding programmes. To this end, it uses qualitative data collection methods as part of an overall interpretivist methodology. In contrast to positivist research, interpretivist approaches seek to understand the meanings of social phenomena by drawing from social

actors' definitions, interpretations, and everyday activities (Blaikie 2009, Mason 2017). To generate qualitative insights into employees' understandings of safety rewarding programmes, field research was undertaken between April and June 2018 across eight sites in three countries (Oman, Malaysia, and Mexico), including an onshore construction project, a supply base for offshore installations, a floating production platform, a floating production storage and offloading vessel (FPSO), a remediation site, and an onshore production facility. All sites were run by one company that is a global service provider to the oil and gas sector, specialising in designing, building, operating, and maintaining oil and gas facilities. While some of the company's activities were in construction, a sector with a distinct approach to safety management, the practices of the offshore oil and gas sector also affected the company's safety outlook.

We undertook 41 semi-structured interviews across the eight sites, with interviewees including, among other roles, deck crew, carpenters, painters, technicians, safety officers, engineers, and health, safety, and environment (HSE) supervisors and managers. Only one participant, a safety supervisor, was female. Interviews lasted between 30 and 90 minutes and covered topics such as meanings and practices of safety including risk, hazard awareness, and importance of safety; incentivisation including experiences, existing practices, and preferences; and communication including training, learning, and effective communication. The questions were not rigorously followed, allowing new ideas to be brought up during the interview. The study produced a large amount of data, but this article focuses on incentivisation experiences, practices, and preferences.

Interviews were transcribed and analysed, together with field notes, drawing on a constructivist grounded theory approach (Charmaz 2006). This constructivist grounded theory approach is distinct from objectivist grounded theory, which has its roots in positivism and explicitly seeks to answer 'why' questions (Charmaz 2008). Constructivist grounded theory attends to 'what and how questions [...] with theoretical implications' (Charmaz 2008: 398). Charmaz notes that 'in actuality, few grounded theory studies build theory, but many provide an analytic handle on a specific experience' (2008: 401).

Qualitative data analysis software (NVivo) was used to manage the large data set and create nodes and themes, which were further developed and refined through multiple subsequent coding by both authors. A cross-sectional coding index was developed through open coding.

Initially, codes mostly followed the topics that comprised the interview topic guides, which were safety, hazards, rewarding (experiences, practices, preferences) and communication. Subsequently, and through further reflexive readings of the data and discussion between the authors, additional theoretically imbued themes were developed. These included recognition, reciprocity, obligation, performativity, resistance, the caring company, individualisation, survival and responsabilisation. We also, in addition to cross-sectional coding, employed other forms of analysis, such as reading transcripts from interviewees located at the same sites or in the same professions or skill levels together for similarities and differences.

There are inevitable limitations to our methodological approach. An additional company employee was present on all sites, which was unavoidable given their remoteness and the safety-critical nature of the sector. On some sites, we needed to conduct interviews through a translator, again provided by the company. Although it was clear to participants that the researcher was not employed by the company, the presence of a company representative inevitably shapes the ways and extent to which employees shared their views, understandings, and experiences. However, without such a presence, the research would not have been possible. In line with usual ethical guidelines, all interviewees were assured complete anonymity and they were made aware that they can withdraw at any time during the interview or afterwards. Each interviewee received the contact information of the interviewer for that purpose. The purpose of the interview and assurances of confidentiality, anonymity and right to withdraw were explained via a participant information sheet and consented to by interviews, which was signed by the person to be interviewed.

4. Practices, preferences, and understandings - Findings

4.1 Hazard Identification Cards - The method of collecting performance data

To understand how incentivisation practices and preferences worked on the sites where this research was undertaken, it is essential to first describe how HI cards function. The current safety rewarding systems on all the company's sites are based on HI cards, also referred to as *safety observation cards* in the sector and by participants (see Figure 4.1). They serve to engage employees in safety by encouraging them to look out for and report safe behaviours and unsafe behaviour, as well as potential hazards.

HSSE OBSERVATION CARD

PART A
TO BE COMPLETED BY OBSERVER

SUBMITTED BY: []
DATE: 01-FEB-2016

☐ UNSAFE BEHAVIOUR ☐ NEAR MISS ☒ SAFETY HAZARD
☐ NON-CONFORMANCE ☐ HSSE IDEA ☐ OTHER

DESCRIPTION:
UTILITY EAST SIDE OF C250-PM-2510A:
EXCAVATED TRENCH HAS NO
BARRICADE TO PREVENT FALL.
REF 3

PART B
TO BE COMPLETED BY OBSERVER

SUGGESTED REMEDIAL/CORRECTIVE ACTION:
WORKERS IN THE AREA WERE
ADVISED TO PROVIDE BARRICADE.
CLOSED

PART C
TO BE COMPLETED BY HSSE

CARD No.: []
CLASSIFICATION: GROUND DISRUPTANCE
CLOSE OUT DATE: 1 FEB 2016
SIGNATURE: []

HAZARDCARD

PART A TO BE COMPLETED BY OBSERVER

ONE observation on each card

SUBMITTED BY: []
DATE: 24/01/16

☐ UNSAFE BEHAVIOUR ☒ NON-CONFORMANCE ☐ UNSAFE CONDITION
☒ NEAR MISS ☐ HSSE IDEA ☐ OTHER

DESCRIPTION:
AREA: DCA SITE 5
OBSERVATION:
250 T CRANES SHIFTING MATERIAL
WHILE OTHER WORKER WORKING
ON THE GROUND

Immediate action by the observer
STOP THE ACTIVITY AND ARRANGE
MENTOR AND DISCUSS WITH THE CREW
WHAT THEIR MISTAKE AND WHAT IS
THE CORRECT PROCEDURE.

Figure 4.1 Examples HI cards

To take one example, on a Malaysian floating production storage and offloading vessel carrying approximately 60 workers, the company previously aimed to collect 200 HI cards per month. Completing HI cards is part of every employee's Key Performance Indicator (KPI) and each employee is set different goals. On average, employees were expected to fill in and submit four HI cards within the 2-week period they spent offshore each month on this asset. This includes observations of positive safety behaviours and of hazards. On a second Malaysian site, an offshore production platform run by the same operator and carrying approximately 50 workers, an initial collective goal of 200 HI cards per month was replaced by individual targets based on hours of work (approximately two to three cards during a 14-day rotation). This change was implemented because workers had been found to replicate each other's cards too frequently. Depending on each employee's KPI, interviewees had to raise between 1 and 5 HI cards per month. Similar to the Malaysian sites, the rewarding system on the Omani site, a large onshore construction site for midstream operations, was based on the submission of positive and negative observations on HI cards: the best submitted card would yield a small reward at a mass toolbox talk, for example. There was no required minimum amount of submissions for lower level employees, but HSE personnel were expected to submit two and supervisors four cards per week.

Almost all supervisors and managers interviewed for this study felt that the current HI card systems were effective in getting employees actively involved in safety. Non-managerial staff, on the other hand, reported being motivated to complete HI cards to be chosen for a reward and/or because cards are linked to KPIs. Most accepted the system, though some saw it as a

burden that increased their workload. This perception was exacerbated by the fact that some employees did not receive training or have access to examples of best practice, which made it difficult to complete the cards. On the company's Middle Eastern sites in particular, a large proportion of employees were migrant workers who are illiterate and/or do not speak English, and therefore probably lack the confidence or skills to engage with the HI card system. This challenge was often overcome by supervisors helping lower-skilled employees to complete cards or even completing them.

What is more, employees might be considered 'too' motivated, completing cards when there is nothing to report. For example, as one technician on a Malaysian site put it, 'it is a good system to [receive] reward, we are encouraged to give more HI cards so we can receive a gift' (P14). Senior managers in the organisation regarded the completion of HI cards as a first step in involving employees in safety and to create an awareness that they can actively influence safety, particularly on sites where there is a large percentage of migrant workers who were considered by the company to have little safety knowledge. As one Health and Safety Manager on a Malaysian site put it, 'what we try to do here is to promote the conversation, so that bit is the hardest part' (P13). Once employees are familiar with the process, managers argued, the focus can shift to quality.

However, a positive relationship between numbers of cards and engagement with safety is not self-evident. We frequently heard the complaint by HSSE (Health Safety Security Environment) personnel across all sites that the system produced the expected quantity of HI cards, but it was challenging to find good quality submissions. Employees said that this is both because hazards are not easy to find and due to the pressures of producing several cards every month. As a result, HSSE personnel often received multiple HI cards about the same observation as well as HI cards about positive behaviour (e.g., "spilled water was wiped off to prevent slipping") rather than observations of an unsafe act or condition that could be improved in the future (e.g. "worker was seen walking under a lifted load" or "safety gloves do not fit properly"). Moreover, employees were expected to see their supervisor for follow-up advice when raising an observation, but in practice HI cards were often submitted directly to the safety officer who responded to the supervisor without employees receiving feedback on their cards. Some interviewees were concerned that there was not enough in-depth discussion about how a hazard or unsafe behaviour that has been raised via a HI card can be prevented in the future.

This lack of feedback is a significant omission because feedback is a key component in learning and has been shown to promote safe behaviour (Mc Affee and Winn 1989; Guo et al 2018).

On certain sites, just working safely, without any additional effort, sometimes seemed enough to be chosen for a material reward. One supervisor told us that they are ‘checking if these people could get a reward, everyone one week you choose’ (P39). When questioning whether supervisors randomly chose recipients for rewards, he said, ‘Yes. Because every second day [the company] has toolbox mornings [in which employees will be rewarded]’. This mode of allocating rewards risks a weakening of the link between incentivisation and exceptional safety behaviour. The ubiquity of the HI card system and the company’s associated focus on quantity were also noticeable when we visited one of the national head offices. Despite not constituting a high-risk environment and workers facing no out-of-the-ordinary risks at all, the roughly 250 employees were expected to raise one HI card per quarter. Employees received a yearly bonus if safety requirements related to their KPIs were fulfilled and there were rewards for HI card submissions on a quarterly basis. The company has large corporate offices in a high-rise tower in the business district of the capital city - in their very modern offices, hazards might include steam from the kettle, perished food in the fridge or potential tripping hazards.

On another company site, HI card submissions were also part of personal KPIs. But the head office here had acknowledged and mitigated the apparent shortcomings of the conventional HI system described above (for example the difficulty of processing information in a timely manner; the illegibility of some cards; the fact that cards were sometimes received too late from onshore and offshore facilities to action timely responses). By the time we visited the site, a safety reporting app had been implemented, enabling electronic submission of HI cards as well as active monitoring for supervisors. It was developed by a senior engineer in a local office but then rolled out to all assets in that country. The app was generally perceived to be an improvement, eliminating some of the ‘for the sake of it’ submissions of the paper-based HI card system and focusing on operational employees. Contrary to the criticisms of some employees on other sites about a lack of feedback, this system allows sight of the status of a case and gives feedback on actions taken to the person that submitted the card. This system also represents a reversal of the usual top-down directionality of knowledge transfer in the company, where initiatives are developed at head office level and then rolled out to country and site levels.

Having outlined the function of HI cards in this particular rewarding system, we now turn to examining existing practices and workers' preferences around safety incentivisation.

4.2 The Setting

Settings for rewarding are often determined by the size of a given site and can range from impromptu on the job recognition, daily toolbox talks and daily morning talks to large monthly site-wide ceremonies and stand-downs. Most sites conducted a monthly rewarding ceremony. On the Malaysian offshore oil rig, the best HI card was chosen during the weekly morning meeting, while once a month during an asset-wide safety meeting the 'best of the best' card was also rewarded alongside the person submitting the most HI cards. On the FPSO, rewarding was conducted monthly as part of the crew's morning meeting. Due to the restraints of the assets, the meetings on the offshore oil rig and the FPSO were conducted in the respective meeting rooms. In Oman, a big stand down involving the whole site was organised monthly, while smaller rewarding meetings also held on a weekly basis and ad-hoc on the job recognition was conducted during management walkabouts. In Mexico, a big public event was held each month and safety milestones were celebrated together.

Generally, interviewees felt that the reward setting was appropriate for their site. Most participants across sites valued larger ceremonies over smaller rewarding settings and preferred being rewarded by the highest level of management. Additionally, on the Malaysian assets holding a smaller workforce – the FPSO (up to 70) and the offshore oil rig (approximately 50) - some employees felt that smaller settings are better, as that does not lead to embarrassment. However, interviewees which had received a reward before stated that even though they feel a little embarrassed in front of the whole team, this is surpassed by the feeling of happiness and proudness. Throughout all our interviews, again and again, employees emphasised that it is important for the whole crew to attend the rewarding ceremony. This supports the importance of social utility – being recognised in front of peers, supervisors, and management – which has been argued to have a significant motivational impact (Jeffrey et al 2013).

4.3 Rewards and recognition

Recognition of safe behaviour was typically expressed through a range of financial and non-financial rewards and through different modalities of incentivisation. Material rewards varied from site to site and included items such as T-shirts, watches, backpacks, multi tools, first aid

kits, shopping vouchers and certificates. On the large Omani construction site, mobile phone cards were also given as rewards for safe work during bi-weekly management walk downs. Non-material recognition included praise and acknowledgement, announcing employees' achievements via e-mail, during meetings and rewarding events, via the company's intranet and on safety boards or banners. For example, during safety recognition events in Mexico, management praised three employees from each site in front of all personnel as 'Safety Leaders of the Month'. The names and pictures of the monthly winners were also shared with everyone via e-mail and the company's intranet. Similarly, in Malaysia, the names of reward winners are published internally, and details of the HI card and the winner are presented to the management team during monthly meetings. In Oman, winners of the monthly safety reward were congratulated during large stand-downs in front of all site employees – depending on the project phase, this could involve up to 15,000 employees. Some interviewees felt that the chance of receiving a reward is very small. Sites might therefore consider increasing the number of winners to enhance motivation.

While participants on assets in Mexico appreciated tangible rewards, they found company recognition of their service – the acknowledgement of having contributed to the company and having improved its safety record – more important. Indeed, the terminology of 'recognition' instead of 'rewards' was used by the majority of participants on the Mexican sites, even when describing financial and non-financial tangible rewards.

Although not all sites and assets offered certificates as a form of reward, there was a general appreciation for printed certificates, which display the reason for the reward and the company name. For Mexican participants, certificates had mostly social utility: they can be shown to others to share their achievement with colleagues, family and friends:

'I put [the certificate] in my status, you know, like Facebook and things like this. And I showed it to my family' (P31).

'I give it to my Mom and let (her) see your kid is doing great' (P40).

Certificates, and other objects of relatively low financial value, were also a way of expressing attachment to the company; interviewees spoke about using objects that included the company logo 'with pride' (P33). One Mexican participant even told us that some of his colleagues had stuck company logo stickers over the logo of another company on calendars that were given

out. Some participants said they wanted their children and grandchildren to remember the role they played in the company:

‘Certificates are an important tool to keep track of the things [...] when I die, my sons and grandchildren they will see that [certificate]. So, for me it is really important to have something visible to recognise the people’ (P34).

In Malaysia, employees were not given certificates. However, all interviewees stated that they would appreciate certificates as it is something that can be put on their CV and that might be helpful when applying for future jobs. The main reason for certificates being preferred by employees on Middle Eastern sites, was that they were viewed to lead to future employment and qualifications, in the context of insecure and temporary work contracts for a transient and relatively unskilled work force:

‘Certificate is the proof if I go for the interview with another company or I attach it with the CV’ (P41).

‘Certificate is more important, because if you go somewhere you can show. For future’ (P38).

‘A reward is the reward, whatever the things will be it will be very good.’ He feel: ‘Certificate, ahh’ - wherever he will go he can show it (P37).

The existing literature on non-cash incentives demonstrates that they can foster affective commitment and that physical objects can act as triggers for memory of recognition by the company (Jeffrey 2003). Our data adds nuance to these arguments by highlighting that the situational and socio-economic contexts of employees need to be considered too.

For example, in Mexico, where employees tend to be working in local companies for many years, interviewees often felt anxious as the future of the assets and sites was uncertain. This becomes apparent in the participant’s keen interest in training, further professional development opportunities and a career plan:

‘He personally believes that the company gives more training for people at the office, but that here outside there is more need’ (P28).

‘Here in Mexico, there is not enough training’ (P30).

‘I think that (company name) needs to focus more on the education for people, for everybody. It could be technical training, or it could be formal education. I am talking

about if you see high potential people in the company, you can pay for a Master or PhD etc. I think that is very powerful and motivating' (P32).

'I would really like to do a Masters in Maintenance and Reliability. I think that the company would benefit and also, for myself. (I have) personally requested some training and it has been denied. So, you know what, I am not asking anymore, I am going to pay myself' (P32).

'In my opinion, they (HR) need to improve a lot – for example training, recognition of the people.... for example, the development career plan - we don't have it, then the people start losing energy, because they say "Ok, what is coming now? I am a supervisor, how can I be a coordinator, how can I continue within the company and the answer is the development plan, career progress. And we don't have that here in Mexico. I think this is one of the parts to motivate people continue working' (P30).

4.4 The rewarding of individuals and teams

One key study finding is that employees had a strong preference to be recognised in teams, rather than as individuals. Every single interviewee, outside of those in managerial roles, expressed this preference, often linking it to the team-based nature of their work:

'It will be good to reward teams, because sometimes the goals [...] do not only depend on one person but the whole team' (P31).

As one production supervisor on a Mexican site put it:

'We are always saying "the team", "we should work in teams.", but if you don't recognise that, you are just saying you are not doing it.' (P34).

A carpenter on the Omani site explained that:

'Group rewarding would be very good, because everyone is safety, and everyone is thinking the same direction – team' (P35).

Interviewees' understandings of safety itself was often framed by reference to team and family – and indeed the team as family:

'You work here as a family. If your co-worker is doing anything unsafe, you have to stop him [...] he is your brother, your friend, stop him and expect him like that you all have to follow, we all have a family, this is also our family' (P38).

Conversely, in interviews with supervisors and managers on a construction site in the Middle East, there was a clear sense that incentivisation programmes were regarded as a means to raise competition between employees and crews. One supervisor said:

‘I am trying to encourage them by implementing the rewards and gifts...I think that will raise the competition between the workers so they will ... start speaking out’ (P10); another told us:

‘[rewarding] is important for all sites, not only for this site, because human beings are competitive in nature’ (P40).

This encouragement of an element of individual competition by the company through the rewarding system was at odds with the preferences of interviewees to be recognised as part of teams.

As mentioned earlier, this study does not focus on culture dimensions. However, it should be noted, that the fact that participants from all sites and assets prefer to be rewarded as part of a team aligns with the arguments within that literature around collectivistic (opposed to individualistic) countries that value group loyalty, commitment to the rules of the group, participation in group activities and social cohesion. However, our previous questionnaire-based research compared collectivistic Indian workers on similar sites in Oman, Kuwait and the UAE with individualistic North Sea workers and both sets had a very clear preference for team rewarding. This supports the findings of Chiang (2005) and Schuler and Rogovsky (1998), that when comparing culturally different countries, similarities are often more notable than any differences in reward allocation preferences.

The finding that employees prefer to be recognised in teams is significant because previous research has shown that team rewarding can increase performance by 45 per cent (Smith 2004). However, team rewarding was not practiced on most sites. All sites rewarded individuals, while some sites celebrated the reaching of crew milestones (such as 10 million accident-free man hours). But only one site out of the eight examined in this study rewarded teams: the safest team on the Malaysian FPSO received a snack hamper for submitting the largest number of HI cards on a monthly basis. Companies’ own preferences for individual rewards, despite their crews’ preferences for the opposite, might reflect the logic of behaviour-based safety programming and the individualisation of risk. Rolston’s (2010: 332) research on safety programmes in mining shows that, in the context of a neoliberal safety culture in which

employers place blame on workers and the mistakes they make, miners ‘asserted a collective responsibility for safety reframing behaviour-based programmes in terms of ethical obligations’, for example by establishing ‘crew families’. Similarly, in our data, rewarding preferences might indicate a push back against the individualisation of safety behaviour (and its associated rewarding systems) and the responsabilisation of employees for accidents. Team rewarding might be preferred precisely because it could be seen to reduce individual responsibility.

4.5 Employee input

One initial significant finding is that existing incentivisation practices across the field sites typically developed from operators’ and clients’ specifications as well as input from HSSE personnel. Employees were not involved in shaping recognition programmes as interviews with managerial staff highlighted:

I: How do you know that... that’s what they want?

P: We never ask.

I: You don’t ask?

P: We don’t ask, we just give to them (P26).

We only encountered one site where decisions about rewarding practices were based, albeit only partly, on the suggestions of the workforce. This represents a missed opportunity. As mentioned in chapter 2, employee involvement regarding reward choice increases perception of fairness amongst employees and it can increase performance by as much as 40 per cent.

4.6 Reciprocity

Understandings of rewarding and recognition were linked to an expectation of reciprocity. Given their hard work and commitment to the company, employees expected the company to recognise their contribution and to care for them, both materially and symbolically. One respondent who worked as a Production Superintendent on a Mexican site expressed this expectation very clearly:

‘When a relative of an employee dies, there is not the attention from someone in the company sending a note saying “This person is going through this situation. We are very sorry for this.” And send flowers or something, to make you feel like “Ok, we are with you”. So little things like that make people feel like “I work here, but they don’t

even care about what I am going through.” These kinds of things are small details but make a big difference. Because you start feeling part of something or identify with something if you feel the company is taking care of you, is worried about you as a person and taking care of you that way’ (P34).

As exemplified in this quote, some interviewees were critical of the relationship that incentivisation apparently produces between employees and the company. They took issue with the fact that it apparently seeks to bind employees to the company through affective commitment without these emotional ties necessarily being reciprocated. For example, one participant shared his frustration at the company only providing a limited number of places for a Father’s Day event managers had organised. Another interviewee explicitly used the analogy of a parent-child relationships to describe his understanding of rewarding:

‘I expect my employer will take care of me as I take care of the company [...] So, it’s just like you take care of your children so if you want them to behave good. If you bring something for them even a small sweet, or sweets or chocolate whatsoever: You give it to them, they will remain much happy, the next day they will commit to you, mummy, tomorrow I will behave very well’ (P10).

This is a problematic aspect of the relationships that incentivisation might potentially produce, since to be behaving like a good child, as is suggested in the above quote, does not suggest being actively involved in safety, but rather to be doing what you are told. In relation to a perceived lack of reciprocity, several interviewees addressed wider social and wellbeing concerns. One maintenance worker pointed out that it is also important for the company:

‘[to] take care of the workers, their needs, not only the token [of a reward]. For our living quarters, you see some of the toilets, tiles already broken, you can ask our safety officer himself every time there is a concern and he keeps on highlighting the repairs and refurbishment but the [head office in the capital city] still don’t act on it’ (P19).

This issue goes beyond organisational obligations to meet the basic needs of employees. Rather, there is a link to safety performance too. As social exchange and reciprocation theories demonstrate, efforts at improving wellbeing or genuine care lead to an obligation of employees to reciprocate, for example in relation to safety. Employees’ perceptions of organisational support for their health and well-being leads to increased organisational commitment and lower

levels of unsafe behaviour (Mearns and Hope 2005). Practices that reflected a ‘genuine concern of management about their workforce’ rather than “tinkering” with policies and procedures tended to be more effective’ (Shannon 1997, cited in Mearns and Reader 2008). Conversely, poor working conditions led some interviewees to question the intentions of the company. Even on sites where working conditions were not raised as a concern, employees spoke about the need for reciprocity and their wish for a reciprocally caring company.

5. Conclusion

This study contributes to the scholarship on safety incentivisation in high-risk industries. Through semi-structured interviews with a wide range of employees and observation research on a companies’ various sites across three countries, we have examined experiences, practices, and understandings of safety incentivisation. Despite the company’s idea of a so-called ‘gold standard’ of safety incentivisation, practices across the sites varied significantly and were shaped by specific socio-economic contexts. What all sites had in common however was that incentivisation practices had been designed from operators’ and clients’ specifications and the perceived preferences of employees that HSSE personnel envisaged. As we have shown, employees’ preferences often differed from these specifications, particularly with regards to being rewarded in teams and emphasizing the importance of recognition and appreciation. Yet, existing literature suggests that employees’ input regarding reward choice increases performance significantly (Caza 2015). By involving the workforce in the incentivisation programme design, they could become far more effective.

Secondly, while the scholarship on cultural dimensions such as individualism/collectivism suggests that they determine reward allocation preferences, our study findings imply that a combination of regulatory, organisational, individual and economic factors – such as job scarcity or asset size – significantly influences on reward allocation decisions. The overwhelming preference of employees across the eight sites to be rewarded in teams was in stark contrast with the actual company practice of individualised incentivisation.

Recent critical scholarship has argued that the rise of safety incentivisation in the workplace represents a neoliberal responsibilisation of individuals for risk management (Rolston 2010, Coulson 2018). Our findings contribute new multi-sited research to this scholarship, demonstrating the linkages of responsibilisation with rewarding. The preference for team rewards then might well be read as resisting the individualisation of risk and responsibilisation

of employees. Following on from this argument, the conventional HI cards system might produce a particular kind of employee, who is very motivated to fill in cards, rather than necessarily producing safer sites. There is a fallacy that more safety cards mean more safety. Moreover, our research highlights the limits of responsabilisation in the context of poor working conditions and where there is an understanding, among some of the work force, of a lack of reciprocity and care by the company.

In practical terms, it would be important to shift the focus towards the quality and the content of HI cards and building in consistent feedback and training opportunities for employees at all levels to make safety incentivisation more effective. Additionally, sites need to be aware of existing communication challenges within the workforce and explore measures to overcome them. This could be done by providing training demonstrating on the correct filling in and use of HI cards. Likewise, companies should consider creating picture-based HI cards to facilitate access for the whole workforce.

Yes, as Mearns and Reader (2008) remind us, safety itself is not motivating. Employees' perceptions about the support an organisation provides for well-being and health have been linked to positive safety behaviour (ibid.). Instead of tokenistic rewards, companies such as the one in this study could prioritise improvements in working conditions, offer training and development opportunities and focus on the preference of employees for recognition and reciprocity we have highlighted in this paper. In scholarship as well as in industry practice, there is an over-reliance on surveys with predetermined categories, rather than companies seeking qualitative feedback about preferences from their employees. By regularly evaluating employees' reward preferences and allowing them to become involved in developing incentivisation programmes, organisations can better determine which rewards are most appropriate and effective at motivating safe behaviour, especially in cross-border scenarios and multi-cultural teams.

Further research, investigating the effectiveness of safety incentivisation in the oil and gas industry is needed. While some research exists on how national culture can influence organizational safety culture (see for example Yorio et al 2019), within oil and gas sector workplaces such as the one we examined here it is not untypical for assets to house dozens of nationalities, linguistic groups, religions, and other cultural identities. Future research should explore how organisational safety cultures can be created that are effective in such highly

diverse workforces. Longer-term observational research on sites such as the ones in this study should also be undertaken. Interview data tell us what people say they do, but not always what it is that they are actually doing. To observe, through ethnographic research, employees' safety behaviours, interactions and negotiations of safety incentivisation, safety observation cards and other techniques, will provide important additional insights into how safe behaviour can be enhanced.

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References

- Armstrong, M., and Murlis, H. (2007). *Reward Management: A handbook of remuneration strategy and practice*. Kogan Page Publishers.
- Blaikie, N. (2009). *Designing Social Research: The Logic of Anticipation*. Polity.
- Bonache, J., and Paz-Aparicio, C. (2015). Compensation and total rewards: trends in emerging markets. *Handbook of Human Resource Management in Emerging Markets*, 293.
- Charmaz, K. (2006). *Constructing grounded theory: A practical guide through qualitative analysis*. Sage.
- Charmaz, K. (2008). Constructionism and the grounded theory method. In Holstein, J. and Gumbrium, J. (eds.) *Handbook of constructionist research*. London: The Guildford Press. 397-412.
- Caza, A., McCarter, M.W., and Northcroft, G.B. (2015). Performance benefits of reward choice: A procedural justice perspective. *Human Resource Management Journal*, 25 (2), p. 84-199.
- Chen, C.C. (1995). New trends in rewards allocation preferences: A Sino-U.S. comparison. *Academy of Management Journal*. 38 (2), p. 408-428.

- Chiang, F. (2005). A critical examination of Hofstede's thesis and its application to international reward management. *International Journal of Human Resource Management*. 16 (9), p. 1545-1563.
- Chiang, F., and Birtch, T.A. (2005). A taxonomy of reward preferences: Examining country differences. *Journal of International Management*. 11, p. 357-375.
- Chiang, F., and Birtch, T.A. (2006). An Empirical Examination of Reward Preferences within and across National Settings. *Management International Review*. 46 (5), p. 573-596.
- Chiang, F. (2007). The transferability of management practices: Examining cross-national differences in reward preferences. *Human Relations*, 60 (9), p. 1293-1330.
- Chrichton, M. (2005). Attitudes to teamwork, leadership, and stress in oil industry drilling teams. *Safety Science*. 43, p. 679-696.
- Choudhry, R.M. (2014). Behavior-based safety on construction sites: a case study. *Accident Anal. Prevent*. 70, 14–23.
- Cox, S., and Flin, R. (1998). Safety culture: philosopher's stone or man of straw? *Work & stress*, 12(3), 189-201.
- Coulson, N. (2018). The role of workplace health and safety representatives and the creeping responsibilisation of occupational health and safety on South African mines. *Resources Policy*, 56, 38-48.
- Dekker, S. (2017). *The Safety Anarchist: Relying on human expertise and innovation, reducing bureaucracy and compliance*. Routledge.
- Fang, M., and Barry, G. (2012). Does pay for performance diminish intrinsic interest? *The International Journal of Human Resource Management*. 23(6), p.1176-1196.
- Fell-Carlson, D., (2004). Rewarding safe behavior – strategies for change. *Workplace Health and Safety Journal*. 52 (12). P. 521-527.
- Fischer, R., and Schwartz, S. (2011). Whence Differences in value priorities? Individual, cultural or artifactual sources. *Journal of cross-cultural psychology*. 42 (7), p. 1127-1144.

Gerhart, B., ed., (2008). Compensation and national culture. In: *Global Compensation Foundations and Perspectives*. New York: Routledge Global HRM. p. 142-155.

Gray, G.C. (2009). The responsabilization strategy of health and safety: Neo-liberalism and the reconfiguration of individual responsibility for risk. *The British Journal of Criminology*, 49(3), p. 326-342.

Guo, B.H., Goh, Y.M., & Wong, K.L.X. (2018). A system dynamics view of a behavior-based safety program in the construction industry. *Safety science*, 104, 202-215.

Hofstede, G. (1984). *Culture's Consequences: International differences in work-related values*. London: Sage Publications Ltd.

Hopkins, A., and Maslen, S. (2015). *Risky rewards: How company bonuses affect safety*. Ashgate Publishing.

Jeffrey, S.A. (2003). Cash vs. Non-Cash Incentives: Why use Non-Cash? A White Paper from the site Foundation. Society for Incentive Travel Excellence.

Jeffrey, S.A., Dickinson, A.M., & Einarsson, Y.F. (2013). The use of incentives in organizations. *International Journal of Productivity and Performance Management*, 62(6), 606-615.

Jenkins, G.D., and Lawler, E.E. (1981). Impact of employee participation in pay plan development. *Organisational behavior and human performance*. 28 (1), p. 111-128.

Kaufmann, T., Chapman, T., and Allen, J. (2013). *The Effect of Performance Recognition on Employee Engagement*. Cicero Group. London.

Long, R. J., and Shields, J. L. (2010). From pay to praise? Non-cash employee recognition in Canadian and Australian firms. *The International Journal of Human Resource Management*, 21(8), 1145-1172.

Lowe, K.B., Milliman, J., De Cieri, H., and Dowling, P.J. (2002). International compensation practices: A ten-country comparative analysis. *Human Resource Management*. 41 (1), p. 45-66.

MacGrain Herkenhoff, L. (2002). National Renumeration (Pay) Preferences: Cultural Analysis within the Hofstede Model – Using Cultural Values to untangle the Web of Global Pay. www.dissertation.com/library/1121466a.htm.

Marin, G.S., ed., (2008). The influence of institutional and cultural factors on compensation practices around the world. In: *Global Compensation Foundations and Perspectives*. New York: Routledge Global HRM.

Mason, J. (2017). Qualitative researching. Sage.

McAffee, R.B., and Winn, A.R. (1989). The use of incentives/Feedback to enhance workplace safety: a critique of the literature. *Journal of Safety Research*. 20, p. 7-19.

McDermott, V., Zhang, R.P., Hopkins, A., and Hayes, J. (2018). Constructing safety: investigating senior executive long-term incentive plans and safety objectives in the construction sector. *Construction Management and Economics*, 36(5), 276-290.

Mearns, K.J., and Hope, L. (2005). Health and well-being in the offshore environment: The management of personal health. Research Report 305. *HSE Books*, Norwich.

Mearns, K.J., and Reader, T. (2008). Organisational support and safety outcomes: An un-investigated relationship. *Safety Science*. 46 p. 388-397.

O. C. Tanner (2012). Effective Global Recognition – 10 critical factors for success. <http://www.octanner.com>

Olsen, J.E. (2015). Societal values and individual values in reward allocation preferences. *Cross Cultural Management*. 22 (2), p. 187-200.

Rolston, J.S. (2010). Risky business: Neoliberalism and workplace safety in Wyoming coal mines. *Human Organisation*, 331-342.

Rynes, S.L., Gerhart, B., and Minette, K.A. (2004). The importance of pay in employee motivation: Discrepancies between what people say and what they do. *Human Resource Management*, 43(4), 381-394.

Schuler, R.S. and Rogovsky, N., (1998). Understanding compensation practice variations across firms: The impact of national culture. *Journal of international Business Studies*. 29 (1). P. 159-177.

Smith, S. (2004). Safety Incentives: Why cash isn't king. *Occupational Hazards*. 66 (3), p. 37-40.

Stajkovic, A.D., and Luthans, F. (2003). Behavioral Management & task performance in organisations: conceptual background, Meta-Analysis, and test of alternative models. *Personal Psychology*. 56, p. 155-196.

McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith-a failure of analysis. *Human relations*, 55(1), 89-118.

Van Derlyke, P. D. (2005). Five-year study of the effectiveness of safety incentive programmes instituted at BJ's Wholesale Club. *Rochester Institute of Technology*.

WorldatWork (2017). *Trends in Employee Recognition*. Scottsdale, AZ.

Yorio, P. L., Edwards, J., & Hoeneveld, D. (2019). Safety culture across cultures. *Safety science*, 120, 402-410.