Title: Influencing safety culture in the UK Offshore Oil and Gas Industry: The importance of employee involvement.

Name: Olusuyi Olusola Beatrice

Matriculation Number: 1009504

Submission Date: 29 September, 2011

Supervisor: Abi Grist

Aim: To establish the significance of employee involvement in influencing a positive safety culture in the UK offshore oil and gas industry.

Objectives:

1. To define safety culture, safety culture indicators and the components of a positive safety culture.

2. To explore various perceptions about employee involvement in health and safety management in the UK offshore oil and gas industry.

3. To highlight the obstacles/barriers to employee involvement in safety in the UK offshore oil and gas industry.

4. To examine the impact of Trade union in influencing employee involvement offshore.

5. To draw conclusions and make recommendations on the importance of employee involvement in influencing a positive safety culture.

Signed:

Total word count (excluding acknowledgements, diagrams, references, bibliography and appendices) 21,921

A Dissertation submitted in partial fulfilment of the requirements for the Postgraduate Certificate/Diploma/MSc Degree in Management
ABERDEEN BUSINESS SCHOOL

Copyright Declaration Form

<table>
<thead>
<tr>
<th>Name</th>
<th>Olusuyi Olusola Beatrice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Email/contact tel no.:</td>
<td><a href="mailto:1009504@rgu.ac.uk">1009504@rgu.ac.uk</a> / 07553194164</td>
</tr>
<tr>
<td>Course:</td>
<td>MSc. Management</td>
</tr>
<tr>
<td>Module:</td>
<td>BSM581: Dissertation</td>
</tr>
<tr>
<td>Dissertation Title:</td>
<td>Influencing safety culture in the UK Offshore Oil and Gas Industry: The importance of employee involvement.</td>
</tr>
<tr>
<td>Supervisor/Tutor:</td>
<td>Abi Grist</td>
</tr>
</tbody>
</table>

Before submitting confirm:

a) that the work undertaken for this assignment is entirely my own and that I have not made use of any unauthorised assistance
b) that the sources of all reference material have been properly acknowledged
c) that, where necessary, I have obtained permission from the owners of third party copyrighted material to include this material in my dissertation.

I have read and agree to comply with the requirements for submitting the dissertation as an electronic document.

I agree:

- That an electronic copy of the dissertation may be held and made available on restricted access for a period of 3 or more years to students and staff of the University through The Robert Gordon University Moodle.
- That during the period that it is accessible on Moodle the work shall be licensed under the Creative Commons Attribution-Non Commercial-Share A like 2.5 Licence to the end-user - http://creativecommons.org/licenses/by-nc-sa/2.5/

Signed................................................................Date..................................................................................
Influencing safety culture in the UK Offshore Oil and Gas Industry: The importance of employee involvement

Olusuyi Olusola Beatrice
The Robert Gordon University, Aberdeen, UK
Aberdeen Business School
MSc. Management
Submission Date: 29 September, 2011

ABSTRACT
The research is aimed at establishing the significance of employee involvement in influencing a positive safety culture in the UK offshore oil and gas industry. The objectives are to explore perceptions about employee involvement in health and safety management within the industry, the barriers to employee involvement in safety as well as the influence of trade union(s) recognition on employee involvement in safety. To achieve these, 6(six) pilot interviews were conducted amongst industry leaders and trade union leaders. Furthermore, an online survey was conducted which received 138 responses from technicians, engineers, elected safety representatives, supervisors and offshore installation managers. Four semi-structured interviews were also conducted in an attempt to elaborate on findings from the survey.

The findings of the research have provided an insight into attitudes and perceptions towards employee involvement many of which are positive. This is especially so in the areas of employees taking responsibility for their safety and that of others as well as the extent of employees’ knowledge about safety procedures. Overall, the research found encouraging evidence of employee involvement but identified barriers hindering better involvement such as training, reward and recognition, communication and management participation and encouragement. It also identified training, rewards, better communication and ease of reporting as ways in which employees can be further involved in safety as well as factors that are relevant for the success of employee involvement initiative.

Though the research tried to establish the influence of employee involvement on safety culture, the exact level of employee involvement that influences a positive safety culture was not determined by this research. It was argued that other factors such as the specific organisational context, leadership and even the culture on various platforms also has a major impact. It was further determined that trade union recognition has no major influence on employee involvement in health and safety management. This was attributed to the lack of prevalence of trade union recognition among respondents.

Keywords: Employee involvement, safety culture, trade union, health and safety management, UK offshore oil and gas industry.
ACKNOWLEDGEMENT
I am most grateful to my supervisor Abi Grist for her kind words of encouragement, constructive feedbacks and support throughout this research. Most especially I want to thank you for your patience with dealing with all my traffic of emails.

My sincere appreciation to OPITO for the great opportunity granted through the Piper Alpha Memorial Scholarship and for their support. A big thank you to leaders of Step Change in Safety, RMT and UNITE, HSE for their support and all the help rendered before and even after the research commenced.

I would also like to use this opportunity to thank Dave Mackintosh, Kay Shelby-James for making all these happen. To Gordon, all my interviewees and respondents, thank you for sparing time out of your busy schedules.

To my contacts within participating organisations, thank you so much and once again I am sorry for all the inconveniences.

To my family, friends and loved ones, you are the best and I thank you so much for your help, understanding and encouragement through it all. Most especially, I am grateful you took time to proofread the work despite the volume of it.

Thank you my helper; you truly are my peace in the midst of confusion.
Table of Contents
ABSTRACT ........................................................................................................................................... i
ACKNOWLEDGEMENT .......................................................................................................................... ii
LIST OF FIGURES ................................................................................................................................... v
LIST OF TABLES ..................................................................................................................................... vi
LIST OF ABBREVIATIONS ....................................................................................................................... vii
1.0 INTRODUCTION .................................................................................................................................. 1
   1.1 SAFETY IN THE UK OFFSHORE OIL AND GAS INDUSTRY ...................................................... 1
   1.2 RESEARCH PROBLEM ............................................................................................................... 2
   1.3 RATIONALE .................................................................................................................................. 3
   1.4 AIM ............................................................................................................................................... 7
CHAPTER 2: LITERATURE REVIEW ........................................................................................................... 8
2.0 CHAPTER STRUCTURE ........................................................................................................................ 8
2.1 SAFETY CULTURE ............................................................................................................................... 9
   2.1.0 SAFETY CULTURE IN THE UK OFFSHORE OIL AND GAS INDUSTRY ................................. 12
2.2 EMPLOYEE INVOLVEMENT AND PARTICIPATION .............................................................................. 13
   2.2.1 RATIONALE FOR EMPLOYEE INVOLVEMENT (EI) ............................................................ 15
   2.2.2 EMPLOYEE INVOLVEMENT TECHNIQUES/MECHANISMS ................................................... 18
   2.2.3 EMPLOYEE INVOLVEMENT PROCESSES .......................................................................... 18
2.3 EMPLOYEE INVOLVEMENT AND SAFETY CULTURE ......................................................................... 21
2.4 BARRIERS TO EMPLOYEE INVOLVEMENT IN SAFETY ................................................................. 24
2.5 TRADE UNION RECOGNITION AND ITS INFLUENCE ON EMPLOYEE INVOLVEMENT IN THE UK
   OFFSHORE OIL AND GAS INDUSTRY ............................................................................................... 27
3.0 METHODOLOGY .................................................................................................................................. 30
3.1 RESEARCH PHILOSOPHY .................................................................................................................. 30
3.2 RESEARCH METHOD ........................................................................................................................ 32
   3.5 METHOD OF DATA COLLECTION ....................................................................................... 37
   3.5.2 QUESTIONNAIRE ............................................................................................................ 38
   3.7 ETHICS ....................................................................................................................................... 43
4.0 DATA ANALYSIS AND DISCUSSION .............................................................................................. 45
SECTION A: PRESENTATION OF FINDINGS ............................................................................................ 45
   4.1 THE INTERVIEW ....................................................................................................................... 45
   4.2 THE SURVEY ........................................................................................................................... 46
   4.2.1 DEMOGRAPHIC CHARACTERISTICS ............................................................................ 47
   4.2.2 YEARS OF INDUSTRY EXPERIENCE OF RESPONDENTS ................................................ 48
4.2.3 EMPLOYEE INVOLVEMENT IN PRACTICE ................................................................. 49
4.2.4 EMPLOYEE INVOLVEMENT (EI) PROCESSES .................................................. 50
4.2.5 SUCCESS FACTORS TO EMPLOYEE INVOLVEMENT IN SAFETY ............... 51
4.2.6 FURTHER WAYS OF INVOLVING EMPLOYEES IN HEALTH AND SAFETY MANAGEMENT 53
4.2.7 BARRIERS TO EMPLOYEE INVOLVEMENT IN SAFETY ........................................ 54
4.2.8 TRADE UNION RECOGNITION AND ITS INFLUENCE ON EMPLOYEE INVOLVEMENT IN SAFETY ................................................................. 56

SECTION B: ANALYSIS AND DISCUSSION .................................................................... 57

4.3 EMPLOYEE INVOLVEMENT IN PRACTICE ......................................................... 58
4.4.1 INTEGRATION OF THE EMPLOYEE INVOLVEMENT (EI) PROCESSES ............. 64
4.4.2 SUCCESS FACTORS FOR EMPLOYEE INVOLVEMENT IN SAFETY ................ 66
FURTHER WAYS OF INVOLVING EMPLOYEES IN HEALTH AND SAFETY............... 69

4.5 BARRIERS TO EMPLOYEE INVOLVEMENT IN SAFETY ........................................ 71
4.6 TRADE UNION RECOGNITION AND ITS INFLUENCE ON EMPLOYEE INVOLVEMENT IN SAFETY ................................................................. 73

CONCLUSION ........................................................................................................... 76
RECOMMENDATIONS .................................................................................................. 80
REFERENCES .............................................................................................................. 82
BIBLIOGRAPHY ........................................................................................................... 89

APPENDIX A: COPY OF LETTER FROM STEP CHANGE TO PARTICIPANTS
APPENDIX B: COPY OF LETTER TO ONSHORE CONTACTS
APPENDIX C: LETTER TO RESPONDENTS
APPENDIX D: QUESTIONNAIRE DRAFT
APPENDIX E: INTERVIEW TRANSCRIPTS
APPENDIX F: RESPONSES TO CLOSED-ENDED QUESTIONS
APPENDIX G: RESEARCH AIM, OBJECTIVES, QUESTIONS AND ANSWERS
LIST OF FIGURES
Figure 1.3.1: Fatal and major injuries 1997/1998 – 2010/2011p..............4
Figure 1.3.1 Combined fatal and major injury rate 1997/1998–2010/2011p.......................................................................................4
Figure 2.2: Blyton and Turnbull’s continuum of employee participation.....14
Figure 2.2.3: Employee involvement processes. Author’s Illustration of Lawler’s four EI processes..............................................................19
Figure 3.2: Mixed method data collection flow.........................................32
Figure 4.2.1: Roles/Duties of respondents..............................................47
Figure 4.2.2: Years of industry Experience..............................................48
Figure 4.2.3: Employee involvement in practice.....................................49
Figure 4.2.2: Employee involvement processes.....................................50
Figure 4.2.5.1: Factors relevant to the success of employee involvement practices......................................................................................51
Figure 4.2.5.2: Other Factors relevant to the success of employee involvement initiatives................................................................................52
Figure 4.2.6: How employees can be further involved in safety..............53
Figure 4.2.7: Barriers to employee involvement in safety......................54
Figure 4.6: Trade union recognition and influence...................................56
Figure 4.4.1: Integration of the employee involvement processes..........65
LIST OF TABLES
Table 3.3: Comparison of Qualitative and Quantitative methodologies....35
Table 3.5.2: strength and weaknesses of open and closed-ended questions.................................................................................................................. 40
Table 4.2.7: Barriers to employee involvement in safety..........................55
LIST OF ABBREVIATIONS
ABC: Activator Behaviour and Consequences
AICHE: American Institute of Chemical Engineers
AMO: Ability, Motivation and Opportunity
ASSE: American Society for Safety Engineers
BP: British Petroleum
CBI: Confederation of British Industry
CIPD: Chartered Institute of Personnel and Development
EI: Employee involvement
HRM: Human Resource Management
HSE: Health and Safety Executives
HSL: Health and Safety Laboratory
NRB: Not Required Back
OCA: Offshore Contractors Agreement
OIM: Offshore Installation Manager
OGP: Oil and Gas producers
EU: European Union
RBBS: Rail Safety and Standards Board
UK: United Kingdom
"It is only through direct worker engagement that a ‘blame-free culture’ can be developed to engender the trust and openness that is conducive to such good practices as workers reporting near misses, identifying hazards, and making recommendations"—Cameron et al. 2006.

1.0 INTRODUCTION

1.1 SAFETY IN THE UK OFFSHORE OIL AND GAS INDUSTRY

With its 107 oil platforms, 181 gas platforms and many subsea installations, the UK offshore industry is a leading employer, major source of the UK’s oil and gas demand and the main national oil and gas industry in the EU (Keynote 2009). As much as safety is paramount in any industry, it is more so in the offshore oil and gas industry being located in a physically harsh and challenging environment. This hostile marine environment in turn presents challenging conditions for health and safety issues (Keynote 2009).

There have been various disasters in the UK offshore oil and gas industry like any other high-hazard industry, which have placed emphasis on the need for safe operations. One of such disasters is the Piper Alpha 1988 disaster which resulted in the death of 167 men and marks the turning point in offshore safety (OGP 2010). Accidents results in loss of life and negatively affect an organisation’s value and the confidence of its employees, therefore, safety certainly is good business. Therefore, the issue of safety has been central to many studies carried out about offshore environments (see Harvey et al. 2001 and Featherly 2008).

Consequently, there have been significant improvements in safety performance as shown in the chart below as the oil and gas industry continues to improve in safety records and can now pride itself on having some excellent safety records compared to some other industries (Featherly 2008). For instance, in 2008/09p there were 3286 reported major injuries in the construction industry as against the 30 recorded for the offshore industry. Likewise, the rate of major injuries to employees, within the offshore and construction industry is 1006.3 to 254.1 per 100,000 employees respectively (HSE 2010, HSE 2011).

Furthermore, the industry continues to lead in workplace safety through setting of new standards that enhances safer equipment and working environments (Featherly 2008). Nevertheless, there can be no room for complacency, and the need for safety culture cannot be
overemphasized. More so as recent statistics from the Health and safety Executives (HSE) is placing further concern on the need for improvements in offshore safety. Other incidents like the April 2010 BP Gulf of Mexico disaster, which led to the death of 11 men (OGP 2011) and the recent Shell North Sea Draugen incident said to involve significant accident potential (Telegraph 2011) is bringing to the fore the need for vigilance and consistency in safety improvement efforts. Therefore, to ensure a safe working environment, it is vital for safety to remain at the heart of all activities carried out and for organisations to be persistent in their efforts to ensure safe environments.

A part of the realisation of the need for increased safety performance is the necessity of adopting a safety culture believed to be a significant predictor of safety performance by many studies. Safety culture simply put is a culture which promotes safety as an organisational goal and makes taking safety improving steps a part of daily routine. The investigation of Lord Cullen (1990) into the Piper Alpha disaster highlighted the need for the adoption of this safety culture in the industry. Arguably, the issue of safety culture has since been a prime consideration within the industry with every organisation striving to embrace this culture. However, one should be aware of the danger of placing too much emphasis on safety culture ignoring other factors like asset integrity and the environment (HSE 2011).

1.2 RESEARCH PROBLEM
Most studies have demonstrated the link between employee involvement and organisational effectiveness, efficiency and safety performance (See Higbee 2008, Ryan 2009 and Raines 2011). Regardless, only fewer studies have attempted examining the link between employee involvement and the overall safety culture of an organisation/industry. One of such study is that of Flin et al. (1996 cited in Yule 2003) where the importance of considering individual factors and not only key organisational factors were established. They argued that personal involvement in safety-related decisions has a vital impact on safety performance, and the associated safety culture, within offshore environments. Gennard and Judge (2005) also highlighted employee involvement practices as an important means by which management can create cultural change in an organisation.
Employees are likely to become very committed to their organisation through involvement practices implemented with the aim of changing employees’ attitudes. Loyalty and commitment to an organisation and the confidence of employees are likely to improve (Gennard and Judge 2005). However, that is if management can achieve a positive change in employee attitude. Commitment shown in high-involvement workplaces is highly essential in achieving better safety performance as employees are adequately involved in improvement efforts. This commitment is achieved through positive attitudes characterized by trust and natural satisfaction of the work as well as organisational commitment (Applebaum et al. 2000).

Nevertheless, building culture through attitude and behavioural change cannot be enforced by management and leaders unless involved individuals cooperate. However, Gennard and Judge (2005) warned that such cultural change can only be achieved on an incremental basis as it is impossible to change the attitude of everyone at the same time. It is not unusual to find that while some employees are totally committed to safety improvement efforts, some others pay lip service to it. However, through persistent involvement effort and peer influence, it is likely more attitudes can be changed. This research is carried out to add to the body of literature on the issue of employee involvement and the impact it has on the adoption and sustenance of a positive safety culture.

1.3 RATIONALE
In line with the statement of research problem above, increase in safety concerns based on recent accidents and statistics have further necessitated the need to undertake this research. As illustrated in the figure below, there were no fatalities in 2010/2011p (provisional figures). In 2009/2010, 50 major injuries were reported as against 30 in 08/09 and 44 in 07/08. The major injury rate per 100,000 workers rose from 106.3 to 188 in 2009/2010 in its highest recorded since 05/06 in a 76.9% increase (HSE2011).
Furthermore, research into the global oil and gas safety and competency standards is revealing that the industry has “still not cracked safety” (ASSE 2011). Identification of key obstacles to safety improvement has formed the foundation for this statement. Of the obstacles, acquiring employees ownership of their own health and safety, insufficiency of effective safety leadership within organisations, the need for improved competence based training and general standards across the industry are the cited ones (ASSE 2011). Getting employees to take responsibility for their safety can be achieved through involvement as employees exercise their knowledge if motivated, and if there is an opportunity to do so.

Figure 1.3.1: Fatal and major injuries 1997/1998 – 2010/2011p (Source: HSE 2011)

Figure 1.3.1 Combined fatal and major injury rate 1997/1998 – 2010/2011p (Source: HSE 2011)
Higbee (2008) in the article titled “foundation for safety excellence” identified five stages to world class safety which mirrors the five stages of the safety culture maturity model (which are the emerging, managing, involving, cooperating and continually improving stage Williams 2000, Flaming and Meakin 2004). The first stage to world class safety starts with the realisation of the need to improve safety performance. It can be argued that the UK offshore oil and gas industry made this realisation after the Piper Alpha disaster which to date is the worst offshore accident in the world marking a turning point in the history of offshore safety. After this realisation, the education begins and the priority for companies lies in the development of policies and procedures at the traditional stage. However, these policies by themselves constitute an incomplete form of communication and posting them is useful to those who write and discuss them and not a culture transforming tools (Carrillo 2010).

Observation-based safety program initiated by management with little or no involvement from employees drives safety improvement at the third stage called the observation stage. Better documentation, compliance and record keeping remains a priority for companies and actions are taken based on this. Negative disciplinary action can be attributed to this stage as a result of fixation on compliance with policies and procedures. It was revealed in a survey for the HSE that 9 of 10 employers claimed their employees are involved in health and safety management. Surprisingly, only 4 of the 10 achieved what the Health and Safety Executive deemed acceptable practice. Employees also observed that the consultation on health and safety has weakened since 2006 (Glendinning, Bhaumik and Palmer 2009).

At the fourth stage, the responsibility for safety improvement through accident prevention is shared by both management and employees, employees are also empowered to take these responsibilities. Furthermore, safety is believed to be a crucial organisational value by all and there is mutual trust as employees have gained confidence in management. Employees are also committed to safety goals and guide improvement efforts. However, the keyword here is mutual trust and commitment of employees which enables them take responsibility for safety improvement.
The final stage called the utopia stage is where safety culture within the industry is self sufficient. Peer-to-peer safety interventions with employees looking out for each other also become a regular part of everyday operation. Employees’ help in initiating culture change is invaluable as the chances of success without information from employees are slim to none (Bolger 2004, Ryan 2009). The industry becomes a benchmark by which other industries assess their own safety performance when this final stage is reached. There is a need to move the culture of the industry through all the stages in order to achieve this world class safety excellence. More so, jumping through one stage without adequate success can lead to future difficulty in improving safety culture.

Raines (2011) identified employee involvement and employee engagement as another step in improving safety and the few studies (Bolger 2004, French and Geller 2008, Higbee 2008, Williams 2008) that have examined the impact of employee involvement on health and safety performance did show a positive link between the level of employee involvement and safety performance. This is not surprising as arguably employees who are faced with the hazard and risks have knowledge of how to improve this. Safety can then be improved if this knowledge is exploited. Raines (2011) opined that there is the possibility of difficulty in the continuous effort to improve safety performance if changes that could affect safety are made without seeking employee input and involvement. Raines concluded by stating that regardless of the method used, involving employees in the safety process will likely result in higher safety performance and an improved corporate safety culture, which will benefit both employees and the organisation.
1.4 AIM
To establish the significance of employee involvement in influencing a positive safety culture in the UK offshore oil and gas industry.

1.5 OBJECTIVES
• To define safety culture, indicators that influences it and the components of a positive safety culture.
• To explore various perceptions about employee involvement in health and safety management in the UK offshore oil and gas industry.
• To highlight the obstacles/barriers to employee involvement in safety in the UK offshore oil and gas industry.
• To examine the impact of Trade union in influencing employee involvement offshore.
• To draw conclusions/ make recommendations on the importance of employee involvement in influencing a positive safety culture.

This chapter has attempted to establish the research topic within its context, the research problem and the rationale for undergoing a research in this area. The aim of the study and the objectives outlined to achieve it has been highlighted.

The next chapter shall explore the research topic in detail by highlighting the various schools of thoughts in this field. The major themes of the research are identified and discussed with evidence from the academic literature to support these.

Chapter 3 shall discuss the methodology adopted in the collection and analysis of findings, the rationale for choices made as well as the limitations and ethical consideration of data collection.

Chapter 4 will focus on presenting the results of the data collected and findings shall be further discussed in line with literature review, research questions objective and the aim of the research.

Finally, a brief summary of the research shall be presented and recommendations outlined in the conclusion and recommendation chapter.
CHAPTER 2: LITERATURE REVIEW
2.0 CHAPTER STRUCTURE
The chapter explores and analyses the key elements of the study and discusses these against relevant literature and theoretical backgrounds. The first section discusses safety culture by defining the term and identifying its major components and indicators known to influence this culture. The chapter also explores employee involvement and the relationship between this practice, safety performance and safety culture. Subsequent discussions on employee involvement include its techniques and processes and barriers to the involvement of employees in health and safety management. The latter section of the chapter talks about the influence of trade union recognition on employee involvement in the UK offshore oil and gas industry.

In order to set a background, it is relevant to define the key terms that shall be further explored within the chapter. The key theme of the research is employee involvement which has been defined diversely by various authors within academic literatures. One of such definitions of the term is that of Kauffman (2010) which defines employee involvement as "delegating authority to employees across all levels of a firm by involving them in strategic initiatives, encouraging them to generate ideas, create beneficial initiatives and put them into action".

Likewise, safety culture has been defined in a range of ways from simple definitions like "this is how we do things around here" (CBI 1990 cited in HSE 2005) to more in-depth definitions. Safety culture is defined as "the product of the individual and group values, attitudes, competencies and patterns of behaviour that determine the commitment to, and the style and proficiency of an organisation’s health and safety management" (HSE 2005). Identified characteristics of organisations with a positive safety culture include assurance of the effectiveness of preventative methods, mutual trust through honest communication and shared perceptions of the value of safety (HSE 2005).
2.1 SAFETY CULTURE
In 1986, the International Atomic Energy Agency introduced “Safety culture” in their Chernobyl nuclear power plant disaster report where some saw the accident as an indication of a poor safety culture at the plant. This is mainly because errors and violations of operating procedures contributed to the accident (Fleming and Meakin 2004, HSE 2005). Dan Petersen in his interview with Williamsen (2007) stated that, “safety exists as a result of culture; safety is not a sub-function of culture. Culture is one of the things that indicate what goes on in organisations for productivity, for everything – including safety”.

Culture is at the very heart of every organisation and “it is the way they do things”. It is a powerful force that shapes the attitude, belief and behaviour of members of the organisation and their approach to work (AICHE 2010). It is imperative for organisations to develop their culture, as Ryan (2009) suggests that an organisation’s culture can affect performance even to the point that some successes and failures within an organisation can be attributed partly to its corporate culture. As complex as culture is, its major features that have endured over time is that culture is a learned lay of values which may reflect in practices construed through rules and norms of behaviour (Harvey et al. 2001). This complexity reflects in the diverse definitions and arguments about the term in academic literatures and forms the rationale for the numerous research carried out in this field.

Safety culture is a component of the overall culture of an organisation which affects the attitudes and beliefs of members as regard health and safety performance (Cooper 2000). Although there is no agreement about safety culture definition, various definitions with similar elements have emerged over the years within the literatures such as Cooper (2000) and HSE (2005). These elements are attitude, behaviour and perception of members of an organisation which makes them realise that safety is a priority (Harvey et al. 2001). Harvey et al. (2001) further described safety culture as “learned behaviour and those beliefs in the necessity, practicality and effectiveness of controls, attitudes and risk perception which makes people think safely and trust in safety measures or characteristics and attitudes in organisations which result in safety issues being a priority”.
The major challenge to building this safety culture is the existence of a huge gap between management and front line employees. As observed by Regents (2002), administrative team encourages compliance and efficiency through standardized rules and regulations but in order to achieve a safety culture, organisations must find ways to bridge the gap between leadership and the front line. For an organisation to change, it requires people’s hearts and minds to change and not just preference or routine behaviours. Williams (2000) opines that the scope for improving safety performance rest on changing attitudes and behaviour of people.

In defining the components of a positive safety culture, various opinions within the literatures were identified. Yule (2003) identified five components of a positive safety culture while others have suggested eight or ten components. Nevertheless, according to Fleming (2001) and AICHE (2010) the components of a positive safety culture can be described as follow. Safety is promoted as a core value and strong leadership is present. High standards of performance are established and implemented. A sense of openness is maintained and power is given to individuals to fulfil successfully their safety responsibilities. Mutual trust is promoted and open and effective communications are ensured. In addition, a questioning/learning environment is established and admiration to expertise is provided. Moreover, apt response to safety issues and concerns and constant monitoring of performance is provided.

Yule (2003) further classifies these components as informed culture, reporting culture, just culture, flexible culture and learning culture. According to him, the informed culture is the safety system that gathers data from previous accidents and near misses and merges them with information from other hands-on measures. Needed to ensure employees freely contribute to the informed culture through active reporting is the reporting culture. The just culture characterised by mutual trust is in turn needed to encourage participation. Finally, a learning culture is necessary in order to draw conclusions from the information available and the will to implement change to enhance organisational safety performance.
As a brief reminder, studies such as that of Higbee (2008) have identified five stages to world class safety. This starts with the realisation of the need for action, followed by the traditional stage where policies and procedures rule. The observation stage is characterised by compliance and training with little level of employee involvement. The empowerment stage entails employee’s involvement and empowerment to take responsibility for their safety and that of others. Finally, the utopia stage is where the resulting safety culture is self sustaining and the industry becomes a benchmark for other industries.

Furthermore, as stated in the objective of the study, it is necessary to identify the indicators known to influence safety culture. A report written by Human Engineering for the Health and Safety Executives (2005) has identified these indicators as:

- Leadership
- Two-way communication
- Employee involvement
- Learning culture
- Attitude towards blame

As much as all these are significant in influencing a positive culture of safety, the ones of relevance to this research are leadership, two-way communication and employee involvement. Leadership and employee involvement go hand in hand, and they play a major role in the development and sustenance of better safety performance and safety culture while two-way communication is a part of employee involvement mechanisms.
2.1.0 SAFETY CULTURE IN THE UK OFFSHORE OIL AND GAS INDUSTRY

At the heart of effective management of all risks offshore such as major accidents and hazard is safety culture (HSE 2011) believed to be a major predictor of safety performance. Moreover, findings of major incident investigations have pointed to the misleading notion that rewriting and fixing of rules and procedures are enough to prevent similar incidents (Carrillo 2010). Hence, almost every company in the UK North Sea has a program to improve its safety culture (Fleming and Meakin 2004, Haukelid 2008).

Fleming and Meakin (2004) have also described safety culture as the most important theoretical development in health and safety research in recent decades, generating a great deal of attention from Cooper 2000, Cox and Cheyne, 2000 (see also Hale 2000, Richter and Koch 2004 cited in Haukelid 2008). Alexander et al. (1994 cited in Yule 2008) tried to evaluate aspects of safety culture in the offshore environment within one operating company in the UK sector of the North Sea. They also focused on differences in perception of the prevailing culture between company employees and contractors and those working onshore and offshore environments.

Cox and Cheyne (2000) carried out a research on the assessment of safety culture in the offshore environments discussing development of a safety culture assessment methodology based on a systems approach to organisational culture. Harvey et al. (2001) tried to determine the effectiveness of training to change safety culture and attitudes within a highly regulated environment which is the case in the UK Offshore oil and gas industry and they concluded that training is clearly effective in changing attitudes and safety culture.

The examination of incidents experienced in the industry has shown that the bulk could have been averted, or the consequences reduced, by appropriate behaviour of people at the scene (Williams 2000). Most significant, is the investigation into the Piper Alpha disaster which cost 167 men their lives and the company billions of dollars property damage. The investigation showed that the accident was a result of accumulation of errors and questionable decisions, flaws in design guidelines, and design practices and misguided priorities in management putting productivity ahead of safety (Cullen 1990).
Consequently, causes of most accidents have been attributed to human error and as suggested by many researches in the field of health and safety, 85-98 per cent of all workplace injuries are caused by unsafe behaviour (Williamsen 2007). It was argued that people’s unsafe act is the cause of 88% of industrial accidents while 10% are a result of mechanical or environmental conditions and only 2% of accidents are unpreventable (Carrillo 2010). However, it has also been opined that organisational failures will always underlie individual active errors (Harvey et al. 2001).

This suggests that organisational failures are strongly related to the organisation’s prevailing culture and are the basis for most individual errors. Notwithstanding, prevailing themes in relation to human factors specifically safety culture have emerged from offshore studies and other reported studies in the literature. In one of such studies, safety culture within the operating company involved was described in terms of employee’s perceptions by six factors. These factors are management commitment, personal need for safety, appreciation of risk, attitude to blame, conflict and control and supportive environment (Alexander et al. 1994 cited in Yule 2008).

2.2 EMPLOYEE INVOLVEMENT AND PARTICIPATION

Employee relationship can be managed by four main policies namely, employee participation, worker subordination via management prerogative, union incorporation via collective bargaining and employee commitment via employee involvement (Farnham 2000). A major observation in the area of people management is the interchangeable use of the term employee involvement and employee participation. However, these terms have also been interpreted differently and this view is supported by the definition offered by the chartered institute of personnel and development (CIPD) to help distinguish between the two concepts.

According to CIPD definition cited by many authors (Farnham 2000, Light 2004), employee involvement is a range of processes designed to engage the support, understanding and optimum contribution of all employees in an organisation and their commitment to its objectives. Employee participation on the other hand is defined as “a process of employee involvement
designed to provide employees with the opportunity to influence and where appropriate take part in decision making on matters which affects them”.

The difference between employee participation and employee involvement is apparent from the definitions. Regardless, a more rounded definition is that of Kauffman (2010) which defined employee involvement as delegating authority to employees across all levels of a firm by involving them in strategic initiatives, encouraging them to generate ideas, create beneficial initiatives and put them into action.

The CIPD definition of employee participation and involvement has shed some light on the difference between the two terms. Regardless, further review of the literatures has suggested other differences. Employee participation is a pluralist/collective approach with a continuum from “no involvement” to “employee control” as suggested by Blyton and Turnbull (Cited in Rose 2008 see illustration below).

Employee participation may involve processes and mechanisms such as collective bargaining, work councils, joint consultative employee share schemes, worker directors and European works councils (Rose 2008). On the other hand, employee involvement is individualistic, and unitarist aimed at gaining commitment to organisational objectives and depends on the maintenance of management control. It is a part of a “soft” HRM (Human Resource Management) approach and involves upward and downward communications flow (Rose 2008). More so, employee involvement is seen as a way of achieving increased employee influence on organisational decision making beside industrial democracy and employee participation.

Figure 2.2: Blyton and Turnbull's continuum of employee participation. Adapted from: Rose 2008
2.2.1 RATIONALE FOR EMPLOYEE INVOLVEMENT (EI)
Within the literature, there have been various arguments about the link between employee involvement and hard or soft managerial rationales of Human Resource Management (HRM). Soft HRM emphasizes the significance of treating employees as strategic and valuable resources in establishing competitive advantage. This is achieved by concentrating on factors of EI like communication, motivation and leadership (see Storey 1989 cited in Armstrong 2006). The hard aspect of HRM on the other hand, is concerned with increasing performance and output.

The first emergence of HRM as a clearly defined concept was in the mid-1980s when American Academicians produced two models. Notwithstanding, history from academic literature have shown that the use of human resource was there in different times fulfilling very vital roles (Malik 2009). The two models of HRM produced were the Matching model and the Harvard framework, labelled as such by Boxall (see Boxall 1992 cited by Malik 2009).

The Harvard framework promotes the concept of mutuality as developed by Walton (see Walton 1985 cited by Armstrong 2006) and the theory is that “policies of mutuality will elicit commitment which in turn will yield both better economic performance and greater human development” (Malik 2009). The Harvard model widens the context of HRM to include “employee influence” which according to Hyman and Mason (1995) is most visibly manifested through employee involvement and employee participation.

David guest expanded the Harvard Model further by including strategic integration and high commitment (through involvement) such as behavioural loyalty to engage established goals and attitudinal dedication displayed through a strong identification with the organisation (see Guest 1989 cited in Malik 2009). Behavioural science movement represented by writers such as Maslow, Argyris, Herzberg and Likert, outlined the importance of integration and involvement. This has highlighted the idea that management should accept the need to increase the quality of working life in securing improved motivation and better results as a fundamental value (Malik 2009).
The work of Karen Legge (1989) as reviewed by Malik (2009) identifies the frequent themes of typical definitions of HRM as the need to integrate human resource policies with strategic business planning to reinforce an appropriate (or change an inappropriate) organisational culture. In addition, human resources are essential and a source of competitive advantage that may be obtained most effectively by mutually consistent policies that encourage commitment. Consequently, employees are motivated to act agreeably in such a way that the achievement of organisational excellence is enhanced. Legge (cited in Malik 2009) further argued that HRM emphasizes the development of a strong corporate culture by not only giving direction to an organisation, but also mediates the pressure between individualism and collectivism, as individuals socialised into a strong culture are subject to typical collective controls on attitudes and behaviour.

Conversely, John Purcell (1993 cited in Malik 2009) argued that the adoption of HRM result from and also cause power to be significantly concentrated in the hands of management. He considers that the policies and procedures of HRM are often associated with words like commitment, competence, empowerment, flexibility, culture, performance, assessment, reward, teamwork, involvement, cooperation, coordination, quality and learning when implemented within an organisation as a break from the past. Therefore, “the danger of descriptions of HRM as modern best-management practice is that they stereotype the past and idealize the future” (Malik 2009). Malik (2009) further identified other criticism of the HRM model in respect of the disagreement as to the meaning and significance of the concept as well as the doubt about the operational purposes, incidence of application and impact of performance appraisal.

Gennard and Judge (2005) have identified various rationales for initiating employee involvement practices. The major rationale for introducing employee involvement practice is to change attitudes of employee. They opined that these practices designed to increase employee information about, and commitment to the organisation is initiated primarily by management. According to them, at the heart of commitment management approach is the recognition that increasing employee commitment will result in enhanced performance.
It was also hypothesised that by granting workers greater access to management information, mutual trust and commitment will increase. Employee involvement practices are also an important means by which management can achieve organisational cultural change. However, they warned that these changes are achieved incrementally over a period as it is not possible to change the attitude of every individual at the same time (Gennard and Judge 2005).

Additionally, other impacts of employee involvement as identified by Gifford, Neathey and Loukas (2005) include improved organisational performance, greater employee commitment to the changes crucial to the development and survival of an organisation. Inclusively, building employee relations founded on a culture of openness and trust, motivating employees and maximising their input to the organisation.

More so, a review of the literature has shown the importance of employee involvement in increasing performance (Ryan 2009), process of increasing employee voice, employee attitude and morale (Gennard and Judge 2005), other works have demonstrated the importance of employee involvement in achieving world class safety culture (Higbee 2008, Raines 2011).

Nevertheless, employee involvement has been criticised by some other authors and it was argued that employee involvement techniques do not contribute to a better climate than that found in more traditional workplaces. In addition, Hyman and Mason (1995) observed that there is little visible evidence to connect individual EI techniques with any measurable effects on employee behaviour. They further identified weaknesses of employee involvement as the following:

- The lack of substantial evidence to show that the influence of employees over decisions affecting them has been, or can ever be improved through contemporary forms of involvement.
- The danger of further eroding the collective means to influencing employer and management decisions through the progressing attention given to involvement practices at work.
- Additional doubts are raised about the ability of involvement to function as a tool of expressing employee interest.
2.2.2 EMPLOYEE INVOLVEMENT TECHNIQUES/MECHANISMS
Cotton (1993) identified key employee involvement techniques employed within organisations and they are - quality of work life programs, quality circle, gain sharing plans, representative participation, job enrichment and work teams and employee ownership. These techniques were categorised into three in terms of their effect. Those with strong effect include self-directed work teams and gain sharing, quality of work life. Job enrichment and employee ownership are intermediate effect while those with weak effect include quality circles and representative participation.

Hyman and Mason (1995) identified the various approaches to employee involvement as upward communication either for individual employees or groups of employees. Downward communication to individual employees or groups of employees and finally job restructuring; including job enrichment, quality of working life initiatives and more recent employee empowerment. The communication/flow of information downward from management to front line staff through such means as handbooks, newsletter, staff forums, and notice board is downward communication. The methods of downward communication prevalent in the UK offshore oil and gas industry include handbooks, toolbox talks, and town hall meetings among others. Upward communication on the other hand refers to information flow from front line staffs back to top management through formal or informal channels. These channels often include suggestion schemes, employee survey and appraisal schemes.

2.2.3 EMPLOYEE INVOLVEMENT PROCESSES
Coye and Belohlav (1995 cited in Light 2004) have opined that employee involvement process is a function of the four organisational processes mirroring Lawler’s employee involvement model with the four organisational processes at its core (Light 2004). Likewise, Marchington and Wilkinson (2005) mentioned the use of the AMO (Ability, motivation and Opportunity) model. The AMO model argues that for people to perform better, they must have the ability, skills and knowledge necessary. They must be motivated (perhaps through reward) to want to do well and they must be given the opportunity to deploy their skills. Lawler’s four processes as illustrated in the figure below are power, information, knowledge and reward.
Lawler (1986 cited in Light 2004) argued that the effectiveness of EI program within an organisation relates directly to the degree to which information, knowledge, power and rewards are vertically integrated into the organisational structure. Accordingly, the success of the EI programs requires the simultaneous integration of all four processes. It was stated that without this integration, employee involvement would be ineffective. This argument was strengthened by Lawler (1986 cited in Light 2004) stating that:

Power without knowledge, information and rewards is likely to lead to poor decisions. Information and knowledge without power leads to frustration because people cannot use their expertise. Rewards for organisational performance without power lead to frustration because people cannot influence their rewards. Information, knowledge and power without rewards for organisational performance are dangerous because nothing will ensure that people will exercise their power in ways that will contribute to organisational effectiveness (p. 42).

Figure 2.2.3: Employee involvement processes. Author’s Illustration of Lawler’s four EI processes
Information has been described as a source of power in an organisation and it refers to any form of shared communication and knowledge transfer (Lawler 1986 cited in Light 2004). He also argued that information sharing is the most essential and the mostly integrated process of involvement. If employees are not well informed, there can be no relevant input and this can lead to wrong decision making. It is also important for information to be clearly communicated in order to eradicate suspicion between management and employees hence fostering mutual trust. Thomas, Tolin and Hartman (2009) focused their research on the role of communication in developing mutual trust and its effect on employee involvement. They refer to the quality and quantity of information communicated as having a great influence on trust.

According to their hypothesis, employee’s perception of quantity and quality of information received influences employee’s trust. This in turn shapes perceptions of general openness in the organisation and has the most direct influence on the employee’s involvement in the organisation’s goals. However, they concluded their findings by stating that “the relationship between communication and trust is context related and interconnected, which makes it difficult to separate” (Thomas, Tolin and Hartman 2009). Nevertheless, a recent research (Marcella and Pirie 2011) accessing the information gap in health and safety management within the oil and gas industry has revealed that almost every one surveyed is frustrated by poor information quality, poor communications infrastructure, information overload and poor information access.

Consequently, Power refers to the ability to influence or act on what has been communicated. This is argued to engage employees in their work as they have the ability to make decisions that are important to their performance and to the quality of their working lives (Kular et al. 2008). As Lawler 1986 (cited in Light 2004) suggested, a form of participative decision-making can include any form of decision made in an organisation outside the top management team. This can be achieved through empowerment whereby employees can participate in decision making without fear of negative comeback. Nevertheless, information and power require proper knowledge to put them into use.
Therefore, *Knowledge* as cascaded from the discussion of power and information above refers to the skills, abilities and competence of the employees to participate in decision making. A clearer definition is “information put to productive use” which is often personal, intangible and difficult to determine and distribute (Armstrong 2006). It was also argued that vital to any employee involvement in organisational decision making attempt is their expertise and knowledge regarding the decision and operation of the organisation (Lawler 1988 cited in Kular et al. 2008). Hence, when employees have gone the extra mile by demonstrating exceptional expertise, there is a need for them to be rewarded.

However, it was observed that a reward system is the most under-utilized and mismanaged managerial tools employed in driving organisational performance (Armstrong 2006). Nonetheless, *Rewards* are a critical component of employee involvement effectiveness. After obtaining power, information and knowledge, employees expect more when they have in some ways contributed to organisational effectiveness or as in this case safety performance. Therefore sharing organisational reward is vital as all employees who are part of an involvement effort should be rewarded, at least in part, based on organisational performance (Mohrman & Lawler 1985 cited in Kular et al. 2008).

### 2.3 EMPLOYEE INVOLVEMENT AND SAFETY CULTURE

Employee involvement or workforce involvement as frequently used in the offshore oil and gas industry is an indicator of willingness to make process improvements and is related to safety (Woolfson 2003). Since the SI 971 regulations came into existence there has been ongoing debate about improving “workforce involvement” to improve the industry’s safety performance (RMT 2010). It is inherent that safety and employee involvement are related since employees who are involved with operations and safety are also likely to have positive perceptions about the safety program (Veltri et al. 2007).
HSE (2005) suggest that the culture of an organisation is an important factor in whether employees felt they could speak up about health and safety and how seriously it is regarded. Likewise, culture influences the level of involvement but the participation of employee in turn is required to build that culture that encourages involvement (HSE 2005). The oil and gas industry recognises the benefits of employee involvement in the offshore oil and gas industry regarding communication, motivation and operational efficiency (Solomon 2000).

As suggested by Raines (2011), studies have shown a positive link between employee engagement, employee involvement and safety performance and “Increasing employee involvement and engagement can positively affect an organisation’s safety performance”. Raines concluded by stating that regardless of the method used, involving employees in the safety process will likely result in higher safety performance and an improved corporate safety culture, which will benefit both employees and the organisation.

The interest in workforce involvement increased considerably after Lord Cullen noted its benefit in the Piper Alpha disaster investigation report. In his report, Lord Cullen (1990 Vol. 2 par. 18.48) referred to the involvement of the workforce as “an important means of developing and maintaining an attitude to safety that is beneficial to the prevention of accidents which may have harmful consequences”. He further opined that:

The representation of the workforce in regard to matters is important not merely for what it achieves on installations but also for the effect which it has on the morale of the workforce in showing that their views are taken into account and that they are making a worthwhile contribution to their own safety (Vol. 2 par. 21.74).

The knowledge of the importance of employee involvement however is not sufficient as this does not translate to actions by itself. This explains why the topic still features significantly in the industry driven “Step Change in Safety” forum and the tri-partite group “Offshore Industry Advisory Committee” (OIAC) made up of representatives from HSE, industry and trade unions (RMT 2010). Hence along with knowledge, it is essential to know the process necessary to actual involvement of employees and how this can be measured for further improvement.
French and Geller (2008) suggest that safety is not something management does for employees and it is not just management’s problem but it is every individual employee’s problem. Management commitment to safety is essential, but true safety excellence requires involvement from persons throughout organisation. A reflection of this can be seen in various safety culture models that have been developed such as the safety culture maturity model, ABC Model of behaviour and Leading safety excellence model (Fleming and Meakin 2004, Williams 2000, Read et. al. 2010, Williams 2008 and Whitefield 2009).

Though it emerged from the review carried out by Gadd and Collins (2002) that management was the key influence on an organisation’s safety culture, Matkin and Scotti (2011) and Raines (2011) have argued that optimizing safety culture requires active employee involvement and engagement in safety. However, in obtaining this maximum level of engagement from employees and to maximising involvement, Kular et al. (2008) have suggested that the highest possible level of power is pushed downwards to the employees that have to carry out the decisions.

Management and leadership may be doing everything to facilitate change by altering routines, writing new policies, but individual member of the workforce has to be carried along (Regent 2002). The significance of this is to ensure that the change not only goes beyond routines but employees are well inspired to change those deep seated attitude that reflect in the survival in work environment and the way routine is handled. As a result, most organisations are seeking ways to increase employee involvement in safety efforts (Williams 2008).

According to Ryan (2009), corporate safety culture cannot be improves without information from employees. Without employees' help in initiating a culture change, the odds of success are slim to none as frontline employees are essential to changing the safety culture (Bolger 2004). Raines (2011) has identified employee involvement as another step in improving safety and though fewer studies have examined the impact of employee involvement on Safety Health and Environment performance, these studies show a noteworthy positive connection between the level of employee

It is quite possible that accidents within an organisation could be due to the existence of more than one safety culture which inhibits cooperation (Harvey et al. 2001). In order to implement a culture of safety, there is need for awareness of the various cultures within the organisation. It has been suggested that the informal trade-offs between individuals are the true drivers of culture rather than the formal rules of organisations. Creating a cohesive safety culture require ongoing process of negotiating middle ground between diverse cultural elements (Regents 2002).

As a rule, several sub-cultures compete within a single company, and those who work on the frontline will often have a “counterculture” that conflicts with management’s goals and values (Haukelid 2008). In creating an integrated safety culture then, there is need for employees to be involved and have the opportunity to provide changes in their workplace. If changes that could affect safety are made without seeking employee input and involvement, it may be difficult to continuously improve safety performance within an organisation over time (Raines 2011).

2.4 BARRIERS TO EMPLOYEE INVOLVEMENT IN SAFETY
According to a research report by HSE (2005), the health and safety executives in 2005 commissioned ECOTEC research and consulting limited to carry out a research aimed at identifying types of incentives that would encourage greater participation and obstacles preventing worker involvement in health and safety. They carried out a series of focus groups with participants from the construction, manufacturing, hospitality and retail sector in the UK. The barriers identified are categorised under five themes explained below.

Inadequate understanding and knowledge of the meaning of health and safety and cost incurred and time to initiate and implement good practice. The other themes are the issue of complexity of health and safety legislation and regulations, attitudes toward health and safety, the culture of organisations and the value attached to involvement in health and safety and the size and type of organisation. Management involvement in health and safety also has an impact on involvement as a result of the perception
that unless management was committed to introducing good health and safety practices it is unlikely that employees would become involved in health and safety (HSE 2005).

Within their themes, a breakdown of barriers were identified, under the lack of awareness and understanding, it was observed that many employees concluded that safety is a matter of common sense and there is therefore no need to be burdened with the bulk of information available on health and safety. Laziness was also identified as a barrier which results in employees thinking that safety is the sole responsibility of management and leaders and hence there is no need to get involved unless it is absolutely required.

The time and cost of implementing good safety and involvement practice was also cited as a major barrier to the design and practicality of employee involvement in safety. This is due to the tight time schedule and insufficient resources which make it impossible to take time off for training or for implementing correct practices and procedures. Another barrier identified is the complexity of legislation and regulations, this is because legislations and safety are constantly changing or being revised and the presentation and clarity of explanation and language makes it difficult to understand and implement.

The attitude of employers and employees to health and safety is another identified barrier. Within the report, the attitude of employers were described by employees in six major perspectives namely; fear of legal action, organisational beliefs, nature of operation and the importance of risk management, size of the enterprise and its profit margins, lack of interest and commitment and frustration with the impact of statutory requirements on the job (HSE 2005).

Likewise, employees’ attitudes to health and safety were in turn perceived to be driven by cost and impact on profit margins, age, knowledge and awareness, extent of common sense (HSE 2005). Age is considered as a barrier as older workers though have more experience might not be working safely and are often wary of change because they are fixed on their methods of operating. The readiness to raise issues or get involved was linked to job security and how indispensable employees felt they were within their jobs. Macho behaviour was also raised as a barrier where it
seems that an interest in health and safety issues implies softness and weakness. This means that employees have a relaxed attitude to wearing the appropriate safety equipment. The extent of staff empowerment is also a barrier as is the case where there is little dialogue between employers and employees making it more difficult to involve employees in health and safety.

Nevertheless, various authors have identified features of successful employee involvement techniques and factors relevant to the success. Among the most cited one is the observation of Cotton (1993) which identified four major features of successful techniques namely; involvement is focussed on daily routine, employees possess a degree of control to make decision, improvements can be initiated by employees and major changes in employee’s work life is required for more successful techniques. He further recommended management commitment, employee training and management education as processes for involvement.

On the same note, Gifford, Neathey and Loukas (2005) suggested some success factors for employee involvement initiatives. Among these factors is leadership by which senior level champion of employee involvement in the organisation is visible. They also mentioned consistency through the embeddedness of consistent employee involvement in the general HR approach of the organisation.

Worthy of mentioning also is openness through honest communication essential for maintaining mutual trust between parties. The quality of individual relationship between those involved and training was also highlighted. The importance of training in this case is for employees and management to be informed on issues to be addressed and in new ways of working.
2.5 TRADE UNION RECOGNITION AND ITS INFLUENCE ON EMPLOYEE INVOLVEMENT IN THE UK OFFSHORE OIL AND GAS INDUSTRY

The employment relations in the UK Offshore oil and gas industry from its foundation has been characterised with various union avoidance strategies (Woolfson and Beck 2004). Trade union recognition and collective bargaining power has endured its periods of up and down since the establishment of the industry in the early 1970s and it has endured much hostility and victimization by employers in the industry (Woolfson and Beck 2004). With not only the oil companies refusing the interference of trade unions but also compelling dependent contractors to resist unionisation as well.

The effort to encourage union recognition especially in safety became an important topic after the Piper Alpha oil rig disaster and a renew attempt was made to encourage union recognition. In his report on the Piper Alpha disaster, Lord Cullen touched briefly the advantage of trade union recognition but the issue of workforce involvement in safety process was well addressed (Cullen 1990).

Woolfson and Beck (2004) suggested that there is a noted strong linkage between safety and industrial relations in the UK offshore oil and gas industry. Previously, safety concerns were secondary to output as meeting target in the high investment and high-risk industry was the major concern for the oil companies. They believe that collective employee representation is a potential hindrance to production. This can be explained by the view on employee involvement which has been seen by some as a direct or indirect union avoidance mechanism and a weapon to gain or regain greater control of the workforce (Hyman and Mason 1995).

Within the UK offshore Oil and Gas industry, regardless of the lack of prevalence of trade union recognition, trade unions like UNITE and RMT do play huge roles in safety improvement efforts. This can be attributed to their position as part of the tri-partite group “Offshore Industry Advisory Committee” (OIAC) made up of representatives from the HSE, industry and trade unions. Their roles include running interventions, representing employees at disciplinary panels, training and negotiation of OCA terms with employers and the government (Interviewee D, see Appendix for details).
Some studies in the United States have shown that sites with trade union safety representatives are safer than those without (Cameron et al. 2006) albeit this is in the construction industry. However, Cameron et al. have highlighted the danger of the assumption that the mere presence of trade unions will guarantee lower incident rates. In his report, Lord Cullen mentioned the fact that there might be a case for trade union appointed safety representatives through the credibility and resistance to pressure which trade union backing provides (Cullen 1990).

In addition, a number of other studies have stressed the potential influence that a positive union response could have on HRM and employee involvement initiatives within organisations (Hyman and Mason 1995). Hyman and Mason (1995) further highlighted however, the failure of unions to make serious contribution to the involvement trend despite the increasing awareness of the potential outcomes of involvement initiatives, and the need to be active in their design, implementation and operations.

More so, empirical studies have suggested the view that direct EI influences employee attitudes and behaviour more strongly than representative EI through, for example, unions, works councils or union–management co-operation also called ‘workplace partnership’ (Bryson, 2004).

The aim of the study and the objectives outlined to achieve this coupled with the search of the literature carried out above has raised the following research questions:

• What is safety culture, what are its indicators and, what constitutes a positive safety culture?

• What does employee involvement mean to people in the industry?

• What are the employee involvement techniques in practice?

• What are the factors relevant to the success of employee involvement in safety?

• What hinders the involvement of employees in safety in the UK offshore oil and gas industry?

• How can employees be further involved in H&S management?
• How are trade unions involved in health and safety management?
• Does trade union influence employee involvement in the UK offshore oil and gas industry?
3.0 METHODOLOGY

Saunders, Lewis and Thornhill (2009) have suggested that a thorough research should have the following characteristics; systematic collection and interpretation of data and a clear purpose of finding things out. They also argued that research should involve an explanation of the methods used to collect data, an argument as to why the results obtained are valid, and an explanation of any limitations associated with them. Therefore, this chapter shall be discussing the methods and approach taken in the systematic collection and interpretation of data.

Despite the adoption of mixed method approach in this research, it is essential to distinguish between the other methods, identify the key features and also the limitations and reasons for the adoption of both the quantitative and qualitative methods. Therefore, this section gives an overview of the research approach adopted, the population and sampling techniques, and methods used in the collection of data. In addition, this chapter also outlined the approach to analysis of collected data, ethical consideration and limitations of the research.

3.1 RESEARCH PHILOSOPHY

As Saunders, Lewis and Thornhill (2009) opine there are four main research philosophies namely positivism, realism, interpretivism and pragmatism. They further suggested the interpretivist perspective is considerably suitable for researchers particularly in the fields of organisational behaviour, marketing and human resource management. Consequently, the proposed philosophy adopted by this research was the interpretivist perspective which suggests that the data collection techniques to use will include small samples and qualitative in nature.

The initial plan to collect qualitative data from a small sample, led to the conduction of unstructured/in-depth pilot interviews with industry leaders, trade union leaders, Health, Safety and Executive leader and representative of the step change in safety committee. The choice of interviewees was based on their impact on health and safety offshore being members of the step change in safety committee the "UK based partnership with the
responsibility to make the UK the safest Oil and Gas Exploration and Production sector in the world” (Step Change in Safety 2011).

However, the challenge with this approach is entering the social world of research subjects and understanding their world from their own point of view (Saunders, Lewis and Thornhill 2009). Section 3.2 below discusses the other limitations associated with qualitative data. As a result of the initial findings from the pilot interviews, it was necessary to explore further the themes emerging by gathering data from a larger sample of offshore personnel to validate the findings. In addition, the pilot interviews informed the design of the primary data collection tool which is the survey administered farther into the research. Hence, a mixed method of data collection was adopted, “A methodological strength of the mixed methods approach is that the qualitative insight into the complexities of people’s beliefs and attitudes can be validated on a larger population sample thereby increasing confidence in overall conclusions” (Shearn 2004 cited in Cameron et al. 2006).

Therefore, though the proposed philosophy was interpretivist, the data collected are a mixture of both qualitative and quantitative pointing to a mixed method strategy often linked to the pragmatic perspective. The pragmatic researcher’s view of reality is chosen to enable best ways of answering the research questions (Saunders, Lewis and Thornhill 2009).
3.2 RESEARCH METHOD

The figure below illustrates the flow of the data collection process and the rationale behind the adoption of each tool.

Pilot interview: identification of themes that forms the basis for the survey design

Survey: helps to overcome the limitations of small sample size as this tool can then reach a larger population

Semi-structured interviews: For the purpose of corroborating, validating or contradicting the findings of the survey.

A mixed method strategy was adopted in this research as data were collected primarily through the use of data collection tools associated with qualitative and quantitative methods. Mixed research involves using both qualitative and quantitative data collection techniques and analysis procedures either at the same time or one after the other in the context of a single research (Saunders, Lewis and Thornhill 2009). The three variations to the mixed method strategy are sequential, parallel and transformative (Creswell 2009). These are based on the difference in the timing of data collection, the combination of data forms, and the way one form of data is prioritized one over the other such that either the quantitative and qualitative stages take place concurrently or sequentially (Driscoll et al. 2007).

The sequential mixed method adopted in this research implies the researcher seeks to elaborate on or expand on the findings of one method with another method (Creswell 2009). The pilot interviews were conducted in an attempt to identify relevant themes and expand the knowledge of in the research area. The findings from the pilot interviews necessitated the
need for the researcher to broaden the methodology in order reach a wider population to eliminate the issue of validity associated with a small sample size. The pilot interviews besides informing on the relevant themes, it further informed on the survey design. The survey was administered to elected safety representatives and the OIMs and first line supervisors in the absence of one-on-one interview. In an effort to further validate and elaborate the issues emerging from the survey responses, further semi-structured interviews were conducted and this included OIM, HSE manager, Trade union leaders. These people were chosen based on their ability to answer the questions raised. Hereby, this emphasizes the prime rationale for the adoption of the mixed method strategy.

Creswell and Plano Clark’s (2007 cited in Creswell 2009) suggestion on the use of mixed method involves the use of both approaches in synergy such that on the whole, the strength of the study is greater than either the qualitative or quantitative research. The qualitative and quantitative methods while they have their individual benefit also have limitations associated with them. Furthermore, in order to justify the adoption of the mixed method approach, it is essential to identify the strength and weaknesses of the different approach as well as a distinction between the two strategies.

In a qualitative research, the respondent has the opportunity of providing more in-depth answers to questions thus offering important insights likely to have been missed by any other method (RDSU 2003). Qualitative research is also appropriate in exploring attitudes, behaviour and knowledge through methods like interviews or focus groups in an attempt to get an thorough opinion from participants (Dawson 2009). However, one of the identified limitations of qualitative research is that, only small numbers of subjects can be studied because data collection methods are so labour intensive. It has also been criticized for being subject to researcher bias, difficult to analyse rigorously, and lacks the ability to reproduce and generalise the findings (RDSU 2003).

On the other hand, the advantages of a quantitative research include the relatively quick collection of data, when statistical instruments are used, data analysis is relatively fast, it can be used to study a large number of
people, and it may have higher credibility with people in power. Notwithstanding, some of the weaknesses of the quantitative method can include, it is possible to miss out on phenomena occurring because of the focus on theory or hypothesis testing (Johnson and Onwuegbuzie 2004). Furthermore, the use of quantitative data to understand human resource management is unavoidably restricted by the availability of ‘hard’ data on which to support decisions (Angel de Brio, Fernandez and Junquera 2007).

Sogunro (2002 cited in Light 2004) attempted to distinguish between both qualitative and quantitative approach to research using diverse factors. The differences are detailed in the table below:
<table>
<thead>
<tr>
<th>FACTORS</th>
<th>QUALITATIVE</th>
<th>QUANTITATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collected</td>
<td>Soft data</td>
<td>Hard data</td>
</tr>
<tr>
<td>Collection techniques</td>
<td>Active interaction</td>
<td>Passive interactions</td>
</tr>
<tr>
<td>Sample population size</td>
<td>Small population</td>
<td>Large population</td>
</tr>
<tr>
<td>Research variables</td>
<td>Large number</td>
<td>Small number</td>
</tr>
<tr>
<td>Data collection</td>
<td>Ongoing observation and</td>
<td>Pre and post experiment</td>
</tr>
<tr>
<td>Relationship with subjects</td>
<td>Intense and long-term</td>
<td>Distant and short-term</td>
</tr>
<tr>
<td>Research context</td>
<td>Uncontrolled</td>
<td>Controlled</td>
</tr>
<tr>
<td>Data analysis</td>
<td>Content interpretive</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Analysis through themes</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pattern and narrative</td>
<td>Descriptive and inferential</td>
</tr>
<tr>
<td></td>
<td>synthesis</td>
<td>statistics using specific</td>
</tr>
<tr>
<td></td>
<td>Using coding and</td>
<td>procedures</td>
</tr>
<tr>
<td></td>
<td>descriptive statistics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>including ranking,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>frequency and percentages</td>
<td></td>
</tr>
<tr>
<td>Research findings</td>
<td>Inductive</td>
<td>Deductive</td>
</tr>
<tr>
<td>Interpretation of information</td>
<td>Subjective</td>
<td>Objective</td>
</tr>
<tr>
<td>Research tradition</td>
<td>Ethnography, Hermeneutics,</td>
<td>Descriptive, correlational,</td>
</tr>
<tr>
<td></td>
<td>Phenomenography, case studies</td>
<td>experimental, casual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>comparative</td>
</tr>
</tbody>
</table>

Table 3.3: Comparison of Qualitative and Quantitative methodologies
While the chosen methods of data collection may appear to be the most appropriate for the research, it is not devoid of limitations. Silverman (2010) warned that in choosing two different set of data collection tools, there is a possibility that one of the data sets will be under-analysed. Likewise, Bazeley (2004) has also warned on the need to consider the issues surrounding mixed methodology such as the definitional, paradigmatic and methodological. Johnson and Onwuegbuzie (2004) have identified other weaknesses of the mixed method strategy and the strength include the fact that it is time consuming and more expensive. In addition, some of the details of a mixed research have not been fully worked out. Nevertheless, the mixed method strategy can provide stronger evidence for a conclusion through convergence and corroboration of findings and can provide qualitative and quantitative strengths (Johnson and Onwuegbuzie 2004).

3.4 POPULATION AND SAMPLING

The population of the study is made up of a number of platforms located in the North Sea which is the UK sector of the United Kingdom Continental Shelf (UKCS). Within the research population, participants of research include elected safety representatives elected under the “Offshore Installations (Safety Representatives and Safety Committees) Regulations 1989” (SI 971). Offshore installation managers and first line supervisors were also included in order to get a well rounded perception of work site leaders and the represented workforce.

Purposive sampling requires the researcher identify and target individuals who are believed to be “typical” of the population being studied (Davies 2007). Purposive/strategic sampling was used in this research as participants were chosen strategically based on their roles within the industry studied and their relevance to the research problem. Cited in Silverman (2010), Mason (1996) defined theoretical sampling as selecting a group to study based on their relevance to the research questions, theoretical position and most importantly the description or account being developed” this was inappropriate in this case as there was no theoretical position involved in choosing the sample.
Additional rationale for choosing the purposive sampling technique is due to the time and resources available to the researcher. Elected safety representatives, OIMs (offshore installation managers) and supervisors play a key role in the success of workforce involvement is the making them the appropriate sample to study. Though employee involvement is management's initiatives and the most suitable sample will be leaders, it is essential to get the perception of the workforce as there could be a gaping disconnect between what leaders/management think is true and what is going on at the front line (Williamsen 2007).

As informed by a work site leader on a participating installation, there are on an average 1 OIM, 4 supervisors and 7 elected safety representatives on a platform at any one time as each safety representative has 40 workers in their constituent. Therefore as estimated by the researcher based on the information available, the population size for the 55 platforms included in this survey is on an average around 605 potential respondents. The proposed sample size for the survey is 100 respondents including elected safety representatives, OIMs and Supervisors. This is considered appropriate for the scope of this research because it has been statistically proven that a relatively small sample size can provide accurate information (Ryan2009).

3.5 METHOD OF DATA COLLECTION

3.5.1 PILOT
After the design of the primary source of data collection—the questionnaire, it was piloted by the first three responses to the survey from a participating organisation. This was necessary though the pilot interviews informed on the approach to take in the design of the questionnaire. Piloting the questionnaire helped to review the questions to check for misinterpretation and the approximate time of completion of the survey. After the pilot, it became necessary to reduce the length of the closed-ended questions within the survey in order to avoid "respondent fatigue" (Saunders, Lewis and Thornhill 2009) and to increase response rate.
3.5.2 QUESTIONNAIRE

For the administration of the questionnaire, pen and paper questionnaire despite its advantages was an impossible choice thus an online survey was selected based on the access available to the researcher and the extreme difficulty associated with travelling offshore for research purposes (Hart 2002). The cons of administering an online survey include its ability to ensure anonymity, reach larger population and provide honest feedback (Esposito 2006). Bryman and Bell (2007) further opine that the advantages of online surveys include low cost, faster response, attractive formats, fewer unanswered questions and better response to open questions. Nevertheless, the pros also include the likelihood of misleading wording, misunderstanding of instruction and multiple responses from a single source (Esposito 2006). It is also characterized by low-response rate, restricted to online population; require motivation, as well as issues of confidentiality and anonymity (Bryman and Bell 2007). To mitigate these, the survey was set so it accepts a single response per source and the wordings were carefully written to avoid misunderstanding.

The questionnaire consists of 27 closed-ended questions based on a Likert categorical scales ranging from strongly agree to strongly disagree and a middle scale for those who neither agree nor disagree. The RSSB’s (Rail safety and standards board) safety culture survey was tremendously helpful as a foundation and insight in generating these closed-ended questions. The questions have been adapted and incorporated in this research though it is mostly on safety culture; it was useful in formatting questions about employee perception of their involvement in safety. The questionnaire for this research also included 3 open-ended questions giving respondents opportunity to further comment on the issues.

The use of the Likert scale has issues and various concerns about its associated limitations. Nevertheless, the use of the method appears to have been accepted in behavioural and attitudinal research (Light 2004). Moreover, this scale is used in many researches making it a hugely popular style of questionnaire with the general population. This popularity helps to reduce possible confusion about responses and helps to increase the internal validity of the questionnaire (Light 2004). The scale is more
appropriate in this case as against the Guttman scale which uses a ratio measurement scale and the Thurstone scale which uses the interval measurement scale. The Likert scale has been adopted by the researcher even in light of the argument that Likert scale does not measure attitude per se but helps to rate group of individuals in descending or ascending order in relation to their attitudes toward the issue in question (Kumar 2010).

The use of closed-ended questions and open-ended questions was relevant in this case. It is assumed that the likelihood of response to this format considering their busy schedule is more compared to using all open-ended questions. In addition, the weakness associated with either form of question is the strength of the other as illustrated in the table below. This helps to ensure that all responses are covered because "as a rule", closed-ended questions are highly useful for eliciting factual information and open-ended questions are for seeking opinions, attitudes and perceptions (Kumar 2010).
<table>
<thead>
<tr>
<th>OPEN-ENDED QUESTIONS</th>
<th>CLOSED-ENDED QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tend to be slower to administer</td>
<td>Quicker to administer</td>
</tr>
<tr>
<td>Can be harder to record responses</td>
<td>It is often easier and quicker to record responses</td>
</tr>
<tr>
<td>If multiple answers are given, it may be complicated to code</td>
<td>It is easier to code</td>
</tr>
<tr>
<td>Responses are not restrained</td>
<td>There are predefined ways for respondents to answer</td>
</tr>
<tr>
<td>New issues can be raised by respondents</td>
<td>It is impossible for respondents to raise any new issue.</td>
</tr>
<tr>
<td>It enables respondents feel they have been able to speak their mind</td>
<td>Frustration can arise as respondents can only answer in a way and this may not equal their actual opinion</td>
</tr>
<tr>
<td>There might be problem with analysis if respondents have left the question blank due to their unwillingness to write long answers</td>
<td>Respondents are more likely answer all questions as it is quick and easy to tick boxes</td>
</tr>
<tr>
<td>It can be used to find out all possible responses before the design of a closed-ended questionnaire</td>
<td>A section can be include at the end for people to write in longer responses if they wish</td>
</tr>
</tbody>
</table>

Table 3.5.2: strength and weaknesses of open and closed-ended questions.  
Adapted from Dawson (2009)

The targeted sample for the survey is elected safety representatives and interviews proposed for gathering data from the site leaders. Nevertheless, due to the lack of access and the busy schedule of offshore workers at the time of the data collection, it was necessary to administer the same questionnaire to the site leaders. The rationale for this is based on the suggestion by Dan Petersen in his interview with Williamsen (2007) that it is essential to ask the same questions to each member of the organisation across all levels as this helps to point out where there is a disconnect. Respondents were asked to specify their role, name of platform, year of industry experience and confirm whether they were elected safety representatives. These are relevant control measures, as it was impossible for the researcher to monitor the administration of the survey personally.
The administration of the questionnaire was achieved by persistent contact with onshore corporate offices of the prospective respondents. Communication to the organisations was mainly through emails between the researcher and the gatekeepers or contact persons. The link to the survey was sent to the onshore contact and in turn their offshore personnel on the confirmation of willingness to participate in the research. To mitigate against these limitations, it was necessary to turn to trade unions and industry bodies. The Offshore Petroleum Industry Training Organisation (OPITO) who are supporters of this research, step change in safety and UNITE were of enormous help in getting the survey to a wider population.

3.5.3 SEMI-STRUCTURED INTERVIEW

The preliminary unstructured interviews conducted necessitated the use of semi-structured interviews in order to further elaborate on themes emerging from the survey and the literature. Two semi-structured telephone interview and two semi-structured one –on- one interviews were conducted. The interviewees include two managers and two union leaders. Due to the inability to get reasonable access to conduct the interviews due to logistics and location of platforms, the initial proposal of 10 interviews with offshore installation managers and first line supervisor became impossible. The concern of organisations about the tight schedule of participants made it further impossible to get approval for more telephone interviews.

Though there are other forms of collecting qualitative data such as focus group, in-depth interviews, the use of the semi-structured interview was adopted. This is because it allows the questions to have enough structure to make it easy to go back to the original question. Especially when the answers are not on track while still allowing the researcher opportunity to ask spontaneous questions and follow up on things said by the interviewee (Punch 2005).

The diverse themes to be explored in line with the research questions were categorised under four main sections in the interview schedule. The first section is a general question about the year of industry experience as well as safety related activities involved in by the interviewee. The next section explores opinion on the level of employee’s involvement in safety, the
rationale for employee involvement, barriers and likely ways to overcome these barriers. The next section is further explores the employee involvement processes (power, knowledge, information and reward) and their integration in the industry. The theme of the last section is the trade union involvement in safety and the influence on employee involvement (See Appendix E).

3.6 METHOD OF DATA ANALYSIS

Method of analysis follows the suit of how the data collected would be analysed. There are two forms of data collected through questionnaires and interviews with the questionnaires containing both closed-ended and open-ended questions. A review of the literature (Silverman 2010) suggest, different methods of data analysis such as grounded theory, narrative, as well as conversation or discourse analysis for the qualitative data. The recorded data collected through the interviews were transcribed and coded thematically. Silverman (2010) defined coding as putting data into theoretically defined categories in order to analyse them. However, he further argued that thematic coding is based upon a given set of categories that provides a strong conceptual grid that limits. While this grid is useful in organizing data analysis, it takes away attention from unclassified responses.

Consequently, in order to make sense of what collected data mean to the research, coding of collected data will be followed by proper interpretation. As Saunders, Lewis and Thornhill (2009) have suggested, these codes provide with emergent structure that is relevant to research project for further organization and analysis of data. The themes arising from the coded data will be linked to the research objective in a thematic analysis providing a framework with which findings will be reported and discussed.

The questionnaire will be analysed using personal-computer based analysis software like Excel, SPSS and SAS. The descriptive statistical analysis tool of the SPSS 17 package will be used in the analysis of the survey results. The use of SPSS is common in social science researches because of its flexibility (Guerrero 2010). The use of online survey package (Kwiksurvey) suggests the use of excel spreadsheet as downloaded results in their coded form is in the excel format. The use of Excel is sufficient and appropriate
because it provides resident add-in utilities that are particularly useful in basic statistical analysis and dozens of statistical functions through its function utility (Guerrero 2010). Nevertheless, the results will then be exported to SPSS 17 for further analysis.

However, the negative side of using readily available analysis software is that it becomes much easier to generate "elegantly presented rubbish" as opined by Robson (2002 cited in Saunders, Lewis and Thornhill 2009). To avoid this observation, the results after presentation, shall be discussed for accurate interpretation of findings.

3.7 ETHICS

Research ethics refer to treating both participants and the information they provide with honesty and respect (Dawson 2009). In carrying out this research, there will be a need to intrude on people’s lives, and while some people might be willing to participate, others will not. Therefore, there is the need to minimise disruption to people’s lives and awkward situations may arise, but proper preparation and self-awareness helped reduce this. This is an open research that is out in the public such that everyone knows who the researcher is and what the researcher is doing (Dawson 2009).

While there was no confidentiality agreement with participants, researcher had to clarify the use of data before the covering letter with the link to the survey could be sent out to offshore personnel by the onshore contact. The covering letter included the statements on the use of data assuring confidentiality and anonymity of the respondents. This research conforms to the principle of informed consent advised by Bryman and Bell (2007). The covering letter clearly highlights what the research is about, the purpose and who is supporting it for participants to understand. Additionally, it explained the nature of respondent’s involvement in the research, how long their participation is going to take and the usage of the data collected. Appendix A-C contains a copy of the covering letters. In conducting interviews, the researcher sought the consent of the interviewees before the recording of the interview. For both the interviews and the questionnaires, participants’ names shall not be mentioned or discussed to ensure anonymity.
3.8 LIMITATION

The major limitation of this work is the poor access to primary data. Logistics and the location of offshore platforms made it highly impossible for the researcher to oversee the administration of the questionnaire. Likewise, it was difficult getting approval for one-on-one interview with OIMs and supervisors as proposed. This has limited the number of interviews carried out but to overcome this limitation, OIMs and supervisors were urged to complete the survey as well in order to also gather their perceptions. As work site leaders, they have a vital role to play in the issue of offshore safety and employee involvement being a management scheme depends on leader commitment. Therefore, findings of the research depend mainly on the data collected through the survey. A future research will benefit from greater access to offshore personnel, and a telephone interview though not devoid of limitations will be an excellent compromise, if granted access as was missing in this case.

In addition, due to the adoption of a purposive sampling instead of any other sampling technique, there are certain biases which may or may not bias the result of the survey. However, the purposive sampling is the most appropriate in this case though a future research might benefit from adopting a different sampling technique based on time and resources available to them; they can choose a random sampling technique to include other members of the workforce. The weaknesses associated with the various approach, method and tools employed in data collection and analysis further limits this research.
4.0 DATA ANALYSIS AND DISCUSSION

In this section, demographic characteristics of the respondents studied shall be discussed, the results of the primary research presented as well as the analysis of responses. In addition, the objectives and research questions of the study shall be linked and discussed in line with the findings from the interviews, survey and the literature.

While the number of manned platforms is around 200 as informed by an OIM, the researcher was unable to reach every platform due to time and resources. However, the responses to the survey have shown that 55 platforms participated in the survey. The closed-ended questions of the questionnaire have been analysed using the descriptive statistics function of the SPSS 17 package. The result from the survey was downloaded from the online survey package *kwiksveys* in excel format in its coded form and this was then exported to SPSS where it was analysed.

The qualitative responses from the Open-ended questions and the interview responses were coded and analysed thematically. Verbatim responses have been included in the presentation and analysis of findings in order to enhance the validity of the results.

SECTION A: PRESENTATION OF FINDINGS

4.1 THE INTERVIEW

The results of the interviews are presented in Appendix E with verbatim responses to the questions transcribed and presented in a table. The 4 interviewees are hereafter referred to as interviewee A, B, C and D to ensure anonymity. As earlier mentioned, the interviews were conducted to explore further themes emerging from the survey and the questions were grouped into four sections A-D. Section A is around demographic information regarding year of industry experience and safety activities involved in by interviewees. Section B explores employee involvement in health and safety management- the extent, advantages, disadvantages and barriers. Section C further explores employee involvement in the context of its techniques and processes. The final section D explores the questions around trade union. The fit of the survey questions and subsequent interview questions with the overall aim, objectives and research questions of the study is detailed and presented in Appendix G. A notable observation as regards the interview is that some questions were omitted and some
were introduced for different interviewees as applicable. This was necessary as newer themes emerged as the survey progresses necessitating the need for further interview.

4.2 THE SURVEY
138 useable responses to the survey were received, though there are 15 incomplete responses, most of them have been included in this analysis as they completed at least 50% of the questions. Appendix F shows the responses to the closed ended questions with their frequency and valid percentages. As informed by a worksite leader on a participating installation, there are on an average 1 OIM, 4 supervisors and 7 elected safety representatives on a platform at any one time as each safety representative has 40 workers in their constituent. Therefore as estimated by the researcher based on the information available, the population size for the platform included in this survey is on an average around 605 potential respondents putting the response rate for the survey around 23%.

While the percentage of the 138 responses received against the whole offshore population cannot be statistically determined by the researcher, the number of responses presented and analysed within this work is considered adequate for the scope of this research. Nevertheless, a future research might benefit from more responses depending on the aim of the research and the approach chosen.

The results shall be presented and subsequently discussed in the following sections in an attempt to answer the research questions raised by the literature and the objectives highlighted to achieve the overall aim of the research (see Appendix G). The data collection tools were therefore designed with the aim of answering these questions and the findings will be presented below around five main issues. These are: employee involvement in practice, factors relevant to the success of employee involvement initiatives, further ways of involving employees in health and safety management as well as trade union recognition and its influence on employee involvement in safety.
4.2.1 DEMOGRAPHIC CHARACTERISTICS
The target respondents were elected safety representatives, OIMs and first line supervisors working in the UK offshore oil and gas industry. Despite the clear specification on the study target sample in the covering letter to respondents (see Appendix B and C), the responses to the survey have shown a mixture of various roles from supervisors and managers to engineers, technician and operators as illustrated below.

While elected safety representatives fall in the category of engineers and technicians, not all the respondents in these categories have indicated they are elected safety representatives. In as much as this can be seen as a limitation to the sampling technique, the researcher has chosen to take this as an advantage. This is mainly because it provides a wider range of responses and the whole workforce has a role to play. However, of these respondents 34% have indicated they are elected safety representatives.

Figure 4.2.1: Roles/Duties of respondents (Source: Author’s Illustration)
4.2.2 YEARS OF INDUSTRY EXPERIENCE OF RESPONDENTS

The respondents were asked to specify their years of industry experience to give an indication of the knowledge and experience of the respondents on the subject. On the average of the 138 useable responses received, the years of industry experience of respondents is about 12 years though there are more people with less than this number of years in industry experience. The chart below gives an indication of the distribution of the industry experience of the respondents.

Figure 4.2.2: Years of industry Experience (Source: SPSS generated)
4.2.3 EMPLOYEE INVOLVEMENT IN PRACTICE

The figure above represents the respondents’ opinion on the current employee involvement practices. 90% agreed that there are well established means of communication from frontline staffs to management. Over 67% felt that there are relevant training/briefing sessions relevant and useful to them, 68% further agreed that they receive the needed training and feedback about their performance. For over 71% of the respondents, frontline staffs are involved in making safety-related decisions and participate in safety improvement initiatives.
From the figure above, 88% of the respondents felt that long-term safety strategy is clearly communicated to them and 73% also agreed that they receive adequate warning of changes to safety procedures. Furthermore, 93% felt they have the power to make safety related decisions and 98% of respondents agree that they have the knowledge of safety requirement at work and only fewer individuals (41%) agreed to being recognised for doing a safe job.
4.2.5 SUCCESS FACTORS TO EMPLOYEE INVOLVEMENT IN SAFETY

The above figure represents the agreement of respondents to the prevalence of the above factors relevant to the success of employee involvement practices within their work environment. 59% felt that staff safety suggestions were readily acted upon by management, 74% further agreed that the safety trainings received are effective. Likewise, 58% felt methods for safe working are set following consultation with the workforce and 70% believed that management and workforce works together to tackle safety related issues. 100% agreed that they take responsibility for their safety and that of others around and for 79% of the respondents, unsafe acts can be easily reported without fear of negative comeback.

Moreover, respondents were asked to comment on other factors relevant to the success of employee involvement initiatives beside those presented in the above chart, the various responses have been grouped into seven categories and presented in the figure below in order of their increasing frequency.
Figure 4.2.5.2: Other Factors relevant to the success of employee involvement initiatives
4.2.6 FURTHER WAYS OF INVOLVING EMPLOYEES IN HEALTH AND SAFETY MANAGEMENT

In order to identify those areas of employee involvement in safety that needs to be improved on, respondents were asked to comment on other ways they feel employees can be further involved in safety management and a range of responses were given. The figure above presents the various ways identified through which further involvement in health and safety management can be achieved.

**Figure 4.2.6: How employees can be further involved in safety**

In order to identify those areas of employee involvement in safety that needs to be improved on, respondents were asked to comment on other ways they feel employees can be further involved in safety management and a range of responses were given. The figure above presents the various ways identified through which further involvement in health and safety management can be achieved.
4.2.7 BARRIERS TO EMPLOYEE INVOLVEMENT IN SAFETY
The figure below illustrates respondents’ opinion about identified barriers to employee involvement. Over 76% of respondents disagreed that their supervisors do not do enough to ensure a safe working environment. 50% disagreed that there is low level of trust between management and frontline staff. 91% disagreed that safety trainings are too expensive and so should not be done too often. Finally, 77% disagreed that some health and safety procedures do not need to be followed in order to get job done safely. This clearly indicates that the most prevalent of these barriers is low level of trust between management and employees and the least likely barrier is the cost of training.

Figure 4.2.7: Barriers to employee involvement in safety
To further explore opinion about the barriers to employee involvement, respondents were asked in an open-ended question to comment on other barriers to employee involvement beside the ones already stated. The emerging responses have been grouped as illustrated in the table below:

<table>
<thead>
<tr>
<th>Barriers to employee involvement</th>
<th>Responses</th>
<th>Barriers to employee involvement</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manning levels</td>
<td>4</td>
<td>Complacency based on perception of age and experience</td>
<td>4</td>
</tr>
<tr>
<td>Fear of negative comeback</td>
<td>9</td>
<td>Lack of up-to-date information</td>
<td>3</td>
</tr>
<tr>
<td>Management</td>
<td>18</td>
<td>Lack of recognition</td>
<td>3</td>
</tr>
<tr>
<td>Inadequate training</td>
<td>5</td>
<td>Low level of trust</td>
<td>1</td>
</tr>
<tr>
<td>Deadlines</td>
<td>4</td>
<td>Lack of interest</td>
<td>1</td>
</tr>
<tr>
<td>Too much time spent on theoretical safety</td>
<td>4</td>
<td>Ignorance and lack of Health and safety understanding</td>
<td>1</td>
</tr>
<tr>
<td>Weak safety culture</td>
<td>7</td>
<td>No barriers</td>
<td>9</td>
</tr>
</tbody>
</table>

**Table 4.2.7: Barriers to employee involvement in safety**
4.2.8 TRADE UNION RECOGNITION AND ITS INFLUENCE ON EMPLOYEE INVOLVEMENT IN SAFETY.

![Trade union recognition and influence chart]

Figure 4.6: Trade union recognition and influence.

Over 51% of respondents disagreed that trade union is adequately recognised on their installations. Only 34% of the respondents felt they understand the role of trade union in the effort to involve employees in safety issues. Likewise, 47% felt trade union representation has no influence on employee involvement in their organisation.
SECTION B: ANALYSIS AND DISCUSSION
The research is aimed at establishing the significance of employee involvement in influencing a positive safety culture has been carried out. In the first stage of the research, 6 pilot interviews were conducted to highlight the themes relevant to the research area and the industry being studied. These pilot interviews were conducted amongst industry leaders, HSE representative and trade union leaders. The pilot interview further informed on the need to gather data from a larger sample which led to the widening of the research methodology.

At the second stage, an online survey was carried out and 138 useable responses were received. Majority of the respondents (68%) have described their roles as engineers and technicians. Of this percentage, 34% have identified themselves as elected safety representatives. 29% of the respondents are worksite leaders indicating their role as supervisors or offshore installation managers. As presented in figure 4.2.2, the average industry experience of the respondents is about 12 years. Whilst the year of industry experience and roles of respondents have not been analysed or discussed in relation to their responses in anyway, this has been highlighted to demonstrate the knowledge of the respondents on the issue being researched. In the third stage, 4 semi-structured interviews made up of 2 telephone interviews and 2 face to face interviews were conducted with leaders.

This section will interpret the relevance of the findings of the research to the overall aim and objective of the study. This will be achieved through triangulation by linking the various evidences from the secondary research presented in Chapter 2 to the evidences gathered from the primary research. Table 1 in Appendix G illustrates the details of the link between the two forms of research undertaken to the overall aims and objective of the research. The emerging issues are discussed and analysed below.
4.3 EMPLOYEE INVOLVEMENT IN PRACTICE
In establishing the significance of employee involvement in influencing a positive safety culture in the UK offshore oil and gas industry, it was relevant to explore the various perceptions about employee involvement in health and safety management. This raised a question about what employee involvement mean to people in the industry in terms of the extent, advantages and disadvantages of involvement in safety. As a brief reminder, the literature review has highlighted various rationales for employee involvement and its weaknesses (Cotton 1993, Hyman and Mason 1995 and Gifford, Neathey and Loukas 2005). Worthy of mention also is Lord Cullen’s observation about the significance of involving employees in safety management. He referred to the involvement of the workforce as “an important means of developing and maintaining an attitude to safety that is beneficial to the prevention of accidents which may have harmful consequences” (1990 par 18.48).

Nevertheless, interviewees were asked to comment on the advantages of employee involvement in safety. From Appendix E, it can be seen that all interviewees agreed that there are diverse advantages to involving employees in safety management. Interviewee C felt if employees are involved, they are more likely to take ownership of what they are doing and getting this buy-in yields better results. On the whole, all interviewees agreed that there is no downside or disadvantages to involving employees in safety management. Interviewees A, B and D agreed that the people who know the problems are the people at the frontline and they have suggested involving them is essential.

It was suggested that the only way to improve offshore safety is not through “talkinism” with MDs and trade union sitting in an office discussing. Rather, it is by giving employees on offshore platforms the confidence and security to discuss and challenge safety issues without being dismissed. According to interviewee D,

“...it is about creating that environment. Only then and when you get people working on the job participating, is when you get a safe environment and we are not there yet, in fact we are not even close to being there.”
This general consensus of the advantages of employee involvement gives an indication of the knowledge of employee involvement practices. Appreciating the fact that this knowledge does not translate automatically into action necessitated the need to explore the extent and indication of employee involvement practice in health and safety management. Consequently, Figure 4.2.3 presents the findings of the survey in terms of training and feedback, frequent safety training/briefing sessions, involvement and participation in making safety-related decisions and established means of communication from employees to management (upward communication).

Themes emerging from the interviews also gave an indication of the involvement of employees in safety matters. According to Interviewee A, “employees are involved in safety matters all the time, they are truly engaged”. It was also revealed that employees are involved in activities such as risk assessments though interviewee C mentioned that risk assessment is done online on his platform and only discussed by department leaders. Employees are also involved in suggestion schemes, attendants of safety meetings, as well as inspections and audits. Nevertheless, 9% of respondents to the survey felt frontline staffs are not involved in safety related decisions and do not participate in safety improvement initiatives. The major themes highlighted within the findings of the survey and the interview is elaborated on below.

COMMUNICATION

Communication based on mutual trust has been identified as a major feature of an organisation with a positive safety culture (HSE 2005). Likewise, Cotton (1993) identified downward and upward communication as the two main approaches to employee involvement. Surprisingly, more than 90% of the respondents to the online survey have agreed that there are well established means of upward communication from employees to management. More so, the interviews revealed the various methods of downward communication from management to frontline employees. The cited methods of communication include formal trainings, monthly safety
meetings presented by OIMs, toolbox talks, daily town hall meetings, posters, teleconferencing, leaflets as well as video presentations.

The existence of upward communication means is quite commendable as often, employee involvement is just slightly higher than a cascade of information from management making any significant employee contribution unlikely (Marchington and Wilkinson 2005). The existence of these two forms of communication mechanisms without further probe as to their effectiveness indicates a two-way communication method identified as another indicator that influences safety culture (HSE 2005). The importance of this means of communication or any communication lies in its ability to develop mutual trust (Thomas, Tolin and Hartman 2009) which has been highlighted as still missing by findings of the research. Downward communication from management to employee is relevant and can be seen as a form of involvement. However, communication means from employees to management is more important as this displays the willingness to get employee input as against mere preaching or mere consultation. This consultation according to the workforce involvement survey for HSE (Glendinning, Bhaumik and Palmer 2009) has been observed by employees to have weakened since 2006.

Regardless of the fact that 88% of respondents agreed that long-term safety strategy was clearly communicated to them, and 90% felt there is well established means of communication between frontline staffs and management, there is no room for complacency. Communication in Figure 4.2.5.1 was identified as a factor relevant to the success of employee involvement initiatives, in Figure 4.2.6 it was highlighted as a means of ensuring further involvement of employees in safety. Nevertheless, the lack of it was identified was a barrier to employee involvement (See table 4.2.8). It can be concluded that this communication plays a huge role in the effort to involve employees in safety management. This finding further confirms and strengthens the argument of (Gifford, Neathey and Loukas 2005 and Thomas, Tolin and Hartman 2009) on the central role played by communication in not only employee involvement effort but also in safety improvements (Solomon 2000).
INFORMATION

Recalling the observations of Ryan (2009) and Bolger (2004), employees’ help in initiating culture change is invaluable as the chances of success without information to and from employees are slim to none. In the survey, the level of information was determined by the level of communication of long-term safety goals as well as information about warning to safety procedures. Although majority (80%) agreed they have adequate and relevant information about safety in their workplace, others believe the information could be better. Either in quality or in quantity, as the quantity and quality of information received has a role to play in fostering mutual trust as opined by Gennard and Judge (2005). Issues have to be clearly communicated in order for individuals to be able to make any real input. Mere consultation or management preaching safety down to the workforce is not sufficient, there has to be two-way communication whereby employees can communicate back to management.

When asked how relevant these information made available to employees’ safety is to them, the interviewees agreed that they were very relevant. Though it was mentioned by one that the information is not as adequate at is should be for another, there is enough information.

"The information is very relevant; if they know where to look as the vast majority of employees have their own company laptops. Those who don’t have laptops have access to the network through the desktop computers as all the health and safety materials are online". (Interviewee A)

The evidence suggests that employees receive information about health and safety and that the information received is very relevant referring to the quality of information. However, the quality and quantity of information-stated as enough by some and inadequate by others can be further improved. Interestingly, lack of up-to date information was only sparsely cited as a barrier to employee involvement in safety in this research. Nevertheless, a recent research (Marcella and Pirie 2011) accessing the information gap in health and safety management within the industry has revealed that almost every one surveyed is frustrated by poor information quality, poor communications infrastructure, information overload and poor information access.
This variation in opinion within the same industry can be arguably related to the context of the research and the population difference. Regardless, the need for improvement in information sharing cannot be overstressed as the success of employee involvement requires information in order to provide a basis from which to offer suggestions and contribute to improvements in organisational (safety) performance (Marchington and Wilkinson 2005). Nonetheless, information sharing should not be to the point of “overload” leading to further confusion and loss of interest on the part of employees.

**REWARD AND RECOGNITION**

Another conflicting issue revealed by the findings is the issue of reward and recognition. There was a division amongst respondents to the survey and even amongst interviewees. Around 41% of the respondents to questionnaire felt that they receive adequate recognition for doing a safe job, others felt the lack of reward and recognition was a barrier to employee involvement. More so, reward and recognition was majorly cited as a relevant factor for the success of employee involvement initiatives. Additionally, the issue of reward was further probed within the interview and some agreed that they have a sort of reward and recognition system where financial reward albeit small is giving to recognise exceptional safety contributions.

“...Recognition reports are viewed by management and they can put in place rewards; generally financial rewards in terms of points and points can be turned into vouchers to be spent at shops” (Interviewee A).

On the other hand, it was suggested by others that the use of financial reward in association with safety is a barrier to reporting. The rationale being that people spend time hiding near misses and focus on lost time incidents without reporting them.

"For instance if you are handing out prizes, or punishment connected with lost time accidents, people will only be focusing on loss time accidents. And they will spend so much energy hiding them and not reporting them” (Interviewee B).
The use of financial rewards was identified as being commonly used in the industry. Among these financial rewards, the use of vouchers which can be used to purchase items in the shops were mentioned. Another example given is that of awarding individuals on an installation £10,000 for a whole year with no lost time incidents. Nonetheless, some have stated their opposition to the use of any form of financial rewards in connection with health and safety basing their argument on the fact that the use of financial rewards in safety management hinders reporting and in turn any further improvement to safety performance. This then raise the question as to “what type of reward is appropriate in rewarding exceptional safety behaviour and performance?”

Even so, other evidence suggests the need of a reward and recognition scheme, not necessarily the financial rewards mostly cited. These studies stress the importance of a reward scheme to the effectiveness and success of employee involvement practice. That way, individuals are encouraged to further get involved as the rewards make them feel good about their contribution and its relevance. Marchington and Wilkinson (2005) argued that employees are more likely to show interest in involvement if their efforts are rewarded with performance-related incentives, share ownership and access to training opportunities. Furthermore, Lawler (1986 cited in Light 2004) stated that “…Information, knowledge and power without rewards for organisational performance are dangerous because nothing will ensure that people will exercise their power in ways that will contribute to organisational effectiveness”.

### TRAINING

67% of respondents have agreed that they receive the relevant trainings and feedback about performance, 74% also felt the safety trainings received are effective. Irrespective of that, inadequate training has been identified as a major barrier to employee involvement in safety and in order to further involve employees, there is need for more training. This view was supported by the findings of the interviews where it was opined that the 5-day safety induction training - the minimum norm within the industry is inadequate. This is especially so for elected safety representatives as they
have more active role to play in safety management than those they represent.

Interviewee D opined that in order for the safety representatives to be more effective, the minimum training should be about 7 weeks which should include specialist trainings in the areas of duty represented and can be distributed over 2 years. This suggestion however can pose a great challenge as to the time to be taken of duty to attend the trainings. Consequently, this leads to another issue that was raised- which is that of conducting trainings onshore away from the offshore platforms where they really matter, also, the idea of taking safety courses online. The question raised by this is “how effective are the safety trainings really, if they are done online or away offshore as against under real day to day offshore situations?”

However, training has been repeatedly cited within the literatures as a relevant factor for the success of employee involvement and safety improvement. Harvey et al. (2001) tried to determine the effectiveness of training to change safety culture and attitudes within a highly regulated environment which is the case in the UK Offshore oil and gas industry. They indeed concluded that training is clearly effective in changing attitudes and safety culture. Likewise, Cotton (1993) recommended employee training and management education as processes for involvement. The importance of training was also cited by Gifford, Neathey and Loukas (2005) as essential for employees and management to be informed on issues to be addressed and in new ways of working.

4.4.1 INTEGRATION OF THE EMPLOYEE INVOLVEMENT (EI) PROCESSES

Lawler (1986 cited in Light 2004) argued that the effectiveness of EI program within an organisation is directly related to the degree in which information; knowledge, power and rewards are vertically integrated into the organisational structure. Likewise, The AMO model (Marchington and Wilkinson 2005) argues that for people to perform better, they must have the ability, skills and knowledge necessary. They must be motivated (perhaps through reward) to want to do well and they must be given the opportunity to deploy their skills. Therefore, in order to measure the
integration of employee involvement processes into the safety management practices on the installations studied, respondents were asked questions around the EI processes of power, knowledge, information and rewards.

The findings of the survey have revealed as presented in Figure 4.2.2 and the figure below that 93% of respondents have the power to make the decisions that improve the safety of their work. It also confirms the existence of a major component of a positive safety culture as identified by Fleming (2001) and AICHE (2010) which is individuals have power to fulfil their safety responsibilities. Likewise, and 80% have the necessary information about safety, the relevance of information to employee involvement in safety has been earlier discussed and it was can be deduced that its significance cannot be overemphasized. Similarly, 98% of respondents felt they have the knowledge of safety requirement at work. This was further confirmed as the interviews also revealed that employees are fully knowledgeable about safety procedures. Nevertheless, the main question remains whether or not employees were going to follow the procedures despite their knowledge of it and how well this knowledge is exploited to improve safety.

Figure 4.4.1: Integration of the employee involvement processes
Furthermore, for employees to be involved there has to be information made available to them about the issue at hand. It is also essential for them to have the knowledge to make the right decisions for actual participation in decision making. More so, there is need for them to have the power and opportunity to make these decisions and a recognition and reward scheme is also crucial in encouraging further involvement in safety. However, only 41% of respondents agreed that they receive regular recognition for doing a safe job. This can be supported by the observation of Armstrong (2006) that rewards are the most under-utilized and mismanaged managerial tool in enhancing organisational performance.

Through further analysis, it was determined as presented in the figure above that only 33% of respondents have the four processes completely integrated in the management practice while the remaining 67% is only partially integrated. While this may be attributed to the low level of rewards and recognition indicated by findings, there is evidence to prove that there is more to be done in ensuring the availability of information, power and knowledge.

4.4.2 SUCCESS FACTORS FOR EMPLOYEE INVOLVEMENT IN SAFETY

There are factors that determine the success of employee involvement process some of which have been discussed within the literature even though those are generic and not peculiar to the oil and gas industry. Amongst these are simultaneous integration of employee involvement processes as discussed above, leadership championship (participation), openness through honest communication and training (Gifford, Neathey and Loukas 2005). Therefore, it was deemed necessary to further highlight what the success factors to employee involvement initiatives within the industry are (See Figure 4.2.3.1 and 4.2.3.2) as these can be further enhanced in order to achieve best practice.

Encouragingly, all of the respondents (100%) agreed that they take responsibilities for their safety and that of others around them. This is a commendable evidence of the willingness to be involved as it shows that safety is not left completely in the hands of management. This can in turn enhance employee participation and ownership identified as a means
through which employees can be further involved in safety. Nonetheless, it is concluded that the prevalent agreement that employees take responsibility of their safety and that of others around them, though commendable is not enough. There is need for this to be taken to a greater level through proper involvement and empowerment such that employees have the power and security needed to make effective safety decisions when faced with such situations.

More so, over 70% of the respondents have agreed that management and workforce works together to tackle safety related issues. Although only 15% strongly agreed that management and workforce works together, a small proportion felt that management and workforce do not work together.

Over 58% of respondents felt that safety policies are set following consultation with the workforce and 74% of the respondents agreed that the safety trainings they receive are effective. When asked if safety related suggestions from staffs are easily acted upon by management, only 59% responded that this was the case. Another 7% of the respondents felt their safety related suggestions were not readily acted upon by management. This can hinder future suggestions as staffs may begin to feel that their inputs are irrelevant. This can also indicate a weak safety culture as a component of a positive safety culture is that it provides timely response to safety issues and concerns and provide continuous monitoring of performance (Fleming 2001).

In addition, majority of the respondents (84%) felt that the discussions at the safety briefings/meetings they attend are frank and open. Another 79% said they can easily report unsafe acts without the fear of negative comebacks. These two factors are essential as they help to generate trust between those involved. According to Marchington and Wilkinson (2005), open communications ensure workers are informed about organisational issues and also conveys a symbolic and substantive message that they are to be trusted in and open and positive manner.

Figure 4.2.3.2 presents other factors stated by respondents as relevant for the success of employee involvement initiatives. The emerging themes from the responses are reward and recognition, clear and open communication, management participation and encouragement, understanding and visibility.
of involvement initiatives, workforce participation and ownership, training. These mirror other factors already discussed and those identified within the literatures (Cotton 1993, Gifford, Neathey and Loukas 2005).

**MANAGEMENT PARTICIPATION AND ENCOURAGEMENT**

Bringing to the fore, the relevance of the commitment of management and workforce to safety cannot be overemphasized as this is relevant in promoting safety as a core value in the organisation (AICHE 2010). Management have been constantly cited throughout the findings and the subsequent discussion warranting the shedding of more light on the subject. Management participation and encouragement which is an indicator of management commitment has been a prevalent theme throughout the findings.

Yule (2008) carried out a review of 31 literatures in the field of safety culture and majority of the findings of these works have cited management commitment as very crucial to safety culture. Likewise, Alexander et al. (1994 cited in Yule 2008) suggests that management commitment is one of the factors through which an organisation’s safety culture is described in terms of employee’s perceptions. Within this work, the significance of management commitment, management attitude to suggestions, management participation, management encouragement and management visibility were further highlighted.

In table 4.2.5, management was presented as the majorly cited barrier to employee involvement in safety. This raises a major concern as employee involvement is a management initiative hence it can be argued that without management commitment to employee involvement, the program cannot be truly effective. It is no wonder management participation and encouragement was further identified as a major factor relevant for the success of employee involvement and a means through which further employee involvement in safety can be achieved. This finding further supports that of HSE (2005) where management involvement in health and safety was revealed as having an impact on involvement. This results in the perception that unless management was committed to introducing good
health and safety practices it is unlikely that employees would become involved in health and safety.

French and Geller (2008) suggest that management commitment to safety is essential and true safety excellence requires involvement from persons throughout organisation. It also emerged from the review carried out by Gadd and Collins (2002) that management has the key influence on an organisation’s safety culture. It can then be inferred that management participation, encouragement and commitment reiterated by the findings of this work is a key component in influencing a positive safety culture through the involvement of employees.

Others factors identified though not as recurring as others include no blame culture, good professional attitude and behaviour towards safety, accepting people are human, increasing rights of employee and publishing reasons for not required back (NRB). Not required back has been identified as a barrier to employee involvement because it hinders people from challenging and reporting safety issues due to fear of negative comebacks. Marchington and Wilkinson (2005) argued that workers are more likely to welcome involvement if they have employment security.

**FURTHER WAYS OF INVOLVING EMPLOYEES IN HEALTH AND SAFETY**

In order to identify those areas of employee involvement in safety that needs to be improved on, respondents were asked to comment on other ways they feel employees can be further involved in safety and a range of responses were given. The majority of the respondents felt that employees taking more responsibility and showing more interest in involvement is an important way. Interestingly, all the respondents agreed that they take responsibility for their safety and that of others around. Perhaps, this is better explained by the view cited by many that employees need to volunteer more and make themselves available as elected safety representatives.

Others have said employees need to be personally motivated and participate more in safety related activities like toolbox talks and meetings. Another majorly cited way is through management’s participation and
encouragement, the importance of these cannot be overemphasized as this shows the seriousness of the involvement practice through leadership championship which in turn fosters openness and mutual trust (Gifford, Neathey and Loukas 2005).

Minority have said that the practice within their organisation is first class and needs no further improvement. This view was further probed through the interviews and interviewee D agreed that while it might be true on some platforms, it is not true on others. He further argued that the reason why people might think their safety needs no further improvement is because they do not know what a first class safety should be like. According to him, “What people think is good might just be a facade and behind that facade there is nothing”.

Nevertheless, others have suggested that better communication and ease of reporting are ways through which employee involvement can be better improved. This is understandable seeing as fear of negative comeback which hinders reporting has been identified as a major barrier to employee involvement in safety. Safety culture has been identified as another way and this culture has a major influence on employee involvement as much as employee involvement influences safety culture. It has been suggested that for employee involvement to be effective, there has to be a safety culture which encourages involvement as this impacts on whether employees feel they could speak up about health and safety and how seriously it is regarded (HSE 2005)

The need to be proactive has also been cited and of great importance is the issue of openness and honesty which is a major tool in developing mutual trust. A further link can be made back to communication through which as openness and honesty is displayed. Knowledge sharing was also considered relevant in the sense that the knowledge and experiences of employees should be exploited. The other less prevalent responses revolve around stronger union, proper job security and banning not required back (NRB). Perhaps the latter two are related as banning NRB will ensure greater job security. NRB has emerged from the interview as a major barrier to employee involvement. It was opined that one issue that can make a big
difference offshore is the issue of NRB and the suggestion is that people should be given a legal right to challenge NRB.

4.5 BARRIERS TO EMPLOYEE INVOLVEMENT IN SAFETY

Another objective of the research was to highlight the various barriers to employee involvement in safety management in the UK offshore oil and gas industry. In identifying the barriers to employee involvement, questions around the commonly cited barriers like low level of trust between employee and management, cost, perception about safety procedures and perceptions about supervisors (HSE 2005) were asked. Though the results presented in figure 4.2.5, shows respondents agreement to the existence of the identified barriers within their organisation, it shall be interpreted differently. This is because the responses suggest that these barriers are not as prevalent in the industry as in the industries studied by HSE (2005).

Over 76% of respondents felt their supervisors do enough to ensure a safe working environment. 50% felt there was adequate level of trust between management and frontline staff. 91% believe that safety trainings are not too expensive to be done often. Finally, 77% felt all health and safety procedures are to be followed to get job done safely. This positive responses regarding supervisors is interesting, this is because supervisors attitude toward safety has been repeatedly cited within the literature as a barrier to improvement.

Likewise, when respondents were further asked to comment on other barriers to employee involvement, majority of the respondents identified management as a major barrier to employee involvement, the reason behind this ranging from negative management response to safety related issues to lack of management commitment and to poor management of change and supervisors lack of commitment.

“Opinions are being voiced but the consensus is not what the supervision wants to hear as it means too much effort / time / money to rectify. Rather than discussing the issue properly and explaining the situation, management can often be quite poor in feeding this
back and it can seem that the project is going on regardless and that the workforce made no difference”.

While the evidence from the survey indicates that low level of trust is not a major barrier to employee involvement, the interviews mainly highlighted the issue of trust as a barrier and the consensus is whether employees actually trust management.

The main barrier to employee involvement is trust, whether the employees actually trust. The problem is if somebody reports something, they often think that they’ll get in trouble for reporting it. Whereas most of the time what happens is we have known that the situation is happening in the company and we actually thank the people.

The view of the interviewees supports what has been identified in the literature about the usual low level of trust between management and frontline workers. As opined by interviewee B, the only way to build this trust is through open reporting culture which is a major characteristic of a positive safety culture (HSE 2005). Other emerging barriers from the interviews include legal issues of Not required back (NRB) mentioned earlier and also the use of financial rewards and punishment in connection with safety. The rationale for this was identified as- rather than rewarding people for being safe, in the real sense it is rewarding people for not reporting safety issues.

Another interesting view from the interview is that most of the barriers are mental in the minds of the individuals. This is based on the perception of pressure to get the job done. It was also mentioned that people are reluctant to change mainly because they are uncomfortable with anything they are not familiar with. The challenge this raise for management is how to convince individuals that getting involved is the right thing to do. As interviewee C observed, there are some really cynical people and they are reluctant to do what have been asked of them. He further argued that there is a limit to how people can be encouraged as some are just argumentative for the sake of it.
4.6 TRADE UNION RECOGNITION AND ITS INFLUENCE ON EMPLOYEE INVOLVEMENT IN SAFETY.

Though trade union representation is mostly identified with employee participation, this in itself can be seen as a form of indirect involvement as CIPD have identified participation as a process of involvement. Consequently, in exploring the importance of employee involvement in influencing safety culture in the oil and gas industry, it is worth exploring how the recognition or non recognition of trade union on installations influences the employee involvement in safety.

Over 51% of respondents have indicated that trade union is inadequately recognised on their platform. Only about 14% felt there was adequate trade union recognition in their organisation. This is not surprising giving the consensus about trade union recognition in the industry as identified within the literatures (Woolfson and Beck 2004). This was further validated within the interview as it was also suggested that there is no real form of trade union recognition. However, there are three recognised unions in the offshore oil and gas industry- UNITE, GMB and RMT.

It was further highlighted what the roles of the trade unions are and they include quite diverse roles from daily active role in safety offshore to meeting with the government to discuss health and safety legislations. They also sit on the tripartite committee (OIAC) with employers and the Health and Safety Executives. The fit of trade union recognition with employee involvement practice was cited as representing employees when they are being disciplined, negotiating terms and conditions of employment for most offshore workers as well as sitting with employers to map out what the future of the industry is in terms of training and skills.

34% of the respondents felt they understood the role of trade union in the effort to involve employees in safety issues, but 18% of the respondents do not understand. This can be attributed to the low level of trade union recognition as only 14% agreed that trade union was adequately recognised within their organisation. It is worthy of note that though only 14% agree to trade union recognition, 34% understands what the role of these trade unions are in employee involvement in safety issues.
Likewise, 47% felt that trade union recognition has no influence on employee involvement in their organisations. Notwithstanding, 7% agreed that trade union recognition has an influence and once again it can be inferred that of the percentage that agreed to the recognition of trade union within their organisation, only about half of that support the fact that trade union recognition has any influence on involvement. Perhaps this can be attributed to the lack of visibility of trade union role in employee involvement efforts or the non-existence of such roles. This was further reiterated by the interview where it was stated that though some of the staffs are represented by trade unions, there is no official trade union. This representation is arguably declining further as employment contracts are now better. It was however suggested that union membership is needed for employees with the OCA type contract.

It was also concluded by some interviewees that there is no trade union input as regards employee involvement in safety efforts. Woolfson and Beck (2004) have opined that the employment relations in the UK Offshore oil and gas industry from its foundation has been characterised with various union avoidance strategies. Likewise, employee involvement has been viewed by some as a direct or indirect union avoidance mechanism and a weapon to gain or regain greater control of the workforce (Hyman and Mason 1995). More so, believe within the UK offshore oil and gas industry as suggested by Woolfson and Beck (2004) is that collective employee representation is a potential hindrance to production. However, it cannot be concluded based on these evidences what the rationale for employee involvement in this regard is – union avoidance or weapon to regain greater control of the workforce?

Generally, there are various issues raised within the research both in regards to barriers or important factors relevant to the success of employee involvement practices and for further involvement of employees. These have been presented in Section A of this chapter and the major ones have further been discussed accordingly. Management participation and encouragement is one of such and the importance of this has been shed more light on in an earlier discussion.
The inadequacy of training and information was also highlighted as well as the need for a reward and recognition scheme, however the use of financial rewards was criticised. Clear communication was also noted to be an enhancer of mutual trust, but the research has pointed towards the lack of clear, open and honest communication as this was cited as a major barrier. While employees have indicated that they have the knowledge of safety procedures and expectations, there is a need to exploit these knowledge and for employees to have the power to use their expertise. In the absence of this power, having knowledge and information can lead to frustration as Lawler (1986 cited in Light 2004) opined:

“Power without knowledge, information and rewards is likely to lead to poor decisions. Information and knowledge without power leads to frustration because people cannot use their expertise. Rewards for organisational performance without power leads to frustration because people cannot influence their rewards...”
CONCLUSION

The findings of the research have given an insight into the perception about employee involvement in safety in the UK offshore oil and gas industry and this have been mostly positive. The advantage of involving employees in health and safety management was a general consensus and it was agreed that there was no downside to employee involvement in safety. The findings further revealed that while the industry is not completely in the dark with the issue of employee involvement, there is room for improvements.

Section 4.4.3 suggests that there is more to be done in the effort to involve employees in safety management. It was suggested that until the industry gets people working on the job participating, there can be no safe environment and “the industry is not there yet; in fact it is not even close to being there” (Section 4.6). While this might sound pessimistic, the findings have shown that there are still major barriers to be overcome in order to increase employee involvement in safety.

The barriers to the involvement of employees in health and safety management have been highlighted by the research and while there are a number of them, (See Section 4.5) the ones cited by the majority are management participation and actions, fear of negative comeback, weak safety culture, inadequate training and low level of trust. Some other less prevalent ones are lack of up to date information, complacency based on the perception of age and experience and lack of recognition.

The findings also highlighted ways in which employees can be further involved in safety (Section 4.4.3). Worthy of emphasis are employees taking more responsibility and ownership, employee participation in safety meetings, management participation and encouragement, communication, positive safety culture, ease of reporting as well as openness and honesty which can be achieved through communication.

More so, there are factors crucial to the success of employee involvement initiatives, most of which was identified within the literature review (Section 2.5). Within the findings of the primary research, it was further revealed what factors within the UK offshore oil and gas industry are relevant to the success of employee involvement practices. Figure 4.4.2.1 and 4.2.2.2 clearly indicates what respondents felt are the factors relevant to the
success of employee involvement initiatives. From Section 4.4.2, it can be observed that the most prevalent of these factors are workforce participation and ownership, management participation and encouragement, training, reward and recognition as well as clear and open communication.

While 100% of the respondents have indicated that they take responsibility for their safety and that of others around, there is no evidence associating this with the employee involvement practices in place. Rather, it can be attributed to the level of safety culture as this in itself is a major characteristic of a positive safety culture. It has been concluded that this prevalent agreement that employees take responsibility of their safety and that of others around them, though commendable is not enough. There is need for this to be taken to a greater level through proper involvement and empowerment such that employees have the power and security needed to make effective safety decisions when faced with such situations.

It was also revealed that employees have adequate knowledge of safety procedures and safety expectations at work, it has been suggested that this knowledge needs to be exploited. This is invaluable seeing as the front line staffs not only know the safety policies and procedures well, they are the ones who are truly aware of the risks and hazards associated with their daily routines.

In line with the objective of the research, the findings further highlight the low level of trade union recognition in the UK offshore oil and gas industry and the influence trade union representation has on employee involvement in safety (Figure 4.2.6 and Section 4.6). It was concluded that there was only sparse trade union recognition among the sample studied and the role of trade union in efforts to involve employees in safety issues was understood by a minority. More so, fewer people agreed that trade union recognition has an influence of the involvement of employees in safety in their organisations. However, there were insufficient evidences to conclude what the rationale for employee involvement in relation to trade union recognition was – union avoidance or weapon to regain greater control of the workforce? (Section 4.6)
A conclusion was not reached by this research as to the evidence of employee involvement best practice in the UK offshore oil and gas industry as the whole offshore population was not included in the study. However, evidence from the primary research suggests that the industry is still some distance away from getting to that point of true involvement characterised by open and honest communication and mutual trust. The question raised by this finding which was not covered in this research is “how can the safety culture and safety performance be improved if the environment is still not conducive enough for true involvement?” Perhaps a future research will provide answers to this question.

Conclusively, the achievement of best practice employee involvement will go a long way in influencing the safety culture of the industry. Not only is safety culture moved one more step further the maturity model towards world class safety. It is also because the absence of most of the characteristics of a good safety culture has been identified as barriers to employee involvement in safety. Hence, if these barriers are overcome, a positive safety culture can truly be realised.

In addition, the relationship between employee involvement and the safety culture of an organisation can be described as a mutualistic one seeing as one benefits from the other. For any form of involvement to occur, there has to be a culture which encourages employees to speak up and get involved. As suggested in Section 2.3, while culture influences the level of involvement, the participation of employee in turn is required to build that culture that encourages involvement.

It is out of the scope of this research to determine the exact level of employee involvement that influences the achievement of a positive safety culture. It is difficult to determine the extent of changes to safety performance and safety culture through increased level of involvement. A future research might want to go further in-depth to test the extent of dependency of both variables. Nonetheless, it is argued that other factors such as the specific organisational context can also influence this as well as other indicators mentioned in Section 2.1. As a result of these other factors, what works in one organisation might not work effectively in another. However, following the safety culture maturity model and the steps to
achieving world class safety culture (Section 2.1) it is apparent that the presence of employee involvement within an organisation influences its safety culture. This is mainly because there cannot be any meaningful improvement in safety performance without the input of employees (Section 2.3).

To this end, the findings from both the secondary and primary research undertaken have shown a thorough exploration of the research subject and reasonable conclusions have been made. It is the belief of the researcher that the evidences revealed in this work has shown not only how employee involvement influences safety culture but also how safety culture impacts on the existence and effectiveness of employee involvement practice within an organisation. Therefore, to a great extent the overall aim of the research which was to establish the significance of employee involvement in influencing a positive safety culture has been achieved.
RECOMMENDATIONS
The following are recommended in line with the findings of the primary research, literature reviewed, the conclusions and issues highlighted.

- There is need for a reward scheme that encourages greater participation and involvement without hindering reporting. This might be something as little as giving awards, publishing individuals name even up to putting them forward for industry wide safety awards like the oil and gas UK safety awards. The use of major financial rewards like giving £10,000 to individuals for absence of lost-time accidents on a yearly basis should be reviewed. Giving vouchers to spend at shops or all-expense paid meals are still acceptable forms of reward.

- More so, mechanisms should be put in place to ensure employees are rewarded in such a way that they remain motivated and committed without hindering reporting. This can be achieved through proper management of the reward and recognition systems already in place or the implementation of a new reward system.

- Management participation and encouragement was identified as an important factor in relation to employee involvement in health and safety in this research. Consequently, management needs to show active involvement and not just mere consultation with the workforce. There is need to do away with “Talkinism” and walk the talk by practicing what is preached. Proactive and visible management participation in turn increases the level of trust between them and employees and employees’ faith in the genuineness of involvement efforts is enhanced.

- Though there is no guarantee that employing fulltime safety representatives will make any major difference, it is recommended that the industry has nothing to lose by giving this a try. This can be piloted on few installations to determine its effectiveness. The rationale behind this being, though the safety representatives will be elected, they would not be paid by any one employer but by all the
employers involved from operators to contractors. That way, these safety representatives will have the power and security necessary for them to make truly effective safety decisions and more time to get involved in safety activities like training and meetings.

- There is also the need for a more practical approach to the way safety trainings are conducted. Rather than online or onshore safety trainings, a more practical approach towards safety training will be conducting them offshore. This is crucial as the training is going to be useful in offshore environment; therefore, taking the training onshore hinders the proper limits it to theory as against learning with real on the job situations. In addition, this approach towards safety eliminates the challenge of taking time off duties to go onshore for training or having to go for training during time away from offshore duties.

- The 5-day safety training currently given to employees especially safety representatives is considered inadequate. Therefore, it is recommended that consideration be given to increasing safety trainings. This might be arguably expensive but not as much as the cost of any accident no matter how minor. Safety representatives who are trade union members are given 6-7weeks of training which is distributed over 2years. Similar trainings can be extended to elected safety representatives in the UK offshore oil and gas industry.
REFERENCES


19. CULLEN, the Hon. Lord 1990. *The Public Inquiry into the Piper Alpha Disaster*, 1 and 2 London: HMSO.


BIBLIOGRAPHY
11. GELLER, S. People-Based Leadership: Enriching a work culture for world-class safety. Professional Safety 53(3) pp29-36.


21. O’TOOLE, M. 2010. Employee perception surveys: Key steps in the development and analysis of Results. ASSE 2010


APPENDIX A: COPY OF LETTER FROM STEP CHANGE TO PARTICIPANTS

Colleagues,

It has been requested by Olusuyi Olusola, a Robert Gordon University Student and a Piper Alpha Scholarship winner in 2011 if we at Step Change in Safety could assist her in her studies by sending you a copy of a survey recently developed by her to which your participation would greatly be appreciated. Her studies are aimed at establishing the importance of employee involvement in safety management in influencing a positive safety culture in the UK offshore oil and gas industry.

I have attached a covering letter above, explaining her requirements, specifying that this work could help us develop a better understanding of what needs to be done to improve our health and safety performance.

It should be noted that this project and associated survey is in no way connected to the work being carried out by the Workforce Engagement workgroup, and the specific set of tools they intend developing over the coming months.

The survey has been circulated to the email addresses we currently have on record for Elected Safety Reps.

The link to the survey is: http://www.kwiksurveys.com/online-survey.php?surveyID=NMHIOL_d93ceab

Please note that any correspondence regarding this survey should be directed to Olusuyi, her e mail address can be found at the bottom of her covering letter.

Best Regards

Step Change (Name edited for anonymity).
APPENDIX B: COPY OF LETTER TO ONSHORE CONTACTS

24th July 2011

Dear Sir/Madam,

Your organisation has been identified as one with a culture that encourages workforce involvement in safety matters and a strong commitment to ensuring employee safety.

As part of my dissertation research that is exploring the importance of employee involvement in influencing safety culture, I am keen to learn more about what the relationship between these elements are and how it is driven within your organisation.

I want to achieve this based on good evidence as opposed to assumption, word of mouth or just what has been done by other researchers.

I feel that the best way of gaining this understanding is to issue a questionnaire to elected safety representatives who will be a good representation of the workforce and conduct interviews with offshore installation managers and supervisors as worksite leaders in order to get the leadership and workforce opinion of the subject.

I would like to ask for your help in making this project a success by allowing me access to some elected safety representatives (20 most appropriate), OIMs and Supervisors, it would be helpful to arrive at a convenient arrangement (time and venue) for administering the questionnaires and carrying out the necessary interviews.

I envisage taking up about one hour to conduct the interview and less than that for the completion of the questionnaire. I have included a sample of the questionnaire that will be completed and a copy of the interview schedule for your attention.

The results of this project shall be discussed in the dissertation and submitted to the Robert Gordon University, a copy shall be submitted to OPITO as well for knowledge sharing within the industry.

I would appreciate it if you could contact me shortly to discuss suitable dates and logistics arrangements for the data collection process. I would like to thank you in advance for your help and should you have any questions please contact the undersigned.

Olusuyi Olusola
b.o.olusuyi@rgu.ac.uk
07553194164
APPENDIX C: LETTER TO RESPONDENTS

Dear respondent,

Your organisation has been identified as one with a culture that encourages workforce involvement in safety matters and a strong commitment to ensuring employee safety.

As part of the OPITO awarded Piper Alpha Memorial Scholarship Scheme and my dissertation research that is aimed at establishing the importance of employee involvement in safety management in influencing a positive safety culture in the UK offshore oil and gas industry, I am keen to learn more about what the relationship between these elements are and how it is driven within your organisation.

I want to achieve this based on good evidence as opposed to assumption, word of mouth or just what has been done by other researchers. I feel that the best way of gaining this understanding is to administer questionnaires aimed at gathering perception of the offshore workforce on the issue of employee involvement and its elements.

The survey is targeted at elected safety representatives who will be a good representation of the workforce and also because of their role in safety matters. As Interview with OIM or first-line supervisor deemed appropriate will be impossible due to logistics, it would be helpful if they can complete the survey as well in order to obtain their opinion as worksite leaders on the topic.

The data collected from this research is strictly confidential and anonymity of respondents is guaranteed. The findings of the research shall be submitted to the Robert Gordon University in fulfilment of my masters’ degree and to OPITO (Offshore Petroleum Industry Training Organisation) for best practice sharing within the oil and gas industry. I would appreciate you completing the questionnaire as soon as possible.


I have included the link to the survey and this should take just about 10 minutes to complete. I am available for any further query on the questionnaire or the research.

Thank you in anticipation of your support.

Kind regards
Olusuyi Olusola
b.o.ulusuyi@rgu.ac.uk
APPENDIX D: QUESTIONNAIRE DRAFT (transferred to kwiksurvey)
DEPARTMENT OF MANAGEMENT, ABERDEEN BUSINESS SCHOOL
ROBERT GORDON UNIVERSITY, ABERDEEN

SECTION A: DEMOGRAPHIC CHARACTERISTICS

1. Role: ____________________________
2. Years of industry experience ____________________________
3. Name of platform? ____________________________

SECTION B: EMPLOYEE INVOLVEMENT IN SAFETY CULTURE

(KEY: STRONGLY AGREE = 1; AGREE = 2; NEITHER AGREE NOR DISAGREE = 3; DISAGREE = 4; STRONGLY DISAGREE = 5).

<table>
<thead>
<tr>
<th>No.</th>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>The long-term safety strategy of the organisation is always clearly communicated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I receive adequate warning of changes to safety practices.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I know fully what is expected of me at work regarding safety.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I have authority to make decisions that improve the safety of my work.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Unsafe act can be easily reported by me without fear of negative comeback.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I regularly receive recognition for doing a safe job</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>Staff suggestions are readily acted upon by management.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I receive the needed training and feedback about my performance.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>Safety trainings received are effective.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION C: WAYS TO INVOLVE EMPLOYEES IN SAFETY CULTURE

*Key: Strongly agree = 1; Agree = 2; Neither agree nor disagree = 3; Disagree = 4; Strongly disagree = 5.*

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>I take responsibility for my safety and that of other workers around me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Methods for safe working are set following consultation with the workforce</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Frontline staff are involved in making safety-related decisions and participate in safety improvement initiatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Management and the workforce work together to tackle safety-related issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>There are well-established means of communicating health and safety matters from employees to management.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>Discussions about safety at the briefings/meetings I attend are frank and open</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>There are frequent safety training/briefing sessions that are useful/relevant to me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

21. In my opinion, employees can be further involved by: ____________

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

________________________________________________________________

SECTION D: THE BARRIERS TO EMPLOYEES INVOLVEMENT

*Key: Strongly agree = 1; Agree = 2; Neither agree nor disagree = 3; Disagree = 4; Strongly disagree = 5.*

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.</td>
<td>There is a low level of trust between management and frontline staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Safety trainings are expensive and so shouldn’t be done too often</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
24. Some Health and Safety procedures do not need to be followed to get the job done safely

25. I don't think my immediate boss does enough to ensure a safe working environment

26. Other barriers to employee involvement in safety in my opinion are:
   __________________________________________________
   __________________________________________________
   __________________________________________________
   __________________________________________________

SECTION E: IMPACT OF TRADE UNION TO INFLUENCING SAFETY CULTURE
(KEY: STRONGLY AGREE = 1; AGREE = 2; NEITHER AGREE NOR DISAGREE = 3; DISAGREE = 4; STRONGLY DISAGREE = 5).

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Trade union is adequately recognised in my organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>I understand the role of trade union play in the effort to involve employees in safety issues</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Trade union representation has no influence on employee involvement in my organisation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30. What other factors are relevant for the success of employee involvement initiatives?
   __________________________________________________
   __________________________________________________
   __________________________________________________
   __________________________________________________
APPENDIX E: INTERVIEW TRANSCRIPTS

<table>
<thead>
<tr>
<th>QUESTIONS</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SECTION A: DEMOGRAPHIC INFORMATION</strong></td>
<td></td>
</tr>
</tbody>
</table>
| 1. How long have you been working in the industry/offshore?               | Interviewee A: 25 years  
Interviewee B: Not stated  
Interviewee C: 28 full time and 6 years part time  
Interviewee D: 36 years                                                                 |
| 2. What type of safety related activities are you involved in?            | • Write standard documents, procedures, do risk assessment, audit, inspections and train  
• Telling employees what is expected about safety procedures, hosting town hall meetings, meeting flight, discuss safety performance, carrying out interventions, do STOP process and permit audit  
• Representing offshore workers in a disciplinary panel if they are being disciplined or they have grievances.  
• Negotiating terms and conditions of employments for most offshore workers. We negotiate all the agreements from sick pay to overtime and to how much is spent on travelling. |
| 3. To what extent are employees involved in safety matters in your organisation? | **Interviewee A:** They are involved all the time in safety matters, they are truly engaged, and we have an open reporting culture so if any one has any issue they can report them into the system. Last year we had 98% of the report in the UK.  
**Interviewee B:** They are quite involved a lot, the central unions are involved in their discussion with the government and the organisation that represents oil companies in what is called tripartite cooperation. In addition the working environment act and regulations offshore demands that there shall be workforce involvement both locally and central in the companies so it is regulated by law and regulations. |
**Interviewee C:** Pretty much – every working man can quote the line from section 7 of the HSE work act that states that it is the duty of every company to provide a safe work place for employee while at work but the often forget section 8 which says it is the responsibility of every individual to work safely in such a manner that he doesn’t harm himself or others. But we are very safety centric, Most people live and break safety while others don’t adapt much to the safety culture but generally speaking, everyone is involved in safety and whether they are committed to it whole heartedly or just pay lip service to it, I don’t know.  

**Interviewee D:** NOT ASKED

### SECTION B: EMPLOYEE INVOLVEMENT IN SAFETY

| 4. How are employees involved in influencing safety practices and decision making in relation to health and safety? | **Interviewee A:** They can enter reports into the system, they are expected to perform the task of risk assessments, they can put in suggestions as well, they can attend safety meetings, raise concerns with either the safety reps or the safety managers and they can be involved in inspections and audits as well.  
**Interviewee B:** They are involved on different levels.  
**Interviewee C:** That is a tough question to ask because the average man is lazy; he will rarely volunteer his time / effort, but they can only be cajoled into doing so and anything that comes up in terms of safety, we sit with the safety reps and tell them that is what we have to do and they’ll go away and speak to their constituents and they’ll come back and either agree or further discuss. Typically, the average working man would go with the flow, anything for a quiet life. Some who are more vocal may make suggestions, come up with new ideas (which are very rare). So if anyone does come up with ideas / suggestions that can be good practice, we would jump on it and publicise it because it is quite a rare thing. If a suggestion is raised and it is shrugged, then he’s likely not to bother again.  
**Interviewee D:** NOT ASKED |
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5. What are the advantages of involving employee in health</td>
<td><strong>Interviewee A:</strong> They know the job better than we do; basically we try to make the place as safe as we can so we go and speak to the experts and the</td>
</tr>
</tbody>
</table>
| and safety management? | experts are the people that do the job  
**Interviewee B:** It is very advantageous because the workforce know the situation very well, the risk and what is needed to prevent the risk  
**Interviewee C:** If they are involved, they are more likely to take ownership of what they are doing and it gives better results if that buy-in (acceptance) is gotten. A much better performance is gotten out of it. It isn’t rocket science but planning things well is a very effective way of going about new business, because if everyone knows what is expected of them, the job usually goes much more smoothly but also goes much more safely. Part of the plan is to execute it safely as well.  
**Interviewee D:** The people who work on the shop floor are the ones who know what the problems are. If you look at the priority for safety offshore in step change which is MD’s and leaders, they are miles away from what happens on the shop floor so there is always too much conflicting priorities as various requests are fed downwards. So the only way safety offshore can be improved offshore is not by trade union or MD sitting in an office talking about it. It’s by people offshore on the platform having the confidence and the security to discuss and to challenge it. Only then and when you get the people working in the job participating, that is when you get a safe environment and we are not there yet in fact we not even close to being there. |
| --- | --- |
| 6. What are the disadvantages of involving employee in health and safety management? If none, what are the barriers to employee involvement? | **Interviewee A:** No disadvantages. The main barrier to employee involvement is trust whether the employees actually trusts. The problem is if somebody reports something, they often think that they’ll get in trouble for reporting it. Whereas most of the time what happens is we have known that the situation is happening in the company and we actually thank the people.  
**Interviewee B:** No disadvantages. The workers can be barriers against risk so involving them is a very important step to avoiding accident. Management’s focus on employees as harming themselves is a barrier  
**Interviewee C:** No downside to involvement at all, if you’ve got a competent, confidence workforce who are good at planning their activities it is going to be a very efficient workforce. The barrier is that people are reluctant to change |
mainly because they fear change and are uncomfortable with anything they are not familiar with. Some people get quite angry if a new way of suggesting things are suggested as they claim they’ve done it a certain way. Most barriers are human; sometimes there is a preparation of pressure of getting the jobs done. Most of the barriers are mental in the individuals own mind. Convincing people that it is the right thing to do is tough, there are some really cynical people out there.

**Interviewee D:** No disadvantage at all. The real issue is a legal one; one issue that can make a big difference offshore is the NRB (Not Required Back) biggest barrier is NRB. Lack of training especially for safety reps. (They get 5 days training) a lot of trade union safety reps get 6 – 7 weeks training courses for at least 2 – 3 weeks each year. We reckon that the minimum training a safety rep should have is about 7 weeks and there might be some specialist trainings they might go ahead and give them. There is a need to get away from financial reward or financial punishment in connection with safety.

<table>
<thead>
<tr>
<th>7. How can you/do you overcome these disadvantages and barriers?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviewee A:</strong> Trust can only be built up after a number of years. So the culture of reporting in the organisation I work with is quite open. That is the culture we try to keep going.</td>
</tr>
<tr>
<td><strong>Interviewee B:</strong> I think the regulation should make a better protection for the safety delegates for short period to bring forward difficult issues that will be problematic for the companies and cost money. Stronger union will also make it better.</td>
</tr>
<tr>
<td><strong>Interviewee C:</strong> By relentless effort to keep telling people what the right thing to do are if they push back challenge them on that. Some of the barriers are culture or whether it’s part of their training. It is mainly because the individuals are uncomfortable with anything they are unfamiliar with and that is the barrier. Sometimes repetition and leading by example. Everyone has got to demonstrate the right kind of behaviour and for those who don’t, hopefully by osmosis it will eventually get through them.</td>
</tr>
<tr>
<td><strong>Interviewee D:</strong> Management needs to be able to show that everyone can</td>
</tr>
</tbody>
</table>
easily report without jeopardising any financial incentives. Certainly, 8 weeks training should be the minimum and giving people a legal right to challenge NRB will go a long away.

### SECTION C: EMPLOYEE INVOLVEMENT PROCESSES AND TECHNIQUES

#### 8. What are the methods used in communicating with front line employees within your organisation?

Formal trainings, monthly safety meetings, teleconferences, visual video conferencing, video presentations, posters, leaflets and town hall meetings at the start of each shift *(SUMMARISED RESPONSE FROM INTERVIEWEE A, B, C and D)*.

#### 9. How relevant is the information made available to employees regarding their safety?

**Interviewee A:** We don’t exactly have safety handbook we have what we call safety passport which have the basic information like health and safety policies. The information is very relevant; if they know where to look as the vast majority of employees have their own company laptops. Those who don’t have access to the network work through the desktop computers. All the health and safety materials are online. We have a safety recording code which is a best practice system so if we have any losses, and previously learned from procedures, this basically give people the up to date information of best practices in the particular task.

**Interviewee B:** N/A

**Interviewee C:** The information sent out is not sufficient whereas in other places there is too much of it “initiative overload” as it is called but it is about finding the compromise.

**Interviewee D:** N/A

#### 10. How knowledgeable is the workforce about safety policies and procedures?

**Interviewee A:** I would say they are very knowledgeable. People are knowledgeable about the safety procedures they are meant to follow, whether they would follow them or not is a different question.

**Interviewee B:** N/A

**Interviewee C:** They could quote chapters of everything but they are pretty well up to speed.

**Interviewee D:** N/A
<table>
<thead>
<tr>
<th>11. How are employees recognised and rewarded when they have made great effort to improve safety?</th>
</tr>
</thead>
</table>
| **Interviewee A:** There is a recognition system so that people can recognise somebody for their safety performance or when they’ve done something particularly well in say environmental compliance. They can put forward a recognition report. Subsequently, those reports are viewed by management and they can put in place rewards generally financial rewards in terms of points and points can be turned into vouchers to be spent at shops. We have my recognition at the moment is close to about 700 recognitions this year and 500-600 rewards.  
**Interviewee B:** Many sort of reward being used in health and safety but most of them are causing problems as they are putting focus away from the whole safety work and lead to under reporting and wrong focus. Using reward in connection with health and safety is not a good idea but actually a problem. For instance if you are handing out prizes, or punishment connected with lost time accidents, people will only be focusing on loss time accidents. And they will spend so much energy hiding them and not reporting them.  
**Interviewee C:** STOP cards are used and the card of the day is rewarded though some companies use it as a numbers game by compelling employers to fill them.  
**Interviewee D:** There are numbers of reward scheme. A common example is if there are no accidents on a rig in a year, everyone gets £10,000. So 10 months into the year, if there is a minor injury, there are two choices, report it and everyone loses £10,000 or hide it and what normally happen is accident are hid. “There should be no financial reward what so ever in connection with health and safety. All that does is it doesn’t reward people for being safe, it rewards people for not reporting safety issues and we are opposed to that”. |

<table>
<thead>
<tr>
<th>12. How many trade unions are recognised in your organisation?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Interviewee A:</strong> Only one location in the UK, we’ve got about 5 and half thousand people in our company and only that location has trade union and that is not in the offshore industry it is a manufacturing platform.</td>
</tr>
</tbody>
</table>

**SECTION D: TRADE UNION**
| 13. **What are the typical activities carried out by trade unions in relation to health and safety management?** | **Interviewee B:** No official trade union recognition but some of the staff are represented by trade union though fewer now than before but for those with OCA type contract union membership is needed. Couple of trade union officials are usually asked for comments when there has been an incident that makes the papers otherwise no trade union input.  
**Interviewee C:** No.  
**Interviewee D:** UNITE, GMB and RMT. |
|---|---|
| 14. **How would you describe the role of safety representatives on your platform?** | **Interviewee A:** N/A  
**Interviewee B:** We give our safety representatives quite a lot of power to stop unsafe work and so on. For instance if they find something wrong on an installation, they can stop the whole production on the installation. It very rarely happens but it is possible to do it. So that gives our safety delegates quite a lot of power.  
**Interviewee C:** The safety reps are not the best, they are not proactive.  
**Interviewee D:** N/A. |
| 15. **What type of support is provided to safety representatives? Is senior management committed and supportive or not?** | **Interviewee A:** N/A  
**Interviewee B:** N/A  
**Interviewee C:** Safety representatives are given all the support they need. They have their own offices, helmet separate from the rest of the workforce.  
**Interviewee D:** There is a lot of commitment involved but a lot of safety representatives have resigned because they do not think they are getting the actual support they need to do the job; they don’t get the training. The agenda of the safety meeting is run by OIM and they are talking about minor things and not major things like hydro carbon releases or rust on the deck. The only way to have active safety representatives offshore is to have fulltime safety reps rather than part-time elected safety reps. They will be elected but on a
full time bases so they could have time to go do the safety reps stuffs. Full time safety reps work in Norway. If the system of safety representatives right now is not working as there has been no dramatic change in hydrocarbon releases or ships and falls then there is need for a system that works. Different platforms give different kinds of support. For operators, support is given but for contractors; lots of barriers are put up to avoid having to get another person offshore in order for a safety rep to attend training offshore. Good practice offshore I don’t know, what I’ll call very good practice is 20%. Bad practice is 20% and mediocre practice is 60%. There are very few rigs where it works successfully and very correctly.

| 16. What is your opinion on the perception that the safety on a platform is first class and needs no room for improvement? | **Interviewee D:** People might think their safety is first class because they do not know what it should be like. What people think is good might just be a façade and behind that façade there is nothing. While on some rigs things might be truly safe, it’s not so on other rigs they just don’t know what it should be that’s why they think it’s going well. |
| 17. Are people offshore really lazy? | **Interviewee D:** There will be people who want to finish their work and go home and there will be people who do not want to take an active role. But in the mean, I’ll argue that there are more people prepared to take an active role offshore than any other industry. Taking away NRB will give more job security; if safety reps become full time then they won’t be paid for by anyone’s employer that will be paid for by the people involved in the job. That will give greater job security and greater freedom and greater opportunity to get trained. It takes away all the things that stopped safety reps and that will leave the door opened for real act of safety reps demanding change and that is why the offshore industry doesn’t want it. It is scared of it; rather than welcoming that because it would improve safety, they are scared and have always been scared of giving safety reps too much power. They can also argue that it is expensive. For an industry that hires a drilling rig per day cost a £100,000 so investing £120,000 per year to employ full time safety reps is not a lot of money. “Talkinism doesn’t work
### APPENDIX F: RESPONSES TO CLOSED-ENDED QUESTIONS

<table>
<thead>
<tr>
<th>Variables</th>
<th>Responses (frequency and percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Agree</td>
</tr>
<tr>
<td>1 Clear communication</td>
<td>40 (30.1)</td>
</tr>
<tr>
<td>2 Information about changes</td>
<td>25 (19.1)</td>
</tr>
<tr>
<td>2 Knowledge of safety expectations</td>
<td>67 (50.4)</td>
</tr>
<tr>
<td>4 Authority to make decisions</td>
<td>58 (43.6)</td>
</tr>
<tr>
<td>5 Reporting without fear of negative comeback</td>
<td>52 (38.8)</td>
</tr>
<tr>
<td>6 Responsibility for safety</td>
<td>94 (70.7)</td>
</tr>
<tr>
<td>7 Recognition for doing safe job</td>
<td>7 (5.2)</td>
</tr>
<tr>
<td>8 Management's action on staff suggestions</td>
<td>11 (8.3)</td>
</tr>
<tr>
<td>9 Training and feedback on performance</td>
<td>19 (15.3)</td>
</tr>
<tr>
<td>10 Effectiveness of training received</td>
<td>10 (8.1)</td>
</tr>
<tr>
<td>11 Consultation with the workforce</td>
<td>13 (10.6)</td>
</tr>
<tr>
<td>12 Direct involvement and participation of frontline staffs</td>
<td>24 (19.4)</td>
</tr>
<tr>
<td></td>
<td>Management and workforce collaboration in safety issues</td>
</tr>
<tr>
<td>---</td>
<td>-------------------------------------------------------</td>
</tr>
<tr>
<td>13</td>
<td>18(14.8)</td>
</tr>
<tr>
<td>14</td>
<td>38(30.9)</td>
</tr>
<tr>
<td>15</td>
<td>41(33.6)</td>
</tr>
<tr>
<td>16</td>
<td>23(18.9)</td>
</tr>
<tr>
<td>17</td>
<td>5(4.0)</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
</tr>
<tr>
<td>19</td>
<td>2(1.6)</td>
</tr>
<tr>
<td>20</td>
<td>3(2.5)</td>
</tr>
<tr>
<td>21</td>
<td>3(2.5)</td>
</tr>
<tr>
<td>Aim</td>
<td>Objectives</td>
</tr>
<tr>
<td>-----</td>
<td>------------</td>
</tr>
<tr>
<td>To establish the significance of employee involvement in influencing a positive safety culture in the UK offshore oil and gas industry.</td>
<td>To define safety culture, safety culture indicators and the components of a positive safety culture.</td>
</tr>
<tr>
<td></td>
<td>To explore various perceptions about employee involvement in health and safety management in the UK offshore oil and gas industry.</td>
</tr>
<tr>
<td></td>
<td>To highlight the obstacles/barriers to employee involvement in safety in the UK offshore oil and gas industry.</td>
</tr>
<tr>
<td></td>
<td>To examine the impact of Trade union in influencing employee involvement offshore.</td>
</tr>
<tr>
<td></td>
<td>To draw conclusions/ make recommendations on the importance of employee involvement in influencing a positive safety culture.</td>
</tr>
</tbody>
</table>